Kemira
Where water meets chemistry™

ANNUAL REPORT

2016

The Kemira Annual Report 2016 consists of four modules. By clicking the titles below, you can go directly into each module with its own table of contents.

TABLE OF

Contents

All forward-looking statements in this report are based on the management's current expectations and beliefs about future events, and actual results may differ materially from the expectations and beliefs such statements contain.

Kemira

– KEY FIGURES 2016

→ Revenue: EUR 2.4 billion (2.4 billion in 2015)

→ Operative EBITDA: EUR 302.5 million (287.3 million)

→ Operative EBITDA margin: 12.8% (12.1%)

→ Earnings per share: EUR 0.60 (0.47)

→ Employees 4,818 (4,685)

→ Manufacturing network of 63 (64) sites, products sold in more than 100 countries

→ Financial targets on mid- to long-term: above-the-market revenue growth, operative EBITDA margin 14–16%, gearing below 60%

→ Headquartered in Helsinki, Finland and listed on the Nasdaq Helsinki Ltd.

Kemira

TODAY

Kemira is a global chemicals company serving customers in water intensive industries. We provide expertise, application know-how and chemicals that improve our customers' product quality, process and resource efficiency. Our focus is on pulp & paper, oil & gas, mining and water treatment.

VISION

The first choice in chemistry for water intensive industries

VALUES

→ We are dedicated to customer success
→ We drive performance and innovation
→ We care for people and the environment
→ We succeed together

THE AMERICAS 38%
EUR 895 million
1,558

BUSINESS SEGMENTS:

PULP & PAPER

A leading global bleaching, process and functional chemical supplier, #1–2 in all regions.

MUNICIPAL & INDUSTRIAL

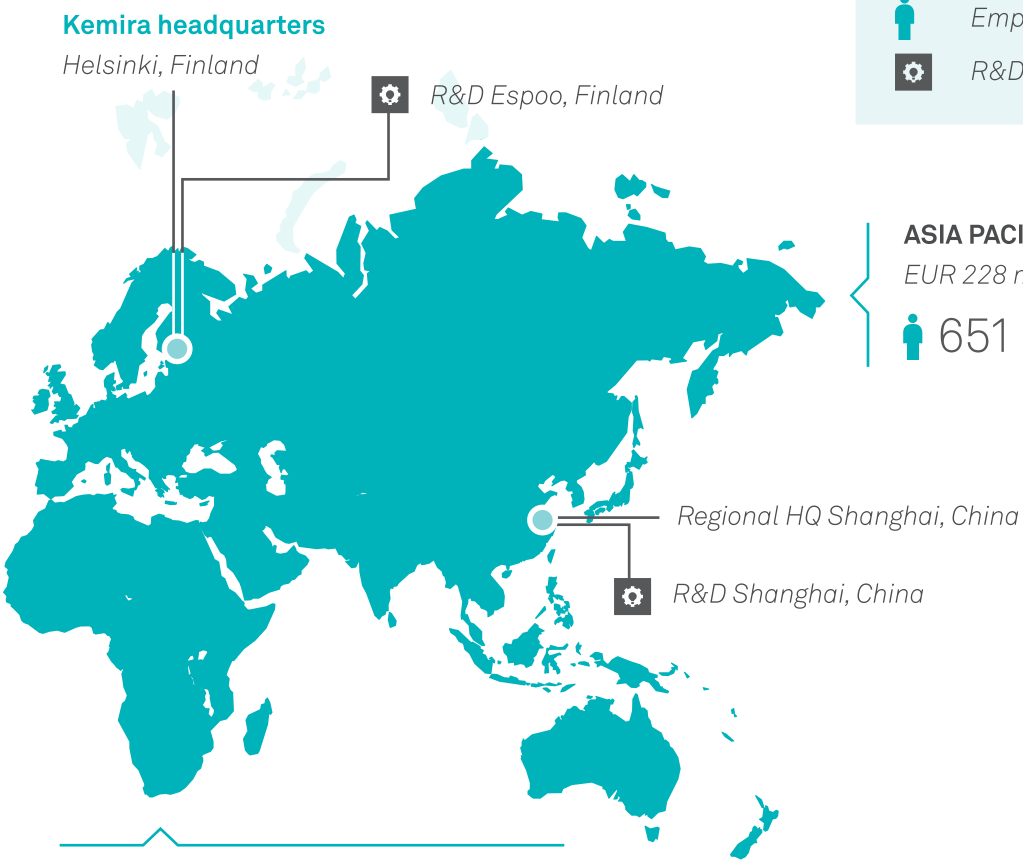
Market leader in raw and waste water treatment chemicals, #1 in Europe and North America.

OIL & MINING

A growing chemical supplier to the oil & gas and mining industries, #2 in global polyacrylamide polymers.

Employees

R&D and technology centers



ASIA PACIFIC 10%

EUR 228 million

651

EUROPE, MIDDLE EAST AND AFRICA 52%

EUR 1.239 million

2,609

CONTINUED IMPROVEMENT IN

profitability

Jari Rosendal I President and CEO

In 2016, we continued to improve our profitability. We have systematically followed our strategic plan, and we are on our way towards our mid-to-long-term financial targets. Our goal is to deliver revenue growth above-the-market with improving profitability.

THE YEAR 2016 IN BRIEF

The year 2016 showed that our action plan is delivering continued improvement in profitability despite adverse developments in oil and gas markets. We progressed a step forward towards our profitability target and achieved operative EBITDA margin of 12.8% (12.1%). Organic revenue growth remained challenging, mainly due to the deflationary pricing environment, declines in oil and gas markets, and tightening competition in the pulp and paper chemicals market. Our full-year revenue amounted to EUR 2.4 billion with organic growth of -2%, mainly due to drop in oil and gas markets.

In September 2016, we updated our mid- to long-term financial targets. Kemira aims for above-the-market revenue growth with operative

EBITDA margin of 14–16%. The gearing target is maintained at below 60%.

OUR STRATEGY FOR PROFITABLE GROWTH

Kemira's vision is to be the first choice in chemistry for water intensive industries. This means we must provide first class expertise, application know-how and chemicals that improve our customers' product quality as well as their process and resource efficiency. It also means that we must operate sustainably, efficiently and safely, while employing the best people with the right service attitude and a passion for our business.

Over the past three years we have been focusing on the following four areas: driving growth, acquisitions, cost discipline, and efficiency. In March 2016, we announced an investment of approximately EUR 50-60 million in the expansion of our production capacity in Joutseno, Finland, aiming to capture growth opportunities in the pulp and paper industry. We have also expanded our production in San Giorgio, Italy, and in Bradford, UK. Our capital expenditure in 2016 was EUR 211 million (2015: EUR 305 million), and these investments have all been executed on schedule and on budget. In spring 2016, we successfully started up our new sodium chlorate plant in Ortigueira, Brazil, strengthening our capability to meet growing demand for pulping chemicals in the South American market.

> OVER THE PAST THREE YEARS WE HAVE BEEN FOCUSING ON THE FOLLOWING FOUR AREAS: DRIVING GROWTH, ACQUISITIONS, COST DISCIPLINE, AND EFFICIENCY.

The integration of the AkzoNobel paper chemicals business, acquired in May 2015, has progressed better than expected, so we raised the related cost synergy target from EUR 15 million to EUR 20 million in September. The synergy capture will be at full run-rate by the end of 2017.

During 2016 we launched a new operational excellence program known as BOOST, to improve efficiency and customer experience. We expect this program to bring annual savings run-rate of EUR 20-30 million within 2-3 years. A new partnership with Odyssey, who will start to operate Kemira's external road transportation activities in the EMEA region and North America in 2017, will make a major contribution to the BOOST program's benefits.

Our strategy execution is on track, and we will continue to move forward with regard to delivering our mid-to-long-term financial targets. We remain determined to drive profitable growth through initiatives including Total Chemistry Management (TCM) contracts and additional bleaching chemical capacity in the Pulp & Paper segment; Chemical Enhanced Oil Recovery (CEOR) and oil sands in Oil & Mining; and measures to increase revenue in Municipal & Industrial including Advanced Water Treatment (AWT) applications and geographical expansion in selected regions.

RESPONSIBILITY THROUGHOUT THE VALUE CHAIN

Our corporate responsibility work is guided by the increasing expectations of our customers and other stakeholders, as well as by our own strategy and Code of Conduct, and internationally defined principles. Our work particularly focuses on responsible business practices, sustainable products and solutions, responsible manufacturing, responsibility in our supply chain, and responsibility towards our employees, and local communities wherever we operate.

Thanks to our long-term efforts to enhance health and safety culture throughout Kemira, we have been able to significantly improve our safety performance. The frequency of reported injuries per million hours worked by our employees and contractors decreased to 3.4, compared to 7.2 in 2015. We will continue to invest a lot of time and effort to achieve further improvements in workplace safety.

We create sustainable value by innovating and improving product performance, by reducing the environmental footprint of our value chain, and by improving safety throughout product life cycles. We launched 14 new products in 2016 (2015: 3) and the share of innovation products in total sales increased to 9% by revenue (2015: 8%). Our innovation sales target is 10% and we will continue our efforts to reach it.

Our main environmental impact is the carbon dioxide emissions from our manufacturing, which we are striving to reduce through energy efficiency improvements and the sourcing of more low-carbon energy. In 2016, we were able to source a higher share of low-carbon energy and we continued to invest in more energy efficient equipment and production lines through our E3plus energy efficiency program. The Kemira Carbon Index improved to 86, and we are on progress to reach our target of reducing the Kemira Carbon Index by 20 percentage points by the end of 2020, compared to the baseline year 2012 (index value = 100).

WE PROGRESSED WELL TOWARDS OUR PROFITABILITY TARGET AND REACHED OPERATIVE EBITDA MARGIN OF 12.8% IN 2016.

THE RIGHT MIX

Today, we are number one globally in bleaching, process and functional chemicals for the pulp and paper industry – and also the market leader in waste water treatment chemicals in Europe and North America. Our products are distributed to over 100 countries globally, and we have 4,818 employees in approximately 40 countries. During the three years I have worked as Kemira's CEO, I have clearly seen that we are a global technology house with excellent in-house chemistry expertise and a profound understanding of different industrial processes. Creating the right mix of these elements will make us the first choice for our customers.

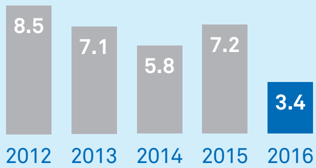
Jari Rosendal
President & CEO

PERFORMANCE 2016

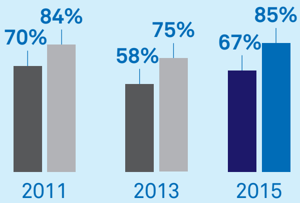
Responsibility towards employees

Occupational health and safety target:
Achieve zero injuries
(TRIF 2.0 by 2020)

Total Recordable Injury Frequency (TRIF), per million hours, Kemira + contractor, 1 year rolling average.

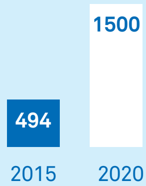


Engagement target:
Employee engagement index at or above the external industry norm, participation rate 75% or above.



■ Employee engagement index, % (external norm 2015: 68%)
■ Participation rate, % of total employees

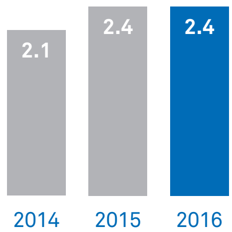
Leadership development target :
Two (2) leadership development activities per people manager position during 2016–2020



Financial performance

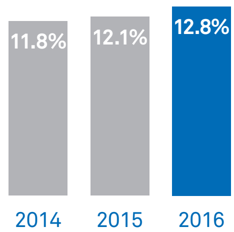
Revenue (EUR billion)

Target: above market growth



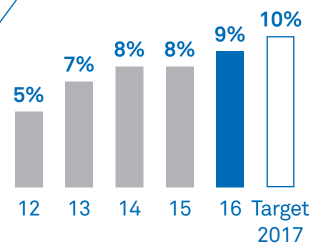
Operative EBITDA (%)

Target: 14-16%



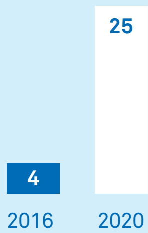
Sustainable products and solutions

Innovation sales target:
10% of total revenue by the end of 2017



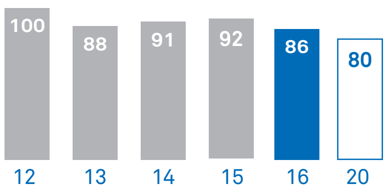
Responsibility in our supply chain

Target: 5 suppliers audited every year during 2016-2020, average.



Responsible manufacturing

Climate change target:
Kemira Carbon Index ≤ 80 by the end of 2020



Kemira

Business model

INPUTS

Equity: EUR 1,183 million

Interest-bearing liabilities: EUR 807 million

Cash: EUR 173 million

Business units in 40 countries, 63 manufacturing sites

Key relationships: customers, suppliers, distributors & agents, industrial partners for secondary raw materials

4,818 professionals worldwide

250 R&D experts in 3 centers, over 1,200 patents

Total materials purchased:
- → 3.5 million tons, 27% recycled
- → Total energy purchased (GWh) 4,426

BUSINESS ACTIVITIES

Differentiation:
- → Unique strategy based on expertise, application knowhow and chemicals for customers in water-intensive industries.

Product stewardship
- → Ensuring safety of our products

Responsible business practices
- → Compliance to Kemira Code of Conduct

Responsibility for employees
- → Workplace safety
- → Employee engagement
- → Leadership development

Responsible supply chain
- → Sustainability in sourcing and supply chain management

Responsible manufacturing
- → Lowering costs & environmental impacts of our operations

OUTPUTS

Sustainable products and solutions, market position
- → Polyacrylamide polymers #2
- → Coagulants #1
- → Sizing #1
- → Chlorate & peroxides #2

Income received from customers
- → EUR 2.4 billion

Services
- → Application support
- → Process control & monitoring
- → Total Chemistry Management

Emissions and waste
- → Scope1 + Scope2 (CO2 eq. tonnes) = 931,000
- → Total waste disposal 82,300 tonnes

OUTCOMES

Customers
- → Product quality or product yield optimization
- → Process and energy efficiency
- → Water quality and regulatory compliance
- → Customer Net Promoter Score: 28 (industry average 26)

Shareholders & lenders
- → EUR 114 million paid in dividends*

Society
- → Purified water, suitable for reuse
- → Sustainable use of biobased materials: recycled fibers
- → Less water and energy used in industrial processes
- → More efficient extraction and use of non-renewable resources: oil, minerals and water
- → Income taxes paid: EUR 23 million*

on cash basis including interest expenses

OUR STRATEGY FOR

profitable growth

THREE CORE SEGMENTS WITH STRONG MARKET POSITIONS

Our focus will continue to be on promoting and supporting profitable growth in three business segments. We gain synergies through similar production technologies and shared manufacturing sites. Polymers are the largest product group used throughout these segments.

PULP & PAPER

62%

of group revenue

Operative EBITDA **13.4 %**

Market Position **#1**

OIL & MINING

13%

of group revenue

Operative EBITDA **5.9 %**

Market Position **#2***

MUNICIPAL & INDUSTRIAL

25%

of group revenue

Operative EBITDA **14.9 %**

Market Position **#1**

*in polyacrylamide polymers

In **Pulp & Paper,** we have unique expertise in applying chemicals and in helping pulp and paper producers to innovate and constantly improve their operational efficiency and environmental impacts. Kemira is the only company in the industry with a major global presence in pulp, packaging and paper chemicals. Thanks to an increased focus on this business combined with strategic investments and selective acquisitions, we have been able to grow and become the global market leader.

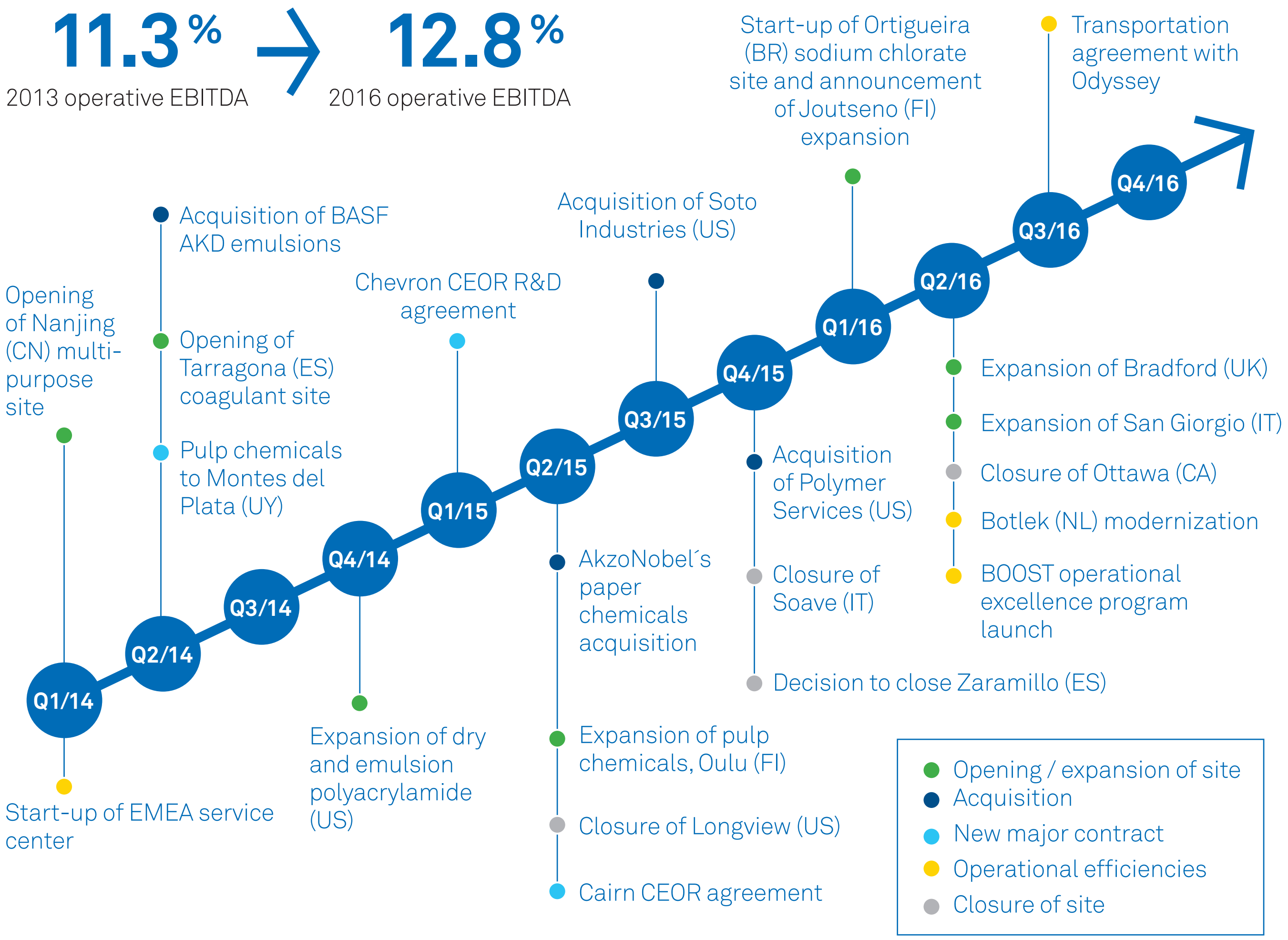
In **Oil & Mining,** we provide a unique combination of innovative knowhow on chemicals and applications that can improve process efficiency and yields in oil, gas and metals recovery. Kemira is the second largest producer of polyacrylamide (PAM) polymers globally. Within the extensive global oil and gas industry we have selected a few attractive niches such as the shale fracking industry. We have a leading market position in friction reducers used in fracking of shale oil and gas. In addition, oil sands and Chemical Enhanced Oil Recovery (CEOR), are attractive growth prospects for the long-term.

In **Municipal & Industrial,** we enable our customers to improve their water treatment efficiency by providing expertise and chemicals for the management of raw and waste water. In this segment we have a market share of around 30% in Europe and North America, but we have also gained ground in selected growth markets such as Singapore and Shanghai. In our focus regions, we are the leading supplier for raw and waste water treatment chemicals.

PROFITABLE GROWTH THROUGH

clear, defined actions

ACHIEVEMENTS & ONGOING PROJECTS



MID- TO LONG-TERM TARGETS

	2014	2015	**2016**	FINANCIAL TARGETS (mid- to long-term)
Revenue	2.1 EUR billion	2.4 EUR billion	**2.4 EUR billion**	**Above-the-market growth**
Operative EBITDA margin	11.8%	12.1%	**12.8%**	**14–16%**
Gearing	42%	54%	**54%**	**Below 60%**

Over the last three years Kemira has initiated and executed multiple actions to deliver profitable growth. These actions are a key factor behind revenue growth from around EUR 2.2 billion in 2013 to around EUR 2.4 billion in 2016, as well as profitability improvements from 11.3% in 2013 to 12.8% in 2016, despite the adverse developments in the oil and gas markets. The single largest action has been the acquisition of AkzoNobel paper chemicals business, which has brought us additional annual revenue of around EUR 200 million and some 350 experts around the world. This acquisition strengthened our market position in all regions, especially in the APAC region where we are now the #1 chemicals provider to paper, board and tissue mills. The acquisition is also expected to bring around EUR 20 million in synergies on top of the EUR 19 million EBITDA (pro forma 2015) contribution from the existing business. We are very satisfied with the way integration has proceeded, and proud to have new AkzoNobel employees and products as a part of Kemira's business today, giving us an even stronger market leadership position.

SELECTIVE INVESTMENTS TO SUPPORT FUTURE GROWTH

Kemira is currently in an investment phase, and our capital expenditure in 2016 amounted to EUR 211 million (Capital expenditure including acquisitions, 2015: EUR 305 million, 2014: EUR 145 million). Several site expansions and openings have taken place during the last three years, of which the most recent is a new sodium chlorate site in Ortigueira, Brazil. The site opened in March 2016, exclusively serving Klabin, Brazil's largest pulp producer. Other examples of the investment phase include expansions in Bradford, UK, and San Giorgio, Italy, as well as the upcoming new bleaching chemical production line in Joutseno, Finland.

In addition, we have optimized our Group-wide production footprint through prudent cost control. This is essential, since we have to constantly take care of our efficiency to remain competitive. At the end of 2016, we had 63 production sites (compared to 64 in 2015) in 24 different countries. Kemira is well on its way towards its mid- to long-term financial targets. However, the world is unpredictable. Economic cycles affect the supply and cost of certain important raw materials. Currency rates have also been fluctuating substantially, and geopolitical issues such as Brexit have recently arisen. The issues may not impact Kemira directly, but they certainly may have consequences for some of our customers and for entire economies, and therefore they may have indirect impacts on Kemira.

DRIVERS FOR PROFITABLE GROWTH

In **Pulp and Paper**, the cornerstone of revenue and profitability improvement is continuous excellence in all daily operations. Growth in pulp chemicals is driven by our investments in bleaching chemical capacity to meet growing demand in South America and Northern Europe. The newly built capacity in Brazil is now running at full speed, and we are in the process of building a new sodium chlorate line in Joutseno, Finland, to serve primarily the Nordic market. The new line is expected to come into operation in the fourth quarter of 2017. In paper chemicals, our newly launched Total Chemistry Management (TCM) concept has brought us multiple deals, especially in the APAC region, thanks to our one-stop-shop

ALL SEGMENTS AIMING FOR PROFITABLE GROWTH

MID- TO LONG-TERM TARGETS

Pulp & Paper

62% of Group revenue

Growth

2 X market growth

Profitability

In line with the Group target

Oil & Mining

13% of Group revenue

Growth

Double-digit growth-% over-the-cycle

Profitability

Over-the-cycle profitability in line or above the Group target

Municipal & Industrial

25% of Group revenue

Growth

Steady growth of 2-4%

Profitability

Slightly below the Group target

approach. On the profitability side, synergies from the AkzoNobel´s paper chemicals acquisition will continue to ramp up and contribute towards our profitability target.

In **Oil and Mining**, the shale oil and gas market seems to have bottomed in summer 2016. The rig count in the US is an indirect indicator of activity in shale fields, and the number of rigs has risen by 63% from the bottom in spring 2016 to 658 rigs, though the figure is still far below the 1,800 level where it was on average during 2014. We are continuing our efforts for entering Chemical Enhanced Oil Recovery (CEOR). CEOR is an area where it typically takes 12-24 months to develop and tailor the right product to fulfill all customer's needs, relating to factors including specific conditions in a certain oilfield. This kind of know-how-based and tailored application requirement is very suitable for Kemira, as we have decades of experience in polymer applications. We have also entered oil sands, which is a growth prospect in Canada, as oil producers are required by law to conduct appropriate tailings treatment. We are also focusing on our mining business as well as our process industry portfolio in selected industries.

In **Municipal and Industrial**, we aim to continue with our successful business in existing markets, with wider offerings to the market. We are additionally looking for geographic expansion, selectively going into new areas. Some of our products, such as anti-scalants, are not yet

PROFITABLE GROWTH DRIVERS

Group wide drivers

- BOOST program – operational excellence
- Selective acquisitions

Pulp & Paper

- Winning Formula – Excel in basic game
- Bleaching chemical capacity additions
- New Total Chemistry Management (TCM) contracts
- Capture acquisition synergies

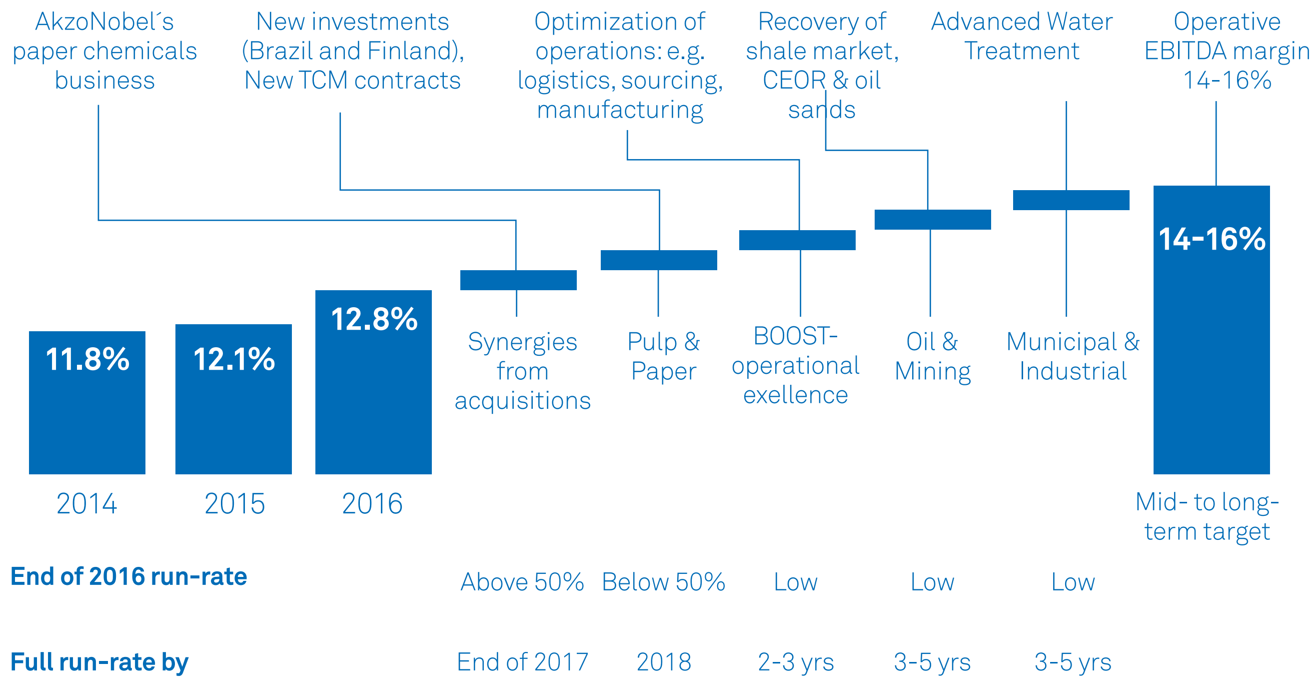
Oil & Mining

- CEOR - tailored polymers for harsh conditions in Chemical Enhanced Oil Recovery
- Oil sands – tailings treatment
- Recovery of shale market

Municipal & Industrial

- Geographic expansion
- Expansion in product offering
- Advanced Water Treatment (AWT)

OUR KEY ACTIONS FOR HIGHER MARGINS



offered to all of our customers. There is an increasing demand for Advanced Water Treatment (AWT) among municipalities for such solutions. We are currently expanding our capabilities and knowhow to serve this market.

In 2016, we launched the new BOOST program to enhance our operational excellence. We operate in 63 manufacturing sites, serving 16,000 ship-to-customers in over 100 countries with a wide product portfolio of more than 2,000 products and we feel convinced that we can extract more out of the company in the future.

Kemira targets above-the-market growth. Annual market growth in the respective chemicals is estimated to be around 2% until 2020. For profitability, the target is operative EBITDA margin of 14–16%. The range takes into account economic cyclicalities. We have set clear targets and launched purposeful initiatives how we will improve our financial performance.

People

– MAKING AN IMPACT TOGETHER

EMPLOYER OF CHOICE – OUR JOURNEY SO FAR

We aim to be an employer of choice by ensuring that our diverse workforce enjoy a safe and engaging working environment. We also strive to attract, develop and retain the right mix of talented people for the continued success and growth of Kemira.

BUILDING OUR SAFETY CULTURE

Safety is our first priority in all our locations globally, and our long-term goal is zero harm to people. We are continuously investing a lot of training time and resources to further enhance our safety culture. As an example, in 2016 we started a group-wide Behavior Based Safety program which will be rolled out to all locations. During 2016, the frequency of reported injuries per million hours worked (TRIF) decreased significantly to 3.4, compared to 7.2 in 2015 (covers both Kemira employees and contractors working at our sites and facilities).

EMPLOYER BRANDING

During 2016, we renewed our employer brand concept. We aim to offer employees the right mix of opportunities and challenges in a global and diverse working environment. Our result-oriented and collaborative culture empowers employees to solve the challenges of tomorrow in an inspiring company, so that together we can have a major impact on the future. We have started implementing the new Employer Brand concept by renewing our Kemira.com/careers site and the implementation will be completed during 2017.

We have defined three differentiating themes for our employer brand:

- Making an impact together
- Empowering your full potential
- Delivering innovation

LEADERSHIP DEVELOPMENT

Skilled leaders are key to the successful execution of Kemira's strategy. We continue to help our leaders to develop by running on-the-job learning, stretch projects, coaching and mentoring schemes, and development programs. In 2016, 494 leadership development activities were completed, exceeding our target of 300 for the year.

EMPLOYEE ENGAGEMENT

An engaged workforce is the cornerstone for becoming the employer of choice. We currently measure employee engagement with our biennial Voices@Kemira survey and intervening pulse surveys. In 2016, we ran a brief pulse survey, whose results suggest that our employee engagement levels are stable and in line with industry norms. The latest Voices@Kemira survey was done in 2015.

DIVERSITY

We are an equal opportunity employer. A total of 60 nationalities are represented in our workforce, and our gender split is 74% male and 26% female. The diversity of our workforce supports our organizational performance. In 2016, we defined the diversity principles for the composition of our Board of Directors.

Innovating together

WITH CUSTOMERS

Kemira's main goal in terms of innovation is to help our customers improve their process efficiency and product quality to make us their first choice. We innovate for the future through customer collaboration, partnerships and open innovation. We utilize the opportunities of digitalization to improve our own efficiency as well as the services offered to customers.

Customers benefit by using our products and solutions to:

- Improve product properties and quality
- Enhance process and energy efficiency
- Ensure that water quality meets end-use specifications and regulatory requirements.

We focus on customer-driven, sustainable innovation. Sustainability reviews are required at every stage of Kemira's New Product Development (NPD) process to ensure that sustainability criteria are met. These evaluations consider impacts on Kemira's own operations as well as on customers' processes. We also aim to identify more sustainable alternatives for raw materials with the help of our NPD process. We always push for solutions that improve sustainability compared to those already available on the market.

Our technical customer support in the field provides a feedback loop to let us know how our products are working in our customers' industrial facilities, how they are serving our customers, and what needs our customers might have in the future, so we can develop our products further. We are a technology house for chemistry, able to tailor solutions and solve customers' problems – and this is an important differentiator in competition with our peers.

INNOVATING TOGETHER TO IMPROVE OUR CUSTOMERS WATER, ENERGY AND RAW MATERIAL EFFIENCY

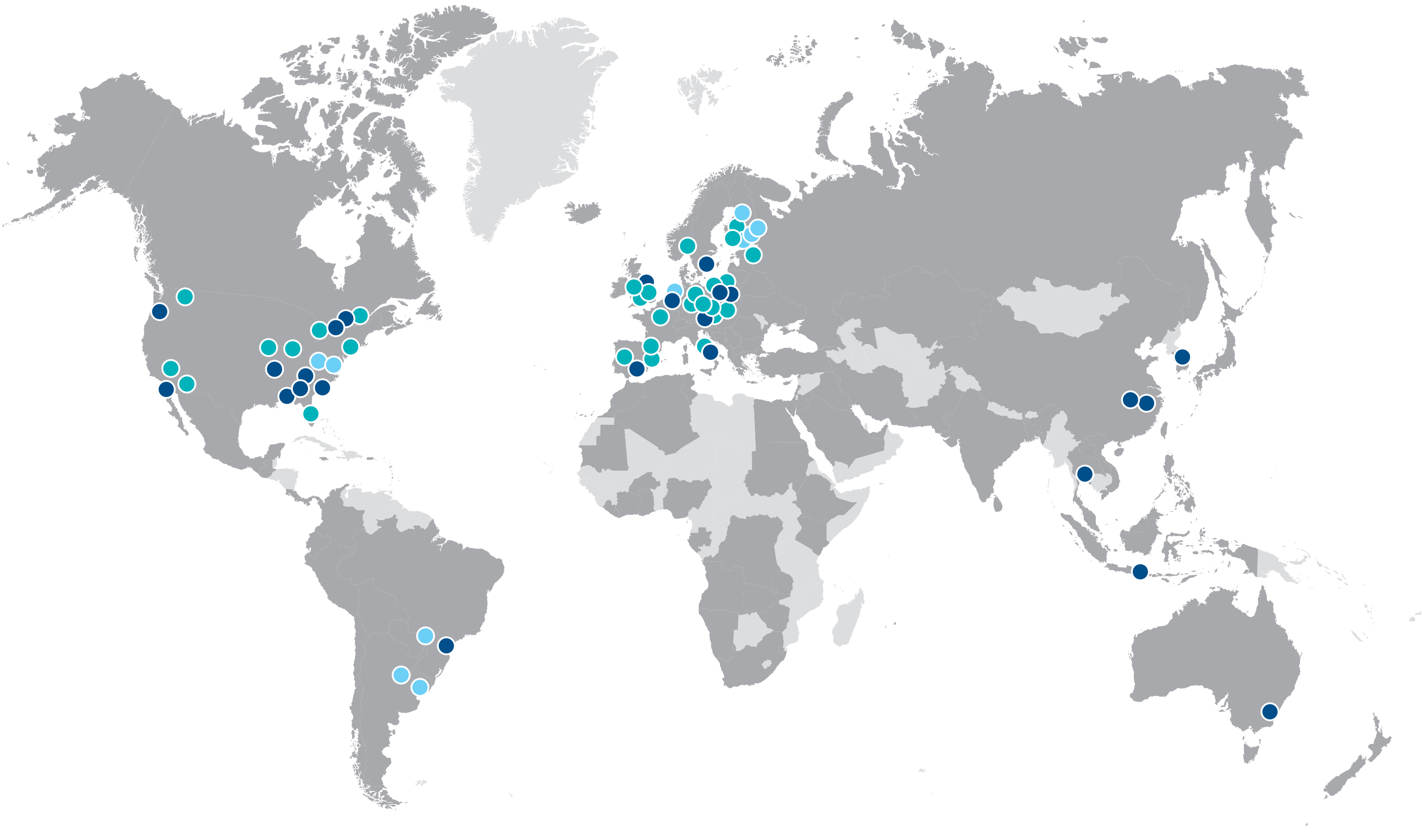
→ 250 EXPERTS IN 3 R&D CENTERS IN FINLAND, CHINA AND US

→ 348 PATENT FAMILIES

→ 1,236 GRANTED PATENTS

→ 860 PENDING PATENTS

Our global network



- Polyacrylamide polymers and other process chemicals (24)
- Coagulants (29)
- Bleaching and pulping (10)
- Ship-to countries

63 manufacturing sites

Pulp & P

13.4 %

Operative EBITDA

1

Market Position

LEADING
global pulp and
paper chemical supplier

62%

of group revenue

Growth

2 x market growth

Profitability

In line with Group target

Profitable growth drivers

Winning Formula – excel in basic game	Bleaching chemical capacity additions	New Total Chemistry Management (TCM) contracts	Acquisition synergies

Paper

THE LEADING GLOBAL PROVIDER OF CHEMICALS FOR THE PULP AND PAPER INDUSTRY

Growth in the use of pulp & paper chemicals is driven by higher production volumes for board and tissue grades. Kemira has unique expertise in chemical applications, and we are well placed to help our pulp & paper producing customers to innovate and constantly improve their operational efficiency and end-product quality. We are working to support our customers through the transition to a bio-based economy, by enabling production with fewer inputs, lower environmental impacts and a reduced water footprint.

RESULT 2016

Revenue

1,457

EUR million, growth 3%

Operative EBITDA

195

EUR million, margin 13.4%

MARKET POSITIONS

#1 IN EUROPE
#2 IN AMERICAS
#1 IN APAC

PRODUCTS

Share of segment revenue:
35% Bleaching and pulping
25% Strength and sizing
20% Defoamers, dispersants, biocides and other process chemicals
10% Polymers
10% Other (e.g. paper colorants)

MAJOR RAW MATERIALS

Acrylonitrile, olefins, cationic monomer, tall oil soaps and crude tall oil, electricity, fatty acids, heavy fuel oil/natural gas, maleic anhydride, sodium chloride, sulfur

40%
Pulp

40%
Packaging & Board, Tissue & Specialties

20%
Printing & Writing

2016 IN BRIEF

- Volume growth continued, supported by Total Chemistry Management deals in the APAC region, and paper-to-board conversion start-up contracts in the EMEA region.
- Revenue growth impacted by lower sales prices and unfavorable currency fluctuations.
- Strong improvement in profitability, driven by acquisition synergies, new production capacity, higher utilization, and improved gross margin
- Inauguration of a new bleaching chemical plant in Ortigueira, Brazil for Klabin.
- Synergy realization from the AkzoNobel´s paper chemicals acquisition proceeded ahead of plan, with the target increased from EUR 15 million to EUR 20 million. Current run-rate at the end of 2016 was EUR 14 million. Contract manufacturing insourcing successfully completed in the Americas. Insourcing progressing according to plan in the EMEA and APAC regions, with completion expected during 2017.
- Announcement of new line for bleaching chemical capacity in Joutseno, Finland. The new capacity is expected to come into operation during the fourth quarter of 2017.

MARKET OUTLOOK

Our Pulp & Paper segment is expected to grow at double the market growth rate. The market's compounded annual growth rate (CAGR) is estimated to be 1.0%. The majority of the growth is expected to occur in emerging markets in South America and the APAC region. Though market growth in the APAC region is expected to slow down slightly, it is still expected to be some 2–3% per annum. There is also an increased demand for pulp chemicals in the Nordic region, where several expansion projects are ongoing or have been announced. Thanks to our comprehensive offering, our global reach and our strong application knowhow, Kemira remains well positioned to serve the pulp and paper industry.

BUSINESS SPECIFICS

- Strategic commitment to the pulp & paper industry
- Customer and application-driven approach
- Offerings adapted to regional requirements
- Innovative partner for customers in the pulp & paper industry

KEMIRA'S COMPETITIVE ADVANTAGES

- Application know-how
- Product performance
- Backward integration into key raw materials
- Comprehensive offering
- Global reach

CUSTOMER VALUE

Improved

- Process efficiency
- End-product features and quality
- Raw material, energy and water efficiency: sustainable innovations

STRATEGIC OBJECTIVE

2 x market growth with improved profitability

How?

- Improve customer experience
- Maximize capacity utilization
- Manage fixed costs
- Reduce complexity
- Enhance performance culture
- Invest in growth and R&D

Oil & Min

5.9 %

Operative EBITDA

#2*

Market Position

* in polyacrylamide polymers

GROWING
chemical supplier to
oil, gas and mining
industries

13%

of group revenue

Growth

Double-digit growth-%
over-the-cycle

Profitability

Over-the-cycle profitability
in line or above the Group target

Profitable growth drivers

Recovery of shale market	CEOR - tailored polymers for harsh conditions in Chemical Enhanced Oil Recovery	Oil sands – tailings treatment

ning

INNOVATIVE KNOWHOW ON CHEMICALS AND APPLICATIONS FOR THE OIL, GAS AND MINING INDUSTRIES

Kemira provides a unique combination of knowhow on innovative applications and chemicals that can improve process efficiency and yields in oil, gas and metals recovery. We tailor chemistries for specific process needs, ensuring each customer has the most cost-effective and best-performing product for their particular application and field. We help our customers to extract oil, gas and certain ores with higher resource efficiency, getting more out of existing resources, while also utilizing less water and energy.

RESULT 2016

Revenue

310

EUR million, growth -12%

Operative EBITDA

18

EUR million, margin 5.9%

MARKET POSITION

#2 IN GLOBAL POLYACRYLAMIDE POLYMERS PRODUCTION

PRODUCTS

Share of segment revenue:
60% Polyacrylamide polymers
40% Other products such as dispersants, antiscalants, biocides, emulsifiers, defoamers

MAJOR RAW MATERIALS

Acrylonitrile, acrylic acid, various monomers

35%
Other industries through distributors

40%
Oil & Gas

25%
Mining

2016 IN BRIEF

- Revenue decreased due to weak oil and gas markets.
- Signs of recovery in the US shale oil and gas market towards the year end, albeit fragile and at early phase.
- Further business gained in the Canadian oil sands market.
- Progress in the development of tailored products for Chemical Enhanced Oil Recovery (CEOR).
- Restructuring of a manufacturing plant in Botlek, Netherlands.
- Continue to selectively grow our process industry portfolio.

MARKET OUTLOOK

Volatile market conditions are likely to continue going into 2017. Being a technology and value provider, Kemira is well positioned to weather the fluctuations in the market. Recovery of shale market, oil sands and Chemical Enhanced Oil Recovery (CEOR) present long-term growth opportunities in Oil & Mining segment.

BUSINESS SPECIFICS

- Application-driven approach
- Focus on rapid innovation to solve our customers' critical challenges

KEMIRA'S COMPETITIVE ADVANTAGES

- Innovative knowhow on chemicals and applications
- 2nd largest manufacturer of polyacrylamides worldwide

CUSTOMER VALUE

Improved

- Process efficiency
- Yield
- Cost efficiency
- Water efficiency
- Energy efficiency
- Compliance with environmental regulation

STRATEGIC OBJECTIVE

Recovery in shale business, and growth in new applications like Chemical Enhanced Oil Recovery and oil sands.

How?

- Improve customer experience
- Maximize capacity utilization
- Manage fixed costs
- Reduce complexity
- Enhance performance culture
- Invest in growth and R&D

Municipal Indus

14.9 %

Operative EBITDA

 # 1

Market Position,
EU & North America

MARKET LEADER
in water treatment chemicals in Europe and North America

25%

of group revenue

Growth

Steady growth of 2-4%

Profitability

Slightly below Group target

Profitable growth drivers

Geographic expansion	Expansion in product offering	Advanced Water Treatment (AWT)

&
strial

MARKET LEADER IN RAW AND WASTE WATER TREATMENT CHEMICALS

The market for Kemira's Municipal & Industrial segment is driven by regulation. Kemira is helping municipalities, private operators and water intensive industries to advance through the transition towards a circular economy by enabling water to be reused, and by improving the efficiency of water treatment at every stage of water management. We are the leading chemicals supplier for raw water, waste water and sludge treatment applications in Europe and North America, and the only manufacturer offering a full product portfolio of coagulants, polyacrylamide polymers and other water treatment chemicals. This makes our position in the market unique.

RESULT 2016

Revenue

596

EUR million, growth -2%

Operative EBITDA

89

EUR million, margin 14.9%

MARKET POSITIONS

#1 IN EUROPE

#1 IN NORTH AMERICA

PRODUCTS

Share of segment revenue:

65% Coagulants

20% Polyacrylamide polymers

15% Other products such as antiscalants, defoamers and biocides

MAJOR RAW MATERIALS

- 60–70% secondary input materials: participating in local and flexible by-product streams
- Acrylonitrile, sulfuric acid, hydrochloric acid, aluminum hydrate, iron ore, pickling liquor, copperas (ferrous sulfate)

40%
Industrial customers

60%
Municipal customers

2016 IN BRIEF

- Volume growth in line with market growth. Lower sales prices have impacted revenue development.
- Market position remains strong in our key markets.
- Advanced Water Treatment initiatives progressing well, e.g. on-line monitoring and control based applications for sludge dewatering and odor control.
- Strong operative EBITDA margin improvement from 13.7% to 14.9%, driven by better operational performance, customer focus and lower raw material prices.
- North American business impacted by raw material supply disruption, which was solved operationally during the year.
- Closures of manufacturing plants in Zaramillo, Spain, and Ottawa, Canada.

MARKET OUTLOOK

Our Municipal & Industrial segment's strategic intent is to grow by 2–4% annually, and to further improve profitability and maximize cash flow. For us to achieve greater growth figures, water treatment will need to be more strongly regulated and enforced – especially in emerging markets.

BUSINESS SPECIFICS

- Regulation-driven business
- Local business
- Municipal tenders
- Raw material backward integration
- Large customer base

KEMIRA'S COMPETITIVE ADVANTAGES

- Security of supply, speed, and logistics flexibility
- Expertise and decades of knowledge in water treatment applications
- Comprehensive portfolio
- Backward integration into other industries' by-products through long-term partnerships
- Extensive manufacturing network in mature markets

CUSTOMER VALUE

Improved

- Water treatment process reliability and efficiency: total water cycle management
- Regulatory compliance and beyond

STRATEGIC OBJECTIVE

Steady growth and cash flow generation

How?

- Further strengthen the base business in raw and waste water treatment
- Build on top of our strong existing customer base with innovation-driven Advanced Water Treatment applications
- Selective geographic expansion in Middle East, Africa and APAC
- Expand product offering by introducing existing products into new markets

KEMIRA

RISKS & OPPORTUNITIES

CHANGES IN CUSTOMER DEMAND

OPPORTUNITIES

- Rising demand for sustainable solutions for: packaging, board and tissue grades; chemistries enabling water recycling and reuse; and technologies enabling unconventional oil and gas recovery and enhanced conventional oil recovery

RISKS

- Further decline in demand for printing and graphical paper grades, leading to mergers and mill closures
- Prolonged/further slowdown in oil, gas and mining activity, due to soft market conditions
- Shift in demand towards water treatment technologies with lower chemical consumption
- Unforeseen customer production slowdowns

MANAGEMENT APPROACH

- Systematic monitoring of market development
- Focus on improved sustainability of products and solutions
- Customer intimacy and innovation
- Geographic and customer-industry diversity
- Comprehensive & diversified portfolio
- Flexible manufacturing network with competitive scale
- Active communications spotlighting the benefits of Kemira's technologies

CHANGES IN LAWS AND REGULATIONS

OPPORTUNITIES

- Increased demand for chemical treatment of water, due to stricter regulation and enforcement
- Regulatory developments expected to favor recycling and reuse of resources

RISKS

- Regulatory developments creating pressure to replace chemicals with other substances or technologies
- Bans/restrictions on substances used in Kemira's production
- Changing regulations on import/export and customs, increasing the need to effectively monitor and master global trade compliance

MANAGEMENT APPROACH

- Proactive follow-up and participation in regulatory discussions relating to chemical substances, water treatment and the circular economy
- Active evaluation of alternatives to debated substances
- Focus on R&D: innovations enabling more efficient use and recycling of resources
- Increased focus and resource allocation for company compliance matters (incl. trade compliance)

CHANGES IN COMPETITION

OPPORTUNITIES

- Large customers looking for a strategic supplier with a global footprint and commitment to their line of industry
- New product and service concepts such as all-encompassing chemistry management and increased use of digitalization
- Sustainability and compliance aspects emphasized in partner selection

RISKS

- Major competitor or customer consolidations that could reshape market positions
- New standard commodity chemical producers entering the market

MANAGEMENT APPROACH

- Regular strategy reviews to reflect changes in the competitive situation
- Close follow-up of competitive activity
- Investments in competencies and capabilities
- Differentiation and customer intimacy
- Participation in market consolidation and active M&A monitoring
- Continuous systematic and joint development of new product and service concepts

CHANGES IN RAW MATERIAL COSTS & AVAILABILITY

OPPORTUNITIES

- Efficiencies brought by active price and inventory management and forecasting
- Bio-based materials increasingly favored as an alternative to fossil-based materials

RISKS

- Increased costs impact profitability
- Dependency on a single source for raw material supply
- Breaks or disturbances in the availability of key raw materials

MANAGEMENT APPROACH

- Comprehensive strategic approach to sourcing
- Strategic purchase contracts, backward integration, tracking of prices of key raw materials
- Captive manufacturing of critical raw materials
- Strategic investment in energy-generating companies, and the hedging of a portion of the Group's energy and electricity spend

COMPETITION FOR KEY TALENT

OPPORTUNITIES

- → Attractive employer status in many areas, thanks to market-leading knowhow and people processes

RISKS

- → Key talent attracted by value chain players

MANAGEMENT APPROACH

- → Continuous identification of high potentials and key competencies for meeting future needs
- → Development and improvement of compensation schemes, learning programs, and career development programs
- → Systematic approach and commitment to employee engagement
- → Collaboration with educational institutes, employer branding

POTENTIAL FOR HAZARD & REPUTATIONAL DAMAGE

OPPORTUNITIES

- → Ability to demonstrate high performance and compliance with standards and expectations, giving us an advantage over smaller players

RISKS

- → Possible harmful incidents such as process safety deficiencies, machinery breakdowns, environmental damage, or employee health and safety incidents, together with the consequent financial losses and brand damage
- → Unauthorized IT system access or damage caused by computer malware/viruses, resulting in physical damage or financial losses

MANAGEMENT APPROACH

- → Systematic focus on achieving set targets and implementing certified management systems, efficient hazard prevention programs and related reporting, crisis management procedures, and personnel competency development
- → Insurance programs protecting the company against the financial impacts of eventual hazards
- → Systematic risk analyses and continuous improvements in procedural, technical and physical protection mechanisms

ADVERSE DEVELOPMENTS IN INNOVATION CAPABILITY

OPPORTUNITIES

- → Kemira's ability to innovate for resource efficiency, circular economy and bioeconomy together with customers

RISKS

- → New disruptive technologies by competitors
- → Slow product portfolio renewal, lack of differentiation
- → Failure in raising awareness regarding new products and service concepts and related competitive advantages

MANAGEMENT APPROACH

- → Customer intimacy and co-creation
- → Innovation metrics and sustainability checks
- → Differentiated products and technologies, application knowhow
- → Monitoring and scouting for new technologies
- → Ensuring adequate marketing and technical sales expertise and training

GEOPOLITICAL CHANGES

OPPORTUNITIES

- → New geographical markets become accessible

RISKS

- → Business interference or other adverse consequences caused by political actions, trade-related political decisions or economic uncertainties, either globally or in countries strategically important to Kemira

MANAGEMENT APPROACH

- → Continuous monitoring and consideration of geopolitical movements and changes, followed by appropriate business adjustments

Where water meets chemistry™

GRI DISCLOSURES

2016

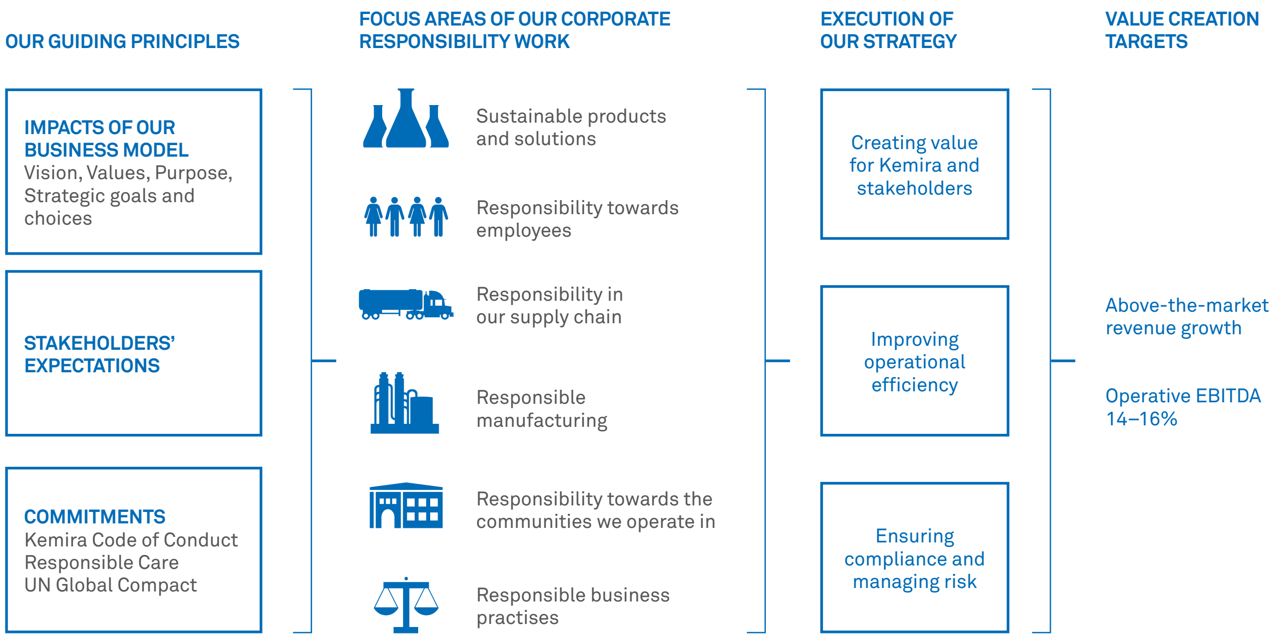
TABLE OF CONTENTS

GRI disclosures provide information about our economic, environmental and social impacts caused by our business activities and how we manage these impacts. The GRI disclosures are prepared according to the sustainability reporting framework of The Global Reporting Initiative (GRI). These disclosures together with the Business Overview provide an overview on corporate responsibility at Kemira.

1 CORPORATE RESPONSIBILITY AT KEMIRA

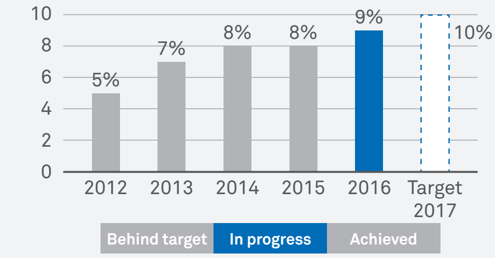
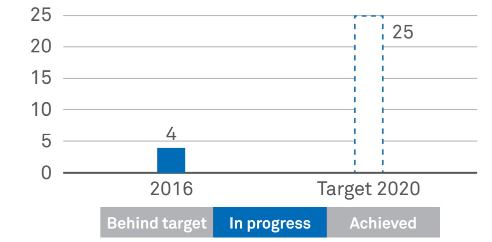
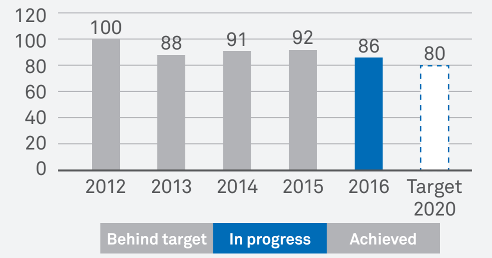
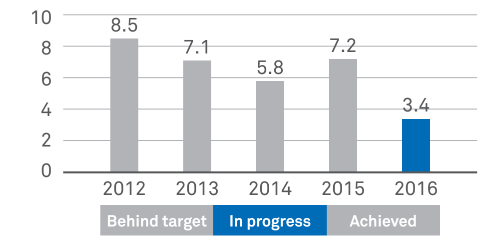
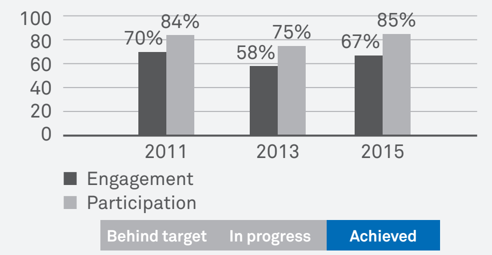
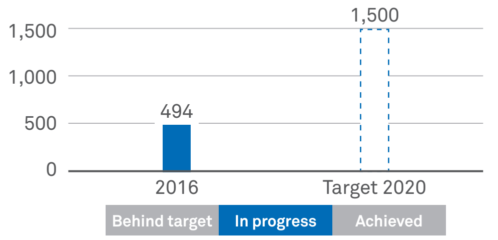
1.1 CONTRIBUTION TO VALUE CREATION

Our corporate responsibility work is guided by our strategic goals and choices, our stakeholders' expectations and our commitments to Kemira's Code of Conduct and internationally defined principles. In our corporate responsibility work, our selected focus areas, targets and key performance indicators (KPIs) all help us to execute our business strategy by creating value in the long term, improving our operational efficiency, ensuring compliance and managing risks. For Kemira, corporate responsibility means both being responsible throughout our own operations, and contributing to sustainable development all along our value chain.



1.2 TARGETS, PERFORMANCE AND RECOGNITIONS

OUR TARGETS AND PERFORMANCE IN 2016

Focus area	Topic, KPI, target value	Comments	Status
Sustainable products & solutions	**INNOVATION SALES** **Share of innovation revenue in total revenue, %** → 10% by the end of 2017 → KPI reported quarterly	Due to delays in commercialization of NPD projects the innovation sales target was slightly behind the 10% target. However, a record number of new products and new treatment concepts were launched in 2016 (14 versus 3 in 2015). Innovation sales target 10% was extended by one year until 2017.	
Responsibility in our supply chain	**SUPPLIER MANAGEMENT** **Number of onsite sustainability audits for highest risk suppliers** (with lowest sustainability assessment score) [1] → 5 suppliers audited every year during 2016–2020, average → KPI reported annually	The new supplier audit process was initiated, with 4 onsite audits conducted by an external service provider.	
Responsible manufacturing	**CLIMATE CHANGE** **Carbon index** → Kemira Carbon Index ≤ 80 by end of 2020 (2012 = 100) → KPI reported annually	The carbon index[2] improved as a result of purchased electricity sourced from less carbon-intensive sources. This improvement outweighed the negative effect of the sale of part of Kemira's holding in Pohjola Voima Oy, which entitled to nuclear power production capacity in Finland.	
Responsibility towards the employees	**OCCUPATIONAL HEALTH AND SAFETY** **Total Recordable Injury Frequency (TRIF)** (per million hours, Kemira + contractor, 1 year rolling average) → Achieve zero injuries (TRIF 2.0 by 2020) → KPI reported quarterly	Safety performance significantly improved due to our time and efforts invested on management commitment, employee engagement and higher visibility of safety related matters in our internal communication.	
	EMPLOYEE ENGAGEMENT **Employee engagement index based on Voices@Kemira biennial survey** → The index at or above the external industry norm **Participation rate in Voices@Kemira** → 75% or above → KPI reported biennially	Next biennial Voices@Kemira survey is being planned for 2017.	
	LEADERSHIP DEVELOPMENT **Leadership development activities provided, average** → Two (2) leadership development activities per people manager position during 2016–2020 [3] → KPI reported annually	The amount of leadership development activities during 2016 was very high (494), and we are significantly ahead of our target of having 1500 development activities[4] during 2016–2020.	

1 117 sustainability assessments have been performed for strategic, critical and large spend suppliers.
2 Carbon index value in 2015 was corrected from 91 to 92 due to more accurate information from few sites.
3 The cumulative amount of leadership development required to reach two (2) leadership development activities per people manager position during 2016–2020 equals 1,500 leadership activities (when number of people manager positions is 650–850).
4 Development activities include job rotations, coaching and mentoring, and development programs.

OUR RECOGNITIONS IN 2016

CDP

Kemira achieved a rating of Leadership (A-) in CDP's Climate Change 2016 evaluation (on a scale of A to D). This Leadership level indicates that the company is implementing current best practices in its actions to combat climate change. Kemira was rated above the chemical industry average in all of the categories assessed, i.e. governance and strategy, risk and opportunity management, emissions management, and verification.

ECOVADIS

Kemira's approach to Corporate Social Responsibility (CSR) management was given a Gold rating by EcoVadis. To achieve this recognition, a company must have an overall score of 62–100 on a scale of 1 to 100. Kemira's score was 75. The EcoVadis methodology framework assesses the policies and measures put in place by companies with regard to environmental issues, labor practices, human rights, fair business practices and sustainable procurement, as well as the related reporting. The results indicate that we have a structured and proactive CSR approach, with appropriate engagements, policies and tangible actions on major issues, as well as effective CSR Reporting on our actions and performance.

ROBECOSAM

Kemira participates in the RobecoSAM corporate sustainability assessment to understand our strengths, identify development areas, and examine how our sustainability performance is benchmarked against our peers in the chemical industry. In 2016, our score improved to 73 on a scale of 0–100 (from 71 in 2015). Our relative ranking (as a percentile) within the chemical industry is 68% (66% in 2015), indicating that Kemira's overall sustainability performance is clearly above the chemical industry average. The assessment results show that our performance is above the average both at an aggregated level and on most individual issues in the economic and environmental dimension, although within the social dimension our Human Capital Development still needs improvement to bring our performance up to the same level.

1.3 FOCUS AREAS OF OUR CORPORATE RESPONSIBILITY WORK

Our focus areas clearly reflect Kemira's priorities for managing economic, environmental and social impacts in our value chain. For each focus area we have defined key topics to facilitate our management approach. We follow the principles of continuous improvement including target setting and follow-up.

Corporate responsibility focus areas	Key topics for the management approach
Responsible business practises	• Code of Conduct, Compliance program • Anti-corruption and bribery • Human rights
Sustainable products and solutions	• Innovation for a sustainable product portfolio • Product stewardship
Responsibility towards employees	• Workplace safety – Occupational Health and Safety • Employee engagement • Leadership development
Responsibility in our supply chain	• Responsible business practices in our supply chain
Responsible manufacturing	• Reducing environmental impacts of our operations through better energy efficiency and safety of our operations
Responsibility towards the communities we operate in	• Safe neighborhood with Kemira • Engagement of our employees for the benefit of local communities

1.3.1 RESPONSIBLE BUSINESS PRACTICES

Our commitment: to ensure compliance with regulatory requirements and high ethical standards.

CODE OF CONDUCT

Our management approach for responsible business practices is based on our corporate values and our Code of Conduct. These principles demonstrate our commitment to conduct our business in compliance with all applicable laws and regulations, and according to ethical standards.

Our Code of Conduct sets the minimum standards of expected behavior for our employees and business partners. Our internal policies and procedures provide more detailed guidance to steer our daily work and decision making.

Every Kemira employee receives regular training on our Code of Conduct, which is available in 21 languages and distributed to all our employees. We also train selected employee groups on more specific compliance matters, such as anti-bribery, competition compliance and insider information.

We expect our business partners to follow our Code of Conduct for Suppliers, Distributors and Agents (CoC-SDA) in their business activities.

Both of these Code of Conduct documents can be found at www.kemira.com.

ETHICS AND COMPLIANCE AT KEMIRA

Our Ethics and Compliance Program aims to enhance compliance management at Kemira on a continuous basis. The Program addresses all of the following measures taken to manage risks related to ethics and compliance:

- PREVENTION: measures that help us proactively prevent ethics and compliance risks from materializing;
- DETECTION: measures that help us detect where ethics and compliance risks have materialized or may arise;
- RESPONDING: measures that help us investigate and respond to potential ethics & compliance breaches.

ORGANIZATIONAL STRUCTURE FOR ETHICS AND COMPLIANCE

- Our **Ethics and Compliance** function is responsible for overseeing the effective implementation of Kemira's compliance program. The status of the compliance program is also reported directly to the Audit Committee on a regular basis.
- The **Compliance Committee** oversees the management of compliance allegations to ensure fair and sufficient investigation, remediation and disciplinary action across our organization. The committee consist of Group General Counsel, EVP Human Resources, Head of Internal Audit, and Director, Ethics and Compliance.
- Our **Local Ethics and Compliance Officer Network** consists of employees across the organization who support our regional ethics and compliance activities as part of their work.

REPORTING MECHANISMS FOR NON-COMPLIANCE

We promote a culture that encourages our employees to speak freely. We provide everyone with a safe, secure and confidential way to express their concerns and ask questions when the usual ways are unavailable or inapropriate. Our employees have access to an externally hosted Ethics and Compliance Hotline, which is a 24/7 service enabling them to report potential violations of our Code of Conduct and any other concerns. All employees can anonymously submit such reports in their own languages, by phone or through a web form, wherever such channels are not restricted by local legislation. Employees can additionally report suspected non-conformities to Kemira's Ethics and Compliance function or Internal Audit function.

The email address responsibility(at)kemira.com can also be used by third parties to report cases of potential misconduct relating to Kemira or our business partners.

This information is available on our website and in the Kemira Code of Conduct for Suppliers, Distributors and Agents.

NUMBER OF GRIEVANCES FILED, ADDRESSED, AND RESOLVED THROUGH FORMAL GRIEVANCE MECHANISMS* IN 2016. (GRI G4: EN34, LA16, HR12, SO11)

G4-EN34: Number of grievances about environmental impacts	In 2016, public complaints about oil leakage at the FC Power hydrogen power plant located in the Kemira´s industrial site at Joutseno, Finland. See G4-SO2.
G4-LA16: Number of grievances about labor practices	No grievances about labour practices were filed through formal grievance mechanisms in 2016, and no previously filed grievances existed that needed to be resolved.
G4-HR12: Number of grievances about human rights	Four grievances regarding human rights impacts were filed in 2016 through our Ethics and Compliance hotline. All of these grievances were addressed and resolved during 2016.
G4-SO11: Number of grievances about impacts on society	No grievances about impacts on society were filed through formal grievance mechanisms in 2016, and no previously filed grievances existed that needed to be resolved.

* The formal grievance mechanism for our employees is the Ethics and Compliance Hotline. For external stakeholders there are several channels such as contacting Kemira management directly or responsibility[at]kemira.com.

KEY ACHIEVEMENTS IN 2016

- A Group-wide Ethics and Compliance Risk Assessment was performed in 2016 aiming to gain an overall understanding of Kemira's exposure to ethics and compliance risks. The assessment mainly focused on competition compliance, anti-corruption, third party due diligence, fraud, and ethics and compliance culture. The assessment was conducted jointly with an external partner. It involved an extensive survey, interviews, a workshop, and top management validation. The results suggest that Kemira has a strong culture of ethics and compliance and the compliance program has many building blocks well in place that help us to manage our compliance risks. The assessment recommendations enable us to develop our compliance program further.
- Kemira's Management Board approved a new Investigation Procedure in July, defining a standard investigation process for the timely and appropriate evaluation of any allegations involving potential non-compliance, misconduct or fraud. Our Ethics and Compliance function is responsible for the implementation of the new procedure.
- A Data Privacy Compliance Assessment was performed to evaluate how well Kemira's current personal data processing practices meet the requirements of the EU General Data Protection Regulation (GDPR), which will become effective in spring 2018. The assessment helped us to identify and plan actions required to improve our compliance with the GDPR. Kemira has nominated a project leader to take the development actions further.
- Our Ethics and Compliance function conducted regional ethics and compliance visits during 2016. These visits aim to increase our employees' awareness of ethics and compliance matters, and spotlight the principles of ethical business conduct.
- New part-time Local Ethics and Compliance Officers were nominated in 2016 to strengthen our compliance program. Their role is to provide support locally for related activities such as communications and training, while they will also help us to resolve compliance allegations and concerns.

FOR MORE INFORMATION, SEE THE RESPECTIVE MATERIAL ASPECTS AND GRI-G4 INDICATORS
Anti-corruption (SO3, SO4, SO5)
Public policy (SO6)
Anti-competitive behaviour (SO7)
Compliance (SO8, EN29, PR9)
Non-discrimination (HR3)
Human rights assessments (HR9)

1.3.2 SUSTAINABLE PRODUCTS AND SOLUTIONS

Our commitments: to provide sustainable products and solutions for our customers enabling improved resource and process efficiency, and to ensure the safe use of our products throughout their lifecycle.

Target	Key performance indicator (KPI) and related target value
Innovation sales*	Share of innovation revenue in total revenue → 10% by the end of 2017**

* Definition of innovation sales: new chemistries, product upgrades and tailored chemistries sold into new applications, developed and launched within the last 5 years.
** Target has been extented to 2017

INNOVATING FOR A MORE SUSTAINABLE PRODUCT PORTFOLIO

Sustainable value creation is an integral part of Kemira's strategy and business. We help our customers to improve their water, energy and raw material efficiency. Innovation drivers for new products include improved product performance, a lower environmental footprint in our value chain, and improved safety throughout the product lifecycle. Our innovation work also focuses on the identification and testing of alternative, more sustainable raw materials, particularly including secondary or bio-based materials. Our open innovation approach has especially been applied to find ways to increase the use of biodegradable raw materials.

SUSTAINABILITY REVIEWS IN NEW PRODUCT DEVELOPMENT

Sustainability evaluations are integrated into our New Product Development (NPD) process. The evaluations examine the economic, environmental and social impacts of any new product, compared to existing benchmarked solutions. The NPD process starts with an idea generation and collection phase, and continues with five development stages and decision gates. Each NPD project is supported by a cross-functional steering team, who ensure that sustainability and business related factors are considered at every stage of the process.

Successful NPD projects must demonstrate both improved sustainability and business benefits at each decision gate to justify the project's continuation, and ultimately the product launch. The NPD project must also demonstrate better overall sustainability both for Kemira's own operations, for example in terms of raw material use, safety and energy usage, and for our customers' operations, for example in terms of better process efficiency.

KEY ACHIEVEMENTS IN INNOVATION MANAGEMENT IN 2016

- Our innovation sales were 9%, while our target is 10% share of total revenue. The improvement was supported by an increase in the number of new products and concepts (14) launched in 2016 (3 in 2015).
- NPD projects are implemented with stronger cross-functional engagement and shorter throughput time of innovation projects, to speed up the rollout of new products. The time taken to get newly launched Kemira products to the market is on a par with or sligthly shorter than the chemical industry benchmark.
- We have continued to implement the NPD process applying a wider range of sustainability criteria, and with more quantitative evaluations of sustainability benefits.
- A new Technology Roadmap was approved by the Management Board with a focus on identifying secondary bio-based raw materials for our chemicals.

PRODUCT STEWARDSHIP AS A FOUNDATION FOR OUR SUSTAINABLE PRODUCT PORTFOLIO

Product Stewardship involves the proactive management of the health, safety and environmental aspects of a product throughout its lifecycle. It covers activities related to the initial introduction of a product, its evaluation and modification during the product lifetime, and eventually also the product's withdrawal from our product portfolio.

Our customers have their own health, safety and environmental requirements for their input materials, and they typically follow several voluntary certification schemes, including ecolabelling schemes, which set further expectations on our product offerings. Public discussion and concerns relating to specific chemicals and their hazards also affect our approach to product stewardship and chemical management. Kemira follows all such developments closely, and we take an active approach to fulfilling the expectations of different stakeholders.

KEY ACHIEVEMENTS IN PRODUCT STEWARDSHIP MANAGEMENT IN 2016

In 2016, a new Product Stewardship policy was issued. We also continued to enhance and implement our management process for priority substances. These are substances included in selected regulatory schemes with the anticipation of stricter regulation in the future, or substances seen as controversial or questionable by our stakeholders.

FOR MORE INFORMATION, SEE THE RESPECTIVE MATERIAL ASPECTS AND GRI-G4 INDICATORS
Products and services (EN27, EN28)
Customer health and safety (PR1, PR2)
Product and service labelling (PR3, PR4)
Marketing communication (PR6)
Product compliance (PR9)

1.3.3 RESPONSIBILITY TOWARDS EMPLOYEES

Our commitment: to ensure a safe and engaging workplace for all employees

Target	Key performance indicators (KPIs) and related target values
Occupational health and safety	Total Recordable Injury Frequency (TRIF) (per million hours, Kemira employees and contractors) → zero injuries (TRIF 2.0 by 2020)
Leadership development	Leadership development activities provided, long-term average → Two (2) leadership development activities per people manager position during 2016–2020
Employee engagement	Employee Engagement Index → Index at or above the industry norm
	Participation rate in Voices@Kemira → 75% or above

SAFETY IN THE WORKPLACE

Kemira's long-term vision for safety is "Zero harm to people" and we aim for world class safety level (TRIF 2.0) by 2020. We aim to build up a strong health and safety culture through visible management commitment and having skilled and well-trained employees. We ensure that incidents and safety observations are consistently reported, with improvements realized to address the root causes of incidents.

Our health and safety management practices are guided by our updated Environmental, Health, Safety and Quality Policy (Jan 1, 2017) which requires that Kemira's companies and operations will continue to implement and maintain management systems that meets all applicable international standards. By the end of 2016, 89% (86% in 2015) of Kemira's manufacturing sites were covered by OHSAS 18001 certification.

Our safety performance has improved as measured by the TRIF indicator (Total Recordable Injury Frequency per million hours worked), which includes fatalities, lost time injuries, restricted work cases and medical treatment cases covering Kemira employees and contractors working at our sites and facilities.

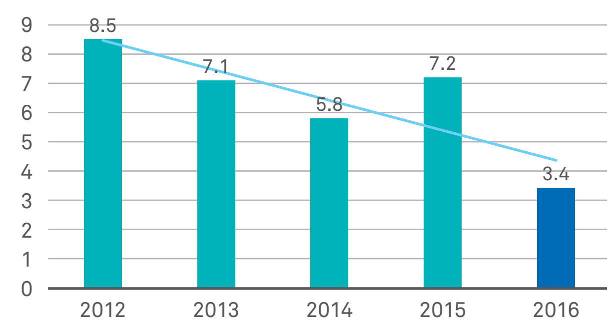
In 2016, 45 people were involved in accidents (TRI) in our operations. In comparison to 2015, we were able to decrease the amount by 42%. For Kemira employees, there has been no fatalities since 2005.

During 2016, we focused on improving our health and safety culture to prevent incidents and mitigating health and safety risks. We also ran an extensive behavior based safety assessment with findings indicating that Kemira is developing well in safety culture although improvements are still needed. The Behaviour Based Safety (BBS) culture development program was initiated on a global level and the program will continue in 2017. Two BBS management workshop were organized for our top management and communication of the company safety issues has been extensive.

We also continued improvements in our internal audit and review systems. We continued the implementation of EHSQ standards for critical activities, for example the contractor management standard. We also improved incident investigations to identify root causes to learn and share, and to avoid repeating similar incidents.

In 2016, all Kemira employees had safety as an obligatory bonus KPI based on safety performance (TRIF) and near miss reporting.

OUR SAFETY PERFORMANCE (TRIF)



TRIF indicator = Total Recordable Injury Frequency per million hours worked, including fatalities, lost time injuries, restricted work cases and medical treatment cases involving both Kemira employees and contractors working at our sites and facilities. Contractors' injuries and working hours have been included in our TRI figures since 2014.

EMPLOYEE ENGAGEMENT

Our Employer Brand promise, performance management, competence development, and leadership development are all central to our commitment to employee engagement and our goal of becoming an employer of choice.

EMPLOYER BRAND PROMISE

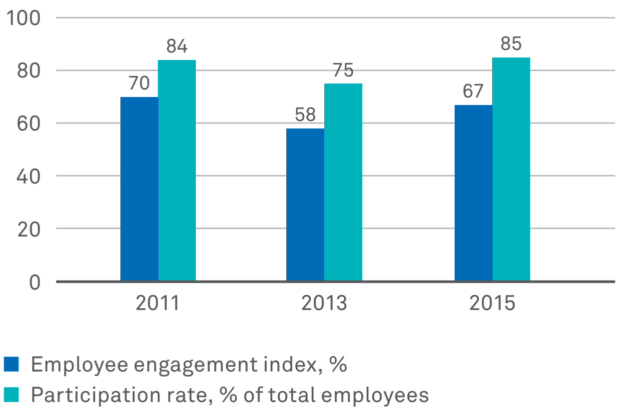
During 2016, we renewed our employer brand concept which describes our value proposition to our employees. We aim to offer employees the right mix of opportunities and challenges in a global and diverse working environment. Our result-oriented and collaborative culture empowers employees to solve the challenges of tomorrow in an inspiring company, so that together we can have a major impact on the future.

EMPLOYEE ENGAGEMENT SURVEY

To follow-up on the Voices@Kemira survey in 2015, we conducted a lighter Pulse survey in Q2, 2016, with a focus on the key drivers of the employee engagement. While the results of the two surveys are not directly comparable, feedback obtained through the Pulse survey indicated that engagement levels remained positive during the period.

The results of the Voices@Kemira people survey conducted in 2015 showed that we are meeting our target to have an employee engagement index at or above the industry norm, and a participation rate of 75% or above. Improved engagement was achieved by carefully creating, implementing and monitoring action plans designed to address areas for improvement identified in the previous such survey in 2013.

EMPLOYEE ENGAGEMENT INDEX



PERFORMANCE MANAGEMENT AND COMPETENCE DEVELOPMENT

Kemira's performance management process aligns our strategic targets with each employees' personal targets, performance evaluation, competencies and development plans. This process is now well established within Kemira as part of our leadership culture, and it forms the backbone of our management system. Our employees are required to take an active role in their own learning and development which includes keeping their competencies up to date in relation to their work and their career aspirations at Kemira. In 2016, we completed two pilots to test a simplified approach to competence assessment, development and evaluation. We will apply the key findings from this project when we shape our Performance Development Discussion (PDD) process in 2017.

LEADERSHIP DEVELOPMENT

We have continued to build a strong leadership bench to meet our business needs in relation to executing our strategy and driving our long-term growth. Our global Talent Management process is well established, and provides a structured way to identify employees with potential for leadership positions. We work with this identified leadership talent to ensure we have strong development plans in place. To this end, our leadership development target 2016–2020 is to provide on average at least two leadership development activities per people manager position during the period 2016–2020. In 2016, a total of 494 such activities were realized (target = 300), representing a significant improvement compared to 2015.

FOR MORE INFORMATION, SEE THE RESPECTIVE MATERIAL ASPECTS AND GRI-G4 INDICATORS
Employment (LA1, LA2)
Labor/management Relations (LA4)
Occupational health and safety (LA6)
Training and education (LA9, LA10, LA11)
Diversity and equal opportunity (LA12)
Equal remuneration for women and men (LA13)
Freedom of association and collective bargaining (HR4)

1.3.4 RESPONSIBILITY IN OUR SUPPLY CHAIN

Our commitment: To ensure compliance with responsible business practices in our supply chain

Target	Key performance indicator (KPI) and related target value
Responsible business conduct in our supply chain	Number of onsite sustainability audits for suppliers with lowest sustainability assessment score (=highest risk) 5 suppliers with highest risk onsite audited per year (average during 2016–2020)

STRUCTURE OF OUR SOURCING AND SUPPLY CHAIN MANAGEMENT [GRI G4-12]

Our Sourcing function is globally responsible for strategic spend management, while our Supply Chain Management function provides supply chain related services on regional level to our business segments.

- Our Sourcing activities cover the identification and selection of suppliers, the consequent negotiations and contract management, and the management of supplier relationships. Our supplier selection criteria are based on cost competitiveness, short-term operational excellence, long-term business stability as well as sustainability performance, which was added as criteria in 2016.
- Our Supply Chain Management activities cover all supply chain related services to our business segments once the supplier relationship has been established by our Sourcing function. Supply Chain Management services include Customer service, Logistics, Supply chain planning, and Procurement. The Supply Chain Management function has regional units that each provide all the services needed within their respective regions.

The total spend of sourcing categories Direct materials and Indirect goods and services amounted to about EUR 1.8 billion in 2016. The Direct materials cover all raw materials and energy while Indirect goods and services include all non raw material related spend for example equipment, services, and logistics.

We have approximately 13,800 suppliers consisting of 1,600 Direct material suppliers and 12,200 Indirect suppliers. Despite of the large number of suppliers, approximately 10% of all suppliers account for some 80% of the total spend. Geographically approximately half of our suppliers are in Europe.

MANAGING RESPONSIBILITY IN OUR SUPPLY CHAIN

Supplier risk and compliance management, supplier performance evaluation, and supplier relationship development are cornerstones of our management approach to ensure responsibility in our supply chain.

RISK AND COMPLIANCE MANAGEMENT

- Compliance with our Code of Conduct for Suppliers, Distributors and Agents is required by all our suppliers and business partners.
- Supplier segmentation is a foundation not only for supplier risk and compliance management but also for supplier relationship development. Our suppliers are segmented into four categories: strategic, critical, volume and base suppliers.
- New supplier screening is part of our New Vendor Creation process. All new potential suppliers fill in a questionnaire which checks for conflicts of interest and supplier acceptance of Kemira's Code of Conduct for Suppliers, Distributors and Agents (CoC-SDA), covering responsible business conduct, respect for human rights and provision of appropriate working conditions, and environmental responsibility. [Indicators GRI-G4-EN32; LA14; HR10; SO9 percentage of new suppliers screened.]
- Sustainability assessments. Strategic, critical or large spend suppliers undergo an assessment through an online platform provided by an external service provider.
- Sustainability and Quality Audits. Suppliers with low sustainability assessment score are audited with certified and qualified Audit Partner. Large spend suppliers undergo also quality audits, which include workplace health and safety standards, production quality and supply security.

SUPPLIER PERFORMANCE EVALUATION (SPE) PROGRAM

- The program provides our suppliers regular feedback on their operational performance. We rate our suppliers for the accuracy of invoice price and quantity, compliance to delivery terms and quality requirements, in order to identify where any improvement is needed. Supplier sustainability assessments are an established part of the overall evaluation program.

Structure of Kemira's supplier base	Direct materials	Indirect Goods and Services
Number of suppliers, approximately	**1,600**	**12,200**
EMEA	700 (44%)	6,700 (55%)
Americas	630 (39%)	4,000 (33%)
APAC	270 (17%)	1,500 (12%)
Number of suppliers that form 80% of the category spend	**180 (~10%)**	**1,220 (~10%)**

SUPPLIER RELATIONSHIP DEVELOPMENT

- Our Vendor Value Program@Kemira was launched in 2015 to support our management of strategic supplier relationships. The program is aimed to develop capabilities that will enable us to identify, partner with and manage strategic and critical suppliers along the various value chains associated with Kemira's product lines.

CODE OF CONDUCT FOR SUPPLIERS, DISTRIBUTORS AND AGENTS (COC-SDA)

All our suppliers must follow our Code of Conduct for Suppliers, Distributors and Agents (CoC-SDA) in relation to all of their dealings with Kemira. This code contains requirements on issues including responsible business conduct, respect for human rights and provision of appropriate working conditions, and environmental responsibility. Kemira's Sourcing and Procurement policy emphasizes that adherence to these principles is to be confirmed in writing by all repeat suppliers with an annual spend value of at least EUR 200,000 (EUR 250,000 starting from Jan 1, 2017) for indirect materials or EUR 500,000 for direct materials. Should a supplier refuse to give such a confirmation, and if Kemira cannot otherwise confirm that the supplier adheres to acceptable ethical principles, an evaluation is performed by our Sourcing personnel to assess whether we need to cease all purchases from them. Signed CoC-SDAs are registered in Kemira's contract archive. By the end of 2016, a total of 89% (93%) of Kemira's repeat suppliers had signed CoC-SDAs.

SUPPLIER SUSTAINABILITY ASSESSMENT PROGRAM

Our strategic, critical and large spend suppliers are requested to participate in a sustainability assessment process. The assessment platforms are provided by external third party companies which are specialized in standardized supplier sustainability evaluation based on the principles of the UN Global Compact and the Responsible Care program.

Based on the assessment results, the suppliers in the target group are classified into high, medium or low risk categories. High risk suppliers who do not comply with our Code of Conduct or meet our expectations in certain areas of their sustainability profile, are asked to implement an improvement plan, which define the corrective actions needed and an implementation timeframe. Suppliers with ongoing improvement plans are always reassessed the following year.

A total of 117 supplier sustainability assessments have been conducted since the launch of Supplier Sustainability program in 2014. Approximately 25% of total spend has been assessed. In 2016, our focus was on indirect and logistics service providers, with 43 such suppliers assessed.

SUPPLIER SUSTAINABILITY AUDITS

In those few cases where suppliers have failed to improve their sustainability performance to meet our standards and expectations, the suppliers are subject to sustainability audits at their own premises. In 2016, we conducted four audits in collaboration with an external service provider. Based on the audit results, a plan with corrective actions and implementation timeframe and follow-up schemes have been prepared. The corrective actions were related to health and safety and labor practices.

KEY ACHIEVEMENTS IN 2016

- A new supplier audit process was initiated, with four audits conducted in collaboration with an external service provider.
- Kemira issued a Slavery and Human Trafficking Statement in accordance with the UK Modern Slavery Act.

FOR MORE INFORMATION, SEE THE RESPECTIVE MATERIAL ASPECTS AND GRI G4 INDICATORS
Emissions (EN17) – Scope 3 (supply chain)
Transport (EN30)

1.3.5 RESPONSIBLE MANUFACTURING

Our commitment: to improve our manufacturing operations to enhance safety and environmental protection

Target	Key performance indicator (KPI) and related target value
Climate change	Kemira Carbon Index → an index score of at least 80 by the end of 2020 (baseline year 2012 = 100)

The main environmental impacts of Kemira's manufacturing operations relate to CO_2 emissions due to high energy intensivity of some of our product lines.

In 2016, our operations in Finland account for 40% of our total energy consumption, USA 33%, region South America 16%, and other countries 10%. The 14 largest manufacturing sites of our 66 operational sites during 2016 consumed 90% of the energy we use, and accounted for 85% of our CO_2 emissions. A substantial portion of our energy management activities is focused on these most energy-intensive sites, which include seven sodium chlorate manufacturing plants in Finland, USA, Uruguay and Brazil. Sodium chlorate plants use more than 80% of the electricity we purchase. Electricity prices consequently play an important role in the capacity utilization planning of our chlorate plants. The growing market for pulp has increased demand for chlorates as pulp bleaching agents, and has driven our investments in chlorate production.

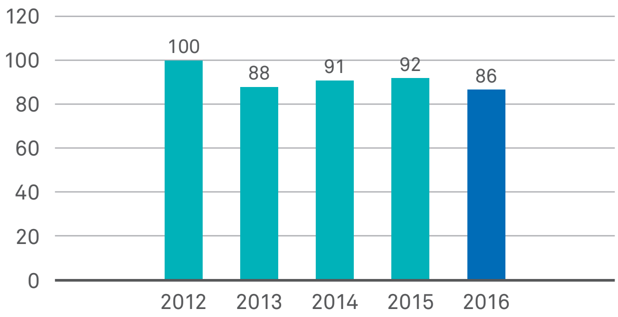
KEMIRA CARBON INDEX – TARGETED REDUCTIONS IN OUR CARBON FOOTPRINT

Kemira introduced a climate change target in 2014 to reduce the Kemira Carbon Index by 20 percentage points by the end of 2020 compared to the baseline year 2012. Our key measures to reduce carbon dioxide (CO_2) emissions include:

- Purchasing more steam and electricity generated using renewable, or less carbon-intensive energy sources
- Shifting our use of fuels towards less carbon-intensive energy sources
- Improving energy efficiency in our manufacturing sites

In 2016, the Kemira Carbon Index decreased to 86 (baseline year 2012: 100) as we were able to source a higher share of low-carbon energy and we continued to invest in more energy efficient equipment and production lines through our E3Plus energy efficiency program. This improvement outweighed the negative effect of the sale of part of Kemira's holding in Pohjola Voima Oy, which entitled to nuclear power production capacity in Finland. The Carbon Index for 2015 was updated from 91 to 92 due to more accurate data from a few sites.

KEMIRA CARBON INDEX
Based on Scope 1 and Scope 2 emissions

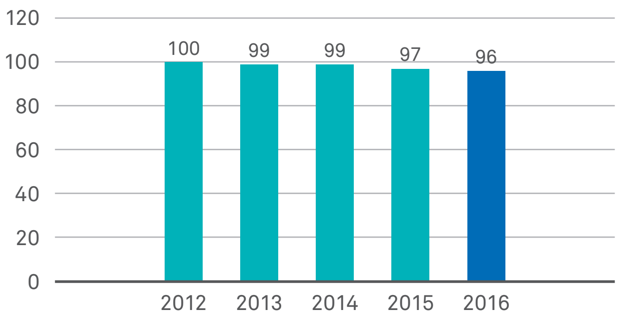


The Kemira Carbon Index measures our CO_2 performance both on a consolidated basis and for individual manufacturing sites. The index covers the CO_2 emissions of fuel consumption for direct energy production in our sites, as well as emissions from purchased steam and electricity, but it excludes direct emissions from chemical processing. The index is independent of the impacts of any changes in production volumes, but it can be affected by the product mix.

KEMIRA ENERGY EFFICIENCY INDEX

Our Energy Efficiency Index enables us to monitor energy efficiency both on a consolidated basis and for each site, reflecting the improvements we have achieved.

KEMIRA ENERGY EFFICIENCY INDEX



The Kemira Energy Efficiency Index measures the ratio of energy use and production normalized to a 2012 benchmark for our 14 most energy-intensive production sites (12 in 2015), which account for more than 90% of our total energy use. The index is not affected by changes in production volumes, but may be affected by the product mix.

OUR ENERGY EFFICIENCY ENHANCEMENT PROGRAM – E3PLUS

Improving energy efficiency in manufacturing is the best way for us to reduce our energy usage and related costs. Energy costs amount to approximately 10% of our total spend of sourcing.

During 2015–16 we have upgraded our E3plus Energy Efficiency Enhancement Program to step up the energy efficiency improvement work and activities started in 2010. The E3plus program aims to reduce the overall specific energy consumption of all our sites (measured as kWh per ton of product) and thereby reduce our energy costs.

The key focus areas of E3plus program are:

- Global alignment of energy efficiency management across all Kemira sites
- E3 Energy Reviews conducted to identify improvement projects and support their implementation
- Technical and economic evaluation of investement projects to improve energy efficiency
- Further development of our energy efficiency management system, facilitating ISO 50001 certification in selected major sites

Our energy efficiency measures focus on our most energy intensive sites. During 2016, we set site-specific energy efficiency targets for selected sites based on energy consumption data collected in 2015 in addition to the findings of E3 Energy Reviews.

In 2016, we also established a new global energy management team whose members represent manufacturing sites, our global energy management work, and electricity sourcing personnel. This continues strengthening our global energy efficiency and technology management work under global coordination. Our energy management team coordinates, steers and supports energy management activities across all regions.

Since the start of the E3 program in 2010, energy efficiency improvement measures have been continously implemented across Kemira's operations. In 2016, we continued to focus on manufacturing processes, with investments made in more energy efficient equipment and production lines. The continuous modernization of the process equipment used in our two highly energy-intensive chlorate plants in Finland, Joutseno and Äetsä, generated important savings. Our latest chlorate plant Ortigueira in Brazil is using the state-of-the-art energy efficient technology.

Energy savings were also achieved during 2016 through 20 projects implemented across Kemira's operations. The resulting energy savings totaled 11,068 MWh (7,664 MWh) with cost savings of EUR 0.5 million (EUR 0.3 million). The cumulative cost savings achieved through about 450 such initiatives completed globally since 2010 now total EUR 9.2 million.

RESPONSIBLE ENERGY SOURCING

The Kemira sites using the highest shares of the electricity we purchase are our energy intensive chlorate manufacturing sites in Finland and US. Our chlorate sites in Finland count for 41% (44%) of total purchased electricity during 2016.

Electricity price risk is mitigated through strategic investments in energy-generating companies, and by hedging a portion of our energy and electricity spend. Kemira owns shares in the Finnish energy companies Pohjolan Voima Oy (PVO) and Teollisuuden Voima Oyj (TVO). During 2016 Kemira sold off 43.3% PVO Class B shares which represented approximately 16% of Kemira´s share of its electricity production capacity in Finland. We purchase the rest of the electricity we use in Finland from Nord Pool. In other countries, energy is purchased from local suppliers taking into account the favorability of the energy source.

During 2016, Kemira received Guarantee of Origin certificates for 111,678 MWh (105,895 MWh in 2015) of electricity purchased from hydropower and wind energy suppliers. All the certificates granted to Kemira were cancelled i.e. made non-tradable, with their benefits exclusively redeemed by Kemira.

FOR MORE INFORMATION, SEE THE RESPECTIVE MATERIAL ASPECTS AND GRI-G4 INDICATORS
Materials (EN1, EN2)
Energy (EN3, EN5, EN6)
Water (EN8, EN10)
Emissions (EN15, EN16, EN17, EN18, EN19, EN20, EN21)
Effluents and waste (EN22, EN23, EN24, EN25)
Environmental expenditures and investments (EN31)
Environmental compliance (EN 29)
Local communities (SO2)

1.3.6 RESPONSIBILITY TOWARDS LOCAL COMMUNITIES

Our commitment: to establish and maintain credible relationships with local communities

Kemira is committed to create positive social impacts in communities close to our operations. Key priorities include transparency on safety and environmental impacts in the vicinity of our manufacturing sites, measures to promote chemistry and our industry as an educational and employment opportunity, and the maintenance of open dialogues with local authorities and other stakeholders.

We regularly conduct environmental impact assessments and systematic process risk assessments of our operations. We conduct assessments at every manufacturing site, as defined in regulatory requirements, the ISO 14001 management system and our own internal standards.

In our dealings with local stakeholders we emphasize transparency, trust and continuous dialogue. We also encourage our employees to engage with local community initiatives and activities on a voluntary basis.

Our Sponsorship and Donation Policy, launched in 2015 and revised in 2016, provides guidance on the permissibility, appropriateness and general acceptability of cash donations, sponsorships, contributions to community involvement initiatives and other donations made on behalf of or in the name of any Kemira company.

All our community involvement activities are locally selected, planned and implemented. Examples of local activities include open house days for local residents at our manufacturing sites, cooperation with local schools and universities, and local charity work. In 2016, Kemira organized approximately 40 local community activities.

FOR MORE INFORMATION, SEE THE RESPECTIVE MATERIAL ASPECTS AND GRI-G4 INDICATORS
Local communities (SO1, SO2)

2 OUR MANAGEMENT APPROACH

Our management approach is based on our commitments, on our stakeholders' expectations, and on the need to manage the most material impacts and risks due to our business model. Management activities are integrated into company-wide management systems.

2.1 OUR COMMITMENTS

CODE OF CONDUCT

The Kemira Code of Conduct reflects the principles of the OECD Guidelines for Multinational Enterprises. It outlines the fundamental requirements affecting how we do business, and sets standards for behavior throughout the company. We also expect our suppliers and other business partners to maintain the same high standards in their own operations, as defined in our Code of Conduct for Suppliers, Agents and Distributors.

COMMITMENTS TO INTERNATIONALLY DEFINED PRINCIPLES

- The United Nations Global Compact is signed by Kemira as our commitment to respect and promote human rights, implement decent work practices, reduce our environmental impact, and combat corruption.
- The Responsible Care® initiative is a voluntary commitment made by the global chemical industry to improve health, environmental performance and security, and to communicate with stakeholders about products and processes. The Responsible Care Global Charter expands and extends the process of continuous improvement beyond the manufacturing of chemicals to other activities, especially those associated with the safe use and handling of products along the value chain. Kemira Oyj has signed both the Responsible Care initiative and the Responsible Care Global Charter.

2.2 STAKEHOLDER EXPECTATIONS

Our key stakeholders include our shareholders, lenders, customers, employees and suppliers. Other important stakeholder groups include the local communities where Kemira operates, regulatory bodies, trade associations, decision makers and opinion leaders.

- A significant share of our investors practise Socially Responsible Investing (SRI). Among the 20 largest shareholders which own 62% of Kemira shares, 13 investors have signed the Principles of Responsible Investment representing 22% ownership of Kemira shares.
- Many of our customers are sustainability leaders in their respective industrial sectors. Kemira forms part of their value chains, and we are expected to demonstrate the same high commitment to sustainable business as our customers.
- Our employees see sustainable business conduct as an important factor behind their engagement with Kemira, according to our employee surveys.

We regularly review our stakeholders' expectations and concerns to help us update our sustainability priorities. According to the most recent review, conducted in spring 2015, our stakeholders continue to highlight the importance of topics such as sustainable products, safety, employee development, business ethics and compliance, responsibility along the supply chain, and reductions in environmental impacts both in our own operations and in the value chain. These stakeholder topics are addressed through our corporate responsibility focus areas. Our approach to stakeholder engagement includes activities ranging from information sharing to active dialogue and collaboration on issues of mutual interest.

OUR MANAGEMENT APPROACH TO STAKEHOLDER ENGAGEMENT

Kemira stakeholders (G4-24)	Basis for identification and selection of stakeholders (G4-25)	Kemira's approach to stakeholder engagement (G4-26)	Key topics and concerns raised through stakeholder engagement (G4-27)	Kemira's response (G4-27)
Shareholders and lenders	• Share of value creation through dividends and interests payments • Expectations for return on investment, good corporate governance practices and sustainability performance	• Regular events like Capital Markets Day, roadshows, conference calls and one-to-one meetings. 23 roadshow days; 390 institutions were met in 225 meetings in 2016	• Management approach to sustainability issues • Potential business risks and opportunities related to sustainability issues	• Responses to investor questionnaires • Transparent reporting and disclosure (e.g. participation in CDP)
Customers	• Our customers are Kemira's main source of value creation • Our customers' expectations and needs drive Kemira's product portfolio and offerings	• Direct customer contacts • Webinars, exhibitions and trade shows • Product testing and plant trials • Customer surveys	• Product safety • Transportation safety • Solutions to reduce environmental footprints • Sustainability risks in our supply chain • Kemira's sustainability performance	• Sustainability checks in New Product Development • Product stewardship • Transportation safety programs • Supplier Performance Evaluation program • Sustainability performance data submitted on request
Employees	• Share of value creation through compensation and benefits • Employees' engagement, well-being and capabilities influence our operational performance and value creation.	• Biennial Voices@Kemira engagement survey, plus lighter Pulse surveys as follow-up • Performance management process • Kemira European Forum • Town hall meetings • Compliance & ethics hotline	Key topics based on the Voices 2015 survey: • Performance management and rewards • Visible role modelling emphasizing Kemira's values	• Performance and development discussions • Leadership development, skills development and training programs • Documented action plans launched in response to the findings of employee surveys
Suppliers	• Share of our value creation through payments for goods and services. • Suppliers' sustainability performance may impact our operational efficiency and business risks	• Working closely with core suppliers to help them meet our sustainability performance expectations, and take corrective actions if needed (supplier relationship programs)	• Our customers' expectations regarding responsible business practices in our supply chain • Business ethics and compliance	• Suppliers are asked to commit to Kemira Code of Conduct for Suppliers, Distributors and Agents • Supplier sustainability assessments and audits
Local communities	• Our value creation in the form of tax payments and employment. • The safety and environmental performance of our operations may impact the acceptance of our local presence.	• Dialogue and collaboration with local communities at major sites to ensure we understand and address their concerns • Collaboration with schools and universities	• Safety and environmental hazards • Employment opportunities	• Transparency • Regular and open dialogue with local communities, e.g. open door days • Environmental impact and process safety risk assessments
Regulatory bodies, trade associations, decision makers and opinion leaders	• These stakeholders have the capability to influence or make political decisions on environmental issues and legislation relevant to Kemira's business.	• Memberships in industrial trade associations • Subject-specific dialogue with regulatory bodies on national and EU level	• Resource efficiency • Chemicals safety	• Position paper on relevant topics such as the circular economy, water reuse and phosphorus recovery • Participation in CEFIC and its member organizations

2.3 MATERIAL IMPACTS AND RISKS DUE TO OUR BUSINESS MODEL

Our strategic goals and choices define which customer segments we focus on, what products we manufacture, the reach of our geographical presence, and how we get our products to the market. These decisions result in various economic, environmental and social impacts either due to our own activities or as a result of our business relationships. Direct impacts relate to the performance of our own operations, while indirect impacts are generated in our supply chain and in the use of our products by our customers.

OUR MATERIAL ECONOMIC IMPACTS

- We generate revenue by selling chemical products for industrial uses in the pulp and paper, oil and gas, mining, and water treatment industries.
- We have a direct economic impact on suppliers and service providers through the payments we make for raw materials and services, to employees through compensation and benefits, to capital providers through dividends and interest payments, to the public sector through taxes, and to society through local community projects, sponsorships and donations.

OUR MATERIAL ENVIRONMENTAL IMPACTS

- Our main environmental impacts and risks concern CO_2 emissions and the safety of our operations.
- Indirect impacts of our products: Global resource scarcity is an important business driver for our customers. Our customers process, extract and refine natural resources such as oil, gas, minerals or fibers. Kemira is not directly involved in the utilization of natural resources as such but we do provide solutions to enable the effective utilization of these resources with the lowest possible environmental impact.
- Direct impacts of our manufacturing: We convert input materials into products through processess causing also wastes and emissions. Some of our major product lines are very energy-intensive. The main environmental impacts of our manufacturing relate to CO_2 emissions and process safety.
- Direct impacts of our products: Our manufacturing and supply operations involve the transportation, handling and processing of various kinds of chemicals, including certain harmful and hazardous substances.
- Indirect impacts of our supply chain: Our logistics operations involve an extensive network of suppliers and customers whose operations have environmental impacts both upstream and downstream of our operations, through processes such as transportation. We currently have 16,000 ship-to-customers in 112 countries, and a manufacturing network with 63 sites and business units in 40 countries. Our supplier base for all direct materials and supplies, logistics services and indirect materials is very extensive, covering some 13,800 suppliers. However, only a limited number of large global suppliers exist for some of our main raw materials, while for secondary raw materials (recycled or industrial by-products) we typically rely on local suppliers, who often operate in industrial symbiosis with Kemira.

OUR MATERIAL SOCIAL IMPACTS

- Our main social impacts, and related risks, concern the safe use of our products along the value chain and any possible non-compliance with responsible business practices in our own operations or those of our business partners.
- Direct impacts on local communities: Our plants seldom have a dominant position in their local communities, for example in terms of significant employment impacts, because our manufacturing units are mainly small or mid-size, and mainly located in more extensive industrial areas such as chemical parks.
- Direct impacts on workforce education and training: Our manufacturing operations are not labor intensive, but we do require qualified and skilled employees in every country where we operate. Our R&D and sales operations also require highly qualified professionals.
- Direct impacts on compliance requirements: Our external business environment is extensively regulated by legislation and industry norms covering business conduct, product life cycle management, and the health, safety and environmental aspects of our products and manufacturing processes.
- Direct impacts on product responsibility: Our product portfolio includes about 2,400 products which must all be registered and documented according to national, regional and global legislation and standards in order to ensure they are safely used throughout their life cycle.
- Indirect impacts on compliance requirements in supply chains: Our suppliers' performance in terms of labor practices, human rights and ethical business behavior can represent a risk in terms of negative indirect impacts in our value chain.

OUR BUSINESS IMPACTS AND RESPECTIVE MATERIAL ASPECTS FOR PERFORMANCE DISCLOSURES

	INDIRECT IMPACTS		DIRECT IMPACTS	INDIRECT IMPACTS	
	Production of input materials and energy	**Upstream transportation**	**Kemira's own operations**	**Downstream transportation**	**Use of Kemira products**
Economic impact			Economic performance		
Environmental impacts	• **Emissions** • **Suppliers' performance** in terms of environmental impacts	• **Emissions** • **Suppliers' performance** in terms of environmental impacts	• **Materials and energy** • **Emissions** • **Effluents and wastes**	• **Emissions** • **Service providers' performance** in terms of environmental impacts	• **Emissions** • **Performance of our products and services**
Social impacts	• **Suppliers' performance** in terms of labor practices, human rights and ethical business behavior	• **Suppliers' performance** in terms of labor practices, human rights and ethical business behavior	• **Labor practices and decent work:** employment and labor relations; occupational health and safety; training and education; diversity and equal opportunity; equal remuneration for women and men • **Human rights:** non-discrimination; freedom of association and collective bargaining; human rights assessments • **Societal:** anticorruption, anticompetitive behavior, public policy, local communities • **Product responsibility:** customer health and safety; product and service labelling; marketing communications; product compliance	• **Service providers' performance** in terms of labor practices, human rights and ethical business behavior	

2.4 MANAGING OUR MATERIAL IMPACTS AND RISKS

Our management approach is guided by our Code of conduct and policies, and the systematic implementation of our integrated management systems. We regularly conduct due diligence assessments, management reviews and audits to monitor the effectiviness of our management approach. Internal and third party audits are conducted according to a defined program. Our aim is to bring together all our operational sites, our Enterprise Resource Planning (ERP) processes, our work procedures and our responsibilities under one integrated management system globally. This also includes an integrated approach to our global Environmental, Health, Safety and Quality (EHSQ) management system, which is based on the ISO 9001, ISO 14001 and OHSAS 18001 standards.

DUE DILIGENCE ASSESSMENTS AND INTERNAL AUDITS

	Key policies and principles	Due diligence processes*	Internal audits**
Economic impacts	• Tax policy	• Enterprise Risk Management process	• Evaluation of internal controls • Reliability of financial reporting • Effectiveness and efficiency of operations
Supply chain impacts	• Sourcing and procurement policy • Code of Conduct for Suppliers, Distributors and Agents	• Supplier assessment program • Trade compliance screening • Third party due diligence project initiated	
Environmental impacts	• Environmental, Health, Safety and Quality (EHSQ) Policy and Vision	• Environmental impact assessments • Process hazard analysis • Legal compliance audits • Stakeholder surveys	• Management system audits • Process safety audits • E3 Energy reviews at site level • Group energy reviews in alignment with ISO 50001 • Self-assessments
Social impacts	• EHSQ Policy • Product stewardship policy • Compensation approval policy • Competition law compliance policy • Gifts, entertainment and bribery policy	• Behavior based safety program • Human Rights Impact Assessment 2014 • Priority substance identification and prioritization 2015 • Stakeholder surveys	• Site specific EHS audits • Product regulatory compliance at manufacturing sites • Internal legal compliance audits • Internal management system audits
Governance, compliance and ethics	• Code of Conduct	• Ethics and compliance survey 2016 • Non-compliance management (investigation procedure and Compliance Committee) • Legal compliance audits > due diligence	• Evaluation of internal controls

* Due diligence: proactive process to identify the actual and potential negative social, environmental and economic impacts of an organization's decisions and activities, with the aim of avoiding and mitigating negative impacts.

** Internal audit is performed within an organization to measure its strengths and weaknesses against its own procedures or methods and/or against external standards adopted by (voluntary) or imposed on (mandatory) the organization. An internal audit is conducted by auditors who are employed by the organization being audited.

OUR EHSQ MANAGEMENT SYSTEM

The effective management of Environmental, Health, Safety and Quality (EHSQ) issues is a fundamental aspect of our efforts to conduct our business in a responsible way.

KEMIRA'S VALUE RELATING TO EHSQ:
We care for people and the environment

KEMIRA´S EHSQ VISION:
Zero environmental harm
Zero harm to people
Customer Satisfaction

Our EHSQ policy applies to all Kemira's locations and operations – and also to anyone working on behalf of Kemira or in alliance with Kemira. The policy sets out our commitment to continuously enhance our health and safety performance, reduce harmul environmental impacts, enhance our energy efficiency, improve customer satisfaction levels, and eliminate quality failures. The updated EHSQ policy (Jan 1, 2017) requires that Kemira's companies and operations will continue to implement and maintain management systems that meets all applicable international standards.

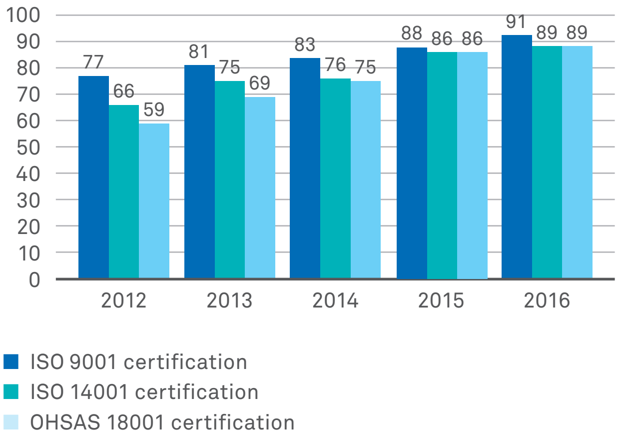
Our EHSQ management system covers our value chain processes all the way from our suppliers to our customers, to ensure that all of the environmental, health and safety and quality aspects are well managed. Related key performance indicators (KPIs) and annual improvement targets are set at global, regional and site level, and we conduct monthly KPI monitoring and quarterly management reviews on a regional basis.

MAIN SCOPE OF EHSQ MANAGEMENT SYSTEMS:

Environmental impact	ISO 14001
Health and safety	OHSAS 18001
Customer satisfaction	ISO 9001

Our EHSQ management system is externally audited through a three-year audit scheme. In 2016, the auditors examined 77 site locations (77 in 2015), including manufacturing sites, major office locations and R&D centers. The certification rates for manufacturing site locations were 91% (88%) for ISO 9001, 89% (86%) for ISO 14001, and 89% (86%) for OHSAS 18001.

CERTIFIED MANUFACTURING SITES, %



Total number of manufacturing sites 63 at the end of 2016.

Kemira implements a Plan, Do, Check, Act (PDCA) process of the EHSQ management system as part of our commitment to achieve continual improvement. The process includes conducting internal and external audits of our manufacturing plants, research and development facilities, and offices. Kemira also reviews (and updates as necessary) the EHSQ standards, procedures, policies, and related elements that are part of the management system. Kemira has developed a global EHSQ Document Management System (DMS) to manage and maintain our controlled documents, records, and archived documents created as part of this process.

In 2016, Kemira updated and approved standards for Contractor Management, Emergency Planning and Preparedness, Field Sales EHS, Management Review and Management System Auditing, Process Safety, and Transportation EHS. In addition, EHSQ developed a Spill Prevention Standard that will be approved and published in the first quarter of 2017.

OUR ENERGY MANAGEMENT SYSTEM

Our energy policy is part of our EHSQ policy.

- Major energy consuming sites in the European Union must be certified under ISO 50001 to meet the requirements of the EU's Energy Efficiency Regulation. Our Helsingborg site in Sweden, Äetsä and Joutseno sites in Finland, and Kemira Oyj's energy management system in Europe are duly certified through ISO 50001 energy management schemes.

2.5 GOVERNANCE OF OUR CORPORATE RESPONSIBILITY MANAGEMENT APPROACH

RESPONSIBILITY FOR ECONOMIC, ENVIRONMENTAL AND SOCIAL TOPICS

GRI G4: G4-34, G4-36

Our CEO is ultimately accountable for sustainability and overall performance of our corporate responsibility targets. The CEO reports on these issues directly to Kemira's Board of Directors.

Our Management Board approves our corporate responsibility targets and key performance indicators (KPIs). The Board of Directors is duly informed about these targets, and our related performance, and its members also approve the Business overview and GRI disclosures of Kemira's Annual Report. The targets and their respective KPIs are reviewed annually, with performance follow-ups made on a quarterly basis and externally reported.

Responsibilities for individual targets are shared between the members of the Management Board (MB), as outlined below. Segments and functions are responsible for their implementation and for driving performance.

Areas of accountability	Responsibility by position
• Responsible business practices • Ethics and compliance	Group General Counsel (reports directly to the CEO and is a secretary of the MB, though not a member of the MB)
• Economic impact (Tax policy, Dividend policy)	Chief Financial Officer
• Responsible sourcing • Climate Change (Emissions based on purchased energy, Scope 2) • Sustainable products and solutions: Product stewardship	EVP, Operational Excellence
• Energy efficiency • Climate Change (Emissions from our own energy production, Scope 1) • Safety	EVP, Projects & Manufacturing Technology
• Leadership and employee engagement	EVP, Human Resources
• Sustainable products and solutions: Innovation	Chief Technology Officer
• Local community engagement • Corporate responsibility function	SVP, Communications & Corporate Responsibility (reports directly to the CEO, but is not a member of the MB)

ORGANIZATION AND ROLE OF KEMIRA'S CORPORATE RESPONSIBILITY FUNCTION

The Corporate Responsibility function, led by the Director, Corporate Responsibility is responsible for managing company-wide processes including:

- Identifying, understanding and managing the most significant economic, environmental and social impacts of our business activities
- Defining our corporate responsibility priorities and targets
- Coordinating, monitoring and reporting on activities related to our corporate responsibility targets
- Coaching and supporting the organization
- Engaging in stakeholder dialogue on sustainability matters
- Establishing processes, tools and metrics to ensure our compliance with relevant external norms and standards, guidelines and expectations.

The Corporate Responsibility Management Team, chaired by Director, Corporate Responsibility, supports and coordinates the implementation of our corporate responsibility targets. The members of the team represent the organizational units that are responsible for the implementation and business integration of these targets, and for management and performance follow-up in their respective organizational units. They also help to prepare proposals for target updates and KPIs for approval by Kemira's Management Board, and support the quarterly performance reporting process.

3 OUR PERFORMANCE INDICATORS

3.1 ECONOMIC PERFORMANCE INDICATORS

MATERIAL ASPECT: ECONOMIC PERFORMANCE

G4-EC1: DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED

Kemira generates economic value from expertise, products and sustainable solutions where water meets chemistry enabling our customers to improve their water, energy and raw material efficiency. Kemira distributes the generated economic value to various stakeholders. This includes suppliers and service providers through payments for raw materials and services, employees through compensation and benefits, capital providers through dividends and interest payments, public sector through taxes, and society through local community projects, sponsorship and donations. The economic value retained is reinvested in the company for capital investments, R&D and technology development. The economic value retained increased to EUR 184 million (160) due to sale of electricity assets.

Stakeholder	Economic value, EUR million (cash flow based)	2016	2015	2014	2013	2012
	Direct economic value generated					
Customers	Income received from customers on the basis of products and services sold, and financial income	2,386	2,350	2,100	2,268	2,312
	Direct economic value distributed					
Suppliers	Payments to suppliers of raw materials, goods and services	1,701	1,709	1,684	1,686	1,737
Employees	Employee wages and benefits paid	364	356	283	327	340
Investors & lenders	Dividends, interests paid and financial expenses paid	114	113	112	113	114
Government & Public sector	Corporate income taxes paid	23	12	33	27	30
	Economic value retained	184	160	-12	115	91

Community investments were EUR 0.32 million in 2016 through sponsorships and donations.

Kemira's financial mid- to long-term targets are above-the-market revenue growth (market growth estimate 2015–2020, CAGR: ~2.0%), operative EBITDA margin of 14–16% and gearing level below 60%. These group level financial targets are translated into business goals and performance measures for each business segment and further down to individual performance targets for employees.

The management approach to economic value generated and distributed is based on the Finnish Corporate Governance Code and the Limited Liability Companies Act, which states that the purpose of a company is to generate profits for its shareholders, unless otherwise provided in the Articles of Association. The overall responsibility for financial performance at group level belongs to the Board of Directors and CEO. Kemira has organized its global activities by three business segments, which bear full profit and loss responsibility. The segment heads are members of the Management Board. Kemira reports and discloses its financial statements in accordance with the International Financial Reporting Standards (IFRS). For detailed information, see the sections Corporate Governance Statement and the Financial Statement in the Kemira Annual Report 2016.

OUR APPROACH TO TAX

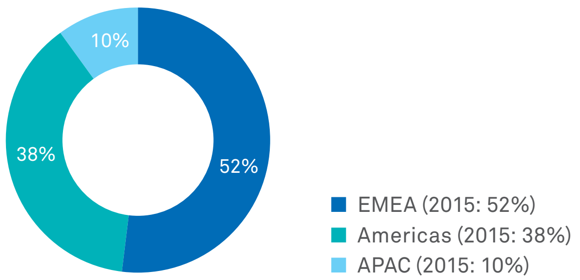
Business rationale: We are a responsible corporate citizen in all our operating countries. Kemira's tax approach supports responsible business performance. Our tax approach is based on our values, corporate strategy, the Kemira Code of Conduct and our tax policies. We target upfront certainty on our tax positions. We do not operate in tax haven countries for tax reasons.

Compliance: Our principle is to strictly comply and pay taxes in accordance with all relevant tax laws and regulations as well as international best practices in all jurisdictions where we operate. In addition to corporate income taxes, Kemira pays other taxes, including e.g. payroll taxes, social security contributions, property taxes, with holding taxes, value added taxes, and customs duties.

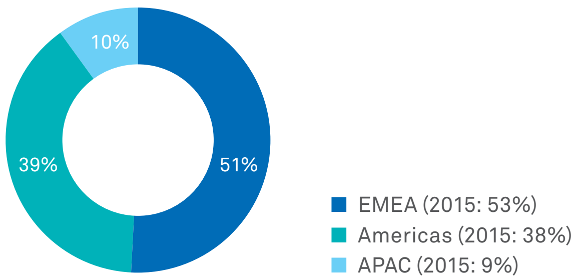
Transparency and relationships with tax authorities: Transparency is an inherent part of our tax strategy. We are committed to high quality tax declarations and reporting by observing applicable disclosure, documentation and reporting requirements such as IFRS. We seek to develop and maintain good working relationships with the tax authorities. We aim at open and constructive dialogue with them to ensure effective cooperation.

ECONOMIC VALUE DISTRIBUTED BY REGIONS

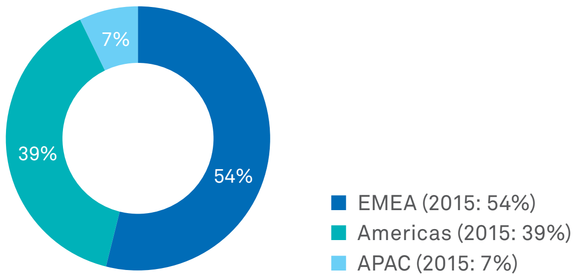
REVENUE BY CUSTOMER LOCATION



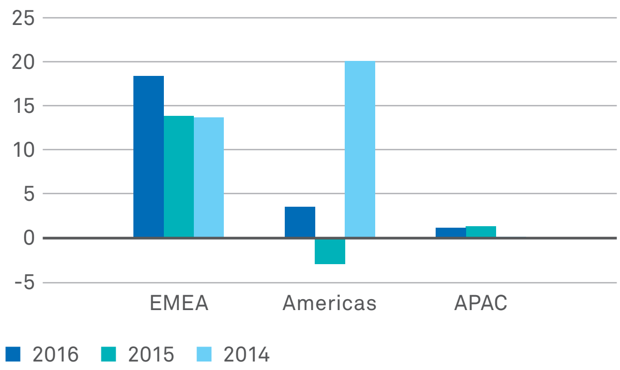
PAYMENTS TO SUPPLIERS OF RAW MATERIALS, GOODS AND SERVICES



EMPLOYEE WAGES AND BENEFITS



CORPORATE INCOME TAXES, MILLION EUR



In 2015, Americas was refunded the overpaid taxes of 2014

Transfer pricing: Kemira applies the arm's length principle in intra-group transactions and targets an appropriate remuneration of activities amongst related parties in accordance with internationally accepted standards, such as the OECD Transfer Pricing Guidelines.

Our OECD BEPS action plan: Kemira follows closely and is committed to comply with the OECD BEPS (Base Erosion and Profit Shifting) requirements and related legislative changes. Kemira has evolved its documentation and compliance processes to fulfill new transfer pricing documentation and Country-by-Country Reporting requirements.

G4-EC3: COVERAGE OF THE ORGANIZATION'S DEFINED BENEFIT PLAN OBLIGATIONS

The coverage of Kemira's defined benefit plans are reported in the Notes to the Consolidated Financial Statements: Note 22 Defined benefit plans. Kemira has various pension plans in accordance with local conditions and practices. The percentage of salary contributed by employee or employer to the benefit plan, and the level of participation in retirement plans are defined according to local legislation and practices.

G4-EC4: FINANCIAL ASSISTANCE RECEIVED FROM GOVERNMENT

Financial assistance received from governments is reported in the Notes to the Consolidated Financial Statements: Note 4 Operating expenses. Kemira received EUR 0.8 million (EUR 1.2 million) in government grants for R&D in 2016 in Finland.

3.2 ENVIRONMENTAL PERFORMANCE INDICATORS

MATERIAL ASPECT: MATERIALS

G4-EN1: MATERIALS USED BY WEIGHT OR VOLUME

The majority of Kemira's raw materials are non-renewable materials. The renewable materials used include mainly starches, tall oil, and fatty acid derivatives.

G4-EN1: MATERIALS USED BY WEIGHT, 1,000 tonnes	**2016**	2015	2014	2013
Total materials purchased	3,536	3,293	3,276	3,521
Non-renewable materials	3,458	3,222	3,217	3,462
Renewable materials	78	71	59	59
Share of renewable materials, %	2.2%	2.2%	1.8%	1.7%

G4-EN2: PERCENTAGE OF MATERIALS USED THAT ARE RECYCLED INPUT MATERIALS

In 2016, approximately 27% of raw materials across all Kemira business segments were recycled input materials (secondary raw materials) which were recycled materials and industrial by-products mainly from smelters, as well as steel and metal manufacturing. The secondary raw materials used included inorganic materials such as scrap iron, ferrous sulphate and pickling liquor bath; and organic materials such as tall oil and by-product fatty alcohols. In the production of inorganic coagulants (the product group used in water treatment), secondary raw materials were accounted for approximately 80% of all raw materials used.

G4-EN2: RECYCLED INPUT MATERIALS, 1,000 tonnes	**2016**	2015	2014	2013
Total materials purchased	3,536	3,293	3,276	3,521
Industrial by-products and recycled material from external partners	945	904	897	911
Share of by-product and recycled materials, %	26.7%	27.5%	27.4%	25.9%

ENERGY AND EMISSIONS

SUMMARY OF OUR ENERGY CONSUMPTION AND EMISSIONS

ENERGY BALANCE IN 2016

FUELS 595 (579*) **GWh**
- Renewable 8 (8)
- Non-renewable 588 (570*)

HEAT 696 (627*) **GWh**
- Renewable 430 (365*)
- Non-renewable 266 (262*)

ELECTRICITY 3,135 (2,935*) **GWh**
- Renewable 842 (634*)
- Non-renewable 2,293 (2,301*)

TOTAL ENERGY INPUT
4,426 (4,141*) GWh
- Renewable 1,279 (1,008*)
- Non-renewable 3,146 (3,133*)

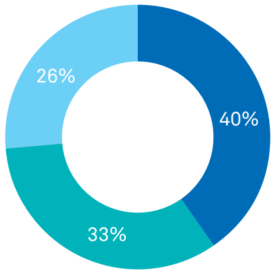
ENERGY CONSUMPTION
3,977 (3,717*) **GWh**

HEAT DELIVERED OFF-SITE
414 (390*) **GWh**

ELECTRICITY DELIVERED OFF-SITE
35 (35*) **GWh**

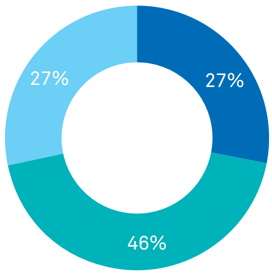
* More accurate information on usage of fuel and electricity at few sites.

ENERGY CONSUMPTION BY GEOGRAPHY IN 2016



EMISSIONS BY GEOGRAPHY IN 2016

Scope 1 and Scope 2, market-based



MATERIAL ASPECT: ENERGY

G4-EN3: ENERGY CONSUMPTION WITHIN THE ORGANIZATION
G4-EN5: ENERGY INTENSITY
G4-EN6: REDUCTION OF ENERGY CONSUMPTION

Energy balance, GWh	GRI-G4 indicator	2016	2015	2014	2013	2012
TOTAL ENERGY CONSUMPTION [1]	**G4-EN3e**	**3,977**	**3,717**	**3,711**	**4,127**	**3,999***
Change in total energy consumption [2]	G4-EN6	260	6	-416	128*	-433*
Production volume, 1,000 tonnes		5,028	4,840	4,587	4,809	4,765
Energy intensity, GWh per 1,000 tonnes of production [3]	G4-EN5	0.79	0.77	0.81	0.86	0.84
Total energy purchased	**G4-EN3c**	**4,426**	**4,141***	**4,107**	**4,555**	**4,449**
Consumed fuel as energy source	G4-EN3a-b	595	579*	542	491	563
Non-renewable		588	570*	542	491	563
Renewable		8	8	0	0	0
Purchased electricity	G4-EN3c	3,135	2,935*	2,820	2,799	2,672
Non-renewable		2,293	2,301*	2,282*	2,249*	2,288*
Renewable		842	634*	539	550	384
Purchased heat	G4-EN3c	696	627*	745	1265	1213
Non-renewable		266	262*	148	1048	992
Renewable		430	365*	596	217	221
Total energy sold	**G4-EN3d**	**449**	**424***	**396**	**429**	**450**
Heat sold off-site		414	390*	366	384	422
Electricity sold off-site		35	35*	31	44	28

* More accurate information on usage of fuel and electricity at few sites

1 The amount of fuel consumed plus purchased electricity and heat minus heat and eletricity sold. Main reason for the increase is the increased production volume.

2 The basis for the energy reduction is energy consumption in one year compared to the previous year values.

3 Kemira has calculated the energy intensity by dividing total energy consumption with the annual production volume. Energy intensity is strongly dependent on the types of production mix, as the energy intensity of Kemira's production tonnes varies from 0,2 to 6,0 GWh/1,000 tonnes.

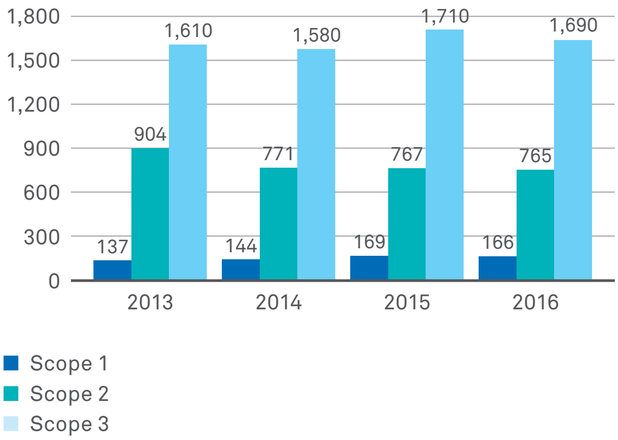
The calculations have been made according to GRI G4 reporting guidelines. The source for conversion factors used is the International Energy Agency (IEA). Where specific information has not been published on production efficiencies by an energy source, estimates have been made based on engineering judgment and historical data.

MATERIAL ASPECT: EMISSIONS

TREND OF OUR GREENHOUSE GAS (GHG) EMISSIONS

Kemira's greenhouse gas emissions are primarily carbon dioxide (CO_2), and negligible emissions of methane (CH_4) and nitrous oxide (N_2O). Kemira estimates GHG emissions using factors in terms of CO_2 equivalent (CO_2eq.) and does not specifically estimate and report mass emissions of CH_4 and N_2O. Scope 1 emissions in 2016 were consistent with 2015 emissions despite an increase in production in 2016. Kemira maintained emissions at the 2015 levels through the use of less carbon intensive fuels where possible. Scope 2 emissions also remained consistent with 2015 levels due to improvements in energy efficiency and a higher share of purchased energy with lower GHG emissions levels. Scope 3 emissions are consistent each year within the level of accuracy associated with the calculation methodology.

GREENHOUSE GAS EMISSIONS, CO_2 EQ, 1,000 TONNES



MATERIAL ASPECT: EMISSIONS

G4-EN15: DIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 1)
G4-EN16: INDIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 2)
G4-EN17: OTHER INDIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 3)
G4-EN18: GREENHOUSE GAS (GHG) EMISSIONS INTENSITY
G4-EN19: REDUCTION OF GREENHOUSE GAS (GHG) EMISSIONS

GREENHOUSE GAS EMISSIONS, CO_2eq 1,000 tonnes	GRI-G4 indicator	2016	2015	2014	2013	2012
TOTAL EMISSIONS [1]		**2,621**	**2,646***	**2,496**	**2,651**	**2,692**
Change in total emissions	G4-EN19	-25	150	-155	-41	N/A
Production volume, 1,000 tonnes		5,028	4,840	4,587	4,809	4,765
Emissions intensity[2]	G4-EN18	0.52	0.55	0.54	0.55	0.56
Direct emissions: Scope 1[3]	G4-EN15	166	169	144	137	147
Change		-3	25	7	-10	-33
Indirect emissions: Scope 2 market-based [4a]	G4-EN16	765	767*	771	904	950
Change		-2	-4	-133	-46	-104
Indirect emissions: Scope 2 location-based [4b]		1,002	988*			
Change		14				
Other indirect emissions: Scope 3[5]	G4-EN17	1,690	1,710	1,581	1,609	1,594
Change		-20	129	-28	15	N/A

Since 2013, GHGs are reported as CO_2eq. In previous years, only CO_2 emissions were reported.
* More accurate information on usage of fuel and electricity at few sites.

1 Scope1 + Scope 2 market-based + Scope 3.
2 Kemira has calculated the GHG emissions intensity as the ratio of total GHG emissions per production volume. Direct GHG emissions (Scope 1), indirect GHG emissions from energy consumption (Scope 2) and other indirect GHG emissions (Scope 3) are included. Energy intensity is strongly dependent on the types of production mix, as the energy intensity of Kemira's production tonnes varies from 0,2 to 6,0 GWh/1,000tonnes.
3 GHG emissions from sources that are owned or controlled by Kemira (Scope 1 of the WRI/WBCSD GHG Protocol). Data covers all of Kemira's production sites according to Kemira consolidation rules. GHG emission are calculated as CO_2 equivalents which includes CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3.
4a GHG emissions from the generation of purchased electricity, steam and heat that is consumed by Kemira (Revised Scope 2 of the WRI/WBCSD GHG Protocol). Market-based emissions are used for target setting and following progress. Location-based emissions are also shown, but these are not used for other indicators. GHG emission are calculated as CO_2 equivalents which includes CO_2, CH_4, N_2O, HFCs, PFCs, SF_6, NF_3. The sources for the emission factors used are the IEA, the UK government's Department for Environment, Food and Rural Affairs (DEFRA), Motiva Ltd. and energy utility companies. As many utility companies often publish their specific emissions factors during Q2 or Q3 of each reporting year, previous years' factors have been used. Data covers all of Kemira's production sites according to Kemira consolidation rules.
4b Location based Scope 2 emissions were calculated first time in 2015.
5 GHG emissions from Kemira's value chain (Scope 3 of WRI/ WBCSD GHG Protocol). Major changes have occurred for all years as a more detailed calculation was carried out for this report and among others, end-of-life treatment of sold products changed significantly and previous years' data was corrected. The calculation is based on the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard and a supporting guidance document Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain. Scope 3 emissions have been calculated since 2012. GHG emission are calculated as CO_2eq. The sources for the emission factors used include the guidance document for the Chemical Sector, the DEFRA, the IEA, Ecoinvent, CEFIC and ECTA. Data covers all of Kemira's production sites according to Kemira consolidation rules. CEFIC = The European Chemical Industry Council; ECTA=The European Chemical Transport Association.

G4-EN17: SCOPE 3 EMISSIONS BY CATEGORIES

Purchased goods and services cover 50% (51%), and upstream and downstream emssions 33% (32%) of our Scope 3 emissions.

SCOPE 3 EMISSIONS BY CATEGORIES, CO_2eq, 1,000 tonnes	2016	2015	2014	2013	2012
TOTAL SCOPE 3 EMISSIONS	**1,690**	**1,710**	**1,580**	**1,610**	**1,590**
1. Purchased goods and services	840	870	760	770	770
2. Capital goods*	*	*	*	*	*
3. Fuel and energy related activities	230	230	240	220	220
4. Upstream transportation and distribution	220	200	200	220	210
5. Waste generated in operations	40	20	20	20	20
6. Business travel	10	10	10	10	10
7. Employee commuting	10	10	10	10	10
8. Upstream leased assets (leased offices)	10	10	10	10	20
9. Downstream transportation and distribution	330	350	330	340	340
11. Use of sold products	0	0	0	0	0
12. End-of-life treatment of sold products	0	0	0	0	0

* Emissions of Category 2: Capital goods are included in Category 1: Purchased goods and services.

Scope 3 was restated in 2015 due to more accurate information available. Major changes occurred for years 2012–2014 as a more detailed calculation was carried out. **Category 12** End-of-life treatment of sold products changed significantly. Category 12 covers all products sold. If a product is not known to have a new lifecycle, it is classified as waste. **Category 11** emissions were estimated to be zero or close to zero, as Kemira does not sell combustible fuels, products that form GHG emissions during use, or products that contain GHG.

The calculation is based on the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard and a supporting guidance document Guidance for Accounting & Reporting Corporate GHG Emissions in the Chemical Sector Value Chain. Scope 3 emissions have been calculated since 2012. GHG emission are calculated as CO_2eq. The sources for the emission factors used include the guidance document for the Chemical Sector, the DEFRA, the IEA, Ecoinvent, CEFIC and ECTA. Data covers all of Kemira's production sites according to Kemira consolidation rules.
The margin of error for Scope 3 calculations is +/- 20%.

NOTE: **Category 10** Processing of sold products is not calculated because it cannot be reasonably tracked; **Category 13** Downstream leased assets is not relevant to chemical sector; **Category 14** Franchises is not relevant to chemical sector; **Category 15** Investments: No information available.

G4-EN20: EMISSIONS OF OZONE-DEPLETING SUBSTANCES (ODS)

RELEASES INTO AIR, tonnes	2016	2015	2014	2013	2012
Ozone-depleting substances	0	0	0	0	-

The data collection on ozone-depleting substances (ODS) from Kemira's sites was made for the first time for the year 2013. A value of zero represents emissions equal to or greater than 0 and less than 0.5 tonnes.

G4-EN21: NO_X, SO_X, AND OTHER SIGNIFICANT AIR EMISSIONS

RELEASES INTO AIR, tonnes	2016	2015	2014	2013	2012
Nitrogen oxides (NO_2) [1]	152	194	206	185	190
Sulphur dioxide (SO_2) [2]	84	83	86	122	116
Volatile organic compounds (VOC) [3]	799*	430	661	682	742
Volatile inorganic compounds (VIC) [4]	164*	36	59	65	94
Particulates	11	14	16	16	21

The figures presented are based on data collected directly from Kemira's sites.

* VOC and VIC emissions increases are primarily associated with the site that is the largest emitter of VOC and VIC in Kemira. The site's production rate increased in 2016, and the site improved the accuracy of the emissions calculation methodology for VOC and VIC.

1 The sum of nitric oxide and nitrogen dioxide calculated as NO_2.
2 All sulphur compounds are calculated as SO_2.
3 VOC is a sum of volatile organic compounds as defined in EU Directive 1999/13/EC.
4 Sum of ammonia, hydrogen chloride and six other simple inorganic compounds.

MATERIAL ASPECTS: WATER AND EFFLUENTS

G4-EN8: TOTAL WATER WITHDRAWAL BY SOURCE
G4-EN10: PERCENTAGE AND TOTAL VOLUME OF WATER RECYCLED AND REUSED
G4-EN22: TOTAL WATER DISCHARGE BY DESTINATION

WATER BALANCE, million m^3	GRI-G4 indicator	2016	2015	2014	2013	2012
TOTAL WATER WITHDRAWAL	G4-EN8	**102**	**98***	**104**	**157**	**144**
Sources of process water		8.7	8.4	7.5	6.3	6.7
Surface water		4.4	4.2	3.7	1.5	1.8
Ground water		1.1	1.3	1.1	0.4	0.8
Rainwater		0.1	0.0	0.0	0.1	0.0
Waste water from another organization		0.0	0.0	0.0	0.1	0.0
Municipal water suppliers		2.4	2.4	2.2	2.2	3.5
Other		0.8	0.5	0.5	2.0	0.6
Sources of cooling water		93.5	89.4*	96.7	151	138
Surface water		88.0	83.6	93.3	146	131
Ground water		1.6	2.3*	0.3	2.0	3.0
Rainwater		0.0	0.0	0.0	0.0	0.0
Waste water from another organization		0.0	0.0	0.0	0.0	0.0
Municipal water suppliers		0.1	0.2	0.2	1.0	0.0
Other		3.7	3.3	2.9	3.0	4.0
TOTAL WATER RECYCLED AND REUSED, million m^3	G4-EN10a	**20.4**	**16.9**	**25.9**	**74.6**	**59.6**
Share of total water recycled and reused, % [1]	G4-EN10b	20%	17%	25%	47%	41%
Water recycled back in the same process		17.2	13.8	23.0	74.5	59.5
Water recycled in a different process, but within the same facility		2.8	3.1	2.9	0.1	0.1
Water reused in another facility		0.4	0.1	0.0	0.0	0.1
TOTAL WATER DISCHARGES	G4-EN22a	**75.2**	**72.8**	**73.1**	**2.1**	**2.4**
External treatment of waste water		1.5	1.5	1.6	1.7	1.8
Own treatment of waste water		0.6	0.5	0.5	0.4	0.6
Discharged with no treatment e.g., cooling water		73.2	70.8	70.9	**N/A	**N/A
Unspecified water losses [2]		6.5	8.1*	5.3		

The calculations have been made according to GRI G4 reporting guidelines. The figures presented are based on data collected from Kemira's sites.
* Numbers corrected due to more accurate data collection.
** Cooling water discharges not included in the data collection before 2014.

[1] Water recycled and reused is calculated as a percentage of the total water withdrawal as reported under Indicator G4-EN8.
[2] Balance = Unspecified water losses such as water evaporated. Calculated as Water withdrawal minus Water reused and recycled minus Water discharged. Kemira aims to have minimum 90% accuracy on the water balance.

G4-EN22B: TOTAL WATER DISCHARGES BY QUALITY

RELEASES INTO WATER, tonnes	2016	2015	2014	2013	2012
Chemical Oxygen Demand (COD)	34	16	15	16	21
Biological Oxygen Demand (BOD)	0	1	2	1	6
Nitrogen (N)	3	2	2	2	2
Phosphorus (P)	1	1	0.5	0.5	0.7
Suspended solids	1	2	5.3	1.8	7
Other*	308	9	1	1	1

The calculations have been made according to GRI G4 reporting guidelines. The figures presented are based on data collected from Kemira's sites. Data covers all of Kemira's production sites according to Kemira consolidation rules.

* In 2016, these releases consisted of chlorides at some sites. The increase in tonnes in the “Other” category is related to primarily to one site experiencing a significant increase in discharge volume compared to 2015 and to the availability of more accurate analytical data.

MATERIAL ASPECT: WASTE

G4-EN23: TOTAL WEIGHT OF WASTE BY TYPE AND DISPOSAL METHOD

The weight data of disposed waste is based on internal company records.

WASTE, 1,000 tonnes	2016	2015	2014	2013	2012
TOTAL WASTE DISPOSAL	**82.3**	**110.6**	**69.4**	**67.9**	**80.2**
Hazardous wastes, total	**51.2**	**75.2**	**41.7**	**41.3**	**48.4**
Off-site landfill	3.4	1.3	1.2	1.4	1.0
Off-site incineration	5.0	2.6	1.7	3.9	1.9
Off-site recycling	7.3	9.6	6.6	3.0	2.7
Other off-site treatment	35.4	61.7	31.7	33.0	42.8
On-site incineration	0.1	0.0	0.5	0.0	0.0
On-site landfill	0.0	0.0	0.0	0.0	0.0
Non-hazardous wastes, total	**31.1**	**35.4**	**27.7**	**26.6**	**31.8**
Off-site landfill	12.1	10.6	11.6	13.7	11.1
Off-site incineration	1.6	1.3	0.8	5.7	1.5
Off-site recycling	7.4	14.9	11.8	4.6	14.3
Other off-site treatment	9.7	8.2	3.1	2.5	2.4
On-site incineration	<0.0	0.0	0.4	0.0	0.0
On-site landfill	0.3	0.3	0.0	0.1	2.4

The waste disposal tonnes in 2016 were less than 2015. In 2015, one site generated a waste that was not part of their normal production wastes. This one-time event caused the 2015 waste disposal tonnes to be abnormally high. In addition, the amount of waste generated due to site closures in 2016 was less than in 2015. The total 2016 waste disposal tonnes are consistent with years other than 2015.

G4-EN24: TOTAL NUMBER AND VOLUME OF SIGNIFICANT SPILLS

In 2016, Kemira enahanced the focus on the reporting, investigating and analysis of incidents, including spills. This resulted in more spills being reported compared to previous years (our treshold for reporting is 1 l), as well as the development of improved root cause analysis and corrective actions post-incident to provide lessons learned and opportunities for improvement for the site and the entire company. For example, the increased focus led to the development of the Spill Prevention Standard.

Kemira definition to Major spills are those greater than 1 tonne that reach the environment (i.e., those spills that are not physically contained or othrewise captured at the location of the spill) or an incident that requires reporting to a government agency. Kemira used these critiera to identify the number and volume of significant spills for the purposes of this indicator.

In 2016, there were 10 significant spills.

Transportation incidents (including related loading and unloading activities) accounted for seven significant spills. The total volume of the tranportation incidents was approximately 74 tonnes. Three significant spills were associated with activities at manufacturing plants. The total volume of the significant spills at manufacturing plant was approximately 24 tonnes.

The significant spills did not have permanent or significant impact on the environment beyond the remediated material. These spills were not reported in Kemira's Financial Statements.

G4-EN25: WEIGHT OF TRANSPORTED, IMPORTED, EXPORTED, OR TREATED WASTE DEEMED HAZARDOUS UNDER THE TERMS OF THE BASEL CONVENTION (2) ANNEX I, II, III, AND VIII, AND PERCENTAGE OF TRANSPORTED WASTE SHIPPED INTERNATIONALLY

In 2016, approximately 51.1 tonnes (51.8 tonnes) of hazardous waste were transported by or on behalf of Kemira to external suppliers not owned by Kemira. Kemira facilities did not treat or import hazardous waste in 2016.

Two of the hazardous wastes generated at Kemira's facility in Fray Bentos, Uruguay do not have a treatment or disposal option within the country. Therefore, it must be shipped to EU for incineration. In 2016, there were no exports of hazardous waste from the Fray Bentos facility. Therefore, 0% (0% in 2015) of the hazardous waste generated in 2016 by Kemira was shipped internationally.

MATERIAL ASPECT: PRODUCTS AND SERVICES

G4-EN27: EXTENT OF IMPACT MITIGATION OF ENVIRONMENTAL IMPACTS OF PRODUCTS AND SERVICES

Kemira's business purpose is to enable our customers to improve their water, energy and raw material efficiency. The use of our products and solutions benefits our customers by:

- Optimizing product quality and yield
- Enhancing process and energy efficiency
- Ensuring that water quality meets end-use specifications and regulatory requirements

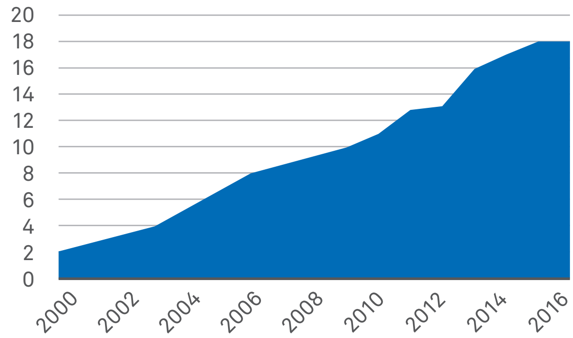
Our business model is business-to-business, and we sell products that are used in industrial scale processes mainly as processing aids. Only in few cases, namely in paper and packaging board and in waste water sludge, our products are part of the end-product.

The extent of the environmental impacts of our products is mitigated by developing products that enable our customers to reduce their environmental impacts. We apply sustainability checks at every stage of our New Product Development (NPD) process. We apply the principles of Product Stewardship, i.e., the proactive management of the health, safety and environmental aspects of a product throughout its life cycle. We also work to identify less hazardous and more sustainable alternatives for raw materials. Other measures include ensuring safe transportation, handling, storage and disposal of our products in the value chain.

For more details on product stewardship see the Chapter Sustainable products and solutions and the performance indicators PR1-PR4, PR6 and PR9. For transportation safety, see indicator EN30.

Our products aimed for water treatment have positive environmental impacts by preventing and reducing eutrophication and pollution of water bodies. The volume of water purified with Kemira's water treatment chemicals for public and industrial purposes is significant. In 2016, the volume equals the annual need of pure water to 320 million people.

WATER PURIFIED WITH KEMIRA PRODUCTS, 1000 million m^3



The volume of water purified with Kemira products is based on the share of product sales to water purification applications and using an experience based average chemicals dosage. It is assumed that in Europe the average water consumption is about 155 liters per day per person.

G4-EN28: PERCENTAGE OF PRODUCTS SOLD AND THEIR PACKAGING MATERIALS THAT ARE RECLAIMED BY CATEGORY

Kemira does not reclaim any sold products. However, we reclaim packaging material when possible. Kemira's liquid products are mainly transported in bulk units, i.e., ISO-tank containers, tank trucks, and tank railroad wagons, which are owned by logistics service providers or leased by Kemira. When small volume packaging is used we work to optimize packaging where it saves packaging and transportations cost and also reclaim packaging materials when possible. When plastic or other reusable material is used in packaging, Kemira strives to reclaim the material. We are also using a third party service provider to return packaging from the customers' sites for reuse. Packaging that is returned to Kemira or to a third party is either reused or processed for recycling.

The primary reclaimed packaging materials are Reconditioned Intermediate Bulk Container (IBCs).

RECLAIMED PACKAGING MATERIALS	2016	2015	2014	2013	2012
Reconditioned IBCs	16%	12%	12%	20%	22%
Total recycled liquid packages incl. IBCs	**7%***	**4%**	**3%**	**5%**	**4%**

Calculated from the total amount of the respective packaging category
* More recycling but less volume

MATERIAL ASPECT: ENVIRONMENTAL COMPLIANCE

G4-EN29: MONETARY VALUE OF SIGNIFICANT FINES AND TOTAL NUMBER OF NON-MONETARY SANCTIONS FOR NON-COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

There were no significant fines or non-compliance with environmental laws or regulations in 2016. There were no non-monetary sanctions in 2016.

MATERIAL ASPECT: TRANSPORT

G4-EN30: SIGNIFICANT ENVIRONMENTAL IMPACTS OF TRANSPORTING PRODUCTS AND OTHER GOODS AND MATERIALS FOR THE ORGANIZATION'S OPERATIONS, AND TRANSPORTING MEMBERS OF THE WORKFORCE

Our management approach to mitigate the environmental impacts of transporting products is based on reducing the GHG emissions from transportation activities and improving transportation safety management to minimize incidents and accidents.

AVOIDING SCOPE 3 EMISSIONS FROM TRANSPORTATION

Emissions from the downstream and upstream transportation of materials and goods are about 33% of our total Scope 3 emissions, while emissions from business travel and employee commuting are non-significant (<1%). See indicator G4-EN17 for more details. Our approach in reducing Scope 3 GHG emissions is based on disciplined management of logistics activities. Our key measures include logistics and load optimization and commitment to logistics service providers that use vehicles compliant with latest emission standards.

Kemira uses train and ocean modes in longer transports or multimodal transports in shorter distances to avoid emissions compared to the level of road transport. Load optimization and full truck loads are means to optimize transportation cost but also leading to lower emissions. Furthermore, our tendering process guides the logistics service providers to look for backhaul arrangements.

Guidelines for reducing the environmental impact from business travel are defined in the Kemira travel policy. Internal traveling between Kemira locations has reduced through the use of online meeting and collaboration tools.

IMPROVING TRANSPORTATION SAFETY

Transportation incidents stayed at the same level as 2015. Kemira is fully committed to develop transportation safety culture to prevent incidents and chemical leakages into environment. Our revised EHS Transportation Standard defines that each region has to develop their own transportation safety programs. All facilities need to comply with the requirements of the regional program, but each region also with any local/regional regulations as applicable. Employees involved in the handling and carriage of dangerous goods are trained regularly. Our logistics service providers are expected to commit to the Kemira Code of Conduct for Suppliers, Distributors and Agents. We hold regular safety discussions with logistic operators and drivers handling and transporting our products.

Our regional EHSQ team is responsibe for the training and monitoring of the implementation of the transportation standard, while our logistics services and plant operations are responsible for the safety program implementation and performance monitoring. Every transportation incident is analyzed for root causes and actions are taken to prevent re-occurrence.

MATERIAL ASPECT: ENVIRONMENTAL EXPENDITURES AND INVESTMENTS

G4-EN31: TOTAL ENVIRONMENTAL PROTECTION EXPENDITURES AND INVESTMENTS BY TYPE

In 2016, our main investments were made in air and water treatment units, spill prevention and control measures, and process equipment upgrades.

ENVIRONMENTAL PROTECTION COST, EUR million	2016	2015	2014	2013	2012
Total environmental protection cost	**29.1**	**19.8***	**14.1**	**13.2**	**17.6**
Environmental capital expenditure	11.2	4.8	2.4	1.4	3.4
Environmental operating costs	17.9	15.0*	11.7	11.8	14.2
Environmental protection cost, % of net sales	1.2%	0.8%	0.7%	0.6%	0.8%

* Numbers corrected due to more accurate data collection.

3.3 SOCIAL PERFORMANCE INDICATORS

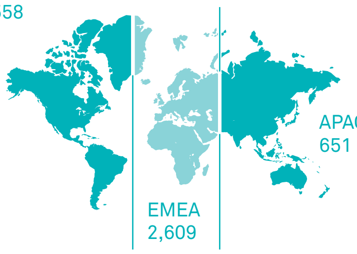
3.3.1 LABOR PRACTICES AND DECENT WORK

GENERIC DISCLOSURES: EMPLOYMENT STRUCTURE
G4-10: STRUCTURE OF EMPLOYMENT

At the end of 2016, Kemira employed 4,818 people (4,685).

The employee distribution by region shows that 54% (55%) of Kemira's total workforce are employed in EMEA, and 32% (35%) in Americas. The number of employees has increased by 133 (compared to increase by 437 during 2015), of which 115 in APAC. The growth has happened organically, only three employees joined through acquisitions. Workers who are legally recognized as self-employed, or individuals other than the ones in Kemira payroll are not counted on these numbers.

TOTAL NUMBER OF EMPLOYEES BY REGION 2016



EMPLOYEES BY GENDER

MALES 74 %

FEMALES 26 %

EMPLOYEES BY AGE GROUP 2016

<30 12 %

30–50 58%

>50 30%

G4-10: TOTAL NUMBER OF EMPLOYEES

	2016	2015	2014	2013	2012
Total number of employees*	4,818	4,685	4,248	4,453	4,857
Females, %	26%	26%	26%	26%	25%
Males, %	74%	74%	74%	74%	75%
White collar, %	61%	62%	58%	58%	N/A
Blue collar; %	39%	38%	42%	42%	N/A

* at year end

G4-10A: TOTAL NUMBER OF EMPLOYEES BY EMPLOYMENT CONTRACT AND GENDER

	2016	2015	2014	%,2016	%, 2015	%, 2014
Total number of employees	4,818	4,685	4,248			
Total permanent	4,715	4,559	4,133	98%	97%	97%
Total fixed-term	103	126	115	2%	3%	3%
Females total	1,259	1,220	1,110			
Permanent	1,227	1,171	1,064	97%	96%	96%
Fixed term	32	49	46	3%	4%	4%
Males total	3,559	3,465	3,138			
Permanent	3,488	3,388	3,069	98%	98%	98%
Fixed term	71	77	69	2%	2%	2%

G4-10B: TOTAL NUMBER OF PERMANENT EMPLOYEES BY EMPLOYMENT TYPE AND GENDER

	2016	2015	2014	%, 2016	%, 2015	%, 2014
Total permanent employees	4,818	4,559	4,133			
Total full-time	4,747	4,481	4,099	98%	98%	99%
Total part-time	71	78	34	2%	2%	1%
Females total permanent	1,259	1,171	1,064			
Full-time	1,208	1,106	1,037	96%	94%	97%
Part-time	51	65	27	4%	6%	3%
Males total permanent	3,559	3,388	3,069			
Full-time	3,539	3,375	3,062	99%	100%	100%
Part-time	20	13	7	1%	0%	0%

G4-10D: TOTAL NUMBER OF EMPLOYEES BY REGION AND GENDER

	2016	2015	2014	%, 2016	%, 2015	%, 2014
Total number of employees	4,818	4,685	4,248			
Americas	1,558	1,578	1,483	32%	34%	35%
Asia Pacific	651	536	352	14%	11%	8%
EMEA	2,609	2,571	2,413	54%	55%	57%
Females total	1,259	1,220	1,110			
Americas	340	338	324	27%	28%	29%
Asia Pacific	175	146	99	14%	12%	9%
EMEA	744	736	687	59%	60%	62%
Males total	3,559	3,465	3,138			
Americas	1,218	1,240	1,159	34%	36%	37%
Asia Pacific	476	390	253	13%	11%	8%
EMEA	1,865	1,835	1,726	52%	53%	55%

G4-11: EMPLOYEES COVERED BY BARGAINING AGREEMENTS

The percentage of employees covered by collective bargaining agreements by 'significant locations of operation' varies widely between regions, being lowest in North America (USA 4%, Canada 12%), which is characteristic to the region.

In APAC, collective bargaining agreements are a practice in the chemical industry only in few countries, Indonesia and Korea having 100% of employees covered with collective bargaining agreements.

In many European countries all employees are covered by collective bargaining agreements, especially in Northern Europe (Finland, Sweden) and Southern Europe (Spain, France, Italy). In Central and Eastern Europe the percentage varies (e.g. UK 30%, Germany 38%), and for example in Poland there are no collective bargaining agreements.

In Brazil and Uruguay all employees are covered by a collective agreement.

The definition used for 'significant locations of operation' refers to countries where we have 20 or more employees, and which counted together 98% of all employees. In Kemira's case there are 22 countries with 20 or more employees.

SPECIFIC DISCLOSURES: LABOR PRACTICES AND DECENT WORK

MATERIAL ASPECT: EMPLOYMENT

G4-LA1: TOTAL NUMBER AND RATES OF NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER BY AGE GROUP, GENDER AND REGION

Total number of new hires in 2016 was 695 (673), out of which 31% (31%) were female and 69% (69%) male. The new hires include summer trainee and other temporary positions, and insourcing of contract workers (98) in two manufacturing sites in China. Kemira's new hiring reflects the similar degree of diversity as in previous years.

Kemira is reporting the employee turnover rate by total and voluntary turnover.

The total turnover rate was 9.2% in 2016 compared to 10.5% in 2015. The total turnover is based on permanent workforce.

The turnover rates in APAC was 8.1% (10.4%) which was lowest of the regions continuing to decrease over years. The highest turnover rate was in Americas 11.2% (13.2%), and EMEA had a turnover of 8.2% (8.8%)

The voluntary turnover rate was 5.6% (5.5%) in 2016 being highest at the age group 30–50 years 11.0% (6.3%) and females 7.8% (8.2%).

G4-LA1A: NEW EMPLOYEE HIRES W/O AQUISITIONS BY AGE GROUP, GENDER AND REGION

	Number of new hires			% of total new hires		
	2016	2015	2014	**2016**	2015	2014
Total new hires	695	673	710	100%	100%	100%
New hires by age group						
<30	284	293	291	41%	44%	41%
30–50	358	312	348	52%	46%	49%
>50	53	68	71	8%	10%	10%
New hires by gender						
Females	218	208	236	31%	31%	33%
Males	477	465	474	69%	69%	67%
New hires by region						
APAC	173	60	60	25%	9%	8%
EMEA	364	373	418	52%	55%	59%
Americas	158	240	232	23%	36%	33%

G4-LA1B: TOTAL TURNOVER BY AGE GROUP, GENDER AND REGION

	Turnover			Turnover, %		
	2016	2015	2014	**2016**	2015	2014
Total turnover	441	490	736	9.2%	10.5%	17.3%
Turnover by age group						
<30	72	78	96	12.4%	13.6%	18.6%
30–50	228	263	428	8.2%	9.8%	17.6%
>50	141	149	212	9.6%	10.4%	16.3%
Turnover by gender						
Females	136	144	242	10.8%	11.8%	21.8%
Males	305	346	494	8.6%	10.0%	15.7%
Turnover by region						
APAC	53	56	44	8.1%	10.4%	12.5%
EMEA	214	225	464	8.2%	8.8%	19.2%
Americas	174	209	228	11.2%	13.2%	15.4%

G4-LA1C: VOLUNTARY TURNOVER BY AGE GROUP, GENDER AND REGION

	Voluntary turnover			Voluntary turnover, %		
	2016	2015	2014	**2016**	2015	2014
Total voluntary turnover	268	258	218	5.6%	5.5%	5.1%
Voluntary turnover by age group						
<30	56	62	42	9.7%	10.8%	8.2%
30–50	162	168	144	11.0%	6.3%	5.9%
>50	50	28	32	1.8%	1.9%	2.5%
Voluntary turnover by gender						
Females	98	100	79	7.8%	8.2%	7.1%
Males	170	158	139	4.8%	4.6%	4.4%
Voluntary turnover by region						
APAC	44	39	34	6.8%	7.3%	9.7%
EMEA	146	139	101	5.6%	5.4%	4.2%
Americas	78	80	83	5.0%	5.1%	5.6%

G4-LA2: BENEFITS PROVIDED TO FULL-TIME EMPLOYEES THAT ARE NOT PROVIDED TO TEMPORARY OR PART-TIME EMPLOYEES, BY SIGNIFICANT LOCATIONS OF OPERATION

Benefit programs in Kemira differ depending on regional and country specific practices, and there are no major changes to the practices in recent years. In most countries the same benefits are offered to full-time and part-time employees, and for temporary employees hired directly by Kemira, if the temporary contract exceeds certain length. Benefit practices are country specific and typically do not vary between locations and operations. Some exceptions apply, for example the sickness fund in Finland is available to full-time employees with more than a one year contract, and some countries offer broader insurance and/or retirement benefits for permanent full-time employees. In North America, the eligibility for benefits varies, in USA employees are eligible if they work at minimum 20 hours per week.

MATERIAL ASPECT: LABOR/MANAGEMENT RELATIONS

G4-LA4: MINIMUM NOTICE PERIODS REGARDING OPERATIONAL CHANGES, INCLUDING WHETHER THESE ARE SPECIFIED IN COLLECTIVE AGREEMENTS

As stated in the Code of conduct, all our sites are obliged to follow local laws and regulations and other agreements regarding labor practices, including notice periods. Notice periods and the time period for the consultation process relating to operational changes varies by country and region, starting from 14 days for smaller changes to up to six months in some countries and for major changes, varying between one to two months in most countries.

MATERIAL ASPECT: OCCUPATIONAL HEALTH AND SAFETY

G4-LA6: TYPE OF INJURY AND RATES OF INJURY, OCCUPATIONAL DISEASES, LOST DAYS, AND ABSENTEEISM, AND TOTAL NUMBER OF WORK-RELATED FATALITIES, BY REGION AND BY GENDER

One of our top priorities during 2016 has been to develop our health and safety culture to prevent incidents and mitigate health and safety risks. Time and efforts have been invested on visible management commitment, employee engagement and better visibility of health and safety related matters in our internal communication.

Our health and safety performance has significantly improved in 2016 compared to earlier years. Kemira reports occupational health and safety as Total Recordable Injuries (TRI) which includes fatalities, lost time injuries, restricted work cases and medical treatment cases covering Kemira employees and contractors working at Kemira sites. TRI Frequency (TRIF) is measured as Total Recordable Injuries per million working hours.

In 2016, TRIF decreased to 3.4 from 7.2 in 2015. Near misses reporting on events that may threaten safety, increased due to higher attention on safety culture.

TRIF	2016	2015	2014	2013	2012
Global	3.4	7.2	5.8	7.1	8.5
By region					
APAC	0.9	0.6	0	0	N/A
EMEA	3.4	10.6	6.1	9.2	N/A
Americas	4.8	5.7	6.4	5.1	N/A

TRIF: Total Recordable Injury Frequency includes Fatalities + Lost Time Incidents+ Restricted work cases + Medical treatment cases. Injury numbers include Kemira employees and contractors working at Kemira site per million work hours. Contractor work hours have been included since 2014.

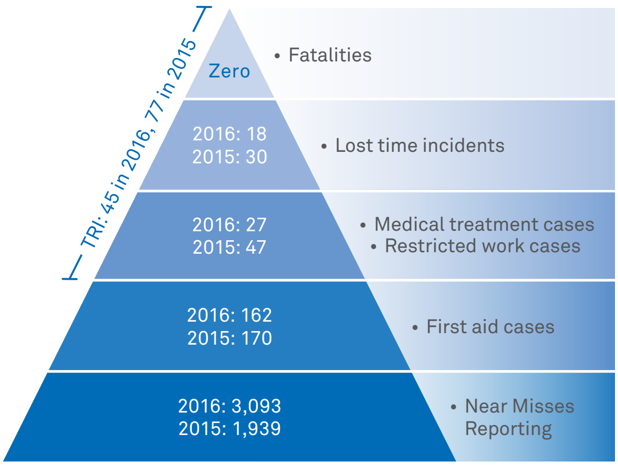
The number of people involved in accidents (TRI) was 45 which was 42% less than in 2015.

TRI	2016	2015
Total	45	77
Kemira employees	31	56
Contractors working at Kemira site	14	21

Majority of our accidents happened at our production sites and for male employees.

The severity of accidents included in our TRI severity rate has decreased. No fatalities have been associated with Kemira employees since 2005. Significant increase in near misses reporting is due to efforts in 2016 to identify and report these events.

Unfortunately there was one fatal off-site hauler road transport accident when transporting Kemira products (off-site incidents are excluded from our TRI definition).



Information regarding absenteeism is collected locally and not consolidated on Group level.

MATERIAL ASPECT: TRAINING AND EDUCATION

G4-LA9: AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE BY GENDER, AND BY EMPLOYEE CATEGORY

A global Learning Management System including a training register has been rolled out to all Kemira countries and functional areas during 2016. Some of the countries have taken the system in use during last months of the year, so training register does not yet cover the full year for all parts of the organization. In 2016, approximately 48,600 (36,100) training hours were registered in the learning management system, which now covers eLearnings, global training programs, and part of the local trainings. During 2017 we will continue to ensure also recording of external trainings and trainings in the sites. Training hours for biggest countries currently registered in the system are e.g. Finland 6,600 (6,800) hrs, UK 5,300 (5,800) hrs, Sweden 5,700 (9,500) hrs, USA 8,100 (4,800) hrs, Netherlands 3,300 (4,000) hrs, China 3,700 and Poland 5,500. The average hours of training for white collar employees do not differ by gender.

G4-LA10: PROGRAMS FOR SKILLS MANAGEMENT AND LIFELONG LEARNING THAT SUPPORT THE CONTINUED EMPLOYABILITY OF EMPLOYEES AND ASSIST THEM IN MANAGING CAREER ENDINGS

Kemira provides each employee with access to the relevant competence development programs and structured learning opportunities to support and assist their continued employability through on the job learning programs (including onboarding and job specific competence development), buddy programs/mentoring programs, and traditional methods like classroom and eLearning.

The scope includes:

- leadership development (internal and external) programs
- professional competence development programs
- statutory or compliance related programs

These programs are available based on the position, skills/competence level and career aspirations. With the exception of leadership development programs and other external cost based programs (pre-approval required), employees can typically enroll and complete the self-paced learning programs available through our LMS (Learning Management System).

We had a strong leadership development portfolio offering and rate of participation in 2016. Examples of other global and regional programs offered during 2016 are listed below:

- Code of conduct, ethics and compliance programs delivered mainly through eLearning
- Numerous EHSQ related programs including Chemical handling, PPE and a new behavioral based safety leadership program, and a new Energy Management program
- Project management program for project managers and project sponsors
- Onboarding / induction for new hires
- Professional selling program
- Manufacturing and product training and awareness programs
- English language courses
- Various Finance, IT systems and tools training – F&A, Excel and PowerPoint IT skills which are mainly available as eLearning

G4-LA11: PERCENTAGE OF EMPLOYEES RECEIVING REGULAR PERFORMANCE AND CAREER DEVELOPMENT REVIEWS, BY GENDER AND BY EMPLOYEE CATEGORY

All permanent employees, who are not absent for an extended time period because of leaves, for example, are covered by our global performance and development discussion (PDD) process. The global PDD process covers both white collar and blue collar employees. Temporary employees' inclusion in the PDD process is evaluated case-by-case, depending on the length of the contract.

G4-LA11: PERCENTAGE OF EMPLOYEES RECEIVING REGULAR PERFORMANCE AND CAREER REVIEWS BY GENDER AND BY EMPLOYEE CATEGORY

	Employees				PDD coverage, %			
Performance and Development Discussion (PDD)	**2016**	2015	2014	2013	**2016**	2015	2014	2013
Total permanent employees not absent *	4,590	4,440	4,019	4,281				
PDD's by gender								
Employees covered in global PDD process	4,009	4,147	3,803	2,382	87%	93%	95%	56%
Females covered in global PDD process	1,116	1,030	977	816	93%	96%	95%	77%
Males covered in global PDD process	2,893	3,117	2,826	1,566	85%	93%	94%	49%
PDD's by employee category								
White collars covered in global PDD process	2,702	2,730	2,317	N/A	98%	97%	98%	N/A
Blue collars covered in global PDD process	1,307	1,417	1,486	N/A	72%	88%	89%	N/A

* All permanent employees, who are not absent for an extended time period, are covered by global performance and development discussion process. Employees who started employment after July 1st, 2016 are not included in the PDD process.

MATERIAL ASPECT: DIVERSITY AND EQUAL OPPORTUNITY

G4-LA12 COMPOSITION OF GOVERNANCE BODIES AND BREAKDOWN OF EMPLOYEES PER EMPLOYEE CATEGORY ACCORDING TO GENDER, AGE GROUP, MINORITY GROUP MEMBERSHIP, AND OTHER INDICATORS OF DIVERSITY

The number of females in the Board of Directors has increased by one in 2016. The percentage share of females (26%) in the total number of employees has remained the same in 2016 as in 2015. The number of females in executive positions (Directors and above) has also remained at the same level (22% vs. 22% in 2015).

G4-LA12A: COMPOSITION OF GOVERNANCE BODIES BY GENDER AND AGE GROUP

	Total				%			
	2016	2015	2014	2013	**2016**	2015	2014	2013
Management Board								
Total	10	9	9	11				
Females	2	2	2	2	20%	22%	22%	18%
Males	8	7	7	9	80%	78%	78%	82%
By age group								
<30	0	0	0	0	0%	0%	0%	0%
30–50	2	5	6	5	20%	56%	67%	45%
>50	8	4	3	6	80%	44%	33%	55%
Board of Directors								
Total	7	6	6	5				
Females	3	2	2	2	43%	33%	33%	40%
Males	4	4	4	3	57%	67%	67%	60%
By age group								
<30	0	0	0	0	0%	0%	0%	0%
30–50	1	0	0	0	14%	0%	0%	0%
>50	6	6	6	5	86%	100%	100%	100%

EQUAL OPPORTUNITY

Women in executive and other positions	**2016**	2015	2014
Management Board	20%	22%	22%
Executive positions excluding Management Board*	22%	22%	21%
White collars	39%	39%	37%
Blue collars	7%	5%	11%
Total employees	26%	26%	26%

* Positions from Director to Senior Vice-President

G4-LA12B: BREAKDOWN OF EMPLOYEES BY GENDER AND AGE GROUP

	Total				%			
	2016	2015	2014	2013	**2016**	2015	2014	2013
Total employees	4,818	4,685	4,248	4,453	100%	100%	100%	100%
<30	579	575	515	646	12%	12%	12%	15%
30–50	2,772	2,672	2,435	2,453	58%	57%	57%	55%
>50	1,467	1,438	1,298	1,354	30%	31%	31%	30%
Females in total	**1,259**	**1,220**	**1,110**	**1,164**	**26%**	**26%**	**26%**	**26%**
<30	179	188	172	205	14%	15%	15%	18%
30–50	823	773	705	710	65%	63%	64%	61%
>50	257	259	233	249	20%	21%	21%	21%
Males in total	**3,559**	**3,465**	**3,138**	**3,289**	**74%**	**74%**	**74%**	**74%**
<30	400	387	343	441	11%	11%	11%	13%
30–50	1,949	1,899	1,730	1,743	55%	55%	55%	53%
>50	1,210	1,179	1,065	1,105	34%	34%	34%	34%

MATERIAL ASPECT: EQUAL REMUNERATION FOR WOMEN AND MEN

G4-LA13: RATIO OF BASIC SALARY AND REMUNERATION OF WOMEN TO MEN BY EMPLOYEE CATEGORY, BY SIGNIFICANT LOCATIONS OF OPERATION

Kemira operates a global job structure that is applied to all white collar employees. The job structure describes job families and the respective job roles with required qualifications and main responsibilities. The job structure links to job grades, which define the salary range and the incentive opportunity for a specific job role. Factors impacting salary increases include country-specific salary budgets, the position of an employee in the salary range and employee performance evaluated as part of the performance management process. Incentive payouts are based on measured achievement for pre-defined targets on the company, unit and individual levels.

The job grade and salary data information allows Kemira to evaluate, analyse and implement equal remuneration.

RATIO OF BASIC SALARY AND REMUNERATION OF WOMEN TO MEN BY EMPLOYEE CATEGORY, BY SIGNIFICANT LOCATIONS OF OPERATION

Country	2016	2015	2014
Finland	91%	93%	93%
USA	88%	91%	94%
Sweden	99%	96%	103%
Poland	92%	91%	93%
Canada	88%	86%	94%
UK	96%	96%	96%
China	94%	94%	93%
Netherlands	96%	97%	N/A
Germany	98%	N/A	N/A

3.4 HUMAN RIGHTS

MATERIAL ASPECT: NON-DISCRIMINATION

G4-HR3: TOTAL NUMBER OF INCIDENTS OF DISCRIMINATION AND CORRECTIVE ACTIONS TAKEN

There were no confirmed incidents of discrimination in 2016.

MATERIAL ASPECT: FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING

G4-HR4: OPERATIONS AND SUPPLIERS IDENTIFIED IN WHICH THE RIGHT TO EXERCISE FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING MAY BE VIOLATED OR AT SIGNIFICANT RISK, AND MEASURES TAKEN TO SUPPORT THESE RIGHTS

Kemira respects the right of all personnel to establish or join trade unions and other representative organizations, and we comply with the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, as stated in our Code of Conduct. Kemira is also a signatory of the United Nations Global Compact, through which we respect the principle that businesses should uphold freedom of association and recognise the right to collective bargaining.

We expect our suppliers to respect these same principles and commit to the Kemira Code of Conduct for Suppliers, Agents and Distributors when conducting business with us.

To increase Kemira employees' awareness of their rights regarding freedom of association and collective bargaining, we review and update the Code of Conduct, and provide regular training. All Kemira employees are given a personal copy of the Code of Conduct.

In 2016, Kemira did not identify any violations of freedom of association or collective bargaining in our own operations. Sinced 2014 we have conducted 117 sustainability assessments of our key suppliers, representing approximately 25% of our total spend, and no evidence has been found to indicate that suppliers would be restricting their employees' opportunities to exercise freedom of association and collective bargaining.

As no risks relating to violations were identified either within Kemira or in our supply chain, no specific support measures were taken. For additional information, see the Responsible business practices section for details of our Code of Conduct training and Kemira's Ethics and Compliance Hotline, which provides an internal channel for reporting any violations of employees' rights. Details of the numbers of employees covered by collective bargaining agreements are given under G4-11.

MATERIAL ASPECT: ASSESSMENT

G4-HR9: TOTAL NUMBER AND PERCENTAGE OF OPERATIONS THAT HAVE BEEN SUBJECT TO HUMAN RIGHTS REVIEWS OR IMPACT ASSESSMENTS

Kemira conducted a Human Rights Impact Assessment in 2014 to identify any risks of human rights impacts in our operations and in our value chain, and any potential gaps in our management approach to human rights. Our management approach was assessed against the Operational Principles of the UN Guiding Principles of Business and Human Rights. Based on the results, no evidence of infringments of human rights was found. The results indicated there are a few potential high risk areas of human rights impacts where we should develop our management approach, which are:

- Unsafe handling of hazardous substances may have potential impacts on health and workplace safety
- Upstream and downstream business relationships
- Business expansion in emerging markets.

To address the health and workplace safety issues, we further develop our product stewardship management to ensure the safe use of our products in our value chain, and continuously develop our workplace safety culture. During 2016, we have focused on enhancing and implementing our management process for priority substances, and developing our safety culture through target setting, training and communications measures. For more information see indicators G4-PR1 for product stewardship and G4-LA6 for workplace safety.

To address the area of business relationships, in 2016, we made a decision to initate 3rd party due diligence project to define a harmonized process for selecting and managing relationships with distributors and agents. We already have an extensive program covering our supplier relationship management.

We have also organized training on human rights for all employees who are responsible for ensuring that human rights are respected in our business relationships and in our own operations. The target group covered a total of 2,850 employees. By the end of 2016, 75% of the targeted employees had completed the training (80% by the end of 2015). Human rights training is also a compulsory part of the induction training given to all new employees in the target group. Kemira also provides all employees training on the importance of our Code of Conduct to enhance awareness of compliance issues including human rights.

3.5 SOCIETY

MATERIAL ASPECT: LOCAL COMMUNITIES

G4-SO1: PERCENTAGE OF OPERATIONS WITH IMPLEMENTED LOCAL COMMUNITY ENGAGEMENT, IMPACT ASSESSMENTS, AND DEVELOPMENT PROGRAMS

Our dialogue with local communities is aimed to understand and implement activities that respond to local needs, concerns and expectations, and to provide opportunities for our own employees to participate in local community initiatives.

OUR LOCAL COMMUNITY ENGAGEMENT AND DEVELOPMENT PROGRAMS

We encourage initiatives that support positive interaction with the communities where we operate. Our global guidance is to focus our sponsorships and donations to education related programs in chemistry and technology, mainly addressed to children and youth. In 2016, the largest sponsorships and donations included a EUR 200,000 donation to Åbo Akademi University (Finland), and a sponsorship of the Gadolin Chemistrylab at Helsinki University (Finland) aimed to support the positive image of chemistry for pupils and students aged from 7 to 20. We also have collaboration and partnerships with universities, for example with the Georgia Institute of Technology in the US. Locally we engage with communities in many ways, for example we support education related to water and chemistry, charity work with selected target group or arrange open-house events to the neigborhoods. In 2016, Kemira organized approximately 40 local community activities.

OUR ENVIRONMENTAL IMPACT ASSESSMENTS

Most of Kemira's manufacturing sites are located in industrial parks that are designed for the purpose of industrial development, and only a few sites are located close to residential areas. Environmental impact assessments and systematic process risk assessment of our operations are conducted at every manufacturing site in alignment of our EHSQ management system. We conduct assessments at every manufacturing site, as defined in regulatory requirements, the ISO 14001 management system and our own internal standards.

- Each Kemira site is classified for hazard risks of operations based on the results of process risk evaluation. Our internal requirements for the degree of environmental and process safety management and audit frequency for each site are based on the hazard ranking level: higher ranking meaning higher requirements. In 2016, 15 out of 66 manufacturing sites (operating during 2016) were classified as high-hazard sites.
- Each Kemira site has a program and contingency plan in place to ensure the safety of surrounding communities. This is done in close cooperation with local environmental authorities. To enhance the safe use of chemicals, Kemira works in close cooperation with many local chemical agencies.

For complementary information, see chapter Responsibility towards local communities.

G4-SO2: OPERATIONS WITH SIGNIFICANT ACTUAL AND POTENTIAL NEGATIVE IMPACTS ON LOCAL COMMUNITIES

Oil spill at the Joutseno site, Finland. In May, 2016, an oil spill occurred during maintenance operations at the FC Power hydrogen power plant located in the Kemira's industrial site in Joutseno, Finland. The FC Power hydrogen plant is owned by Leppäkosken sähkö (66%) and Kemira (34%). Approximately 1,000 liters of lubricant oil leaked in to the lake Saimaa. Most of the oil was collected and the possible environmental impact was evaluated to be low. The evaluation was conducted together with the local fire and rescue department and environmental authorities. The authorities continue to follow the possible effects on the lake´s ecosystem, and we are supporting their work. There have been a few inquiries about compensation for the damages, and those will be handled by FC Power. The root cause analysis has been conducted and review of similar locations has been done to avoid same type of incident to happen again in our operations.

Fire at the Äetsä site, Finland. In April 2016, a fire started in our sodium chlorate site in Äetsä in one of the three chlorate production lines. Our employees quickly brought the fire under control in record time together with the local fire department. There were no reported personnel injuries or environmental damage. All the fire fighting water and other contaminants were successfully collected from the damaged area to a safe location.

MATERIAL ASPECT: ANTI-CORRUPTION

G4-SO3: TOTAL NUMBER AND PERCENTAGE OF OPERATIONS ASSESSED FOR RISKS RELATED TO CORRUPTION AND THE SIGNIFICANT RISKS IDENTIFIED

In 2016, Kemira conducted an ethics & compliance risk assessment, consisting of internal survey, key management interviews and workshops covering key business operations and functions in all regions. In addition, corruption risk has also been one element in the interviews conducted with key management as part of developing the Kemira internal audit plan for 2017. Based on the revenue generated in locations subject to internal audit in 2016, approximately 90% of the legal entities were audited, including certain risks related to corruption. No significant risks related to corruption were identified through ethics & compliance risk assessment, management interviews or internal audits in 2016.

G4-SO4: COMMUNICATION AND TRAINING ON ANTI-CORRUPTION POLICIES AND PROCEDURES

Kemira's principles for anti-corruption are included in the Kemira Code of Conduct and in the Kemira Group Gifts, Entertainment and Anti-Bribery Policy. Both documents are available to all employees on Kemira intranet, and the Code of Conduct is also publicly available at www.kemira.com.

We expect our suppliers and other business partners to conduct their business with integrity and commit to Kemira Code of Conduct for Suppliers, Agents and Distributors (CoC-SDA) in their business activities with Kemira. The CoC-SDA states that Kemira expects its business partners to adhere to local legislation and avoid corruption in all its forms.

Kemira provides mandatory Anti-Bribery training to the selected personnel groups, who need to have comprehensive understanding on Kemira's anti-corruption principles. Employee awareness of anti-corruption matters is also employed through our Code of Conduct training, which is mandatory to all of our employees. Anti-corruption principles are also elaborated in the face-to-face compliance training sessions, which are organized in selected locations.

G4-SO5: CONFIRMED INCIDENTS OF CORRUPTION AND ACTIONS TAKEN

There were no confirmed incidents of corruption or public legal cases regarding corruption in 2016.

MATERIAL ASPECT: PUBLIC POLICY

G4-SO6: TOTAL VALUE OF POLITICAL CONTRIBUTIONS BY COUNTRY AND RECIPIENT/ BENEFICIARY

The Kemira Code of Conduct, Kemira Group Sponsorship and Donation policy and the Kemira Group Gifts, Entertainment and Anti-Bribery Policy prohibit any financial support to politicians, political parties or political organizations. No financial or in-kind political contributions paid by Kemira have come to Kemira's attention during 2016.

MATERIAL ASPECT: ANTI-COMPETITIVE BEHAVIOR

G4-SO7: TOTAL NUMBER OF LEGAL ACTIONS FOR ANTI-COMPETITIVE BEHAVIOR, ANTITRUST, AND MONOPOLY PRACTICES AND THEIR OUTCOMES

Kemira was a defendant in two legal proceedings in which damages were sought for violations of competition law, on the basis of events which occurred before year 2000. These proceedings are described in the Note 29 to the Consolidated Financial Statements: Commitments and contingent liabilities, under heading Litigation.

Several class action suits have been filed 2015–16 in the United States based on alleged violation of antitrust laws relating to sale of certain water treatment chemicals. In some of those claims, Kemira has been named as a defendant among other defendants. According to Kemira's assessment, these law suits against Kemira lack merit.

In 2016, Kemira had no other pending or completed legal actions initiated under national or international laws designed for regulating anti-competitive behavior, antitrust, or monopoly practices.

MATERIAL ASPECT: COMPLIANCE

G4-SO8: MONETARY VALUE OF SIGNIFICANT FINES AND TOTAL NUMBER OF NON-MONETARYSANCTIONS FOR NON-COMPLIANCE WITH LAWS AND REGULATIONS

No significant fines or non-monetary sanctions for non-compliance with laws and regulations came to Kemira's attention in 2016. This is based on the information available through our Group legal department, Group Finance and Administration and the Environmental, Health, Safety and Quality organization.

MATERIAL ASPECT: GRIEVANCE MECHANISMS FOR IMPACTS ON SOCIETY

G4-SO11: NUMBER OF GRIEVANCES ABOUT IMPACTS ON SOCIETY FILED, ADDRESSED, AND RESOLVED THROUGH FORMAL GRIEVANCE MECHANISMS

There were no grievances about impacts on society filed through formal grievance mechanisms in 2016, nor grievances filed prior and resolved in 2016.

3.6 PRODUCT RESPONSIBILITY

MATERIAL ASPECT: CUSTOMER HEALTH AND SAFETY

G4-PR1: PERCENTAGE OF SIGNIFICANT PRODUCT AND SERVICE CATEGORIES FOR WHICH HEALTH AND SAFETY IMPACTS ARE ASSESSED FOR IMPROVEMENT

All our products need to comply with all applicable chemical regulatory requirements in the countries where we manufacture and/or sell chemicals. Assessments examining regulatory compliance, human health impacts, safety issues and environmental protection aspects all form part of our Product Lifecycle Management processes. Our New Product Development (NPD) process also involves regular sustainability, product safety and regulatory compliance reviews at every stage of the process, as well as a final review before market launch.

PRODUCT STEWARDSHIP AS PART OF OUR PRODUCT LIFECYCLE MANAGEMENT

Product stewardship is the key pillar in the Responsible Care program, a voluntary initiative undertaken by the global chemical industry (through the International Council of Chemical Associations, ICCA), which Kemira is committed to. Product stewardship goes beyond regulatory compliance, which itself sets tight controls on the manufacture and sale of chemicals. Product stewardship in practice means proactive management to ensure that chemicals are used safely, to protect the environment and human health. This is a fundamental pre-requisite for conducting our business. Product stewardship provides a platform that helps us to identify risks at an early stage and manage those risks along the value chain. This also helps us to focus our product and process development efforts in areas where our positive impacts on safety and sustainability along the value chain will be greatest.

Kemira's Product Stewardship Policy was approved by the Management Board during 2016, defining minimum requirements for our operations to ensure that our products can be safely used by our stakeholders, and that chemical risks and their impacts are incorporated in decision making relating to our operations, the implementation of our strategy, and our long-term strategic development. Key activities for implementing the policy include the identification of prioritity substances and the preparation of management plans for each of these substances.

Priority substance management is a key process in our proactive management of safe use of chemicals

- **Priority substances** include substances with especially harmful / hazardous properties, substances that are included in selected regulatory schemes with the anticipation of stricter regulation in the future, and substances which are otherwise controversial or the focus of stakeholders' concern.
- **Kemira priority substance list** contains substances from our product portfolio which we have proactively identified and prioritized since they may pose a risk in our value chain. We identify and follow relevant regulatory schemes and the requirements of non-regulatory stakeholders. We screen the long list of substances against available raw material compositions and sales product compositions, and then prioritize the substances by revenue or raw material spend, assigning experts to evaluate the validity of potential concerns.
- **Our priority substance management plan** aims to define the specific risks associated to each substance, examine options for managing these specific risks, and formulate action plans for the preferred options. These options may include substitution, replacement or changes in the product information provided for users in our value chain.

PRODUCT REGULATORY COMPLIANCE

The manufacturing and sale of chemicals are widely regulated around the world. Chemicals are regulated at multiple levels, including:

1) Regional and country-specific inventories and substance registrations, such as the Toxic Substances Control Act (TSCA) in the USA, the China Existing Chemical Inventory (IECSC), and the EU's REACH Regulation (Registration, Evaluation, Authorization and Restriction of Chemicals).
2) Regulations related to hazard communication, including chemical classification, labeling and safety data sheet requirements.
3) End use or application-specific regulations such as food contact regulations, biocide regulations and off-shore chemicals notification schemes.
4) Operational and site-specific requirements related to rules and procedures such as environmental permits for specific operations, and workplace health and safety regulations.

Key activities relating to regulatory compliance conducted in 2016:

- We have continued to prepare for the remaining REACH registrations in the EU, in order to meet our obligations before the third and final transitional registration deadline in 2018.
- We are preparing to register our chemicals so as to comply also with Korea's REACH requirements.
- We have started to make substance registrations and continued to prepare registrations required under the EU Biocidal Products Regulation.

- Actions have been taken in relation to the United Nations' Globally Harmonized System (GHS) for classification and labeling of chemicals, including the due implementation of new classifications with new safety data sheets and labels in Canada, in advance of the deadline of 31st May 2017.
- Product regulatory compliance audits are conducted regularly at our manufacturing sites.

G4-PR2: TOTAL NUMBER OF INCIDENTS OF NON-COMPLIANCE WITH REGULATIONS AND VOLUNTARY CODES CONCERNING THE HEALTH AND SAFETY IMPACTS OF PRODUCTS AND SERVICES DURING THEIR LIFE CYCLE, BY TYPE OF OUTCOMES

In 2016, Kemira did not record any cases of non-compliance with regulations and voluntary codes resulting in any fine, penalty or warning.

MATERIAL ASPECT: PRODUCT AND SERVICE LABELING

G4-PR3: TYPE OF PRODUCT AND SERVICE INFORMATION REQUIRED BY THE ORGANIZATION'S PROCEDURES FOR PRODUCT AND SERVICE INFORMATION AND LABELING, AND PERCENTAGE OF SIGNIFICANT PRODUCT AND SERVICE CATEGORIES SUBJECT TO SUCH INFORMATION REQUIREMENTS

Kemira's product portfolio contains 7 major product lines and approximately 2,400 different products. All of these products are duly documented and labeled according to legal requirements, including the identification of their hazardous components and information on their safe use.

Kemira provides Safety Data Sheets for all products, although in most jurisdictions Safety Data Sheets are mandatory only for hazardous products. In addition to the information provided on product labels and Safety Data Sheets, more detailed information about products and their raw material ingredients can be provided on request.

In 2016, the Kemira Product Stewardship & Regulatory Affairs team responded to approximately 7,700 (8,770 in 2015 and 5,400 in 2014) requests concerning product safety and/or regulatory compliance from customers around the world.

G4-PR3: PRODUCT AND SERVICE INFORMATION PROVIDED

Topic	Product and service information provided
Sourcing of components of the product or service	Only if requested by customers
Content, particularly with regard to substances that might have environmental or social impacts	As required by law, always in Safety Data Sheets (SDS) and on product labels. Additional information compiled about chemicals in our products for voluntary certification/compliance schemes such as ecolabeling is also provided to customers on request, when applicable.
Safe use of the product or service	Details of how to use a product or service safely are provided in SDS's and on product labels. Additional information about usage, dosage and applications is provided to customers when applicable.
Disposal of the product and environmental/social impacts	Whenever legally required, information on the disposal of a product and the related environmental/social impacts is provided in the SDS's and on product labels.

G4-PR4: TOTAL NUMBER OF INCIDENTS OF NON-COMPLIANCE WITH REGULATIONS AND VOLUNTARY CODES CONCERNING PRODUCT AND SERVICE INFORMATION AND LABELING, BY TYPE OF OUTCOMES

Customer complaints, claims and non-conformities are actively monitored, evaluated and corrected as required by the quality management system in use at Kemira.

During 2016, a total of 93 (72) customer complaints were recorded relating to labeling, of which 63 cases were in the EMEA region, 23 in the Americas, and 7 in the APAC region. Wrong label or wrong information on label was the most frequent reason for a customer complaint. Corrective actions planned for 14 cases were underway at the year end.

In late 2016, a total of 3 (4) incidents related to non-compliance with regulations were reported. The handling of all cases was ongoing by the year end.

During 2016, no incidents of non-compliance with regulations resulting in any fine, penalty or warning were reported within Kemira's operations.

MATERIAL ASPECT: MARKETING COMMUNICATIONS

G4-PR6: SALE OF BANNED OR DISPUTED PRODUCTS

As stated in our Code of conduct, Kemira complies with law, including chemical laws and regulations, and we do not sell any banned products. We continuously screen substances that are covered by any regulatory restrictions, or subject to substitution requirements imposed by non-regulatory stakeholders. We proactively work to mitigate health, safety, environmental and image-related risks. See also indicator G4-PR1.

MATERIAL ASPECT: PRODUCT COMPLIANCE

G4-PR9: MONETARY VALUE OF SIGNIFICANT FINES FOR NON-COMPLIANCE WITH LAWS AND REGULATIONS CONCERNING THE PROVISION AND USE OF PRODUCTS AND SERVICES

During 2016, Kemira was not accused of any regulatory non-compliances resulting in fines.

4 REPORTING PRINCIPLES

4.1 REPORTING FRAMEWORK AND DISCLOSURES

The GRI disclosures are part of the Kemira Annual Report 2016, and is prepared in accordance with the Core option of the Global Reporting Initiative (GRI) G4 Guidelines. Some of the General Standard Disclosures or Specific Standard Disclosures according to the GRI G4 Guidelines are reported in other sections of Kemira's Annual Report 2016: i.e. in its Business Overview, Corporate Governance Statement or Financial Statement.

- The requirements of the EU Directive 2014/95/EU disclosure of non-financial and diversity information by large public-interest entities are partially reflected in Kemira's GRI disclosures 2016.
- Communication on Progress (COP) in relation to the UN Global Compact's Ten Principles is included in the Business Overview and this GRI disclosures.

The GRI Content Index refers both to the GRI-G4 indicators for actions to implement the UN Global Compact, and to the disclosure requirements of EU Directive 2014/95/EU.

Kemira's Board of Directors reviewed and approved the contents of our Business Overview and GRI disclosures in February 2017. Deloitte & Touche Oy has independently assured the contents related to our economic, environmental and social performance against the GRI principles for report content and quality.

4.2 REPORTING SCOPE

G4-13: SIGNIFICANT CHANGES DURING THE REPORTING PERIOD

At the end of 2016, Kemira operated 63 (64 in 2015) manufacturing sites. During 2016, Kemira closed 2 manufacturing sites, Zaramillo in Spain and Ottawa in Canada. A smaller site Flix in Spain is integrated into Tarragona site. Ortigueira manufacturing site in Brazil was started in April. Our environmental reporting scope included 66 (67) manufacturing sites owned by Kemira Oyj and subsidiaries. See the Consolidated Financial statements, note 32.

There were no significant changes in our company size, structure or ownership or along our supply chains in terms of the locations of material and service suppliers, or our selection or termination of suppliers. A decision was made to outsource external road transportation management activities to Odyssey, starting in 2017.

G4-17: ENTITIES INCLUDED IN THE ORGANIZATION'S CONSOLIDATED FINANCIAL STATEMENTS

The reporting boundaries mainly follow the reporting boundaries of Kemira's Consolidated Financial Statements. The reporting boundaries and the completeness of the information is provided in the table Reporting scope (G4-19, G4-20, and G4-21). The entities included in Kemira's Consolidated Financial Statements are listed in the Consolidated Financial Statement: Note 33; Group companies.

G4-18: PROCESS FOR DEFINING GRI REPORT CONTENT AND ASPECT BOUNDARIES

The selection of material aspects reported in the section Performance disclosures was carried out in accordance with the GRI G4 Principles for defining report content.

1. IDENTIFICATION OF MATERIAL ASPECTS
Material aspects relevant to Kemira have been identified on the basis of the topics and concerns raised by our stakeholders. Our stakeholder expectations were most recently reviewed in 2015.

2. PRIORITIZATION OF MATERIAL ASPECTS
The identified topics were matched against 46 material aspects in the GRI subject list and were prioritized with reference to their relative importance to stakeholders, and to their relevance to Kemira's strategy and business model, as well as the relevance of sustainability topics to the global chemical sector as a whole. The procedure identified 36 material aspects as duly meeting these criteria, and which were selected for our reporting purposes.

3. VALIDATION
Data collection practices for the selected material aspects were reviewed and defined. These aspects are listed together with the respective aspect boundaries and data collection practices in table G4-19–21. Aspect boundaries for the selected material aspects were defined to reflect whether the impacts occur within or outside of entities owned by Kemira. According to Kemira's consolidation rules, all entities owned by the company during the reporting year are included.

The identified material aspects provide a balanced representation of Kemira's corporate responsibility focus areas, which are: Responsible business practices; Sustainable products and solutions; Responsibility towards our employees; Responsibility in our supply chain; Responsible manufacturing; and Responsibility towards the local communities we operate in.

4. REVIEW
Our Management Board annually discusses and approves our corporate responsibility performance and targets.

G4-19–21 IDENTIFIED MATERIAL ASPECTS AND ASPECT BOUNDARIES

G4-19: Identified material aspects	G4-20: Aspect boundaries within Kemira	G4-21: Aspect boundaries outside Kemira	Data collection practices
CATEGORY: ECONOMIC			
• Economic performance	Kemira's operations*		Data is extracted from Kemira's Enterprise Resource Planning (ERP) system and collected from Kemira consolidated companies. Consolidation on the Group level.
CATEGORY: ENVIRONMENT			
• Materials • Products and services • Transport	Kemira's operations as covered by our ERP**		Data is extracted from Kemira's ERP system and from our R&D and New Product Development process documentation.
• Energy (Scopes1 and 2) • Water • Emissions (Scopes 1 and 2) • Effluents and waste • Compliance • Environmental expenses and investments	Kemira's manufacturing sites***		Data is collected from each production site and consolidated on the Group level.
• Emissions (Scope 3)		Kemira value chain from suppliers to customers	Data is collected from Kemira's ERP system and the relevant organizational units. Default data and assumptions are as in the WBCSD Guidance for Accounting & Reporting Corporate Greenhouse Gas Emissions in the Chemical Sector Value Chain.
• Supplier Environmental Assessments		Suppliers	Harmony Contract Management Tool used to track suppliers' signing of our Code of Conduct for Suppliers, Agents and Distributors. Ecovadis database for supplier sustainability assessment.
• Environmental Grievance Mechanism	Kemira's operations*	External stakeholders	Kemira's Compliance and Ethics Hotline. External notifications collected from responsibility@kemira.com.
CATEGORY: SOCIAL			
Labor practices and decent work			
• Employment • Labor/management relations • Occupational health and safety**** • Training and education • Diversity and equal opportunity • Equal remuneration for women and men	Kemira's operations*		HR data management system. To some extent Kemira uses workers and employees who are supervised by our contractors, but the related information is managed locally at respective sites, and not collected and consolidated globally.
• Supplier Assessments for Labor Practices		Suppliers	Harmony Contract Management Tool used to track suppliers' signing of our Code of Conduct for Suppliers, Agents and Distributors.
• Labor Practices Grievance Mechanism	Kemira's operations*	External stakeholders	Kemira's Compliance and Ethics Hotline.
Human rights			
• Non-discrimination • Freedom of association and collective bargaining • Human Rights Assessments	Kemira's operations*		Notifications through Compliance & Ethics Hotline and responsibility@kemira.com.
• Supplier Human Rights Assessments		Suppliers	Harmony Contract Management Tool used to track suppliers' signing of our Code of Conduct for Suppliers, Agents and Distributors.
• Human Rights Grievance Mechanism	Kemira's operations*	External stakeholders	Kemira's Compliance and Ethics Hotline. External notifications collected from responsibility@kemira.com.
Society			
• Local communities • Anti-corruption • Public policy • Anti-competitive behavior • Compliance	Kemira's operations*		Data is collected from each region, from Kemira's legal archive, and through notifications from Kemira's Compliance and Ethics Hotline.
• Supplier Assessment for Impacts on Society		Suppliers	Harmony Contract Management Tool used to track suppliers' signing of Code of Conduct for Suppliers, Agents and Distributors.
• Grievance Mechanism for Impacts on Society	Kemira's operations*	External stakeholders	Kemira's Compliance and Ethics Hotline. External notifications collected from responsibility@Kemira.com.
Product responsibility			
• Customer health and safety • Product and service labeling • Marketing communication • Compliance	Kemira's operations covered by ERP		Data is extracted from Kemira's ERP system, from R&D and New Product Development process documentation, and from Kemira's legal archives.

* Kemira's operations = all operations covered by Kemira's consolidation rules.
** Kemira's operations covered by ERP = all operations covered by both Kemira's consolidation rules and the company's Enterprise Resource Planning (ERP).
*** Kemira's manufacturing sites = all manufacturing sites covered by Kemira's consolidation rules.
**** Occupational health & safety: total recordable incident (TRI) figures also cover contractors working at Kemira sites.

G4-22: EFFECTS OF ANY RESTATEMENTS OF INFORMATION PROVIDED IN PREVIOUS REPORTS, AND THE REASONS FOR SUCH RESTATEMENTS.

In 2016 report, there were no major restatements of information provided in previous reports.

G4-23: SIGNIFICANT CHANGES FROM PREVIOUS REPORTING PERIODS IN THE SCOPE AND ASPECT BOUNDARIES

There are no significant changes from previous reporting periods in the reporting scope and aspect boundaries.

4.3 REPORT PROFILE

G4-28: REPORTING PERIOD

The reporting period is from 1 January to 31 December 2016.

G4-29: DATE OF THE MOST RECENT PREVIOUS REPORT

Kemira's previous Corporate Responsibility Report 2015 was published on 26 February 2016.

Our first annual report prepared according to the GRI guidelines was published for the reporting year 2011. Prior to 2010 we used the Responsible Care Reporting Guidelines of the European Chemical Industry Council (CEFIC) as a reporting framework to report on our environmental performance since the early 1990s. Reports for the years 2003–2016 are available on Kemira's website www.kemira.com.

G4-30: REPORTING CYCLE

Kemira's annual report is published annually by calendar year. The annual report consist of Business overview, GRI disclosures, Corporate governance statement and Financial statements.

G4-31: CONTACT POINT FOR QUESTIONS REGARDING THE REPORT

If you have any questions regarding this report or its contents, please contact Kemira Communications and Corporate Responsibility. Contact details are available at www.kemira.com.

5 ASSURANCE REPORT

INDEPENDENT LIMITED ASSURANCE REPORT

G4-33: POLICY AND CURRENT PRACTICE WITH REGARD TO SEEKING EXTERNAL ASSURANCE FOR THE REPORT

Information on the organization's policy and current practice with regard to external assurance can be found in the Assurance statement.

TO THE BOARD OF DIRECTORS OF KEMIRA OYJ

We have been engaged by Kemira Oyj (hereafter Kemira) to provide a limited assurance on Kemira's corporate responsibility information for the reporting period of January 1, 2016 to December 31, 2016. The information subject to the assurance engagement is the Kemira GRI Report and corporate responsibility information disclosed in the Kemira Business Overview section in the Annual Report (hereafter: Responsibility Information).

MANAGEMENT'S RESPONSIBILITY

Management is responsible for the preparation of the Sustainability Information in accordance with the Reporting criteria as set out in Kemira's reporting principles on pages 43–45 of the GRI report and the Sustainability Reporting Guidelines (G4 Core) of the Global Reporting Initiative. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of the Sustainability Information that are free from material misstatement, whether due to fraud or error, selecting and applying appropriate criteria and making estimates that are reasonable in the circumstances.

ASSURANCE PROVIDER'S RESPONSIBILITY

Our responsibility is to express a limited assurance conclusion on the Responsibility Information based on our engagement. We conducted our assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised) to provide limited assurance on performance data and statements within the Responsibility Information.

This Standard requires that we comply with ethical requirements and plan and perform the assurance engagement to obtain limited assurance whether any matters come to our attention that cause us to believe that the Responsibility Information has not been prepared, in all material respects, in accordance with the Reporting criteria.

We did not perform any assurance procedures on the prospective information, such as targets, expectations and ambitions, disclosed in the Responsibility Information. Consequently, we draw no conclusion on the prospective information. Our assurance report is made in accordance with the terms of our engagement with Kemira. We do not accept or assume responsibility to anyone other than Kemira for our work, for this assurance report, or for the conclusions we have reached.

A limited assurance engagement with respect to responsibility related data involves performing procedures to obtain evidence about the Responsibility Information. The procedures performed depend on the practitioner's judgment, but their nature is different from, and their extent is less than, a reasonable assurance engagement. It does not include detailed testing of source data or the operating effectiveness of processes and internal controls and consequently they do not enable us to obtain the assurance necessary to become aware of all significant matters that might be identified in a reasonable assurance engagement.

Our procedures on this engagement included:

- Conducting interviews with senior management responsible for corporate responsibility at Kemira to gain an understanding of Kemira's targets for corporate responsibility as part of the business strategy and operations;
- Reviewing internal and external documentation to verify to what extent these documents and data support the information included in the Responsibility Information and evaluating whether the information presented in the Responsibility Information is in line with our overall knowledge of corporate responsibility at Kemira;
- Conducting interviews with employees responsible for the collection and reporting of the Responsibility Information and reviewing of the processes and systems for data gathering, including the aggregation of the data for the Responsibility Information;
- Performing analytical review procedures and testing data on a sample basis to assess the reasonability of the presented responsibility information;
- Performing site visits to San Giorgio in Italy and Nanjing in China to review compliance to reporting policies, to assess the reliability of the responsibility data reporting process as well as to test the data collected for responsibility reporting purposes on a sample basis;
- Assessing that the Responsibility Information has been prepared in accordance with the Sustainability Reporting Guidelines (G4 Core) of the Global Reporting Initiative.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion.

OUR INDEPENDENCE, QUALITY CONTROL AND COMPETENCES

We complied with Deloitte's independence policies which address and, in certain cases, exceed the requirements of the International Federation of Accountants Code of Ethics for Professional Accountants in their role as independent assurance providers and in particular preclude us from taking financial, commercial, governance and ownership positions which might affect, or be perceived to affect, our independence and impartiality and from any involvement in the preparation of the report. We have maintained our independence and objectivity throughout the year and there were no events or prohibited services provided which could impair our independence and objectivity.

Deloitte & Touche Oy applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. This engagement was conducted by a multidisciplinary team including assurance and sustainability expertise with professional qualifications. Our team is experienced in providing sustainability reporting assurance.

CONCLUSION

On the basis of the procedures we have performed, nothing has come to our attention that causes us to believe that the information subject to the assurance engagement is not prepared, in all material respects, in accordance with the Sustainability Reporting Guidelines (G4 Core) of the Global Reporting Initiative or that the Responsibility Information is not reliable, in all material respects, with regard to the Reporting criteria.

Our assurance statement should be read in conjunction with the inherent limitations of accuracy and completeness for responsibility information.

Helsinki 8.2.2017
Deloitte & Touche Oy

Jukka Vattulainen
Authorized Public
Accountant

Lasse Ingström
Authorized Public
Accountant

6 GRI CONTENT INDEX

BR = Business Report
GRI = GRI report
GS = Corporate Governance Statement
FS = Financial Statements

- The report is prepared in accordance with the GRI-G4 Core option.
- Communication on Progress (COP) of the UN Global Compact at Global Compact Active level using the GRI G4 reporting principles.

GENERAL STANDARD DISCLOSURES

	Standard disclosures	Location in the Annual Report (pp)	UN Global Compact Principles
	STRATEGY AND ANALYSIS		
G4-1	Statement from the most senior decision maker of the organization about relevance of sustainability to the organization and its strategy	BO 4–7	Commitement to GC
G4-2	Key impacts, risks and opportunities	BO 32–33 GRI 15–17	
	ORGANIZATIONAL PROFILE		
G4-3	Name of the reporting organization	Kemira Oyj	
G4-4	Primary brands, products and services	BO 20–31	
G4-5	Location of organization's headquarters	Helsinki, Finland	
G4-6	Countries of operation	BO 2–3, 19	
G4-7	Nature of ownership and legal form	BO 1	
G4-8	Markets served with geographic breakdown	BO 2–3, 19	
G4-9	Scale of the reporting organization	BO 2–3, FS 33	
G4-10	Workforce structure by emplyment type, gender and region	GRI 31–32	Principle 6
G4-11	Employees covered by collective bargaining agreements	GRI 32	Principle 3
G4-12	Description of organization's supply chain	GRI 10–11	
G4-13	Significant changes during the reporting period	GRI 43, FS note 32	
G4-14	Position regarding the precautionary principle and its application	GS, FS	
G4-15	Adherance to charters, principles and other external initiatives	BO 6, GRI 14	
G4-16	Memberships of associations and advocacy organizations	GRI 15	
	IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES		
G4-17	Entities included in the organization's consolidated financial statements	FS note 33	
G4-18	Process for determining the report content	GRI 43	
G4-19	Material Aspects identified in the process for defining report content	GRI 44	
G4-20	Boundaries of material aspects outside the organization	GRI 44	
G4-21	Boundaries of material aspects within the organization	GRI 44	
G4-22	Effect of any restatements of information provided in previous reports, and the reasons for such restatements.	GRI 45	
G4-23	Significant changes from previous reporting periods in the Scope and Aspect Boundaries	GRI 45	

GENERAL STANDARD DISCLOSURES

	Standard disclosures	Location in the Annual Report (pp)	UN Global Compact Principles
	STAKEHOLDER ENGAGEMENT		
G4-24	Stakeholder groups engaged by the organization.	GRI 15	
G4-25	Basis for identification and selection of stakeholders	GRI 15	
G4-26	Organization's approach to stakeholder engagement	GRI 15	
G4-27	Key topics and concerns that have been raised through stakeholder engagement and how the organization has responded to those key topics and concerns	GRI 15	
	REPORT PROFILE		
G4-28	Reporting period for the information provided	GRI 45	
G4-29	Date of the most recent previous report	GRI 45	
G4-30	Reporting cycle	GRI 45	
G4-31	Contact point for questions regarding the report or its contents	GRI 45	
G4-32	GRI content index. Table identifying the location of the Standard Disclosures in the report	GRI 48	
G4-33	Policy and practice with regard to seeking external assurance for the report	GRI 46	
	GOVERNANCE AND ETHICS		
	GOVERNANCE (see also Corporate governance statement)		
	Governance Structure and Composition		
G4-34	Governance structure of the organization	GRI 20	
G4-36	Executive-level position with responsibility for economic, environmental and social topics	GRI 20	
	ETHICS AND INTEGRITY		
G4-56	Organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	GRI 5	
G4-57	Internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines	GRI 5	
G4-58	Internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines	GRI 5	

SPECIFIC STANDARD DISCLOSURES

GENERIC DISCLOSURES ON MANAGEMENT APPROACH

For Kemira´s Description of Management Approach (DMA), please see:

- Our management approach, GRI pp 14–20
- Focus areas, GRI pp 4–14
- Economic impact, GRI pp 21–22
- Governance, GS; GRI pp 5, 20

SPECIFIC STANDARD DISCLOSURES

	Performance indicators	Location in the Annual Report (pp)	UN Global Compact Principles
	ECONOMIC PERFORMANCE INDICATORS		
	Aspect: Economic Performance		
G4-EC1	Direct economic value generated and distributed	GRI 21–22	
G4-EC3	Coverage of the organization's defined benefit plan obligations	GRI 22	
G4-EC4	Financial assistance received from government	GRI 22	
	ENVIRONMENTAL PERFORMANCE INDICATORS		
	Aspect: Materials		
G4-EN1	Materials used by weight or volume	GRI 23	Principle 7, 8
G4-EN2	Percentage of materials used that are recycled input materials	GRI 23	Principle 8
	Aspect: Energy		
G4-EN3	Energy consumption within the organization	GRI 24	Principle 7, 8
G4-EN5	Energy intensity	GRI 24	Principle 8
G4-EN6	Reduction of energy consumption	GRI 24	Principle 8, 9
	Aspect: Water		
G4-EN8	Total water withdrawal by source	GRI 27	Principle 7,8
G4-EN10	Percentage and total volume of water recycled and reused	GRI 27	Principle 8
	Aspect: Emissions		
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	GRI 25	Principle 7, 8
G4-EN16	Indirect greenhouse gas (GHG) emissions (Scope 2)	GRI 25	Principle 7, 8
G4-EN17	Other indirect greenhouse gas (GHG) emissions (Scope 3)	GRI 25–26	Principle 7, 8
G4-EN18	Greenhouse gas (GHG) emissions intensity	GRI 25	Principle 8
G4-EN19	Reduction of greenhouse gas (GHG) emissions	GRI 25	Principle 8,9
G4-EN20	Emissions of ozone-depleting substances (ODS)	GRI 26	Principle 7, 8
G4-EN21	NOX, SOX, and other significant air emissions	GRI 26	Principle 7, 8
	Aspect: Effluents and Waste		
G4-EN22	Total water discharge by quality and destination	GRI 27	Principle 8
G4-EN23	Total weight of waste by type and disposal method	GRI 28	Principle 8
G4-EN24	Total number and volume of significant spills	GRI 28	Principle 8
G4-EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention (2) Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	GRI 28	Principle 8
	Aspect: Products and Services		
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	GRI 29	Principle 7, 8, 9
G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category	GRI 29	Principle 8
	Aspect: Environmental compliance		
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	GRI 30	Principle 8
	Aspect: Transport		
G4-EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	GRI 30	Principle 8
	Aspect: Overall environmental spend		
G4-EN31	Total environmental protection expenditures and investments by type	GRI 30	Principle 7, 8, 9
	Aspect: Supplier Environmental Assessment		
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	GRI 10	Principle 8
	Aspect: Environmental Grievance Mechanisms		
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	GRI 6	Principle 8

SPECIFIC STANDARD DISCLOSURES

	Performance indicators	Location in the Annual Report (pp)	UN Global Compact Principles
	SOCIAL PERFORMANCE INDICATORS		
	LABOR PRACTICES AND DECENT WORK		
	Aspect: Employment		
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	GRI 32–33	Principle 6
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	GRI 34	
	Aspect: Labor/Management Relations		
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	GRI 34	Principle 3
	Aspect:Occupational Health and Safety		
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	GRI 36	
	Aspect: Training and Education		
G4-LA9	Average hours of training per year per employee by gender, and by employee category	GRI 35	Principle 6
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	GRI 35	
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	GRI 35	Principle 6
	Aspect: Diversity and Equal Opportunity		
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	GRI 36	Principle 6
	Aspect: Equal Remuneration for Women and Men		
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	GRI 37	Principle 6
	Supplier Assessment for Labor Practices		
G4-LA14	Percentage of new suppliers that were screened using labor practices criteria	GRI 10	
	Labor Practices Grievance Mechanisms		
G4-LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	GRI 6	
	HUMAN RIGHTS		
	Aspect: Non-discrimination		
G4-HR3	Total number of incidents of discrimination and corrective actions taken	GRI 38	Principle 6
	Aspect: Freedom of Association and Collective Bargaining		
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	GRI 38	Principle 3
	Aspect: Assessment		
G4-HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	GRI 38	Principle 1
	Aspect: Supplier Human Rights Assessment		
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	GRI 10	Principle 2
	Aspect: Human Rights Grievance Mechanisms		
G4-HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	GRI 6	Principle 1

SPECIFIC STANDARD DISCLOSURES

	Performance indicators	Location in the Annual Report (pp)	UN Global Compact Principles
	SOCIETY		
	Aspect: Local Communities		
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	GRI 39	Principle 1
G4-SO2	Operations with significant actual and potential negative impacts on local communities	GRI 39	Principle 1
	Aspect: Anti-corruption		
G4-SO3	Total number and percentage of operations asessed for risks related to corruption and the significant risks identified	GRI 39	Principle 10
G4-SO4	Communication and training on anti-corruption policies and procedures	GRI 40	Principle 10
G4-SO5	Confirmed incidents of corruption and actions taken	GRI 40	Principle 10
	Aspect: Public Policy		
G4-SO6	Total value of political contributions by country and recipient/beneficiary	GRI 40	Principle 10
	Aspect: Anti-competitive Behavior		
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	GRI 40	
	Aspect: Compliance		
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	GRI 40	
	Aspect: Supplier Assessment for Impacts on Society		
G4-SO9	Percentage of new suppliers that were screened using criteria for impacts on society	GRI 10	
	Aspect: Grievance Mechanisms for Impacts on Society		
G4-SO11	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	GRI 6	
	PRODUCT RESPONSIBILITY		
	Aspect: Customer Health and Safety		
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	GRI 11	
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	GRI 42	
	Aspect: Product and Service Labeling		
G4-PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	GRI 42	
G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	GRI 42	
	Aspect: Marketing Communications		
G4-PR6	Sale of banned or disputed products	GRI 42	
	Aspect: Product compliance		
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	GRI 42	

7 LINKING KEMIRA'S ANNUAL REPORT 2016 AND THE EU DIRECTIVE 2014/95/EU ON NON-FINANCIAL AND DIVERSITY DISCLOSURES

		Kemira Annual Report 2016	
EU Directive Disclosure elements	**EU Directive Content of disclosure elements**	**Policies, outcome of policies, principal related risks (page in BO or GRI)**	**GRI 4 indicators in GRI disclosures**
GENERAL DISCLOSURES			
	Description of business model	BO page 9, GRI page 17	
	External assurance	GRI page 46	
DIVERSITY			
	Description of our diversity policy in relation to our Board of Directors	Diversity Principles of Board of Directors at www.kemira.com	
ENVIRONMENTAL MATTERS			
	Use of materials	GRI 14–20	EN 1–2
	Use of renewable and/or non-renewable energy	GRI 12–20	EN 3, 5, 6
	Greenhouse gas emissions	GRI 12–20	EN 15–19
	Air pollution	GRI 14–20	EN 20
	Water use	GRI 14–20	EN 8, 10
	Land use and biodiversity	GRI 43	Not reported based on the materiality analysis
SOCIAL MATTERS			
	Dialogue with local communities	GRI 14–20	SO 1–2
	Actions taken to ensure the protection and the development of those communities	GRI 14–20	SO 1–2
EMPLOYEE MATTERS			
	Actions taken to ensure gender equality	GRI 8–9, GRI 14–20	LA 12–13
	Implementation of fundamental conventions of the International Labour Organisation	GRI 8–9, GRI 14–20	HR 3–4
	Working conditions	GRI 8–9, GRI 14–20	LA 6, 14, 16
	Social dialogue (stakeholder engagement)	GRI 14–20	24–27
	Respect for the right of workers to be informed and consulted	GRI 8–9, GRI 14–20	LA4
	Respect for trade union rights	GRI 8–9, GRI 14–20	HR 4
	Health and safety at work	GRI 8–9, GRI 14–20	LA 6
	Diversity of competences and views of the members of administrative, management and supervisory bodies, for instance age, gender and educational and professional backgrounds	GRI 8–9, GRI 14–20	LA 12
HUMAN RIGHTS MATTERS			
	Prevention of human rights abuses	GRI 5–6, GRI 14–20	HR 9–10, 12
ANTI-CORRUPTION AND BRIBERY MATTERS			
	Instruments in place to fight corruption and bribery	GRI 5–6, GRI 14–20	SO 3–5, 11

Where water
meets chemistry™

CORPORATE GOVERNANCE
STATEMENT

2016

Contents

CORPORATE GOVERNANCE STATEMENT 2016

GENERAL

Kemira Oyj's corporate governance is based on the Articles of Association, the Finnish Companies Act and Nasdaq Helsinki Ltd.'s rules and regulations on listed companies. Kemira complies with the Finnish Corporate Governance Code, which is publicly available at www.cgfinland.fi.

This statement is presented separately from the annual report by the Board of Directors. Kemira's Audit Committee has reviewed the Corporate Governance Statement, and the Company's Auditor, Deloitte & Touche Oy, has checked that the statement has been issued and that the description of the main features of the internal control and risk management related to the financial reporting process included in the statement is consistent with the Financial Statements.

MANAGEMENT BODIES

The Shareholders' Meeting, the Board of Directors and the Managing Director are responsible for Kemira's management and operations. Their tasks are defined based on the Finnish Companies Act and Kemira's Articles of Association.

SHAREHOLDERS' MEETING

Kemira Oyj's shareholders' meeting, or the General Meeting, the Company's highest decision-making body, is held at least once a year. The Annual General Meeting (AGM) must be held each year by the end of May. The AGM makes decisions on matters within its competence under the Companies Act and the Articles of Association, such as the adoption of the financial statements and dividend payout, the discharge of Board members and the Managing Director and his Deputy from liability, the election of the Chairman, Vice Chairman and other members of the Board of Directors and their emoluments, and the election of the auditor and the auditor's fees.

Notice to the shareholders' meeting shall be released on the Company's website no earlier than two months and no later than three weeks before the meeting, however, at least nine days before the record date of the meeting. Additionally, if so decided by the Board of Directors, the Company may publish the notice to the shareholders' meeting in one nationwide newspaper.

Kemira Oyj's Annual General Meeting was held in Helsinki on March 21, 2016. The meeting was attended by 509 shareholders either in person or by proxy, together representing around 60% of the shareholders' votes. The documents related to the AGM are available on Kemira's website www.kemira.com > Investors > Corporate governance > Annual General Meeting.

NOMINATION BOARD

The 2012 Annual General Meeting decided to establish a Nomination Board consisting of the shareholders or the representatives of the shareholders to prepare annually a proposal for the next AGM concerning the composition and remuneration of the Board of Directors.

The Nomination Board consists of the representatives of the four largest shareholders of Kemira Oyj based on the situation on August 31 preceding the AGM, and the Chairman of Kemira Oyj's Board of Directors acts as an expert member. The members of the Nomination Board shall elect a Chairman at the first meeting of the Board.

The Nomination Board has a charter that defines more precisely the process to elect its members and chairman as well as its tasks and meeting routines.

The Nomination Board will meet at least two times a year, with authority to convene additional meetings, as circumstances require. The members present at the meeting shall constitute a quorum if at least three of the members are present at the meeting.

As of August 31, 2016, the members of the Nomination Board are Pekka Paasikivi, Chairman of the Board of Oras Invest Oy, Kari Järvinen, Managing Director of Solidium Oy, Reima Rytsölä, Executive Vice President, Varma Mutual Pension Insurance Company, Timo Ritakallio, President & CEO, Ilmarinen Mutual Pension Insurance Company, and the Chairman of the Board Jari Paasikivi as an expert member. During the reporting period, Risto Murto, President & CEO of Varma Mutual Pension Insurance Company, was a member of the Nomination Board, until September 5, 2017.

The Nomination Board met two times in 2016 with an attendance rate of 100%. Each member's participation in the Nomination Board meetings was as follows:

Järvinen	2/2	100%
Murto	1/1	100%
J. Paasikivi	2/2	100%
P. Paasikivi	2/2	100%
Ritakallio	2/2	100%
Rytsölä	1/1	100%

BOARD OF DIRECTORS

COMPOSITION

The AGM elects the Chairman, Vice Chairman and other members of the Board of Directors. In accordance with the Articles of Association, the Board of Directors comprises 4–8 members. On March 21, 2016, the Annual General Meeting elected seven members to the Board of Directors. The AGM re-elected Wolfgang Büchele, Winnie Fok, Juha Laaksonen, Timo Lappalainen, Jari Paasikivi and Kerttu Tuomas to the Board of Directors, and Kaisa Hietala was elected as a new member. Jari Paasikivi was elected the

Board's Chairman and Kerttu Tuomas was elected the Vice Chairman. All of the Board members are independent of the Company except for Wolfgang Büchele who has been the Managing Director of Kemira Oyj as of April 1, 2012 until April 30, 2014. The Board members are also independent of significant shareholders of the Company except for the Chairman Jari Paasikivi. Jari Paasikivi is the CEO of Oras Invest Oy and Oras Invest Oy owns over 10% of Kemira Oyj's shares. The personal information concerning the members of the Board of Directors can be found in the section Group Management and their holdings can be found under the heading Insiders.

PRINCIPLES CONCERNING THE DIVERSITY OF THE BOARD OF DIRECTORS

The Board of Directors has adopted the following principles and targets concerning the diversity of the Board of Directors.

When designing the composition of the Board of Directors, the Nomination Board of the company assesses the Board composition from the viewpoint of the company's current and future business needs, while taking into account the diversity of the Board.

The diversity of the Board of Directors will be assessed from various viewpoints. Kemira's Board of Directors shall have sufficient and complementary experience and expertise in the key industries and markets relevant to Kemira's business. In addition, an essential element is the personal characteristics of the members and their diversity.

The company's aim is that the Board of Directors represent diverse expertise in different industries and markets, diverse professional and educational background, diverse age distribution and both genders. The objective is that both genders are represented in the Board by at least two members.

The current Board of Directors of the company complies with the company's diversity targets. Versatile expertise from various industries and markets is represented in the Board of Directors, as well as various professional and educational backgrounds. The ages of the directors vary between 45 and 64 years. Four of the directors are male and three are female.

TASKS AND DUTIES

According to the Articles of Association, the Board of Directors is tasked with duties within its competence under the Companies Act. It has drawn up a written Charter defining its key duties and procedures. The following is a description of the essential contents of the Charter. The Board of Directors is in charge of corporate governance and the due organization of the Company's operations. It decides on convening and prepares the agenda for the shareholders' meeting and ensures the practical implementation of decisions taken thereby. In addition, the Board of Directors decides on authorizations for representing the Company. The Board of Directors' key duties include matters which, in view of the scope and type of the Company's operations, are uncommon or involve wide-ranging effects. These include establishing the Company's long term goals and the main strategies for achieving them, approving the annual business plans and budget, defining and approving corporate policies in key management control areas, approving the Company's organizational structure and appointing the Managing Director, his Deputy and members of the Management Board. The Board of Directors approves the Company's capital investment policy and major investments, acquisitions and divestments. It also approves the group treasury policy and major long term loans and guarantees issued by the Company.

The Board's duties include ensuring that the Company has adequate planning, information and control systems and resources for monitoring result and managing risks in operations. The Board of Directors monitors and evaluates the performance of Managing Director, his Deputy and members of the Management Board and decides upon their remuneration and benefits. The Board's duty is to ensure continuation of the business operations by succession planning for key persons. The Board defines and approves the main principles for the incentive bonus systems within the Company.

The Board of Directors also manages other tasks within its competence under the Companies Act. It is responsible for the due organization of the supervision of the Company's accounting and asset-liability management. The Board of Directors sees to it that the Company's financial statements give a true and fair view of the Company's affairs and that the consolidated financial statements are prepared under the International Financial Reporting Standards (IFRS) and the parent company's financial statements under the acts and regulations in force in Finland (FAS). The Board of Directors' meetings discuss the Company's profit performance at monthly level. The Board of Directors discusses the Company's audit with the auditor. The Board of Directors evaluates its performance and working methods on an annual basis.

In 2016, the Board of Directors met 11 times. The average attendance rate at the meetings was 98.7%. Each director's attendance in the meetings was as follows:

Büchele	10/11	90.9%
Fok	11/11	100%
Hietala	10/10	100%
Laaksonen	11/11	100%
Lappalainen	11/11	100%
Paasikivi	11/11	100%
Tuomas	11/11	100%

REMUNERATION

Remuneration of the Board of Directors is described in section Remuneration Report.

BOARD COMMITTEES

Kemira Oyj's Board of Directors has appointed two committees: the Audit Committee and the Personnel and Remuneration Committee.

AUDIT COMMITTEE

The Audit Committee works in accordance with its Charter confirmed by the Board of Directors. It is tasked to assist the Board of Directors in fulfilling its oversight responsibilities for financial reporting process, the system of internal control, the internal and external audit process and Kemira's process for monitoring compliance with laws and regulations and the Kemira Code of Conduct. The Committee reports to the Board on each meeting.

The Audit Committee consists of four members of the Board of Directors. Majority of the members shall be independent of the company and at least one member shall be independent of significant shareholders. After the 2016 AGM, the Board elected Juha Laaksonen as the Chairman and Kaisa Hietala, Timo Lappalainen and Jari Paasikivi as members of the Committee. The Audit Committee met five times in 2016 with an attendance rate of 100%. Each member's attendance in the Audit Committee meetings was as follows:

Hietala	4/4	100%
Laaksonen	5/5	100%
Lappalainen	5/5	100%
Paasikivi	5/5	100%

PERSONNEL AND REMUNERATION COMMITTEE

The Personnel and Remuneration Committee consists of three members out of which the majority must be independent of the Company, elected by the Board of Directors from amongst its members. The Board of Directors has approved a Charter for the Committee, according to which the Committee assists the Board of Directors by preparation of matters related to compensation of Managing Director, his Deputy and the members of the Management Board, by preparation of matters pertaining to the compensation systems and long-term incentive plans of the Company, by preparation of matters relating to appointment of Managing Director, his Deputy and the members of the Management Board. The Committee also monitors succession planning of the senior management and the senior management's performance evaluation. The Committee reports to the Board of Directors on each meeting.

After the 2016 AGM, the Board elected Jari Paasikivi the Chairman and Kerttu Tuomas and Juha Laaksonen the members of the Personnel and Remuneration Committee. In 2016, the Personnel and Remuneration Committee met four times. The attendance rate at the meetings was 100%.

Each member's attendance in the Personnel and Remuneration Committee meetings was as follows:

Laaksonen	4/4	100%
Paasikivi	4/4	100%
Tuomas	4/4	100%

MANAGING DIRECTOR

The Board of Directors appoints the Managing Director and the Managing Director's Deputy. Under the Articles of Association, the Managing Director is responsible for managing and developing the Company in accordance with the instructions and regulations issued by the Board of Directors, ensuring that the Company's interests are served by the subsidiaries and associated companies under its ownership, and implementing the decisions taken by the Board of Directors. The Managing Director reports to the Board on financial affairs, the business environment and other significant issues. The Managing Director also functions as the Chairman of Kemira's Management Board.

Kemira Oyj's Managing Director (President and CEO) is Jari Rosendal, and the Deputy Managing Director is Group General Counsel Jukka Hakkila. The Managing Director and the Managing Director's Deputy, including their related parties, are not involved in any substantial business relationships with the Company.

The personal information concerning the Managing Director and the Managing Director's Deputy is set forth under the section Group Management and their holdings can be found in the section Insiders. The financial benefits related to the Managing Director's employment relationship are described in a section Remuneration Report.

MANAGEMENT BOARD

Kemira's Management Board consists of Managing Director Jari Rosendal (President and CEO), Petri Castrén (CFO), Heidi Fagerholm (CTO), Tarjei Johansen (President, Oil & Mining and Americas), Michael Löffelmann (EVP, Projects and Manufacturing Technology), Kim Poulsen (President, Pulp & Paper and APAC), Esa-Matti Puputti (EVP, Operational Excellence), Antti Salminen (President Municipal & Industrial and EMEA) and Eeva Salonen (EVP, HR). The Managing Director is the Chairman of the Management Board and the Group General Counsel acts as its Secretary.

The Management Board is an operative, non-statutory management body that is responsible for securing the long-term strategic development of the Company. The personal information of the Management Board members are presented in the section Group Management and their holdings can be found in the section Insiders. The decision-making process and main principles of remuneration of the members of the Management Board are described in section Remuneration Report.

OPERATIVE ORGANIZATION

Kemira Oyj has organized its business into three customer based segments. The Pulp & Paper segment focuses on serving customers in the pulp and paper industry, the Oil & Mining segment focuses on serving customers in the oil, gas and mining industries and the Municipal & Industrial segment concentrates on serving customers in municipal and industrial water treatment.

The segments have a strategic leadership role as they formulate their respective business strategies and guide the strategy implementation within the segment. Operational business responsibilities within a segment are assumed by Regional Business Units (RBUs) having full Profit & Loss responsibility. The RBUs are the key business decision making organs in the Company. As most business decisions are taken on a regional level closer to customers, Kemira is able to respond rapidly to changes in market environment.

The RBUs are guided by policies and guidelines defined by global functions. Global functions are responsible for developing policies, processes, guidelines and tools related to their respective functional areas on a global basis. Such policies and processes are complied with throughout the Company.

Functions also have representatives in each region. Regional functions ensure that the global policies are implemented and adhered to in the regions. They are also responsible for supporting the business locally in the region.

Geographically Kemira's operations are divided into three business regions: Europe, Middle East and Africa (EMEA), Americas and Asia Pacific (APAC). The Region Heads provide operational support and co-ordination within the region and steer all regional development projects.

INTERNAL CONTROL

Kemira maintains an internal control system to ensure the effectiveness and efficiency of its operations, including the reliability of financial and operational reporting and compliance with the applicable regulations, policies and practices. Internal control is an integral part of all of Kemira's operations and covers all levels of the Group. The entire Group personnel are responsible for internal control and its effectiveness is monitored by managers as part of operative management.

Kemira's corporate values, Code of Conduct and Group level policies and procedures guide the corporate governance and internal control in the Group. The internal policies and the Kemira Code of Conduct have been communicated to all Group staff. The Group also provides training concerning the main policies for people who need to know the policies in question. Every employee has the right and duty to report any violations of the law, the Code of Conduct or Group policies.

The main components of internal control are the management and organizational culture, risk assessment, control activities, reporting and communication, as well as monitoring and auditing.

INSIDERS

Kemira Oyj complies with EU Market Abuse Regulation, Finnish Securities Market Act, the rules and regulations issued by the European Securities and Markets Authority (ESMA) and Finnish Financial Supervision Authority (Fin-FSA) as well as the Guidelines for the Insiders of Listed Companies issued by Nasdaq Helsinki Ltd.

The company has identified the persons and vice-persons responsible for the various areas of insider administration within the company, including among others compliance in general, decision-making on publishing of insider information and on delaying the publication, maintaining the insider list, overseeing the compliance with the trading restriction as well as the publication of transactions made by the persons discharging managerial responsibilities and their closely associated persons involving stocks and other financial instruments relating to Kemira.

The company has determined, as required by the Market Abuse Regulation, that the persons discharging managerial responsibilities within the company include the Board of Directors, the Managing Director (President & CEO), Management Board as well as the secretary of Board of Directors and Management Board. The persons discharging managerial responsibilities are responsible for identifying their closely associated persons and to disclose the same to Kemira.

Kemira discloses by way of stock exchange release all transactions made by the persons discharging managerial responsibilities and their closely associated persons and companies involving stocks and other financial instruments relating to Kemira, as required by the Market Abuse Regulation.

According to the law, a person discharging managerial responsibilities must not make transactions with stocks or other financial instruments of a listed company during a period of 30 days preceding the publications of the interim or annual financial report of a listed company. Kemira applies a similar 30 days trade restriction to those of Kemira Group employees, who are involved in the preparation or publication of the interim or annual financial report and who have access to group level unpublished financial information.

Kemira Oyj's insider list is maintained by the legal department of the company using the SIRE service of Euroclear Finland Oy.

The attached table lays out the number of stocks owned by the persons discharging managerial responsibilities in Kemira Oyj, and by companies under their control, on December 31, 2016.

BOARD OF DIRECTORS

Insider	Position	Personal Ownership	Ownership through controlled companies
Paasikivi Jari	Chairman of the board of directors	212,364	0
Tuomas Kerttu	Vice Chairman of the board of directors	10,639	0
Büchele Wolfgang	Member of the board of directors	103,839	0
Fok Winnie	Member of the board of directors	8,082	0
Hietala Kaisa	Member of the board of directors	1,483	0
Laaksonen Juha	Member of the board of directors	10,949	0
Lappalainen Timo	Member of the board of directors	4,182	0
Total		**351,538**	**0**

MANAGEMENT BOARD

Name	Position	Personal Ownership	Ownership through controlled companies
Rosendal Jari	Chief Executive Officer (CEO)	40,000	0
Castrén Petri	Member of the management board	16,736	0
Fagerholm Heidi	Member of the management board	8,739	0
Johansen Tarjei	Member of the management board	11,236	0
Löffelmann Michael	Member of the management board	8,739	0
Poulsen Kim	Member of the management board	2,602	0
Puputti Esa-Matti	Member of the management board	8,739	0
Salminen Antti	Member of the management board	14,236	0
Salonen Eeva	Member of the management board	35,328	0
Hakkila Jukka	Secretary of the Board of Directors and the management board	66,595	0
Total		**212,950**	**0**
Grand Total		**564,488**	**0**

INTERNAL AUDIT

Kemira Group's Internal Audit function provides independent appraisal and assurance for the review of operations within the Group in order to support the management and the Board of Directors in fulfilling their oversight responsibilities.

The purpose is to evaluate and contribute to the improvement of risk management, control and governance systems in the Group. The purpose, authority and responsibilities of the unit are defined in the Kemira Internal Audit Charter approved by the Audit Committee. Internal auditors have complete and unrestricted access to all Kemira activities.

Internal Audit is free to determine the scope of internal auditing, the ways of performing its work and communicating its results.

Internal Audit reports to the Audit Committee and administratively to the Group General Counsel. Internal Audit reports all of its observations to the responsible management and to the auditor. In addition, Internal Audit reports regularly the most essential and material observations to the Audit Committee in connection with the Audit Committee's meetings. Furthermore, the Internal Audit has a direct and unrestricted access to discuss with the Chairman of the Audit Committee.

AUDIT

Under the Articles of Association, the shareholders' meeting elects an audit firm certified by the Finland Chamber of Commerce as the Company's auditor. The audit firm appoints the Principal Auditor, who is an Authorized Public Accountant certified by the Finland Chamber of Commerce. The auditor's term of office continues until the next Annual General Meeting after the Auditor's election.

The 2016 Annual General Meeting elected Deloitte & Touche Ltd. as the Company's auditor, with Jukka Vattulainen, APA, acting as the Principal Auditor. In 2016, the audit fee paid globally to the auditor (Deloitte) totaled EUR 1.5 million. In addition, a total of EUR 0.6 million was paid as fees for other services.

MAIN FEATURES OF THE INTERNAL CONTROL AND RISK MANAGEMENT SYSTEMS PERTAINING TO THE FINANCIAL REPORTING PROCESS

Kemira's Board of Directors defines the main principles of risk management and approves the Group's risk management policy. The business segments and functions are responsible for identifying, assessing and managing risks involved in their activities. The Group's Risk Management office coordinates and supports risk management. Kemira's internal control system covers all Group operations, including financial reporting. The internal control activities are carried out in all organizational levels as part of the Group's daily operations.

A more detailed description of risks and risk management can be found in Board of Directors Review and on the Company's website at www.kemira.com > Investors > Corporate governance > Risk management. A general description of Kemira's internal control system can be found above under the heading Internal control.

The following describes how Kemira's internal control and risk control work in connection with the financial reporting process to ensure that the financial reports published by the Company give essentially correct information of the Company's financial situation.

ROLES AND RESPONSIBILITIES

Kemira's Board of Directors ensures that the Company has sufficient resources for risk management and control, and that the control has been arranged appropriately and that the financial statements provide correct and sufficient information of the Company. The Board of Directors is assisted by the Audit Committee in these tasks.

The Managing Director handles the Company's everyday management in accordance with instructions and regulations from the Board of Directors. The Managing Director is responsible for the Company accounting being lawful and that assets are managed reliably.

The CFO is responsible for the general control system of financial reporting. The areas of responsibility between financial administration of the Group and the regions have been defined precisely. Group level financial functions support, monitor, instruct and offer training to the financial organizations of the regions. Group level financial functions are also responsible for the Group's internal financial reporting and support segment controllers in analyzing business processes. Financial organization in the regions is responsible for the functionality of the financial functions' processes and correctness of figures in their region. Controlling in segments operates under the segments' business management and analyzes and supports the business processes.

The Group's IT function has a significant role both in financial reporting and internal control, as reporting and many control measures, such as process monitoring are based on IT solutions.

The Internal Audit function including its tasks and areas of responsibility are described more specifically above under the heading Internal Audit.

RISK MANAGEMENT

The Group's financial administration is responsible for managing risks related to financial reporting. The risks are identified, assessed and managed in connection with the Group's general risk management process and separately as part of financial administration's own operating processes. The Group's financial administration assesses risks it has recognized related to financial reporting. The aim of the risk assessment is to identify and to assess the most significant threats affecting the financial reporting and to define to which function or process risks are related and how the risks would affect the Group's financial reporting if those were to materialize. The Group's financial administration and Risk Management are responsible for that the risks are reassessed regularly.

FINANCIAL REPORTING AND CONTROL

The internal control and risk management systems pertaining to the financial reporting process have been designed so that sufficient certainty on the reliability of the financial reporting can be obtained and that the financial statements have been prepared in accordance with the applicable laws and regulations. Kemira complies with the international standards for financial statements (IFRS) which are applicable in the EU and other requirements of the listed companies. Kemira Group policies and Kemira Group Financial Manual define in detail the processes of accounting and financial reporting to be applied in all Group companies. The purpose of the policies and Financial Manual is to ensure the reliability of financial reporting.

The Group has a global Enterprise Resources Planning (ERP) system that ensures fast and reliable access to data. Subsidiaries report their figures from the ERP system to the Group, using a uniform Group reporting system. The financial organizations of the Group, segments and regions check the correctness of the figures in the Group reporting system in accordance with the responsibility areas described above.

Proper control of financial administration, financial reporting and accounting processes is a basic requirement for the reliability of financial reporting. The Group financial administration determines the appropriate control functions, the objectives of each control function and how the effectiveness of the control functions is monitored and checked based on a risk analysis it performs. The control functions are described in the above mentioned risk documentation and financial administration is responsible for their practical implementation.

Financial reporting control is performed either continuously as part of the transactions of the company's monitoring processes such as purchasing and sales processes, or alternatively monthly or annually as part of the reporting process.

COMMUNICATION

By well-functioning internal control environment Kemira aims at securing the timeliness, correctness and transparency of the company's internal and external communication. The most essential guidelines and regulations concerning the financial reporting, internal control and risk management, such as the guidelines regarding the principles of preparation of the financial statements and financial reporting, are available to all employees in the group intranet. Kemira's financial administration regularly arranges trainings regarding internal control and financial reporting as well as using the relevant tools.

MONITORING

The functionality of internal control, risk management and reporting systems is constantly monitored as part of daily management of the Company. Each segment, function and region is responsible for implementing internal control, its efficiency and reliability of reporting within their area of responsibility. The Group financial administration monitors the functionality and reliability of the financial reporting process at Group level. The financial reporting processes are also monitored by the Internal Audit function.

GROUP MANAGEMENT

Further information on the Board of Directors and the Management Board is available on www.kemira.com.

BOARD OF DIRECTORS

JARI PAASIKIVI
b. 1954
- Finnish citizen
- M.Sc. (Econ.)
- Chairman of the Board
- Independent of the Company
- Main occupation CEO of Oras Invest Oy, which owns over 10% of Kemira Oyj's shares

KERTTU TUOMAS
b. 1957
- Finnish citizen
- B.Sc. (Econ.)
- Vice Chairman of the Board
- Independent of the Company and its significant shareholders
- Main occupation KONE Corporation, Executive Vice President, Human Resources

WOLFGANG BÜCHELE
b. 1959
- German citizen
- Dr. rer.nat.
- Member of the Board
- Managing Director of Kemira Oyj 1 April 2012–30 April 2014
- Independent of the Company's significant shareholders
- Main occupation Merck KGaA, Chairman of the Supervisory Board.

WINNIE FOK
b. 1956
- British citizen
- B.Comm.
- Member of the Board
- Independent of the Company and its significant shareholders
- Main occupation Wallenberg Foundations AB, Senior Advisor

KAISA HIETALA
b. 1971
- Finnish citizen
- M.Sc.(Physics) and M.Sc. (Env.Sc.)
- Member of the Board
- Independent of the Company and its significant shareholders
- Main occupation Neste Corporation, Executive Vice President, Renewable products

JUHA LAAKSONEN
b. 1952
- Finnish citizen
- B.Sc. (Econ.)
- Member of the Board
- Independent of the Company and its significant shareholders

TIMO LAPPALAINEN
b. 1962
- Finnish citizen
- M.Sc. (Eng.)
- Member of the Board
- Independent of the Company and its significant shareholders
- Main occupation Orion Corporation, President & CEO

GROUP MANAGEMENT

MANAGING DIRECTOR, DEPUTY MANAGING DIRECTOR AND MEMBERS OF THE MANAGEMENT BOARD DECEMBER 31, 2016

JARI ROSENDAL
b. 1965
M. Sc. (Eng.)
Managing Director
Chairman of the Management Board

JUKKA HAKKILA
b. 1960
LL.M.
Group General Counsel
Deputy Managing Director

PETRI CASTRÉN
b. 1962
LL.M., MBA
Chief Financial Officer

HEIDI FAGERHOLM
b. 1964
D.Sc. (Chem.Eng.)
Chief Technology Officer

TARJEI JOHANSEN
b. 1971
M. Sc.
President, Oil & Mining and Americas

MICHAEL LÖFFELMANN
b. 1970
Ph.D. (Eng.).
Executive Vice President, Projects and Manufacturing Technology

KIM POULSEN
b. 1966
M. Sc. (Econ.)
President, Pulp & Paper and APAC

ESA-MATTI PUPUTTI
b. 1959
Lic. Tech. (Eng)
Executive Vice President, Operational Excellence

ANTTI SALMINEN
b. 1971
Ph.D (Eng.)
President, Municipal & Industrial and EMEA

EEVA SALONEN
b. 1960
M.A. (Edu.)
Executive Vice President, Human Resources

Where water
meets chemistry™

Kemira Remuneration Statement 2016

KEMIRA REMUNERATION STATEMENT 2016

INTRODUCTION

Kemira remuneration statement describes the company's remuneration principles and the remuneration of the management, i.e., the Board of Directors, the Managing Director, the Deputy Managing Director and the other members of the Management Board in 2016. The remuneration statement has been prepared in accordance with the Finnish Corporate Governance Code 2015.

The remuneration statement is divided into following sections:
1. Main principles of remuneration
2. Decision-making process in remuneration related matters
3. Managing Director, the Deputy Managing Director and the Management Board remuneration report
4. Board of Directors remuneration report

1. MAIN PRINCIPLES OF REMUNERATION

Kemira reviews its remuneration principles and practices on a regular basis. The remuneration principles are applied to all Kemira employees. Transparency, market driven reward and pay for performance are the main principles of rewarding at Kemira.

The remuneration in Kemira consists of the following main elements:

In Kemira a global job structure (job grading) is applied to define the job and base salary levels. The main elements outlining the job grade are the responsibilities, scope, and the impact of the job role in the organization. Base pay and benefits follows local market practices, laws and regulations.

Short term bonus plan aims to reward for both company and individual performance.

Long term share incentive plan aims to commit key employees to Kemira, and to combine the objectives and interest of the shareholders and the participants in the plan.

Non – monetary rewarding is an important part of the total remuneration. Kemira is actively developing well-being at work, as well as providing opportunities for development of own job role.

2. DECISION-MAKING PROCESS IN REMUNERATION RELATED MATTERS

The Annual General Meeting decides the remuneration of the Board of Directors for one term of office at a time.

The Board of Directors decides the salaries, other remuneration and the terms of employment of the Managing Director, the Deputy Managing Director and the other members of the Management Board. The Personnel and Remuneration Committee of the Board assists the Board of Directors by preparation of matters related to remuneration of the Managing Director, his Deputy and the members of the Management Board and by preparation of matters pertaining to the compensation systems and long-term incentive plans of the company.

3. MANAGING DIRECTOR, THE DEPUTY MANAGING DIRECTOR AND THE MANAGEMENT BOARD REMUNERATION REPORT

Remuneration of the Managing Director (President & CEO), his Deputy and the other members of the Management Board comprises a monthly salary, benefits and performance-based incentive plans. The incentive plans consist of an annual short term bonus plan and a long term share incentive plan.

Members of Kemira Management Board who are employed by a Finnish Kemira company do not have any supplementary pension arrangements in addition to the statutory pensions. Members of Kemira Management Board who are employed by a foreign Kemira company participate in pension systems based on statutory pension arrangements and market practices in their local countries. The Kemira policy is that all new supplementary pension arrangements are defined contribution plans.

Employment terms and conditions of the Managing Director as of December 31, 2016.

BASE SALARY	Annual base salary is EUR 567,000 per year, including a car benefit and a mobile phone benefit.
SHORT TERM BONUS PLAN	Based on terms approved by the Board of Directors. The maximum bonus is 60 percent of the annual salary.
LONG TERM SHARE INCENTIVE PLAN	Based on the terms of the share plan. The maximum reward is determined as a number of shares and a cash portion to cover taxes and the tax-related costs arising from the reward.
PENSION PLAN	Finnish Employees' Pension Act (TyEL), which provides pension security based on years of service and earnings as stipulated by the law. The retirement age of the Managing Director is based on the Finnish Employees' Pension Act. No supplementary pension arrangements in addition to the statutory pensions.
TERMINATION	A mutual termination notice period of six months applies to the Managing Director. The Managing Director is entitled to a severance pay of 12 months' salary in addition to the salary earned during the notice period, in case the company terminates his service.
INSURANCES	The Managing Director has a life-, private accident-, business travel-, and directors' and officers' liability insurances. The Managing Director participates in the company sickness fund.

REMUNERATION PAID TO THE MANAGING DIRECTOR, DEPUTY MANAGING DIRECTOR AND OTHER MEMBERS OF THE MANAGEMENT BOARD 2016

In 2016, the total remuneration paid to Managing Director Jari Rosendal amounted to EUR 1,494,177 (2015: EUR 669,765), including base salary and benefits, as well as short term bonus plan (based on 2015 earning period) of EUR 324,000 (2015: 109,965), and long term share plan consisting of 24,968 Kemira shares and cash portion with total value of EUR 337,461 (2015: 0 shares, EUR 0).

No remuneration was paid to the Deputy Managing Director based on Managing Director substitution in 2016.

In 2016, the total remuneration paid to the **other members of the management board** amounted to EUR 4 998 347 (2015: 2,519,733), including base salary and benefits, as well as short term bonus plan of EUR 997,872 (2015: 513,029), and long term share incentive plan consisting of 71,266 Kemira shares and a cash portion with total value of EUR 1,043,673 (2015: 0 shares, EUR 0).

	Salary and benefits (EUR)	Short term bonus plan (EUR)	Long term share incentive plan (EUR)	Total 2016 (EUR)	Total 2015 (EUR)
Managing director Jari Rosendal	567,000	324,000	603,177	1,494,177	669,765
Other members of the management board	2,194,639	997,872	1,805,836	4,998,347	2,519,733

* Other management board members 31.12.2016: CFO Petri Castrén, CTO Heidi Fagerholm, President Oil & Mining and Region Americas Tarjei Johansen, EVP Projects & Manufacturing Technology Michael Löffelmann, President Pulp & Paper and Region Asia Pacific Kim Poulsen, EVP Operational Excellence Esa-Matti Puputti, President Municipal & Industrial and Region EMEA Antti Salminen, EVP Human Resources Eeva Salonen

SHORT TERM BONUS PLAN FOR THE MANAGING DIRECTOR, DEPUTY MANAGING DIRECTOR AND OTHER MEMBERS OF THE MANAGEMENT BOARD

The short term bonus plan is determined based on the achievement of the Kemira Group level and personal level performance targets set by the Board of Directors for each financial year.

MAXIMUM REWARD AND CRITERIA 2016

- The maximum bonus for the Managing Director is 60% of the annual gross salary, for the Managing Director's Deputy 50% and for the other members of the Management Board 50–70% of the annual gross salary.
- In 2016, performance targets were determined on the basis of the organic revenue growth, operative cash flow after investing activities, and safety related KPI's of Kemira Group, and individual targets.

MAXIMUM REWARD AND CRITERIA 2017

- The maximum bonus for the Managing Director is 70% of the annual gross salary, for the Managing Director's Deputy 60% and for the other members of the Management Board 60–80% of the annual gross salary.
- In 2017, performance targets are determined on the basis of the operative cash flow after investing activities, operative EBITDA, and safety related KPI's of Kemira Group, and individual targets.

LONG TERM SHARE INCENTIVE PLAN 2015–2017

On December 15, 2014 the Board of Directors of Kemira Oyj decided to establish a long term share incentive plan directed to a group of key employees in Kemira. The aim of the plan is to combine the objectives of the shareholders and the persons participating in the plan in order to increase the value of Kemira, to commit the participants to Kemira, and to offer them a competitive reward plan based on earning Kemira' s shares. The Personnel and Remuneration Committee received advice for the planning work of the long term share incentive plan from external incentive advisors, consultants of Alexander Incentives Oy.

Long term share incentive plan main rules and conditions

EARNING PERIODS AND CRITERIA	The long term share incentive plan includes three performance periods: calendar years 2015, 2016 and 2017. The Board of Directors of Kemira decide on the plan's performance criteria and on the required performance levels for each criterion at the beginning of each performance period.
REWARDS	The potential reward is paid partly in Kemira's shares and partly in cash. The cash proportion covers the taxes and tax-related costs arising from the reward to the participant.
RESTRICTION PERIOD	The shares paid as reward may not be transferred during the restriction period, which will end two years from the end of the performance period.
EMPLOYMENT CONDITIONS	As a rule, no reward will be paid, if a participant's employment or service ends before the reward payment. Should a participant's employment or service end during the restriction period, as a rule, he or she must gratuitously return the shares given as reward.
CLAWBACK	Claw back provisions apply to plan rewards in exceptional circumstances, such as misconduct or misstatement of financial results.
SHARE OWNERSHIP GUIDELINES	The Board of Directors recommends that a member of the Management Board will own such number of Kemira's shares that the total value of his or her shareholding corresponds to the value of his or her annual gross salary as long as the membership continues. If this recommendation is not yet fulfilled, the Board of Directors recommends that a member of the Management Board will hold 50 per cent of the number of shares given on the basis of this plan also after the end of the restriction period, as long as his or her shareholding in total corresponds to the value of his or her annual gross salary.

LONG TERM SHARE INCENTIVE PLAN EARNING PERIODS, MAXIMUM SHARE ALLOCATION AND CRITERIA 2015–2017

SHARE INCENTIVE PLAN EARNING PERIOD 2015

The criteria of the plan for the earning period 2015 were based on the Kemira Group's revenue and on the Group's operative EBITDA margin. The reward from the 2015 performance period was paid in 2016, partly in Kemira Oyj shares and partly in cash. Based on the earning period 2015, 294,445 Kemira Oyj shares were paid to 84 participants. In addition a cash portion corresponding taxes and tax-related cost were paid to the participants.

SHARE INCENTIVE PLAN EARNING PERIOD 2016

The criteria of the plan for the earning period 2016 were based on the Kemira Group's revenue and on the Group's operative EBITDA margin. The Kemira Group's revenue target did not reach the plan threshold level, and thus there will no payout for the 2016 earning period. The plan was directed to 85 people in 2016. The maximum reward on the basis of the 2016 earning period would have corresponded to the value of total of 504,200 Kemira Oyj shares and additionally, the cash proportion intended to cover taxes and tax-related costs.

SHARE INCENTIVE PLAN EARNING PERIOD 2017

The criteria of the plan for the earning period 2017 is based on the Kemira Group's Intrinsic Value. The possible reward from the 2017 earning period is paid partly in Kemira Oyj shares and partly in cash in 2018. The plan is directed to approximately 90 participants in 2017. On the basis of the 2017 earning period the maximum potential reward is corresponding to the value of 585,000 Kemira Oyj shares and, additionally, the cash proportion intended to cover taxes and tax-related costs.

4. BOARD OF DIRECTORS REMUNERATION REPORT

According to the decisions of the Annual General Meeting 2016, the members of the Board of Directors are paid an annual fee and a fee per meeting. The members of the Board of Directors are not eligible for the short term bonus plan or the performance based share plan, or supplementary pension plans of Kemira Oyj.

The annual fees are as follows:

- the Chairman will receive EUR 80,000 per year,
- the Vice Chairman and the Chairman of the Audit Committee EUR 49,000 per year and
- the other members EUR 39,000 per year.

A fee payable for each meeting of the Board and its committees are as follows:

- EUR 600 for the members residing in Finland,
- EUR 1,200 for the members residing elsewhere in Europe and
- EUR 2,400 for the members residing outside Europe.

The meeting fees are to be paid in cash. Travel expenses are reimbursed according to Kemira' s travel policy.

In addition, the Annual General Meeting decided that the annual fee shall be paid as a combination of the company's shares and cash in such a manner that 40% of the annual fee is paid with the Kemira shares owned by the company or, if this is not possible, Kemira shares acquired from the securities market, and 60% is paid in cash. The Annual General Meeting decided that the shares will be transferred to the members of the Board of Directors within two weeks after the release of Kemira' s interim report January 1–March 31, 2016.

The following amounts of shares were paid on May 4, 2016 as part of the annual fee decided by the Annual General Meeting 2016:

- the Chairman received 3,043 shares,
- the Vice Chairman and Chairman of the Audit Committee 1,864 shares and
- the other members 1,483 shares.

There are no special terms or conditions associated with owning these shares.

The remuneration of the Board of Directors 2016

	2016 (euro)	2015 (euro)
Jari Paasikivi, chairman	91,495	92,108
Kerttu Tuomas, vice chairman	57,091	58,898
Wolfgang Büchele	50,754	53,160
Winnie Fok	65,154	69,960
Kaisa Hietala	47,154	-
Juha Laaksonen	60,691	61,298
Timo Lappalainen	48,354	48,960
Total	**420,693**	**384,385**

Where water meets chemistry™

FINANCIAL STATEMENTS

2016

CONTINUED IMPROVEMENT IN PROFITABILITY

In 2016, we continued to improve our profitability. We have systematically followed our strategic plan, and we are on our way towards our mid-to-long-term financial targets.

Kemira aims for above-the-market revenue growth with operative EBITDA margin of 14–16%. The gearing target is below 60%.

The year 2016 showed that our action plan is delivering continued improvement in profitability despite adverse developments in oil and gas markets. We progressed a step forward towards our profitability target and achieved operative EBITDA margin of 12.8% (2015: 12.1%).

Jari Rosendal
President & CEO

VISIT KEMIRA ANNUAL REPORT 2016 ONLINE:
www.kemira.com/investors

FINANCIAL STATEMENTS 2016

BOARD OF DIRECTORS' REVIEW 2016

In 2016, Kemira Group's revenue remained at approximately the prior year level and was EUR 2,363.3 million (2,373.1) as growth from acquisitions and increased sales volumes was offset by decline in sales prices and challenging market impacting Oil & Mining segment. Revenue in local currencies, excluding acquisitions and divestments, decreased 2% as volume growth was not able to offset declining sales prices. Operative EBITDA increased 5% to EUR 302.5 million (287.3), mainly due to sales volume growth while lower sales prices were offset by lower variable costs. Operative EBITDA margin improved to 12.8% (12.1%). Earnings per share increased 28% to EUR 0.60 (0.47) due to improved profitability and gain on the sale of electricity assets.

The Board of Directors proposes a cash dividend of EUR 0.53 per share (0.53) to the Annual General Meeting 2017, totaling EUR 81 million (81).

KEY FIGURES AND RATIOS

EUR million	2016	2015
Revenue	**2,363.3**	2,373.1
Operative EBITDA	**302.5**	287.3
Operative EBITDA, %	**12.8**	12.1
EBITDA	**284.2**	263.8
EBITDA, %	**12.0**	11.1
Operative EBIT	**170.1**	163.1
Operative EBIT, %	**7.2**	6.9
EBIT	**147.0**	132.6
EBIT, %	**6.2**	5.6
Finance costs, net	**-19.1**	-30.8
Profit before taxes	**128.0**	102.1
Net profit for the period	**97.9**	77.2
Earnings per share, EUR	**0.60**	0.47

EUR million	2016	2015
Capital employed*	**1,718.2**	1,659.5
Operative ROCE*	**9.9**	9.8
ROCE*, %	**8.6**	8.0
Cash flow from operating activities	**270.6**	247.6
Capital expenditure excl. acquisitions	**212.6**	181.7
Capital expenditure	**210.6**	305.1
Cash flow after investing activities	**97.8**	-53.8
Equity ratio, % at period-end	**45**	46
Equity per share, EUR	**7.68**	7.76
Gearing, % at period-end	**54**	54
Personnel at period-end	**4,818**	4,685

* 12-month rolling average (ROCE, % based on the EBIT)

Kemira provides certain financial performance measures (alternative performance measures) on non-GAAP basis. Kemira believes that alternative performance measures, like operative EBITDA and operative EBIT, followed by Kemira management, provide useful and more comparable information of its operative business performance.

Kemira's alternative performance measures should not be viewed in isolation to the equivalent IFRS measures and alternative performance measures should be read in conjunction with the most directly comparable IFRS measures. Definitions of the alternative performance measures can be found in the Definitions of the key figures in this report, as well as at www.kemira.com >Investors > Financial information.

FINANCIAL PERFORMANCE, FULL YEAR 2016

Kemira Group's **revenue** remained at approximately the prior year level and was EUR 2,363.3 million (2,373.1) as the growth from acquisitions and sales volumes offset the decline in sales prices and the challenging market impacting our Oil & Mining segment. Currencies had 1% negative impact on revenue. Revenue in local currencies, excluding acquisitions and divestments, decreased 2% as the volume growth was not able to offset the decline in sales prices.

REVENUE

EUR million	2016	2015	Δ%	Organic growth*, %	Currency impact, %	Acq. & div. impact, %
Pulp & Paper	**1,457.3**	1,417.3	+3	-1	-1	+4
Oil & Mining	**309.5**	350.1	-12	-11	-1	0
Municipal & Industrial	**596.5**	605.7	-2	0	-1	0
Total	**2,363.3**	2,373.1	0	-2	-1	+3

* Revenue in local currencies, excluding acquisitions and divestments

Geographically, the revenue split was as follows: EMEA (Europe, Middle East, Africa) 52% (52%), the Americas 38% (40%), and Asia Pacific 10% (8%).

Operative EBITDA increased 5% to EUR 302.5 million (287.3), mainly due to sales volume growth, while lower sales prices were offset by lower variable costs. Operative EBITDA margin improved to 12.8% (12.1%).

VARIANCE ANALYSIS

EUR million	1–12
Operative EBITDA, 2015	**287.3**
Sales volumes	+12.4
Sales prices	-76.3
Variable costs	+76.6
Fixed costs	-3.8
Currency exchange	-1.9
Others	+8.2
Operative EBITDA, 2016	**302.5**

OPERATIVE EBITDA

	2016, EUR million	2015, EUR million	Δ%	2016, %-margin	2015, %-margin
Pulp & Paper	**195.3**	171.0	+14	**13.4**	12.1
Oil & Mining	**18.4**	33.5	-45	**5.9**	9.6
Municipal & Industrial	**88.8**	82.8	+7	**14.9**	13.7
Total	**302.5**	287.3	+5	**12.8**	12.1

EBITDA increased 8% to EUR 284.2 million (263.8). **Items affecting comparability in EBITDA** were EUR -18.3 million (-23.5) and in both years were mainly related to restructuring programs and integration costs.

Depreciation, amortization and impairments increased to EUR 137.2 million (131.2) due to increased investments including EUR 19.2 million (12.6) amortization of purchase price allocation. **Items affecting comparability within depreciation, amortization and impairments** were EUR -4.8 million (-7.0) and were mostly related to write-downs due to restructuring of manufacturing plants.

ITEMS AFFECTING COMPARABILITY

EUR million	2016	2015
Within EBITDA	**-18.3**	-23.5
Pulp & Paper	**-7.5**	-13.9
Oil & Mining	**-6.8**	-2.7
Municipal & Industrial	**-4.0**	-6.9
Within depreciation, amortization and impairments	**-4.8**	-7.0
Pulp & Paper	**-2.5**	-0.3
Oil & Mining	**-1.5**	-5.5
Municipal & Industrial	**-0.8**	-1.2
Total items affecting comparability in EBIT	**-23.1**	-30.5

Operative EBIT increased 4% to EUR 170.1 million (163.1). **Operative EBIT margin** improved to 7.2% (6.9%). **EBIT** increased 11% to EUR 147.0 million (132.6) with a margin of 6.2% (5.6%).

Finance costs, net totaled EUR -19.1 million (-30.8) including a EUR 5 million capital gain from the sale of electricity production assets (Pohjolan Voima Oy) recognized in the second quarter of 2016. Changes in fair values of electricity derivatives were EUR 2.2 million (-0.8). The currency exchange differences had EUR -1.1 million (-2.0) impact on the net financial expenses.

Income taxes were EUR -30.1 million (-24.9). The change is related to higher profit before taxes.

Net profit attributable to equity owners of the parent company increased 29% to EUR 91.8 million (71.0) and earnings per share increased to EUR 0.60 (0.47) driven by lower financing costs and improved profitability.

FINANCIAL POSITION AND CASH FLOW

Cash flow from the operating activities in 2016 increased to EUR 270.6 million (247.6), mainly due to higher profitability and lower net working capital. Cash flow after investing activities increased to EUR 97.8 million (-53.8). In the previous year, the acquisition of AkzoNobel's paper chemicals business had a material impact on the figures.

At the end of 2016, interest-bearing liabilities totaled EUR 807 million (794). The average interest rate of the Group's interest-bearing liabilities was 2.1% (2.0%). The duration of the Group's interest-bearing loan portfolio was 26 months (31). On December 31, 2016, cash and cash equivalents totaled EUR 173 million (152). Group's net interest-bearing liabilities were EUR 634 million (642).

Short-term liabilities maturing in the next 12 months amounted to EUR 158 million. The Group has good liquidity and funding options, including an undrawn EUR 400 million revolving credit facility.

At the end of the period, the equity ratio was 45% (46%), while the gearing was 54% (54%). The shareholders' equity was EUR 1,182.9 million (1,193.2).

The Group's most significant transaction currency risks arise from the Swedish krona, the U.S. dollar, and the Canadian dollar. At the end of the year, the denominated 12-month exchange rate risk of the Swedish krona had an equivalent value of approximately EUR 56 million, 68% of which was hedged on an average basis. The U.S. dollar denominated exchange rate risk was approximately EUR 42 million, 51% of which was hedged on an average basis. The Canadian dollar denominated exchange rate risk was approximately EUR 23 million, 64% of which was hedged on an average basis. In addition, Kemira is exposed to smaller transaction risks in relation to the Chinese renminbi, Norwegian krona, and Brazilian real with the total annual exposure in these currencies of approximately EUR 49 million. 49% of NOK's exposure was hedged on an average basis.

As Kemira's consolidated financial statements are compiled in euros, Kemira is also subject to a currency translation risk to the extent to which the income statement and balance sheet items of subsidiaries located outside Finland are reported in a currency other than euro. The most significant translation exposure derives from the U.S. dollar, the Swedish krona, the Canadian dollar, the Chinese renminbi, and the Brazilian real. Strengthening of these currencies against the euro would increase Kemira's revenue and EBITDA through a translation effect. In 2016, currency rates had an EUR 1.9 million negative impact on the operative EBITDA.

CAPITAL EXPENDITURE

In 2016, capital expenditure decreased to EUR 210.6 million (305.1) including the impact of acquisitions. Capital expenditure, excluding the impact of acquisitions, increased to EUR 212.6 million (181.7) and can be broken down as follows: expansion capex 45% (43%), improvement capex 27% (29%), and maintenance capex 28% (28%). The largest investments during the year were chlorate capacity expansions in Finland and Brazil as well as polymer capacity expansions in the UK and Italy.

RESEARCH AND DEVELOPMENT

Research and Development expenses totaled EUR 32.1 million (31.9) in 2016, representing 1.4% (1.3%) of the Group's revenue.

Kemira's Research and Development is a critical enabler of the growth and further differentiation. New product launches contribute to the efficiency and sustainability of the customer processes and to the improved profitability. Both Kemira's future market position and profitability depend on the company's ability to understand and meet current and future customer needs and market trends, and on its ability to innovate new differentiated products and applications.

The Group's target is to increase the revenue from new products and products for new applications. In 2016, the share of innovation revenue (revenue from new products or from products to new applications launched within the past five years) of the Group's revenue increased to 9% (8%).

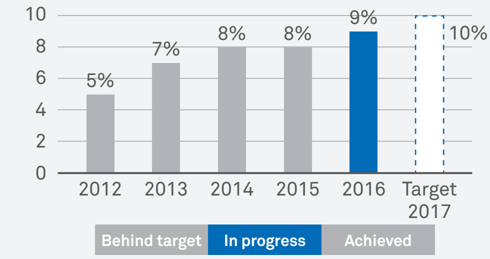
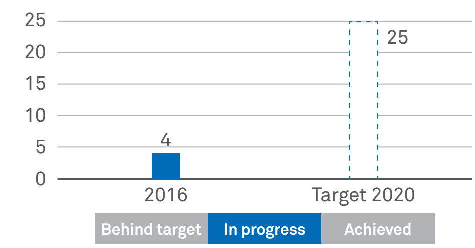
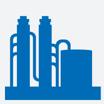
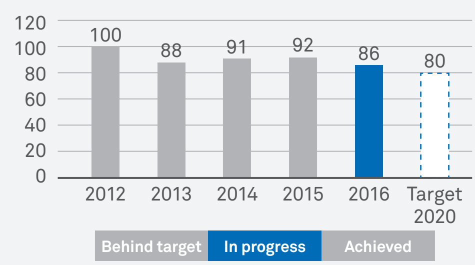
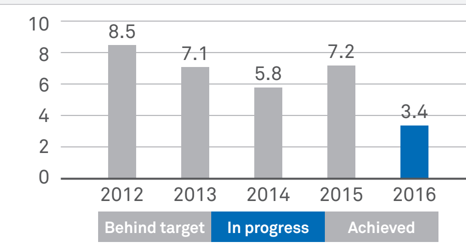
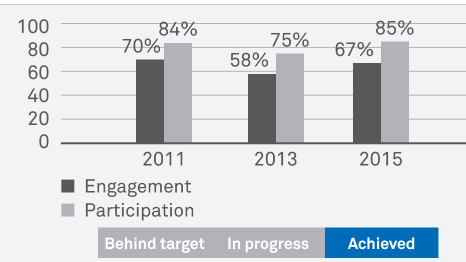
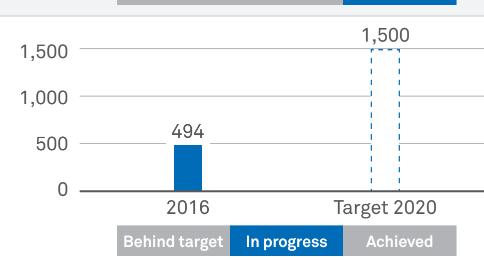
At the end of 2016, Kemira had 348 (345) patent families, 1,236 (1,034) granted patents, and 860 (819) pending applications. A patent family covers one invention and has a number of patents or applications in various countries.

HUMAN RESOURCES

At the end of the period, Kemira Group had 4,818 employees (December 31, 2015: 4,685). Kemira employed 796 people in Finland (785), 1,813 people elsewhere in EMEA (1,786) 1,558 in the Americas (1,578), and 651 in APAC (536).

CORPORATE RESPONSIBILITY

In 2017, Kemira will publish its Corporate Responsibility Report in connection with its Annual Report. The corporate responsibility report 2016 will be verified by a third party and prepared in accordance with the GRI G4 (Global Reporting Initiative) framework. It deals with economic, environmental and social aspects defined material for Kemira, and reflects on Kemira's performance in relation to the sustainability targets approved by Kemira's Management Board. The performance targets are displayed in the following table.

FOCUS AREA	TOPIC, KPI, TARGET VALUE	COMMENTS	STATUS
 Sustainable products & solutions	**INNOVATION SALES** **Share of innovation revenue in total revenue, %** → 10% by the end of 2017 → KPI reported quarterly	Due to delays in commercialization of NPD projects the innovation sales target was slightly behind the 10% target. However, a record number of new products and new treatment concepts were launched in 2016 (14 versus 3 in 2015). Innovation sales target 10% was extended by one year until 2017.	
 Responsibility in our supply chain	**SUPPLIER MANAGEMENT** **Number of onsite sustainability audits for highest risk suppliers** (with lowest sustainability assessment score)[1] → 5 suppliers audited every year during 2016–2020, average → KPI reported annually	The new supplier audit process was initiated, with 4 onsite audits conducted by an external service provider.	
 Responsible manufacturing	**CLIMATE CHANGE** **Carbon index** → Kemira Carbon Index ≤ 80 by end of 2020 (2012 = 100) → KPI reported annually	The carbon index[2] improved as a result of purchased electricity sourced from less carbon-intensive sources. This improvement outweighed the negative effect of the sale of part of Kemira's holding in Pohjola Voima Oy, which entitled to nuclear power production capacity in Finland.	
 Responsibility towards the employees	**OCCUPATIONAL HEALTH AND SAFETY** **Total Recordable Injury Frequency (TRIF)** (per million hours, Kemira + contractor, 1 year rolling average) → Achieve zero injuries (TRIF 2.0 by 2020) → KPI reported quarterly	Safety performance significantly improved due to our time and efforts invested on management commitment, employee engagement and higher visibility of safety related matters in our internal communication.	
	EMPLOYEE ENGAGEMENT **Employee engagement index based on Voices@Kemira biennial survey** → The index at or above the external industry norm **Participation rate in Voices@Kemira** → 75% or above → KPI reported biennially	Next biennial Voices@Kemira survey is being planned for 2017.	
	LEADERSHIP DEVELOPMENT **Leadership development activities provided, average** → Two (2) leadership development activities per people manager position during 2016–2020[3] → KPI reported annually	The amount of leadership development activities during 2016 was very high (494), and we are significantly ahead of our target of having 1500 development activities[4] during 2016–2020.	

1 117 sustainability assessments have been performed for strategic, critical and large spend suppliers.
2 Carbon index value in 2015 was corrected from 91 to 92 due to more accurate information from few sites.
3 The cumulative amount of leadership development required to reach two (2) leadership development activities per people manager position during 2016–2020 equals 1,500 leadership activities (when number of people manager positions is 650–850).
4 Development activities include job rotations, coaching and mentoring, and development programs.

SEGMENTS

PULP & PAPER

Pulp & Paper has unique expertise in applying chemicals and supporting pulp & paper producers in innovating and constantly improving their operational efficiency. The segment develops and commercializes new products to fulfill the customer needs, ensuring the leading portfolio of products and services for paper wet-end, focusing on packaging and board, as well as tissue. Pulp & Paper leverages its strong application portfolio in North America and EMEA and builds a strong position in the emerging Asian and South American markets.

EUR million	2016	2015
Revenue	**1,457.3**	1,417.3
Operative EBITDA	**195.3**	171.0
Operative EBITDA, %	**13.4**	12.1
EBITDA	**187.8**	157.1
EBITDA, %	**12.9**	11.1
Operative EBIT	**111.6**	96.8
Operative EBIT, %	**7.7**	6.8
EBIT	**101.6**	82.6
EBIT, %	**7.0**	5.8
Capital employed*	**1,111.8**	1,068.6
Operative ROCE*, %	**10.0**	9.1
ROCE*, %	**9.1**	7.7
Capital expenditure excl. M&A	**127.1**	118.9
Capital expenditure incl. M&A	**125.1**	240.1
Cash flow after investing activities	**105.7**	-63.2

* 12-month rolling average

Pulp & Paper segment's **revenue** increased 3% to EUR 1,457.3 million (1,417.3). Revenue in local currencies, excluding divestments and acquisitions, decreased 1% due to decline in sales prices, despite the sales volume growth. Currency exchange rates had a -1% impact and acquisitions a +4% impact on revenue.

In **EMEA**, revenue increased 1% to EUR 760.2 million (753.0), mainly due to the acquisition impact. Stable demand for sodium chlorate and process chemicals contributed to the sales volume growth.

In **the Americas**, revenue increased 4% to EUR 519.1 million (501.5). Growth was supported by acquisitions, as well as the new bleaching chemical site in Brazil.

In **APAC**, revenue increased 9% to EUR 178.0 million (162.8), mainly due to acquisitions and sales volume growth. Competitive pressure increased in sizing chemicals during the second half impacting the region's revenue.

Operative EBITDA increased 14% to EUR 195.3 million (171.0), mainly due to sales volume growth, gross margin improvement and acquisitions. Lower fixed costs also contributed positively. Operative EBITDA margin improved to 13.4% (12.1%). **EBITDA** increased 20% to EUR 187.8 million (157.1) with a margin of 12.9% (11.1%).

OIL & MINING

Oil & Mining provides a unique combination of innovative chemicals and application knowledge that improves process efficiency and yield in oil, gas and metals recovery. The segment uses its in-depth understanding of extraction processes to tailor solutions for water management and re-use. Expanding from its position in North America and EMEA, Oil & Mining continues to build a strong base for growth in South America, Middle East, and Africa.

EUR million	2016	2015
Revenue	**309.5**	350.1
Operative EBITDA	**18.4**	33.5
Operative EBITDA, %	**5.9**	9.6
EBITDA	**11.6**	30.8
EBITDA, %	**3.7**	8.8
Operative EBIT	**-3.8**	11.1
Operative EBIT, %	**-1.2**	3.2
EBIT	**-12.1**	2.9
EBIT, %	**-3.9**	0.8
Capital employed*	**274.5**	271.4
Operative ROCE*, %	**-1.4**	4.1
ROCE*, %	**-4.4**	1.1
Capital expenditure excl. M&A	**38.0**	28.5
Capital expenditure incl. M&A	**38.0**	30.7
Cash flow after investing activities	**-19.9**	10.7

* 12-month rolling average

Oil & Mining segment's **revenue** decreased 12% to EUR 309.5 million (350.1). Revenue in local currencies, excluding acquisitions and divestments, decreased 11% mainly as a result of lower sales volumes and prices in the U.S. shale oil and gas fracking activity. Currency exchange rates had an impact of -1%.

In **the Americas**, revenue decreased 22% to EUR 191.5 million (245.9), mainly due to lower activity in the shale oil and gas market. Currency exchange had a negative impact on revenue in the region.

In **EMEA**, revenue increased 13% to EUR 118.0 million (104.3) as a result of new product sales in the field of Chemical Enhanced Oil Recovery. The region started polyacrylamide deliveries to India in the second quarter of 2015. However, the contract was not renewed in the beginning of 2017.

Operative EBITDA decreased 45% to EUR 18.4 million (33.5) as a result of the lower revenue. Operative EBITDA margin was 5.9% (9.6%). **EBITDA** decreased 62% to EUR 11.6 million (30.8) with a margin of 3.7% (8.8%).

MUNICIPAL & INDUSTRIAL

Municipal & Industrial is a leading water chemicals supplier for raw and wastewater applications in EMEA and North America, and aims to capture selected growth opportunities in emerging markets. The segment enables its municipal and industrial customers to improve their water treatment efficiency by supplying them with competitive, high-performing products and value adding application support.

EUR million	2016	2015
Revenue	**596.5**	605.7
Operative EBITDA	**88.8**	82.8
Operative EBITDA, %	**14.9**	13.7
EBITDA	**84.8**	75.9
EBITDA, %	**14.2**	12.5
Operative EBIT	**62.3**	55.2
Operative EBIT, %	**10.4**	9.1
EBIT	**57.5**	47.1
EBIT, %	**9.6**	7.8
Capital employed*	**330.7**	320.2
Operative ROCE*, %	**18.8**	17.2
ROCE*, %	**17.4**	14.7
Capital expenditure excl. M&A	**47.5**	34.2
Capital expenditure incl. M&A	**47.5**	34.2
Cash flow after investing activities	**55.6**	38.2

* 12-month rolling average

Municipal & Industrial segment's **revenue** decreased 2% to EUR 596.5 million (605.7). Revenue in local currencies remained at the prior year level as a combination of the higher sales volumes and lower sales prices. Currency exchange rates had an impact of -1%.

In **EMEA**, revenue decreased 1% to EUR 389.6 million (393.2), mainly due to the weak British pound. Organic growth was positive thanks to the higher sales volumes of coagulants and polymers.

In **the Americas**, revenue decreased 2% to EUR 184.5 million (187.7), mainly due to lower sales prices and negative currency exchange rates, while sales volume growth continued.

In **APAC**, revenue decreased by 10% to EUR 22.4 million (24.9), mainly due to slowdown in demand of our industrial customers in China. Currencies had a negative impact on revenue. The region has also increased the focus on product lines with better profitability.

Operative EBITDA increased 7% to EUR 88.8 million (82.8), mostly as a result of improved gross margin and higher sales volumes. Operative EBITDA margin improved to 14.9% (13.7%). **EBITDA** increased 12% to EUR 84.8 million (75.9) with a margin of 14.2% (12.5%).

PARENT COMPANY'S FINANCIAL PERFORMANCE

Kemira Oyj's revenue increased to EUR 1,364.2 million (1,347.0) in 2016. EBITDA was EUR 77.0 million (109.2). EBITDA decreased, mainly due to an increase in intercompany service costs. The parent company's financing income and expenses were EUR 182.2 million (104.8). Financing income and expenses increased, mainly due to dividends from Group companies. Net profit totaled EUR 215.8 million (165.2). Capital expenditure totaled EUR 17.7 million (60.9), excluding investments in subsidiaries.

KEMIRA OYJ'S SHARES AND SHAREHOLDERS

On December 31, 2016, Kemira Oyj's share capital amounted to EUR 221.8 million and the number of shares was 155,342,557. Each share entitles to one vote at the Annual General Meeting.

At the end of December, Kemira Oyj had 32,622 registered shareholders (32,601). Non-Finnish shareholders held 25.1% of the shares (21.4%) including nominee registered holdings. Households owned 16.0% of the shares (16.1%). Kemira held 2,975,327 treasury shares (3,280,602) representing 1.9% (2.1%) of all company shares.

Kemira Oyj's share price increased 11% since the beginning of the year and closed at EUR 12.13 on the Nasdaq Helsinki at the end of December 2016 (10.88). Shares registered a high of EUR 12.55 and a low of EUR 8.92 in January–December 2016. The volume-weighted average share price was EUR 10.84. The company's market capitalization, excluding treasury shares, was EUR 1,848 million at the end of December 2016 (1,654).

In January–December 2016, Kemira Oyj's share trading volume on Nasdaq Helsinki was 65 million shares (75). The average daily trading volume was 256,233 (298,313) shares. Source: Nasdaq. The total volume of Kemira Oyj's share trading in January–December 2016 was 95 million (112), 32% (33%) of which was executed on other trading platforms (BATS, Chi-X, Turquoise). Source: Kemira.com.

OWNERSHIP ON DECEMBER 31, 2016

Corporations	40.1%
Financial and insurance corporations	3.6%
General government	11.2%
Households	16.0%
Non-profit institutions	4.0%
Non-Finnish shareholders incl. nominee registered	25.1%

SHAREHOLDING BY NUMBER OF SHARES HELD DECEMBER 31, 2016

Number of shares	Number of shareholders	% of shareholders	Shares total	% of shares and votes
1–100	7,598	23.3	463,931	0.3
101–500	13,998	42.9	3,819,909	2.5
501–1,000	5,135	15.8	3,923,221	2.5
1,001–5,000	4,934	15.1	10,247,683	6.6
5,001–10,000	500	1.5	3,612,609	2.3
10,001–50,000	350	1.1	6,643,382	4.3
50,001–100,000	43	0.1	3,291,981	2.1
100,001–500,000	49	0.2	10,583,444	6.8
500,001–1,000,000	3	0.0	2,118,813	1.4
1,000,001–	12	0.0	110,637,584	71.2
Total	**32,622**	**100.0**	**155,342,557**	**100.0**

LARGEST SHAREHOLDERS DECEMBER 31, 2016

	Shareholder	Number of shares	% of shares and votes
1	Oras Invest Ltd	28,278,217	18.2
2	Solidium Oy	25,896,087	16.7
3	Varma Mutual Pension Insurance Company	8,164,836	5.3
4	Ilmarinen Mutual Pension Insurance Company	4,800,451	3.1
5	Nordea funds	1,783,056	1.2
6	Skagen Vekst Verdipapierfond	1,350,000	0.9
7	The State Pension Fund	1,190,000	0.8
8	Veritas Pension Insurance Company Ltd.	1,131,112	0.7
9	Etola Erkki Olavi	1,000,000	0.6
10	Etera Mutual Pension Insurance Company	609,331	0.4
11	Aktia Funds	470,000	0.3
12	LähiTapiola Funds	465,829	0.3
13	Alfred Berg Funds	455,325	0.3
14	Pohjola Funds Managment	428,594	0.3
15	OP-Henkivakuutus Ltd.	413,689	0.3
	Kemira Oyj	2,975,327	1.9
	Nominee registered and foreign shareholders	38,946,080	25.1
	Others, total	36,984,623	23.6
	Total	**155,342,557**	**100.0**

PERFORMANCE SHARE PLAN FOR MANAGEMENT AND KEY EMPLOYEES

On December 15, 2014, the Board of Directors of Kemira Oyj decided to establish a long-term share-based incentive plan ("Performance Share Plan") directed at a group of key employees in Kemira. The aim of the plan is to combine the objectives of the shareholders and the persons participating in the plan in order to increase the value of Kemira, to commit the participants to Kemira, and to offer them a competitive reward plan based on earning of Kemira's shares.

The Performance Share Plan includes three performance periods: calendar years 2015, 2016, and 2017. The Board of Directors of Kemira decides on the plan's performance criteria and on the required performance levels for each criterion at the beginning of each performance period. The potential reward is to be paid partly in Kemira's shares and partly in cash. The cash portion covers the taxes and tax-related costs arising from the reward to the participant. As a rule, no reward will be paid if the participant's employment or service ends before the disbursement of the reward. The shares paid as a reward may not be transferred during the restriction period, which will end two years after the end of the performance period. If the participant's employment or service ends during the restriction period, he or she must, as a rule, gratuitously return the shares given as a reward. For details of the plan, see Kemira remuneration statement.

EARNINGS PERIOD 2016

The criteria for the plan for the earning period 2016 was based on the Group's revenue and operative EBITDA margin. The Performance Share Plan 2016 was directed at 85 people. The maximum rewards for 2016 would have corresponded to the value of an approximate total of 504,200 Kemira Oyj's shares and additionally, the cash portion intended to cover taxes and tax-related costs. Group's revenue did not reach the Performance Share Plan's threshold level for 2016, and thus there will be no reward payout for the earnings period 2016.

AGM DECISIONS

ANNUAL GENERAL MEETING

Kemira Oyj's Annual General Meeting held on March 21, 2016 confirmed the dividend of EUR 0.53. The dividend was paid out on April 6, 2016.

The AGM 2016 authorized the Board of Directors to decide on the repurchase of a maximum of 4,800,000 company's own shares ("Share Repurchase Authorization"). The Share Repurchase Authorization is valid until the end of the next Annual General Meeting. The Board has not exercised its authority by December 31, 2016.

The AGM 2016 also authorized the Board of Directors to decide to issue a maximum of 15,600,000 new shares and / or transfer a maximum of 7,800,000 of the company's own shares held by the company ("Share Issue Authorization"). The Share Issue Authorization is valid until May 31, 2017. The authorization from the AGM 2016 has been used in connection with the remuneration of the Board of Directors and the authorization from the AGM 2015 has been used for the remuneration of key employees in 2016.

The AGM elected Deloitte & Touche Oy to serve as the company's auditor, with Jukka Vattulainen, Authorized Public Accountant, acting as the principal auditor.

CORPORATE GOVERNANCE AND GROUP STRUCTURE

Kemira Oyj's corporate governance is based on the Articles of Association, the Finnish Companies Act, and Nasdaq Helsinki's rules and regulations on listed companies. Furthermore, the company complies with the Finnish Corporate Governance Code. The company's corporate governance is presented as a separate statement on the company's website.

BOARD OF DIRECTORS

On March 21, 2016, the Annual General Meeting elected seven members to the Board of Directors. The Annual General Meeting re-elected Wolfgang Büchele, Winnie Fok, Juha Laaksonen, Timo Lappalainen, Jari Paasikivi, and Kerttu Tuomas, and elected Kaisa Hietala as a new member to the Board of Directors. Jari Paasikivi was re-elected as the Board's Chairman and Kerttu Tuomas was re-elected as the Vice Chairman. In 2016, Kemira's Board of Directors met 11 times with a 98.7% attendance rate.

Kemira Oyj's Board of Directors has appointed two committees: the Personnel and Remuneration Committee and the Audit Committee. The Personnel and Remuneration Committee is chaired by Jari Paasikivi and has Juha Laaksonen and Kerttu Tuomas as members. In 2016, the Personnel and Remuneration Committee met 4 times with a 100% attendance rate. The Audit Committee is chaired by Juha Laaksonen and has Kaisa Hietala, Timo Lappalainen and Jari Paasikivi as members. In 2016, the Audit Committee met 5 times with a 100% attendance rate.

CHANGES TO COMPANY MANAGEMENT

On January 20, 2017, Michael Löffelmann, EVP, Projects & Manufacturing Technology, left Kemira to take up a leadership position in another company. Esa-Matti Puputti, EVP Operational Excellence, acts as the interim head of Projects & Manufacturing Technology.

STRUCTURE

There have been no acquisitions or divestments during the year which would have impacted the company's structure.

SHORT-TERM RISKS AND UNCERTAINTIES

Effective compliance with and systematic execution of Kemira's risk management policy and principles proactively protect and help Kemira to reach the desired aggregate risk level and ensure the continuity of Kemira's operations.

CHANGES IN CUSTOMER DEMAND

Significant unforeseen decline in the use of certain chemicals (e.g. chemicals for packaging and board production) or in the demand of customers' products could have a negative impact on the Kemira's business. Significant decline in certain raw material and utility prices (e.g. oil, gas, and metal) may shift customers' activities in areas, which can be exploited with fewer chemicals. Also, increased awareness of and concern about climate change and more sustainable products may change the customers' demands, for instance, towards water treatment technologies with lower chemical consumption, and this may have a negative impact, especially on the Municipal & Industrial segment's ability to compete. On the other hand, the customer's possible capacity expansions could increase the chemical consumption and challenge Kemira's current production capacity. Failure from Kemira's side to be prepared to meet and manage these changed expectations could result in a loss of the market share.

In order to manage and mitigate this risk, Kemira systematically monitors leading indicators and early warning indicators that focus on market development. Kemira has also continued to focus on the sustainability of its business and is further improving the coordination and cooperation between the Business Development, R&D, and Sales units in order to better understand the future needs and expectations of its customers. Timely capital investments as well as continuous discussions and follow-ups with customers ensure Kemira's ability to respond to possible increase in demands. Kemira's geographic and customer industry diversity also provides partial protection against the risk of changed customer demands.

CHANGES IN LAWS AND REGULATIONS

Kemira's business is subject to various laws and regulations, which have relevance in the development and implementation of Kemira's strategy. Although laws and regulations can generally be considered as an opportunity for Kemira, certain legislative initiatives supporting, for instance, the use of biodegradable raw materials or biological water treatment, limiting the use of aluminum or phosphates, or relating to recovery or recycling of phosphorus, may also have a negative impact on Kemira's business. Significant changes, for instance, in chemical, environmental or transportation laws and regulations may impact on Kemira's profitability through the increase in production and transportation costs. At the same time, such changes may also create new business opportunities for Kemira.

Inclusion of new substances into the REACH authorization process may also bring further requirements to Kemira, where failure to obtain the relevant authorization could impact Kemira's business. In addition, the changes in import / export and customs-related regulation create needs for effective monitoring and mastering global trade compliance in order to ensure for instance compliant product importation.

Kemira continuously follows regulatory developments in order to maintain the awareness of proposed and upcoming changes of those laws and regulations which may have an impact, for instance, on its sales, production, and product development needs. Kemira has established an internal process to manage the substances of potential concern and to create management plans for them. Plans would consider, for example, the possibilities to replace certain substances if those would be subject to stricter regulation. Kemira has also increased the focus and resources in the management of global trade compliance.

Regulatory effects are systematically taken into consideration in the strategic decision making. Kemira takes active role in regulatory discussions whenever justified from the perspective of the industry or business.

COMPETITION

Kemira operates in a rapidly changing and competitive business environment that represents a considerable risk to meeting its goals. New players seeking a foothold in the Kemira's key business segments may use aggressive means as a competitive tool, which could affect Kemira's financial results. A major competitor or customer consolidations could change the market dynamics and possibly also change Kemira's market position.

Kemira is seeking growth in segments that are less familiar and where new competitive situations will prevail. In the long-term, completely new types of technology may considerably change the current competitive situation. This risk is managed both at the Group and the segment levels through continuous monitoring of the competition. The company aims at responding to its competition with the active management of customer relationships and continuous development of its products and services to further differentiate itself from the competitors.

ECONOMIC CONDITIONS AND GEOPOLITICAL CHANGES

Uncertainties in the global economic and geopolitical development are considered to include direct or indirect risks, such as a continuation of low-growth period in the global GDP and possible unexpected trade-related political decisions, both of which could have unfavorable impacts on the demand for Kemira's products. Certain political actions or changes, especially in the countries which are important to Kemira, could cause business interference or other adverse consequences.

Weak economic development may result in the customer closures or consolidations diminishing the customer base. The liquidity of Kemira's customers could become weaker, resulting in increased credit losses for Kemira. Unfavorable market conditions may also increase the availability and price risk of certain raw materials.

Kemira's geographical and customer industry diversity provides only partial protection against this risk. Kemira continuously monitors geopolitical movements and changes, and aims to adjust its business accordingly, if reasonable.

HAZARD RISKS

Kemira's production activities involve many hazard risks, such as fires and explosions, machinery breakdowns, natural catastrophes, environmental incidents, and possible resulting liabilities, as well as the employee health and safety risks. These risk events could derive from several factors, including but not limited to unauthorized IT system access by malicious intruder causing possible damage to the systems and consequent financial losses. A systematic focus on achieving set targets, certified management systems, efficient hazard prevention programs, adequate maintenance, and competent personnel play a central role in managing these hazard risks. In addition, Kemira has several insurance programs that protect the company against financial impacts of hazard risks.

INNOVATION AND R&D

Kemira's Research and Development is a critical enabler for organic growth and further differentiation. New product launches contribute to the efficiency and sustainability of Kemira's or its customers' processes, as well as to the improved profitability. Both Kemira's future market position and profitability depend on its ability to understand and meet current and future customer needs and market trends, and its ability to innovate new differentiated products and applications. Failure to innovate or focus on the new disruptive technologies and products, or to efficiently launch new products or service concepts may result in non-achievement of growth targets.

Innovation and R&D related risks are being managed through the efficient R&D portfolio management in close collaboration between R&D and business segments. Kemira has further improved the coordination and cooperation between Business Development, R&D, Sales and Marketing units in order to better understand the future needs and expectations of its customers. With continuous development of innovation processes Kemira aims towards more stringent project execution. Kemira maintains increased focus towards the development of more differentiated and sustainable products and processes and is also continuously monitoring sales of its new products and applications (launched into the market within the last 5 years).

ACQUISITIONS

Acquisitions can be considered an important driver in the accomplishment of corporate goals and strategies.

Consolidations are driven by, for instance, chemical manufacturers' interests in realizing synergies and establishing footholds in the new markets.

Kemira's market position may deteriorate if it is unable to find and take advantage of the future acquisition opportunities. Inorganic growth through acquisitions also involves risks, such as the ability to successfully integrate acquired operations and personnel. If realized, this risk may result in a shortage in the set financial targets for such acquisitions.

Kemira has created M&A procedures and established Group level-dedicated resources to actively manage merger and acquisition activities and to support execution of its business transactions. In addition, external advisory services are being used to screen potential mergers and acquisitions and to help execute transactions and post-merger integration.

PRICE AND AVAILABILITY OF RAW MATERIALS AND COMMODITIES

Continuous improvement of profitability is a crucial part of the Kemira's strategy. Significant and sudden increase in the cost of raw material, commodity, or logistics could place Kemira's profitability targets at risk if Kemira will not be able to pass on such increase to product prices without delay. For instance, remarkable changes in oil and electricity prices could materially impact Kemira's profitability.

Changes in the raw material supplier field, such as consolidation or decreasing capacity, may increase raw material prices. Also, material demand changes in industries that are the main users of certain raw materials may lead to significant raw material price fluctuations. Poor availability of certain raw materials may affect Kemira's production if Kemira fails to prepare for this by mapping out alternative suppliers or opportunities for process changes. Raw material and commodity risks can be effectively monitored and managed with Kemira's centralized Sourcing Unit. Risk management measures include, for instance, forward-looking forecasting of key raw materials and commodities, synchronization of raw material purchase agreements and sales agreements, captive manufacturing of some of the critical raw materials, strategic investment in energy-generating companies, and hedging a portion of the energy and electricity spend.

SUPPLIERS

The continuity of Kemira's business operations is dependent on an accurate and a good-quality supply of the products and services. Kemira has currently in place numerous partnerships and other agreements with third-party product and service suppliers to secure its business continuity. Certain products used as raw materials are considered critical as the purchase can be made economically only from a sole or single source. In the event of a sudden and significant loss or interruption in such supply of raw material, Kemira's operations could be impacted, and this could have further effects on the Kemira's ability to accomplish its profitability targets. Ineffective procurement planning, supply source selection, and contract administration, as well as inadequate supplier relationship management, create a risk of Kemira not being able to fulfill its promises to customers.

Kemira continuously aims to identify, analyze, and engage third-party suppliers in a way that ensures security of supply and competitive pricing of the end products and services. Collaborative relationships with key suppliers are being developed in order to uncover and realize new value and reduce risk. Supplier performance is also regularly monitored as a part of the supplier performance management process.

TALENT MANAGEMENT

To secure competitiveness and growth, as well as to improve operative efficiency, it is essential to attract and retain personnel with the right skills and competences (e.g. R&D, sales, customer service and marketing competence). Kemira is continuously identifying high potentials and key competencies for the future needs. By systematic development and improvement of compensation schemes, learning programs, and career development programs, Kemira aims to ensure the continuity of skilled personnel also in the future.

A detailed account of the Kemira's risk management principles is available on the company's website at http://www.kemira.com. Financial risks are also described in the Notes to the Financial Statements.

EVENTS AFTER THE REVIEW PERIOD

PROPOSALS OF THE NOMINATION BOARD TO THE ANNUAL GENERAL MEETING 2017

The Nomination Board proposes to the Annual General Meeting of Kemira Oyj that six members (previously seven) be elected to the Board of Directors and that the present members Wolfgang Büchele, Kaisa Hietala, Timo Lappalainen, Jari Paasikivi and Kerttu Tuomas be re-elected as members of the Board of Directors. The Nomination Board proposes that Ms. Shirley Cunningham be elected as new member of the Board of Directors. In addition, the Nomination Board proposes Jari Paasikivi be re-elected as the Chairman of the Board of Directors and Kerttu Tuomas be re-elected as the Vice Chairman. All the nominees have given their consent to the position. Winnie Fok and Juha Laaksonen have advised the Nomination Board, that they are not available as candidates to continue in Kemira's Board of Directors.

Ms. Shirley Cunningham, Executive Vice President and Chief Operating Officer, Ag Business and Enterprise Strategy, is a member of the Senior Leadership Team at CHS Inc., USA. She currently serves on the Board of Directors of Ardent Mills, LLC, Ventura Foods, LLC and TEMCO, LLC. Ms. Cunningham holds a master's degree in business administration from Washington University.

The Nomination Board proposes to the Annual General Meeting that the remuneration paid to the members of the Board of Directors will remain unchanged. The remuneration paid to the members of the Board of Directors would thus be as follows. The annual fees: for the Chairman EUR 80,000 per year, for the Vice Chairman and the Chairman of the Audit Committee EUR 49,000 per year and for the other members EUR 39,000 per year. A fee payable for each meeting of the Board of Directors and the Board Committees would be for the members residing in Finland EUR 600, for the members residing in the rest of Europe EUR 1,200 and for the members residing outside Europe EUR 2,400. Travel expenses are proposed to be paid according to Kemira's travel policy.

In addition, the Nomination Board proposes to the Annual General Meeting that the annual fee be paid as a combination of the company's shares and cash in such a manner that 40% of the annual fee is paid with the company's shares owned by the company or, if this is not possible, shares purchased from the market, and 60% is paid in cash. The shares will be transferred to the members of the Board of Directors and, if necessary, acquired directly on behalf of the members of the Board of Directors within two weeks from the release of Kemira's interim report January 1 - March 31, 2017. The meeting fees are proposed to be paid in cash.

The Nomination Board has consisted of the following representatives: Pekka Paasikivi, Chairman of the Board of Oras Invest Oy as the Chairman of the Nomination Board; Kari Järvinen, Managing Director of Solidium Oy; Reima Rytsölä, Executive Vice-President, Varma Mutual Pension Insurance Company and Timo Ritakallio, President and CEO, Ilmarinen Mutual Pension Insurance Company as members of the Nomination Board and Jari Paasikivi, Chairman of Kemira's Board of Directors as an expert member.

FIRE AT A SUPPLIER'S SITE IN PORI, FINLAND

On January 30, 2017 an extensive fire occurred at Huntsman Pigments' plant in Pori, Finland. Kemira's facilities at the site were not directly exposed and there were no personal injuries. Huntsman Pigments is a key raw material supplier for Kemira's coagulant production and also purchases chemicals and energy from Kemira. Kemira is taking actions to mitigate the disruption of the raw material supply. The length of the stoppage at the Huntsman Pigments' site and the possible financial impact to Kemira is currently unknown.

DIVIDEND AND DIVIDEND POLICY

On December 31, 2016, Kemira Oyj's distributable funds totaled EUR 822,049,454 of which net profit for the period was EUR 215,781,981. No material changes have taken place in the company's financial position after the balance sheet date.

Kemira Oyj's Board of Directors proposes to the Annual General Meeting to be held on March 24, 2017 that a dividend of EUR 0.53 per share totaling EUR 81 million shall be paid on the basis of the adopted balance sheet for the financial year ended December 31, 2016.

Kemira's dividend policy aims to pay a stable and competitive dividend.

MID- AND LONG-TERM FINANCIAL TARGETS AND OUTLOOK FOR 2017

Kemira updated its mid- to long-term financial targets on September 14, 2016, emphasizing its continued goal of above-the-market revenue growth with improving profitability. The company has progressed well towards the previous targets of EUR 2.7 billion in revenue and operative EBITDA margin of 15%, despite the weak developments in oil & gas markets, which started in 2015.

Kemira aims at above-the-market revenue growth with operative EBITDA margin of 14–16%. The gearing target is below 60%.

Main drivers for Kemira's profitable growth are:

- In Pulp & Paper: above-the-market growth arising from the new Total Chemistry Management (TCM) contracts and bleaching chemical capacity additions, as well as synergy capture from acquisitions
- In Oil & Mining: profitable growth in newer applications such as Chemical Enhanced Oil Recovery (CEOR) and oil sands, as well as potential oil market recovery
- In Municipal & Industrial: increasing revenue from Advanced Water Treatment (AWT) applications, as well as continuing growth in current business driven by selective geographic expansion
- Group-wide operational efficiencies with new BOOST program.

Kemira has launched an operational excellence program 'BOOST' to further improve its efficiency. Estimated annual savings run-rate from the program are EUR 20–30 million in 2–3 years. BOOST will focus on the supply chain process optimization and improved asset utilization.

The integration of the acquired AkzoNobel's paper chemicals business has progressed better than expected and Kemira has raised the synergy target from EUR 15 million to EUR 20 million.

In addition, Kemira continues to evaluate acquisition opportunities to enhance profitable growth.

OUTLOOK FOR 2017

Kemira expects its operative EBITDA to increase from the prior year (2016: EUR 302.5 million).

Helsinki, February 7, 2017

Kemira Oyj
Board of Directors

All forward-looking statements in this review are based on the management's current expectations and beliefs about future events, and actual results may differ materially from the expectations and beliefs such statements contain.

GROUP KEY FIGURES

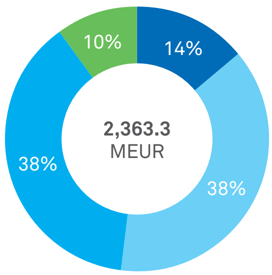
Kemira provides certain financial performance measures (alternative performance measures) on non-GAAP basis. Kemira believes that alternative performance measures, like operative EBITDA and operative EBIT, followed by Kemira management, provide useful and more comparable information of its operative business performance. Kemira's alternative performance measures should not be viewed in isolation to the equivalent IFRS measures and alternative performance measures should be read in conjunction with the most directly comparable IFRS measures. Definitions of the alternative performance measures can be found from the Definitions of the key figures in this financial statements, as well as at www.kemira.com >Investors > Financial information.

	2016	2015	2014	2013	2012
INCOME STATEMENT AND PROFITABILITY					
Revenue, EUR million	**2,363**	2,373	2,137	2,229	2,241
Operative EBITDA, EUR million	**303**	287	253	252	249
Operative EBITDA, %	**12.8**	12.1	11.8	11.3	11.1
EBITDA, EUR million 1) 2)	**284**	264	253	142	180
EBITDA, %	**12.0**	11.1	11.8	6.4	8.0
Operative EBIT, EUR million	**170**	163	158	164	156
Operative EBIT, %	**7.2**	6.9	7.4	7.4	6.9
Operating profit (EBIT), EUR million 1) 2)	**147**	133	153	43	33
Operating profit (EBIT), %	**6.2**	5.6	7.1	1.9	1.5
Share of the results of associates, EUR million 1)	**0**	0	0	-1	11
Finance costs (net), EUR million	**19**	31	31	39	16
% of revenue	**0.8**	1.3	1.4	1.7	0.7
Interest cover 1) 2)	**15**	9	8	4	11
Profit before tax, EUR million 2)	**128**	102	122	3	29
% of revenue	**5.4**	4.3	5.7	0.1	1.3
Net profit for the period (attributable to equity owners of the parent), EUR million 2)	**92**	71	90	-32	18
Return on investment (ROI), % 2) 3)	**7**	7	8	1	3
Return of equity (ROE), % 2)	**8**	6	8	-3	1
Capital employed, EUR million 2)	**1,718**	1,660	1,428	1,496	1,768
Operative return on capital employed (ROCE), % 2)	**9.9**	9.8	11.1	10.9	9.4
Return on capital employed (ROCE), % 2)	**8.6**	8.0	10.7	2.8	2.5
Research and development expenses, EUR million	**32**	32	28	32	42
% of revenue	**1.4**	1.3	1.3	1.4	1.6
CASH FLOW					
Net cash generated from operating activities, EUR million	**271**	248	74	200	176
Disposals of subsidiaries and property, plant and equipment and intangible assets, EUR million	**37**	3	146	193	30
Capital expenditure, EUR million	**211**	305	145	198	134
% of revenue	**9**	13	7	9	6
Capital expenditure excl. acquisitions, EUR million	**213**	182	146	139	134
% of revenue	**9**	8	7	6	6
Cash flow after investing activities, EUR million	**98**	-54	75	196	72
Cash flow return on capital invested (CFROI), % 2)	**12**	12	4	10	8

1) Share of the results of associates is presented after the finance costs, net.
2) Comparative figures for 2012 have been restated according to the revised IAS 19 `Employee Benefits´.
3) The financial figure for 2013 has been restated. Finance costs relating to a write-down of the associate company of Sachtleben have been decreased by EUR 23 million.
4) Number of shares outstanding, excluding the number of treasury shares.
5) The dividend for 2016 is the Board of Directors' proposal to the Annual General Meeting.

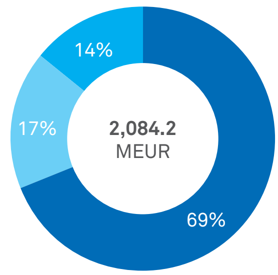
	2016	2015	2014	2013	2012
BALANCE SHEET AND SOLVENCY					
Non-current assets, EUR million	**1,822**	1,825	1,613	1,501	1,682
Shareholders' equity (Equity attributable to equity owners of the parent), EUR million [2]	**1,170**	1,180	1,151	1,113	1,247
Total equity including non-controlling interests, EUR million [2]	**1,183**	1,193	1,163	1,126	1,261
Total liabilities, EUR million	**1,438**	1,402	1,132	1,086	1,202
Total assets, EUR million [2]	**2,621**	2,595	2,296	2,211	2,462
Net working capital	**195**	218	222	198	230
Interest-bearing net liabilities, EUR million	**634**	642	486	456	532
Equity ratio, % [2]	**45**	46	51	51	51
Gearing, % [2]	**54**	54	42	41	42
Interest-bearing net liabilities per EBITDA [2]	**2.2**	2.4	1.9	3.2	3.0
PERSONNEL					
Personnel at period-end	**4,818**	4,685	4,248	4,453	4,857
Personnel (average)	**4,802**	4,559	4,285	4,632	5,043
of whom in Finland	**807**	793	823	1,027	1,173
EXCHANGE RATES					
Key exchange rates at 31 Dec					
USD	**1.054**	1.089	1.214	1.379	1.319
CAD	**1.419**	1.512	1.406	1.467	1.314
SEK	**9.553**	9.190	9.393	8.859	8.582
CNY	**7.320**	7.061	7.536	8.349	8.221
BRL	**3.431**	4.312	3.221	3.258	2.704
PER SHARE FIGURES					
Earnings per share (EPS), basic and diluted, EUR [2] [4]	**0.60**	0.47	0.59	-0.21	0.12
Net cash generated from operating activities per share, EUR [4]	**1.78**	1.63	0.49	1.32	1.16
Dividend per share, EUR [4] [5]	**0.53**	0.53	0.53	0.53	0.53
Dividend payout ratio, % [2] [4] [5]	**88.0**	113.5	89.6	-255.0	455.1
Dividend yield, % [4] [5]	**4.4**	4.9	5.4	4.4	4.5
Equity per share, EUR [2] [4]	**7.68**	7.76	7.57	7.32	8.20
Price per earnings per share (P / E ratio) [2] [4]	**20.14**	23.29	16.72	-58.50	101.51
Price per equity per share [2] [4]	**1.58**	1.40	1.31	1.66	1.44
Price per cash flow from operations per share [4]	**6.83**	6.68	20.24	9.23	10.18
Dividend paid, EUR million [5]	**80.8**	80.7	80.6	80.6	80.6
SHARE PRICE AND TRADING					
Share price, year high, EUR	**12.55**	12.27	12.27	13.02	12.00
Share price, year low, EUR	**8.92**	9.14	9.11	10.55	8.00
Share price, year average, EUR	**10.96**	10.86	10.87	11.76	10.10
Share price at 31 Dec, EUR	**12.13**	10.88	9.89	12.16	11.81
Number of shares traded (1,000)	**64,827**	74,877	75,018	64,937	88,346
% on number of shares	**42**	49	49	42	57
Market capitalization at 31 Dec, EUR million [4]	**1,848.2**	1,654.4	1,503.8	1,848.8	1,795.6
NUMBER OF SHARES AND SHARE CAPITAL					
Average number of shares, basic (1,000) [4]	**152,314**	152,059	152,048	152,039	152,037
Average number of shares, diluted (1,000) [4]	**152,526**	152,395	152,203	152,179	152,173
Number of shares at 31 Dec, basic (1,000) [4]	**152,367**	152,062	152,051	152,042	152,041
Number of shares at 31 Dec, diluted (1,000) [4]	**152,619**	152,544	152,373	152,091	152,090
Increase in number of shares (1,000)	**305**	11	9	1	11
Share capital, EUR million	**221.8**	221.8	221.8	221.8	221.8

REVENUE BY GEOGRAPHICAL AREAS



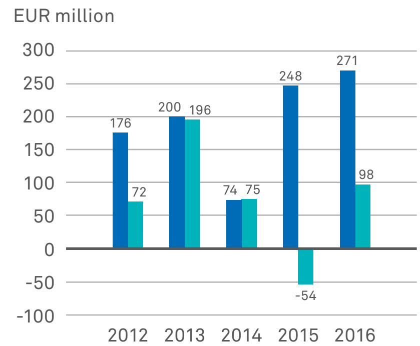
- Finland, domicile of the parent company
- Other Europe, Middle-East and Africa
- Americas
- Asia Pacific

OPERATING EXPENSES



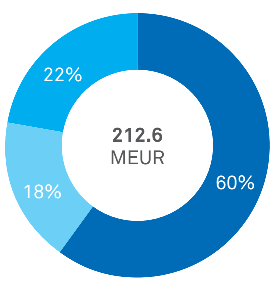
- Material and services
- Employee benefit expenses
- Other operating expenses

CASH FLOW

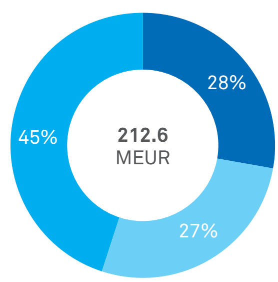


- Net cash generated from operating activities
- Cash flow after investing activities

CAPITAL EXPENDITURE BY SEGMENT EXCLUDING ACQUISITIONS

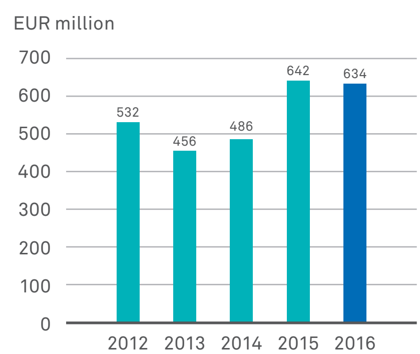


- Pulp & Paper
- Oil & Mining
- Municipal & Industrial

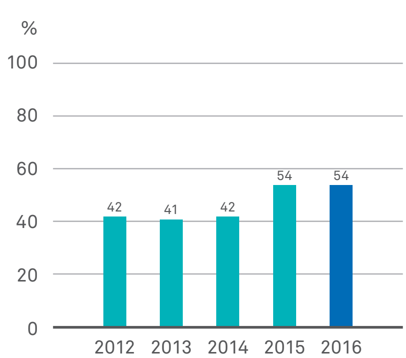


- Maintenance
- Improvement
- Expansion

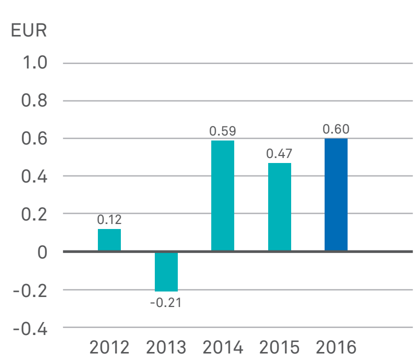
INTEREST-BEARING NET LIABILITIES



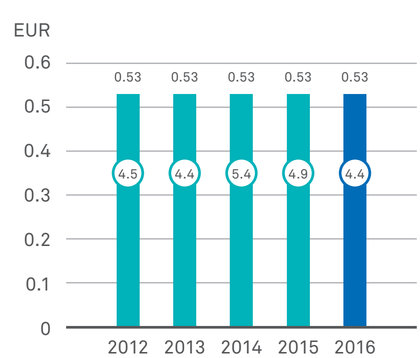
GEARING



EARNINGS PER SHARE



DIVIDEND PER SHARE AND DIVIDEND YIELD [1)]



- Dividend per share [1)]
- Dividend yield, % [1)]

1) The dividend for 2016 is the Board of Directors' proposal to the Annual General Meeting.

DEFINITIONS OF KEY FIGURES

FINANCIAL FIGURES

OPERATIVE EBITDA
Operating profit (EBIT) + depreciation and amortization + impairments - items affecting comparability

ITEMS AFFECTING COMPARABILITY[1)]
Restructuring and streamlining programs + transaction and integration expenses in acquisitions + divestment of businesses and other disposals + other items

OPERATIVE EBIT
Operating profit (EBIT) - items affecting comparability

INTEREST-BEARING NET LIABILITIES
Interest-bearing liabilities - cash and cash equivalents

EQUITY RATIO, %
Total equity x 100

Total assets - prepayments received

GEARING, %
Interest-bearing net liabilities x 100

Total equity

INTEREST COVER
Operating profit + depreciation, amortization and impairments

Finance costs, net

RETURN ON INVESTMENTS (ROI), %
(Profit before tax + interest expenses + other financial expenses) x 100

(Total assets - non-interest-bearing liabilities) [2)]

RETURN ON EQUITY (ROE), %
Net profit attributable to equity owners of the parent x 100

Equity attributable to equity owners of the parent [2)]

CASH FLOW RETURN ON INVESTMENT (CFROI), %
Net cash generated from operating activities x 100

(Total assets - interest-free liabilities) [2)]

CASH FLOW AFTER INVESTING ACTIVITIES
Net cash generated from operating activities + net cash used in investing activities

OPERATIVE RETURN ON CAPITAL EMPLOYED (OPERATIVE ROCE), %
(Operative EBIT + share of profit or loss of associates) x 100 [3)]

Capital employed [4)]

RETURN ON CAPITAL EMPLOYED (ROCE), %
(Operating profit + share of the results of associates) x 100 [3)]

Capital employed [4)]

CAPITAL TURNOVER
Revenue

Capital employed [4)]

INTEREST-BEARING NET LIABILITIES / EBITDA
Interest-bearing net liabilities

Operating profit (EBIT) + depreciation and amortization + impairments

NET FINANCIAL COST, %
(Finance costs, net - dividend income - exchange rate differences) x 100

Interest-bearing net liabilities [2)]

NET WORKING CAPITAL
Inventories + trade receivables + other receivables, excluding derivatives, accrued interest income and other financing items - trade payables - other liabilities, excluding derivatives, accrued interest expenses and other financing items

CAPITAL EMPLOYED
Property, plant and equipment + intangible assets + net working capital + investments in associates

PER SHARE FIGURES

EARNINGS PER SHARE (EPS)
Net profit attributable to equity owners of the parent

Average number of shares

NET CASH GENERATED FROM OPERATING ACTIVITIES PER SHARE
Net cash generated from operating activities

Average number of shares

DIVIDEND PER SHARE
Dividend paid

Number of shares at 31 Dec

DIVIDEND PAYOUT RATIO, %
Dividend per share x 100

Earnings per share (EPS)

DIVIDEND YIELD, %
Dividend per share x 100

Share price at 31 Dec

EQUITY PER SHARE
Equity attributable to equity owners of the parent at 31 Dec

Number of shares at 31 Dec

SHARE PRICE, YEAR AVERAGE
Shares traded (EUR)

Shares traded (volume)

PRICE PER EARNINGS PER SHARE (P / E)
Share price at 31 Dec

Earnings per share (EPS)

PRICE PER EQUITY PER SHARE
Share price at 31 Dec

Equity per share attributable to equity owners of the parent

PRICE PER NET CASH GENERATED FROM OPERATING ACTIVITIES PER SHARE
Share price at 31 Dec

Net cash generated from operating activities per share

SHARE TURNOVER, %
Number of shares traded x 100

Average number of shares

1) Non-GAAP measures excludes the effects of significant items of income and expenses which may have an impact on the comparability in the financial reporting of Kemira Group. Restructuring and streamlining programs; transaction and integration expenses in acquisition; divestments of businesses and other disposals are considered to be the most common items affecting comparability.
2) Average
3) Operating profit and share of profit or loss of associates taken into account for a rolling 12-month period ending at the end of the review period.
4) 12-month rolling average

CONSOLIDATED FINANCIAL STATEMENTS • Consolidated Income Statement (EUR million)

CONSOLIDATED INCOME STATEMENT (IFRS)

		Year ended 31 December	
	Note	**2016**	2015
Revenue	2	**2,363.3**	2,373.1
Other operating income	3	**5.1**	7.1
Operating expenses	4, 5	**-2,084.2**	-2,116.4
EBITDA		**284.2**	263.8
Depreciation, amortization and impairments	6, 11, 12, 13	**-137.2**	-131.2
Operating profit (EBIT)		**147.0**	132.6
Finance income	7	**9.5**	5.2
Finance expense	7	**-27.5**	-33.9
Exchange differences	7	**-1.1**	-2.1
Finance costs, net	7	**-19.1**	-30.8
Share of the results of associates	2, 8	**0.1**	0.3
Profit before tax		**128.0**	102.1
Income taxes	9	**-30.1**	-24.9
Net profit for the period		**97.9**	77.2
Net profit attributable to			
Equity owners of the parent		**91.8**	71.0
Non-controlling interests	18	**6.1**	6.2
Net profit for the period		**97.9**	77.2
Earnings per share for net profit attributable to the equity owners of the parent company (EUR per share)			
Basic and diluted	10	**0.60**	0.47

The notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED FINANCIAL STATEMENTS • Consolidated Statement of Comprehensive Income (EUR million)

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME (IFRS)

	Note	Year ended 31 December 2016	2015
Net profit for the period		**97.9**	77.2
Other comprehensive income			
Items that may be reclassified subsequently to profit or loss			
Available-for-sale financial assets		**-31.6**	-21.0
Exchange differences on translating foreign operations		**11.3**	26.2
Cash flow hedges		**8.5**	-2.5
Items that will not be reclassified subsequently to profit or loss			
Remeasurements on defined benefit plans		**-10.7**	35.9
Other comprehensive income for the period, net of tax	9, 18	**-22.5**	38.6
Total comprehensive income for the period		**75.4**	115.8
Total comprehensive income attributable to			
Equity owners of the parent		**69.6**	109.6
Non-controlling interests	18	**5.8**	6.2
Total comprehensive income for the period		**75.4**	115.8

Items in the Consolidated Statement of Comprehensive Income are disclosed net of tax. The income tax relating to each component of other comprehensive income is disclosed in Note 9.

The notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED FINANCIAL STATEMENTS • Consolidated Balance Sheet (EUR million)

CONSOLIDATED BALANCE SHEET (IFRS)

		As at 31 December	
	Note	2016	2015
ASSETS			
NON-CURRENT ASSETS			
Goodwill	11	**522.4**	518.3
Other intangible assets	12	**115.9**	134.7
Property, plant and equipment	13	**915.6**	815.3
Investments in associates	8	**1.2**	1.2
Available-for-sale financial assets	14, 15	**202.5**	271.6
Deferred tax assets	21	**27.5**	29.5
Other investments	15	**4.4**	5.8
Receivables of defined benefit pension	22	**32.1**	48.9
Total non-current assets		**1,821.6**	1,825.3
CURRENT ASSETS			
Inventories	16	**216.9**	207.0
Interest-bearing receivables	15, 17	**0.2**	0.2
Trade receivables and other receivables	15, 17	**386.1**	389.8
Current income tax assets		**22.7**	21.4
Cash and cash equivalents	28	**173.4**	151.5
Total current assets		**799.3**	769.9
Total assets		**2,620.9**	2,595.2
EQUITY AND LIABILITIES			
EQUITY	18		
Equity attributable to equity owners of the parent			
Share capital		**221.8**	221.8
Share premium		**257.9**	257.9
Fair value and other reserves		**72.2**	94.2
Unrestricted equity reserve		**196.3**	196.3
Translation differences		**-0.8**	-12.4
Treasury shares		**-20.0**	-22.0
Retained earnings		**442.6**	444.5
Equity attributable to equity owners of the parent		**1,170.0**	1,180.3
Non-controlling interests		**12.9**	12.9
Total equity		**1,182.9**	1,193.2
NON-CURRENT LIABILITIES			
Interest-bearing liabilities	15, 19, 20	**649.5**	670.9
Other liabilities	15	**21.4**	21.4
Deferred tax liabilities	21	**63.2**	55.9
Liabilities of defined benefit pension	22	**79.8**	77.3
Provisions	23	**26.5**	28.1
Total non-current liabilities		**840.4**	853.6
CURRENT LIABILITIES			
Interest-bearing liabilities	15, 19, 20	**157.9**	122.7
Trade payables and other liabilities	15, 24	**405.2**	388.7
Current income tax liabilities		**20.3**	22.1
Provisions	23	**14.2**	14.9
Total current liabilities		**597.6**	548.4
Total liabilities		**1,438.0**	1,402.0
Total equity and liabilities		**2,620.9**	2,595.2

The notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED FINANCIAL STATEMENTS • Consolidated Statement of Cash Flow (EUR million)

CONSOLIDATED STATEMENT OF CASH FLOW (IFRS)

	Note	As at 31 December 2016	2015
CASH FLOW FROM OPERATING ACTIVITIES			
Net profit for the period		**97.9**	77.2
Adjustments for			
Depreciation, amortization and impairments	6, 11, 12, 13	**137.2**	131.2
Income taxes	9	**30.1**	24.8
Finance costs, net	7	**19.1**	30.8
Share of the results of associates	8	**-0.1**	-0.3
Other non-cash income and expenses not involving cash flow		**0.3**	2.6
Operating profit before change in net working capital		**284.5**	266.3
Change in net working capital			
Increase (-) / decrease (+) in inventories		**-4.6**	7.7
Increase (-) / decrease (+) in trade and other receivables		**13.3**	-28.9
Increase (+) / decrease (-) in trade payables and other liabilities		**20.8**	41.9
Change in net working capital		**29.5**	20.7
Cash flow from operations before financing items and taxes		**314.0**	287.0
Interest and other finance cost paid		**-27.1**	-26.3
Interest and other finance income received		**1.1**	4.3
Realized exchange gains and losses		**5.6**	-5.2
Dividends received		**0.2**	0.1
Income taxes paid		**-23.2**	-12.3
Net cash generated from operating activities		**270.6**	247.6
CASH FLOW FROM INVESTING ACTIVITIES			
Purchases of subsidiaries and asset acquisitions, net of cash acquired	26	**2.0**	-123.4
Purchases of available-for-sale financial assets		**0.0**	-4.2
Purchases of property, plant and equipment and intangible assets		**-212.6**	-177.5
Change in long-term loan receivables decrease (+) / increase (-)		**0.9**	0.4
Proceeds from sale of subsidiaries, net of cash disposed	25	**0.0**	1.1
Proceeds from sale of available-for-sale financial assets		**35.4**	0.1
Proceeds from sale of property, plant, equipment and intangible assets		**1.5**	2.1
Net cash used in investing activities		**-172.8**	-301.4
CASH FLOW FROM FINANCING ACTIVITIES			
Proceeds from non-current interest-bearing liabilities (+)		**50.0**	250.0
Repayment from non-current interest-bearing liabilities (-)		**-48.1**	-86.0
Short-term financing, net increase (+) / decrease (-)		**6.8**	9.9
Dividends paid		**-86.5**	-86.6
Other finance items		**0.0**	0.1
Net cash used in financing activities		**-77.8**	87.4
Net decrease (-) / increase (+) in cash and cash equivalents		**20.0**	33.6
Cash and cash equivalents at 31 Dec		**173.4**	151.5
Exchange gains (+) / losses (-) on cash and cash equivalents		**1.9**	-1.2
Cash and cash equivalents at 1 Jan		**151.5**	119.1
Net decrease (-) / increase (+) in cash and cash equivalents		**20.0**	33.6

The notes are an integral part of these Consolidated Financial Statements.

CONSOLIDATED FINANCIAL STATEMENTS • Consolidated Statement of Changes in Equity (EUR million)

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (IFRS)

	EQUITY ATTRIBUTABLE TO OWNERS OF THE PARENT									
	Share capital	Share premium	Fair value and other reserves	Unrestricted equity reserve	Exchange differences	Treasury shares	Retained earnings	Total	Non-controlling interests	Total equity
Equity at January 1, 2015	221.8	257.9	117.4	196.3	-38.6	-22.1	418.0	1,150.7	12.6	1,163.3
Net profit for the period							71.0	71.0	6.2	77.2
Available-for-sale financial assets			-21.0					-21.0		-21.0
Exchange differences on translating foreign operations					26.2			26.2		26.2
Cash flow hedges			-2.5					-2.5		-2.5
Remeasurements on defined benefit plans							35.9	35.9		35.9
Total comprehensive income			-23.5		26.2		106.9	109.6	6.2	115.8
Transactions with owners										
Dividends paid							-80.6	-80.6	-5.9	-86.5
Treasury shares issued to the Board of Directors						0.1		0.1		0.1
Share-based payments							0.7	0.7		0.7
Transfers in equity			0.3				-0.3	0.0		0.0
Other changes							-0.2	-0.2		-0.2
Transactions with owners			0.3			0.1	-80.4	-80.0	-5.9	-85.9
Equity at December 31, 2015	221.8	257.9	94.2	196.3	-12.4	-22.0	444.5	1,180.3	12.9	1,193.2
Equity at January 1, 2016	**221.8**	**257.9**	**94.2**	**196.3**	**-12.4**	**-22.0**	**444.5**	**1,180.3**	**12.9**	**1,193.2**
Net profit for the period							**91.8**	**91.8**	**6.1**	**97.9**
Available-for-sale financial assets			**-31.6**					**-31.6**		**-31.6**
Exchange differences on translating foreign operations					**11.6**			**11.6**	**-0.3**	**11.3**
Cash flow hedges			**8.5**					**8.5**		**8.5**
Remeasurements on defined benefit plans							**-10.7**	**-10.7**		**-10.7**
Total comprehensive income			**-23.1**		**11.6**		**81.1**	**69.6**	**5.8**	**75.4**
Transactions with owners										
Dividends paid							**-80.7**	**-80.7**	**-5.8**	**-86.5**
Treasury shares issued to the target group of share-based incentive plan						**1.9**		**1.9**		**1.9**
Treasury shares issued to the Board of Directors						**0.1**		**0.1**		**0.1**
Share-based payments							**-1.2**	**-1.2**		**-1.2**
Transfers in equity			**1.1**				**-1.1**	**0.0**		**0.0**
Transactions with owners			**1.1**			**2.0**	**-83.0**	**-79.9**	**-5.8**	**-85.7**
Equity at December 31, 2016	**221.8**	**257.9**	**72.2**	**196.3**	**-0.8**	**-20.0**	**442.6**	**1,170.0**	**12.9**	**1,182.9**

The notes are an integral part of these Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. THE GROUP'S ACCOUNTING POLICIES FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The principal accounting policies applied in the preparation of these Consolidated Financial Statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

GROUP PROFILE

Kemira is a global chemicals company serving customers in water-intensive industries. The company provides expertise in application know-how and chemicals that improve its customers' water, energy and raw material efficiency. Kemira's three segments Pulp & Paper, Oil & Mining and Municipal & Industrial focus on customers in pulp & paper, oil & gas, mining and water treatment respectively.

The Group's parent company is Kemira Oyj. It is domiciled in Helsinki, Finland, and its registered address is Porkkalankatu 3, FI-00180 Helsinki, Finland. The parent company is listed on Nasdaq Helsinki. A copy of the Consolidated Financial Statements is available at www.kemira.com.

The Board of Directors of Kemira Oyj has approved the Financial Statements for publication at its meeting on February 7, 2017. Under the Finnish Limited Liability Companies Act, the shareholders may accept or reject the Financial Statements at the General Meeting of Shareholders held after their publication. The meeting also has the power to make decision to amend the Financial Statements.

BASIS OF PREPARATION FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The Group has prepared its Consolidated Financial Statements in accordance with IAS and IFRS (International Financial Reporting Standards) and the related SIC and IFRIC interpretations, issued by the IASB (International Accounting Standards Board). In the Finnish Accounting Act and the statutes under it, the International Financial Reporting Standards refer to the endorsed standards and their interpretations under the European Union Regulation No. 1606 / 2002 regarding the adoption of the International Financial Reporting Standards applicable within the Community. The Notes to the Consolidated Financial Statements also comply with the requirements of the Finnish accounting and corporate legislation, which supplement the IFRS regulations.

The Consolidated Financial Statements are presented in million euros and have been prepared based on the historical cost excluding the items measured at fair value that are available-for-sale financial assets, financial assets and liabilities at fair value through profit or loss, and share-based payments on the grant date.

The preparation of Consolidated Financial Statements in conformity with the IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Group's accounting policies. The areas which need a higher degree of judgment and are significant to the Consolidated Financial Statements are described below in section "Critical accounting estimates and judgments".

CHANGES IN ACCOUNTING POLICIES AND DISCLOSURES

NEW AND AMENDED IFRSs AND INTERPRETATIONS ADOPTED IN 2016

The following new and revised IFRSs have been adopted in these Consolidated Financial Statements. The application of these new and revised IFRSs has not had any material impact on the amounts reported for the current and prior years but may affect the accounting for future transactions and events.

- *Amendments to IAS 1 Disclosure Initiative*.
- *Amendments to IFRS 11 Accounting for Acquisitions of Interests in Joint Operations.*
- *Amendments to IFRS 10, IFRS 12 and IAS 28 Investment Entities: Applying the Consolidation Exception.*
- *Amendments to IAS 16 and IAS 38 Clarification of Acceptable Methods of Depreciation and Amortisation.*
- *IAS 16 and IAS 41 Agriculture: Bearer Plants.*
- *Amendments to IAS 19 Defined Benefit Plans: Employee Contributions.*
- *Annual Improvements to IFRSs 2010–2012 Cycle.*
- *Annual Improvements to IFRSs 2012–2014 Cycle.*

APPLICATION OF NEW AND REVISED IFRSs IN ISSUE BUT NOT YET EFFECTIVE

IASB has published the following new or revised standards and interpretations not yet adopted by the Group. The Group will adopt each standard as of the effective date, or if the effective date is other than the first day of the reporting period, from the next reporting period beginning after the effective date.

- IFRS 9 *Financial Instruments* (effective in the EU for annual periods beginning on or after 1 January 2018). IFRS 9 will supersede current IAS 39 Financial Instruments: Recognition and Measurement. IFRS introduced

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

new requirements for the classification and measurement of financial assets and introduces a new impairment model for financial assets, which is based on expected credit losses. Recognition and measurement of financial liabilities will mainly continue to be on the same bases as currently adopted under IAS 39. The new general hedge accounting requirements retain the three types of hedge accounting mechanisms currently available in IAS 39. However, greater flexibility has been introduced to the types of transactions eligible for hedge accounting, specifically broadening the types of instruments that qualify as hedging instruments and the types of risk components of non-financial items that are eligible for hedge accounting.

In the previous financial years, the Group has applied cash flow hedge accounting for electricity forward contracts in accordance with IAS 39. IFRS 9 will change the assessment of the effectiveness of electricity derivatives. In addition, expected credit losses of loans and receivables will be calculated and recognized in accordance with the requirements of the new standard. The Group´s analyzes of IFRS 9 impacts will be completed in the year 2017. The Group estimates that the new standard will not have material impact on the Consolidated Financial Statements. The Group will apply IFRS 9 on 1 January 2018.

- IFRS 15 *Revenue from Contracts with Customers* (effective in the EU for annual periods beginning on or after 1 January 2018). IFRS 15 establishes a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers. IFRS 15 will supersede the current revenue recognition guidance including IAS 18 Revenue, IAS 11 Construction Contracts and the related interpretations when it becomes effective. The core principle of IFRS 15 is that an entity should recognize revenue to depict the transfer of promised goods or services to customers an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. Under IFRS 15, an entity recognizes revenue when (or as) a performance obligation is satisfied, i.e. when 'control' of the good or service underlying the particular performance obligation is transferred to the customer. Furthermore, extensive disclosures are required by IFRS 15.

  Quarterly results for the financial year 2018 and the annual Consolidated Financial Statements 2018 will be prepared in compliance with IFRS 15. The standard guidance permits two methods of adoption: full retrospective method or modified retrospective method. The Group expects to adopt the IFRS 15 standard using the modified retrospective method for the existing and new sales contracts on January 1, 2018. The information from the prior years 2016 and 2017 will be disclosed in accordance with the existing revenue recognition standards IAS 18 and IAS 11. Possible cumulative effect of the transition to the IFRS 15 standard will be recognized in the equity on January 1, 2018. The Group has assessed the impacts of the IFRS 15 standard on the financial reporting and the work will continue in 2017. The Group estimates that the new standard will not have a material impact on the Consolidated Financial Statements. The Group's revenue mainly consists of the sale of chemical products. The revenue recognition for these sales remain substantially unchanged and occurs at the point when control of a sale of the products is transferred to the customer. Shipping and handling services are recognized in conjunction with the sale of the products and they are not treated as separate performance obligations.
- IFRS 16 *Leases* (effective for annual periods beginning on or after 1 January 2019). IFRS 16 provides a comprehensive model for the identification of lease arrangements and their treatment in the financial statements of both lessees and lessors. It will supersede the current guidance including IAS 17 Leases and the related interpretations when it becomes effective. IFRS 16 distinguishes leases and service contracts on the basis of whether an identified asset is controlled by a customer. Distinction of operating leases (off balance sheet) and finance leases (on balance sheet) are removed for lessee accounting, and is replaced by a model where a right-of-use asset and a corresponding liability have to be recognized for all leases by lessees (i.e. all on balance sheet) except for short-term leases and leases of low value assets. In contrast to lessee accounting, IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17, and continues to require a lessor to classify a lease either as an operating lease or a finance lease. In addition, IFRS 16 requires extensive disclosures. On the reporting date December 31, 2016, the Group's operating lease commitments of EUR 211.2 million are disclosed in the Note 29. The Group continues to identify and assess the existing operating lease agreements and right-of-use assets and lease liabilities to be recognized in the balance sheet on the basis of these agreements. IFRS 16 standard will change the accounting practices relating the lease agreements. The Group estimates that this will have an impact on the balance sheet and key figures, as well as the classification of the income statement and cash flow. The assessment of the impact of IFRS 16 is not completed and will continue in 2017. The standard has not yet been endorsed by the EU.
- IFRIC Interpretation 22 *Foreign Currency Transactions and Advance Consideration* (effective for annual periods beginning on or after 1 January 2018). The interpretation issued on December 2016 provides guidance on "the date of the transaction" when an entity pays or received consideration in advance in a foreign currency. In 2017, the Group will assess the potential impact of the interpretation. The interpretation has not yet been endorsed by the EU.

- Other already published, but not yet effective under the new standards, standard amendments or IFRIC interpretation are not expected to have impact on the Group's financial reporting.

CONSOLIDATION

SUBSIDIARIES (NOTE 33)

The Consolidated Financial Statements include the parent company and its subsidiaries. Subsidiaries are all entities over which the Group has control (voting rights generally being over 50 percent). The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity.

Subsidiaries become fully consolidated from the date on which the control is transferred to the Group. They are de-consolidated from the date on which the control ceases.

All intra-group transactions are eliminated. Intra-group shareholdings are eliminated by using the acquisition method. The consideration transferred for the acquisition of a subsidiary is defined as an aggregate of the fair values of the assets transferred, the liabilities assumed and the equity interests issued by the Group. The consideration transferred may include the fair value of any asset or liability resulting from the contingent consideration arrangement. Acquisition-related costs are expensed as incurred. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured at their fair values on the acquisition date. On an acquisition-by-acquisition basis, the Group recognizes any non-controlling interest in the acquiree either at fair value or at the non-controlling interest's proportionate share of the acquiree's net assets.

The amount that exceeds the aggregate of consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the Group's share of the net assets acquired is recorded as goodwill. If this is less than the fair value of the net assets of the subsidiary acquired in the case of a bargain purchase, the difference is recognized directly in the income statement.

Net profit or loss for the financial year and other comprehensive income attributable to the equity holders of the parent and non-controlling interests are presented in the income statement and in the statement of comprehensive income. The portion of equity attributable to non-controlling interests is stated as an individual item separately from the equity to the equity holders of the parent. Total comprehensive income shows separately the total amounts attributable to the equity holders of the parent and to non-controlling interests. The Group recognizes negative non-controlling interests, unless non-controlling interest do not have a binding obligation to cover the losses up to the amount of their investment.

If the parent company's ownership interest in the subsidiary is reduced but the control is retained, the transactions are treated as equity transactions. When the Group ceases to have control or significant influence, any retained interest in the entity is remeasured to its fair value, and the difference is recognized in profit or loss.

ASSOCIATES (NOTE 8)

Associated companies are companies over which the Group exercises significant influence (voting rights generally being 20–50 percent) but not control. Holdings in associated companies are consolidated using the equity method. If the Group's share of the associate's losses exceeds the carrying amount of the investment, the exceeding losses will not be consolidated unless the Group has a commitment to fulfill the obligations on behalf of the associate. The Group's share of the associated companies' net profit for the financial year is stated as a separate item in the consolidated income statement after operating profit, in proportion to the Group's holdings. The Group's share of its associates' movements in other comprehensive income is recognized in Group's other comprehensive income. The Group's associates do not have such items for financial years 2015–2016.

FOREIGN CURRENCY TRANSLATION

Items included in the financial statements of each of the Group's entities are measured by using the currency of the primary economic environment in which the entity operates ('the functional currency'). The Consolidated Financial Statements are presented in euros, which is the Group's presentation currency and the parent company's functional currency.

In the Consolidated Financial Statements, the income statements of foreign subsidiaries are translated into euro using the financial year's average foreign currency exchange rates, and the balance sheets are translated using the exchange rates quoted on the balance sheet date. Retranslating the net profit for the period and the other comprehensive income using different exchange rates in the income statement and in the balance sheet causes a translation difference recognized in equity in the balance sheet; the change in this translation difference is presented under other comprehensive income. Goodwill and fair value adjustments to the carrying amounts of the assets and liabilities that arise from the acquisition of a foreign entity are accounted for as part of the assets and liabilities of the foreign entity, and translated into euro at the rate quoted on the balance sheet date.

Translation differences in the loans granted to foreign subsidiaries in replacement of their equity are treated as an increase or decrease in other comprehensive income. When the Group ceases to have control over a subsidiary, the accumulated translation difference is transferred into the income statement as part of gain or loss on the sale.

In their day-to-day accounting, the Group companies translate foreign currency transactions into their functional currency at the exchange rates quoted on the transaction date. In the Financial Statements, foreign currency denominated receivables and liabilities are measured at the exchange rates quoted on the balance sheet date, and non-monetary items using the rates quoted on the transaction date. Any foreign exchange gains and losses related to business operations are treated as adjustments to sales and purchases. Exchange rate differences associated with financing transactions and the hedging of the Group's overall foreign currency position are stated in foreign exchange gains or losses under financial income and expenses.

REVENUE RECOGNITION

Revenue is measured at the fair value of the consideration received or receivable, and represents the total invoicing value of products sold and services rendered less; sales tax, discounts and foreign exchange differences in trade receivables as adjusting items.

The revenue from the sale of goods is recognized in the income statement when the major risks and rewards related to the ownership of the goods have been transferred to the buyer. Revenue from services is recognized in the accounting period in which the services are rendered.

PENSION OBLIGATIONS (NOTE 22)

The Group has post-employment schemes, including both defined contribution and defined benefit pension plans in accordance with the local conditions and practices in the countries in which it operates. Pension plans are generally funded through contributions to insurance companies or a separate pension fund.

A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. A defined benefit plan is a pension plan that is not a defined contribution plan.

Typically defined benefit plans define an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as compensation and years of service.

The liability recognized in the balance sheet in respect to the defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have the terms to maturity approximating to the terms of the related pension obligation. In countries where there is no deep market in such bonds, the market rates on government bonds are used.

Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise.

Current service costs are included in the Consolidated Income Statement as the employee benefits expenses and net interest cost on finance income and finance expense. Past-service costs are recognized immediately in income statements.

For defined contribution plans, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognized as employee benefit expense when they are due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.

SHARE-BASED PAYMENTS (NOTE 5, 31)

The Group has equity-settled share-based compensation plans under which the Group receives services from employees as consideration for equity instrument of the Group. The potential rewards are provided partly in shares and partly in cash. The potential reward provided in shares is recognized as a personnel expense in the income statement and in the equity. Correspondingly, the rewards provided in cash are recognized as a personnel expense in the income statement and in liabilities. The total expense is recognized over the vesting period, which is the period over which the specified vesting conditions are to be satisfied.

Share-based compensation expense is determined on the grant date based on the Group's estimate of the number of shares that are expected to vest at the end of the vesting period. Based on the vesting conditions, the Group revises its estimates of the number of shares expected to vest based on the balance sheet date. It recognizes the potential impact of the revision to original estimates in the income statement as a personnel expense, with the corresponding adjustment made to equity and liabilities at fair value.

CURRENT AND DEFERRED INCOME TAX (NOTE 9, 21)

The Group's tax expense for the period comprises current tax, adjustments prior tax periods and deferred tax. Tax is recognized in the income statement, except in the case it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

The current income tax charge is calculated based on tax laws enacted or substantively enacted at the balance sheet date in the countries where the company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is recognized, using the liability method, on temporary differences arising between the tax bases of the assets and liabilities and their carrying amounts in the Consolidated Financial Statements. However, deferred tax liabilities are not recognized if they arise from the initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting profit nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the balance sheet date and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled.

Deferred income tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized.

Deferred income tax is provided on temporary differences arising on investments in subsidiaries and associates, except for deferred income tax liability where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities, and when the deferred income taxes assets and liabilities relate to the income taxes levied by the same taxation authority on either the same tax entity or different taxable entities where there is an intention to settle the balances on a net basis.

INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT (NOTE 11–13)

Goodwill arises from business combinations. Goodwill represents the excess of the consideration transferred, the amount of any non-controlling interest in the acquiree and the acquisition-date fair value of any previous equity interest in the acquiree over the fair value of the identifiable net assets acquired. Goodwill is measured at cost less accumulated impairment losses. Goodwill is tested for impairment annually and whenever there is any indication that an asset may be impaired. For this purpose, goodwill is allocated to cash-generating units.

Development costs are capitalized as intangible assets when it can be shown that a development project will generate probable future economic benefit, and the costs attributable to the development project can reliably be measured. Capitalized development costs are presented as a separate item and amortized over their useful lives. Capitalized development costs include material, labor and testing costs, and any capitalized borrowing costs that are directly attributable to bringing the asset ready for its intended use. Other development costs that do not meet these criteria are recognized as an expense as incurred. Development costs previously recognized as an expense are not recognized as an asset in the subsequent periods.

Other intangible assets include for instance software and software licenses as well as patents, technologies, non-compete agreements and customer relationships bases acquired in business combinations.

Property, plant and equipment (PP&E) and intangible assets (with definite useful lives) are measured at cost less accumulated depreciation and amortization and any impairment losses. The Group has no intangible assets that have an indefinite useful life other than goodwill.

Land is not depreciated. Depreciation / amortization is calculated on a straight-line basis over the asset's useful life. The most commonly applied depreciation / amortization periods according to the Group's accounting policies are:

PP&E	
• Buildings and constructions	20–40 years
• Machinery and equipment	3–15 years
Intangible assets	
• Development costs	a maximum of 8 years
• Customer relationships	5–7 years
• Technologies	5–10 years
• Non-compete agreements	3–5 years
• Other intangible assets	5–10 years

The residual values and useful lives of the assets are reviewed at least at the end of each financial year. Gains and losses on the sale of non-current assets are included in other operating income and expenses, respectively. Borrowing costs directly attributable to the acquisition or construction of a qualifying asset are capitalized as part of the cost of the asset in question when it is probable that they will generate future economic benefit and the costs can be reliably measured. The costs of major inspections or the overhaul of asset performed at regular intervals and identified as separate components are capitalized and depreciated over their useful lives.

Depreciation of an asset begins when it is available for use and it ceases at the moment when the asset is classified under IFRS 5 as held for sale or is include in disposal group.

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

GOVERNMENT GRANTS (NOTE 4)

Government grants for investments are recognized as a deduction from the carrying amount of these assets. The grants are recognized in the income statement as smaller depreciations over the asset's useful life. Government grants for research activities are deducted from expenses.

LEASES (NOTE 21, 29)

Leases involving tangible assets, in which the Group acts as a lessee, are classified as finance leases if all of the risks and rewards of ownership transfer substantially to the Group.

At the commencement of the lease term, the finance lease assets are recognized at the lower of the fair value of the leased asset and the present value of the minimum lease payments. These assets and related rental obligations are presented as part of the Group's non-current assets and interest-bearing liabilities. In respect to the finance lease agreements, depreciation on the leased assets and interest expenses from the associated liability are shown in the income statement. Rents paid on the basis of operating leases are expensed on a straight-line basis over the lease terms.

When the Group is a lessor, it recognizes assets held under the finance lease as receivables in the balance sheet. Assets held under operating leases are included in PP&E.

Also the arrangements that are not leases in their legal form but convey the rights to use assets in return for a payment or series of payments are treated as leases.

INVENTORIES (NOTE 16)

Inventories are measured at the lower of cost and net realizable value. Costs are determined on a first-in first-out (FIFO) basis or by using a weighted average cost formula, depending on the nature of the inventory. The cost of finished goods and work in progress include the proportion of production overheads of the normal capacity. The net realizable value is the sales price received in the ordinary course of business less the estimated costs for completing the asset and the sales costs.

FINANCIAL ASSETS, FINANCIAL LIABILITIES AND DERIVATIVE CONTRACTS

When a financial asset or a financial liability is initially recognized on the trade date, it is measured at cost, which equals the fair value of the consideration given or received. The Group's financial assets are classified for subsequent measurement as financial assets at fair value through profit or loss, loans and receivables issued by the Group, and available-for-sale financial assets.

CATEGORY	FINANCIAL INSTRUMENT	MEASUREMENT
Financial assets at fair value through profit or loss	Currency forward contracts, currency options, currency swaps, interest rate forwards , interest rate futures, interest rate options, interest rate swaps, electricity forwards, certificates of deposit, commercial papers, units in mutual funds, embedded derivatives	Fair value
Loans and receivables	Non-current loan receivables, bank deposits, trade receivables and other receivables	(Amortized) cost
Available-for-sale financial assets	Shares, bond investments	Fair value

FINANCIAL ASSETS AT FAIR VALUE THROUGH INCOME STATEMENTS

Financial assets at fair value through profit or loss are measured at fair value. Fair value is the amount for which an asset could be exchanged or loans paid between knowledgeable, willing parties in an arm's length transaction. These derivative contracts to which hedge accounting in accordance with IAS 39 is not applied are classified as financial assets held for trading. These are classified as financial assets at fair value through profit or loss. In the balance sheet, these derivative contracts are shown under prepaid expenses and accrued income and accrued expenses and prepaid income. Any gains or losses arising from changes in fair value are recognized through profit or loss on the transaction date.

LOANS AND RECEIVABLES

Loans and receivables include non-current receivables carried at amortized cost using the effective interest rate method and accounting for any impairment.

AVAILABLE-FOR-SALE FINANCIAL ASSETS (NOTE 14)

Available-for-sale financial assets are measured at fair value if it is considered that fair value can be determined reliably. Unrealized changes in fair value of financial assets available for sale are recognized in other comprehensive income and presented under equity in the fair value reserve taking the tax effect into account. Accumulated changes in fair value are transferred to the income statement as a reclassification adjustment when the investment is divested or it has been impaired to the extent that an impairment loss has to be recognized. Available-for-sale financial assets include non-listed companies, the shareholdings in Pohjolan Voima Oy (PVO) and Teollisuuden Voima Oyj (TVO) representing the largest investments.

PVO and its subsidiary TVO comprise a private electricity-generating group owned by Finnish manufacturing and power companies, to which it supplies electricity at cost. PVO Group owns and operates, among others, two nuclear power plant units in Olkiluoto in the municipality of Eurajoki. The Group has A and C series shares in TVO and A, B, C, G and M series shares in PVO. Different share series entitle the shareholder to electricity generated by different power plants. The owners of each share series are responsible for the fixed costs of the series in question in proportion to the number of the shares, regardless of whether they use their power or energy share or not, and for variable costs in proportion to the amount of energy used.

Kemira Oyj's holding in PVO Group that entitles to the electricity from completed power plants is measured at fair value based on the discounted cash flow resulting from the difference between the market price of electricity and the cost price. The forward electricity price quotations in Finland area published by the Nordic Electricity Exchange have been used as the market price for electricity of the first five years and after this the development of the prices based on a fundamental simulation model of the Nordic electricity market. The impact of inflation in the coming years is taken into account in the price of electricity and the cost prices. The cost prices are determined by each share series. Future cash flows have been discounted based on the estimated useful lifecycles of the plants related to each share series, and hydro power includes terminal value. The discount rate has been calculated using the annually determined average weighted cost of capital.

CASH AND CASH EQUIVALENTS (NOTE 28)

Cash and cash equivalents consist of cash in hand, demand deposits and other short-term, highly liquid investments. Items classified as cash and cash equivalents have a maximum maturity of three months from the date of purchase. Credit facilities in use are included in current interest-bearing liabilities.

IMPAIRMENT OF FINANCIAL ASSETS

The Group assesses any impairment losses on its financial instruments on each balance sheet date. An impairment of a financial asset is recognized when an event with a negative effect on the future cash flows from the investment has occurred. For items measured at amortized cost, the amount of the impairment loss equals the difference between the asset's carrying amount and the present value of estimated future cash flows from the receivable. This is discounted at the financial asset's original effective interest rate. For items measured at fair value, the fair value determines the amount of impairment. Impairment charges are recognized in the income statement.

The Group sells certain trade receivables to finance companies within the framework of limits stipulated in the agreement. The credit risk associated with these sold receivables and contractual rights to the financial assets in question are transferred from the Group on the selling date. The related expenses are recognized in the financial expenses.

FINANCIAL LIABILITIES

Financial liabilities are classified as financial liabilities at fair value through profit or loss and other financial liabilities. Financial liabilities at fair value through profit and loss include derivatives to which hedge accounting is not applied.

CATEGORY	FINANCIAL INSTRUMENT	MEASUREMENT
Financial liabilities at fair value through profit or loss	Currency forward contracts, currency options, currency swaps, interest rate forwards, interest rate futures, interest rate options, interest rate swaps, electricity forwards, embedded derivatives	Fair value
Other financial liabilities	Current and non-current loans, pension loans, bond and trade payables	(Amortized) cost

DERIVATIVES (NOTE 27)

The fair values of currency, interest rate and commodity derivatives, currency options and units in mutual funds as well as publicly traded shares are based on prices quoted in active markets on the balance sheet date. The value of other financial instruments measured at fair value is determined on the basis of valuation models using information available in the financial market.

Changes in the value of forward contracts are calculated by measuring the contracts against the forward exchange rates on the balance sheet date and comparing them with the counter values calculated through the forward exchange rates on the date of entry into the forward contracts. The fair value of interest rate derivatives is determined using the market value of similar instruments on the balance sheet date. Other derivatives are measured at the market price on the balance sheet date.

All of the derivatives open on the balance sheet date are measured at their fair values. As a rule, fair value changes from open derivative contracts are recognized through profit or loss in the Consolidated Financial Statements. The number of embedded derivatives used by the Group is low.

Other financial liabilities are initially recognized in the balance sheet at the initial value of received net assets deducted with direct costs. Later, these financial liabilities are measured at amortized cost, and the difference between the received net assets and amortizations is recognized as interest costs over the loan term.

HEDGE ACCOUNTING (NOTE 27)

According to IAS 39, hedge accounting refers to a method of accounting aimed at allocating one or more hedging instruments in such a way that their fair value offsets, in full or in part, the changes in the fair value or cash flows of the hedged item. Hedge accounting is applied to hedging the interest rate risk, commodity risk and fair value.

Hedge effectiveness is monitored as required by IAS 39. Effectiveness refers to the capacity of a hedging instrument to offset changes in the fair value of the hedged item or cash flows from a hedged transaction, which are due to the realization of the risk being hedged. A hedging relationship is considered to be highly effective when the change in the fair value of the hedging instrument offsets changes in the cash flows attributable to the hedged items in the range of 80–125 percent. Hedge effectiveness is assessed both prospectively and retrospectively. Hedge effectiveness testing is repeated on each balance sheet date.

Hedge accounting is discontinued when the criteria for hedge accounting are no longer fulfilled. Gains or losses recognized in other comprehensive income and presented under equity are derecognized and transferred immediately in the income statement, if the hedged item is sold or falls due. However, gains or losses arising from changes in the fair value of those derivatives not fulfilling the hedge accounting criteria under IAS 39 are recognized directly in the income statement.

At the inception of a hedge, the Group has documented the existence of the hedging relationship, including the identification of the hedging instrument, the hedged item or transaction, the nature of the risk being hedged, the objectives of risk management and the strategy for undertaking hedging, as well as the description of how hedge effectiveness is assessed.

CASH FLOW HEDGING

Cash flow hedging is used to hedge against variability in cash flows attributable to a particular risk associated with a recognized asset or liability in the balance sheet or a highly probable forecast transaction. Interest rate and commodity derivatives are used as investment instruments in cash flow hedging. Interest rate and commodity derivatives are used as hedging instruments in cash flow hedges. Cash flow hedge accounting, specified in IAS 39 is applied by the Group to only selected hedging items. Changes in the fair value of derivative instruments associated with cash flow hedge are recognized in other comprehensive income (including the tax effect) and presented under equity, providing that they fulfill the criteria set for hedge accounting and are based on effective hedging. The ineffective portion of the gain or loss on the hedging instrument is recognized under financial items in the income statement. Derivatives not fulfilling the hedge accounting criteria are recognized in financial items through profit or loss.

FAIR VALUE HEDGING

Fair value hedges are related to the fixed rate bond loan. Interest rate derivatives are used as instruments in fair value hedging. The fair value of the hedging derivative contracts of change in fair value are recognized in the income statement and the hedged item's book value is adjusted through profit or loss to the extent that the hedge is effective.

PROVISIONS (NOTE 23)

Provisions for restructuring costs, personnel related costs, environmental obligations, legal claims, and onerous contracts are recognized in the balance sheet when the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate of the amount of this obligation can be made. A restructuring provision is recognized when there is a detailed and appropriate plan prepared for it and the implementation of the plan has begun or has been notified to those whom the restructuring concerns.

The amount recognized as a provision is the present value of the expenditure expected to be required to settle the obligation on the balance sheet date using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation.

CONTINGENT LIABILITIES (NOTE 29)

Contingent liability is a possible obligation that arises from past events and whose existence will be confirmed by the occurrence of uncertain future events not wholly within the control of the Group or a present obligation that it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation; or the amount of the obligation cannot be measured with sufficient reliability. Contingent liability is disclosed in the notes.

NON-CURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS

Non-current assets are classified as assets held for sale when their carrying amount is to be recovered principally through a sale transaction and a sale transaction and a sale is considered highly probable. Since the time of classification, the assets are valued at the lower of carrying amount and fair value less costs to sell. Depreciation on these assets discontinues at the time of classification. Non-current assets classified as held for sale are disclosed separately in the balance sheet.

A discontinued operation is a component of the Group that has either been disposed of, or is classified as held for sale, and meets one of the following criteria:

- it represents a separate major line of business or geographical area of operations,
- it is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations, or
- it is a subsidiary that has been acquired exclusively with a prospect of reselling.

The profit or loss of the discontinued operation is stated as a separate item in the consolidated income statement and statement of comprehensive income. Assets held for sale and related to other comprehensive income items are recognized in the balance sheet separately from other items.

IMPAIRMENT OF NON-FINANCIAL ASSETS (NOTE 11)

On each balance sheet date, the Group's assets are assessed to determine whether there is any indication of an asset's impairment. If any indication of impairment exists, the recoverable amount of the asset or the cash-generating unit is calculated on the basis of the value in use or the net selling price. Annual impairment tests cover goodwill and intangible assets not yet ready for use.

A cash-generating unit has been defined as an operating segment. Operating segments are Pulp & Paper, Oil & Mining and Municipal & Industrial. Two or more operating segments are not combined one reportable segment. Goodwill impairment is tested by comparing the reportable segment's (Pulp & Paper, Oil & Mining and Municipal & Industrial) recoverable amount with its carrying amount. The Group does not have intangible assets with indefinite useful lives other than goodwill. All goodwill has been allocated to the reportable segments.

The recoverable amount of a reportable segment is defined as its value in use, which consists of the discounted future cash flows to the unit. Estimates of future cash flows are based on continuing use of an asset and on the latest five-year forecasts by the business unit's management. The annual growth rate used to extrapolate cash flows subsequent to the forecast period is assumed to be zero. Cash flow estimates do not include the effects of improved asset performance, investments or future reorganizations.

An impairment loss is recognized, whenever the carrying amount of an asset or a cash-generating unit exceeds its recoverable amount. An impairment loss is recognized in the income statement. Note 11 provides more detailed information on impairment testing.

If there has been a positive change in the estimates used to determine an asset's recoverable amount since the last impairment loss was recognized, an impairment loss recognized previously is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined if no impairment loss had been recognized. An impairment loss for goodwill is never reversed.

EMISSIONS ALLOWANCES (NOTE 30)

The Group holds assigned emissions allowances, under the EU emissions trading system, at its Helsingborg site in Sweden. Carbon dioxide allowances are accounted for as intangible assets measured at cost. Carbon dioxide allowances received free of charge are measured at their nominal value (zero). A provision for the fulfillment of the obligation to return allowances is recognized if the free-of-charge allowances are not sufficient to cover actual emissions. The Group's consolidated balance sheet shows no items related to emissions allowances when the volume of actual emissions is lower than that of the free-of-charge emissions allowances and the Group has not bought allowances in the market.

TREASURY SHARES (NOTE 18)

Purchases of own shares (treasury shares), including the related costs, are deducted directly from equity in the Consolidated Financial Statements.

DIVIDEND DISTRIBUTION

Any dividend proposed by the Board of Directors is not deducted from distributable equity until approved by the shareholders at the Annual General Meeting.

EARNINGS PER SHARE (NOTE 10)

Basic earnings per share is calculated by dividing the profit attributable to equity owners of the parent company by the weighted average number of ordinary shares in issue during the period excluding ordinary shares purchased by Kemira Oyj and held as treasury shares. Diluted earnings per share is calculated by the adjusting the weighted average number of ordinary shares plus diluted effect of all potential ordinary shares dilutive such as shares from the share-based payments.

CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

Estimates and judgments are continuously evaluated and they are based on previous experience and other factors, such as expectations of future events that are expected to be reasonable under the circumstances.

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

ESTIMATED IMPAIRMENT OF GOODWILL

The impairment tests of goodwill and other assets include determining future cash flows which, with regard to the most significant assumptions, are based on gross margin levels, discount rates and the projected period. Major adverse developments in cash flows and interest rates may

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

necessitate the recognition of an impairment loss. More information on goodwill impairment testing, as well as the assumptions used in the sensitivity analysis is presented in Note 11.

ESTIMATED FAIR VALUE OF SHARES IN PVO GROUP

The Group's investments include non-listed shares, holdings in PVO Group representing the largest of these. The Group's shareholding in the company is measured at fair value, based on the discounted cash flow resulting from the difference between the market price of electricity and the cost price. Developments in the actual fair value may differ from the estimated value due to factors, such as electricity prices, the forecast period or the discount rate. More information on PVO Group's fair value determination is presented in Note 14.

DEFINED BENEFIT PENSION PLANS

Determining pension liabilities under defined benefit pension plans includes a number of actuarial assumptions, and significant changes in these assumptions may affect the amounts of pension liabilities and expenses. Actuarial calculations include assumptions by the management, such as the discount rate and assumptions of salary increases and the termination of employment contracts. Pension liability is calculated by independent actuaries. See Note 22 for details on the calculation of the defined benefit pension assumptions.

ENVIRONMENTAL PROVISIONS

Recognizing environmental provisions requires the management's estimates, since the precise euro amount of obligations related to the provisions is not known when preparing the Financial Statements. Provisions are disclosed in Note 23.

DEFERRED TAXES

For the recognition of deferred tax assets on tax losses and other items, the management assesses the amount of a probable future taxable profit against which unused tax losses and unused tax credits can be utilized. Actual profits may differ from the forecasts and in such case, the change will affect the taxes in future periods. Deferred taxes are disclosed in Note 21.

2. SEGMENT INFORMATION

The reporting segments presented in the segment information are:

PULP & PAPER

Pulp & Paper has unique expertise in applying chemicals and supporting pulp & paper producers in innovating and constantly improving their operational efficiency. The segment develops and commercializes new products to fulfill customer needs, ensuring the leading portfolio of products and services for paper wet-end, focusing on packaging and board, as well as tissue.

OIL & MINING

Oil & Mining provides a unique combination of innovative chemicals and application knowledge that improves process efficiency and yield in oil, gas, and metals recovery. The segment uses its in-depth understanding of extraction processes to tailor solutions for water management and re-use.

MUNICIPAL & INDUSTRIAL

Municipal & Industrial is a leading water chemicals supplier for raw and wastewater applications in EMEA and North America, and aims to capture selected growth opportunities in emerging markets. The segment enables its municipal and industrial customers to improve their water treatment efficiency by supplying them with competitive, high-performing products and value adding application support.

SEGMENT REPORTING

Segment information is presented in a manner consistent with the Group's internal organizational and reporting structure. Kemira management evaluates the segments performance based on operative EBITDA and operating EBIT, among other factors. Assets and liabilities dedicated to a particular segment's operations are included in that segment's total assets and liabilities. Segment assets include property, plant and equipment, intangible assets, investments in associates, inventories, and current non-interest-bearing receivables. Segment liabilities include current non-interest-bearing liabilities. Geographically, Kemira's operations are divided into three business regions: Europe, Middle East and Africa (EMEA), the Americas and Asia Pacific (APAC).

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

INCOME STATEMENT ITEMS

2016	Pulp & Paper	Oil & Mining	Municipal & Industrial	Group
Revenue [1]	1,457.3	309.5	596.5	**2,363.3**
EBITDA [2]	187.8	11.6	84.8	**284.2**
Depreciation, amortization and impairments	-86.2	-23.7	-27.3	**-137.2**
Operating profit (EBIT) [2]	101.6	-12.1	57.5	**147.0**
Finance costs, net				**-19.1**
Share of the results of associates				**0.1**
Profit before tax				**128.0**
Income taxes				**-30.1**
Net profit for the period				**97.9**

1) Segments revenue consists only of sales from external customers and there are no intersegment sales. Revenue consists mainly of sale of products.
2) Includes items affecting comparability.

ITEMS AFFECTING COMPARABILITY IN EBITDA AND EBIT

2016	Pulp & Paper	Oil & Mining	Municipal & Industrial	Group
Operative EBITDA	195.3	18.4	88.8	**302.5**
Restructuring and streamlining programs				**-5.8**
Transaction and integration expenses in acquisition				**-5.0**
Divestment of businesses and other disposals				**0.5**
Other items				**-8.0**
Total items affecting comparability	-7.5	-6.8	-4.0	**-18.3**
EBITDA	187.8	11.6	84.8	**284.2**
Operative EBIT	111.6	-3.8	62.3	**170.1**
Items affecting comparability in EBITDA	-7.5	-6.8	-4.0	**-18.3**
Items affecting comparability in depreciation, amortization and impairments	-2.5	-1.5	-0.8	**-4.8**
Operating profit (EBIT)	101.6	-12.1	57.5	**147.0**

BALANCE SHEET ITEMS

2016	Pulp & Paper	Oil & Mining	Municipal & Industrial	Group
Segment assets	1,364.7	345.8	430.8	**2,141.3**
Reconciliation to total assets as reported in the Group balance sheet:				
Available-for-sale financial assets				**202.5**
Deferred income tax assets				**27.5**
Other investments				**4.4**
Defined benefit pension receivables				**32.1**
Other assets				**39.7**
Cash and cash equivalents				**173.4**
Total assets as reported in the Group balance sheet				**2,620.9**
Segment liabilities	231.3	65.1	95.2	**391.6**
Reconciliation to total liabilities as reported in the Group balance sheet:				
Interest-bearing non-current financial liabilities				**649.5**
Interest-bearing current financial liabilities				**157.9**
Other liabilities				**239.0**
Total liabilities as reported in the Group balance sheet				**1,438.0**

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

OTHER ITEMS

2016	Pulp & Paper	Oil & Mining	Municipal & Industrial	Group
Capital employed by segments at 31 Dec	1,133.4	280.7	335.6	**1,749.7**
Capital employed by segments, 12-month rolling average	1,111.8	274.5	330.7	**1,718.2**
Operative ROCE, %	10.0	-1.4	18.8	**9.9**
Capital expenditure	125.1	38.0	47.5	**210.6**

INCOME STATEMENT ITEMS

2015	Pulp & Paper	Oil & Mining	Municipal & Industrial	Group
Revenue [1)]	1,417.3	350.1	605.7	**2,373.1**
EBITDA [2)]	157.1	30.8	75.9	**263.8**
Depreciation, amortization and impairments	-74.5	-27.9	-28.8	**-131.2**
Operating profit [2)]	82.6	2.9	47.1	**132.6**
Finance costs, net				**-30.8**
Share of the results of associates				**0.3**
Profit before tax				**102.1**
Income taxes				**-24.9**
Net profit for the period				**77.2**

1) Segments revenue consists only of sales from external customers. There are no intersegment sales. Revenue consists mainly of sale of products.
2) Includes items affecting comparability.

ITEMS AFFECTING COMPARABILITY IN EBITDA AND EBIT

2015	Pulp & Paper	Oil & Mining	Municipal & Industrial	Group
Operative EBITDA	171.0	33.5	82.8	**287.3**
Restructuring and streamlining programs				**-5.7**
Transaction and integration expenses in acquisition				**-13.0**
Divestment of businesses and other disposals				**-1.8**
Other items				**-3.0**
Total items affecting comparability	-13.9	-2.7	-6.9	**-23.5**
EBITDA	157.1	30.8	75.9	**263.8**
Operative EBIT	96.8	11.1	55.2	**163.1**
Items affecting comparability in EBITDA	-13.9	-2.7	-6.9	**-23.5**
Items affecting comparability in depreciation, amortization and impairments	-0.3	-5.5	-1.2	**-7.0**
Operating profit (EBIT)	82.6	2.9	47.1	**132.6**

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

BALANCE SHEET ITEMS

2015	Pulp & Paper	Oil & Mining	Municipal & Industrial	Group
Segment assets	1,304.0	333.3	415.9	**2,053.2**
Reconciliation to total assets as reported in the Group balance sheet:				
Available-for-sale financial assets				**271.6**
Deferred income tax assets				**29.5**
Other investments				**5.8**
Defined benefit pension receivables				**48.9**
Other assets				**34.7**
Cash and cash equivalents				**151.5**
Total assets as reported in the Group balance sheet				**2,595.2**
Segment liabilities	214.4	56.6	94.8	**365.8**
Reconciliation to total liabilities as reported in the Group balance sheet:				
Interest-bearing non-current financial liabilities				**670.9**
Interest-bearing current financial liabilities				**122.7**
Other liabilities				**242.6**
Total liabilities as reported in the Group balance sheet				**1,402.0**

OTHER ITEMS

2015	Pulp & Paper	Oil & Mining	Municipal & Industrial	Group
Capital employed by segments at 31 Dec	1,089.6	276.7	321.1	**1,687.4**
Capital employed by segments, 12-month rolling average	1,068.6	271.4	320.2	**1,659.5**
Operative ROCE, %	9.1	4.1	17.2	**9.8**
Capital expenditure	240.1	30.8	34.2	**305.1**

INFORMATION ABOUT GEOGRAPHICAL AREAS

Revenue by geographical area based on customer location	**2016**	2015
Finland, domicile of the parent company	**334.7**	334.8
Other Europe, Middle East and Africa	**904.6**	906.0
Americas	**896.3**	935.9
Asia Pacific	**227.7**	196.4
Total	**2,363.3**	2,373.1

Non-current assets by geographical area	**2016**	2015
Finland, domicile of the parent company	**660.1**	710.1
Other Europe, Middle East and Africa	**459.4**	441.1
Americas	**504.4**	477.3
Asia Pacific	**138.1**	118.1
Total	**1,762.0**	1,746.6

INFORMATION ABOUT MAJOR CUSTOMERS

The Group derives revenue from many significant customers. However, 10% or more of the Group's revenue is not derived from any single external customer in 2016 or 2015.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

3. OTHER OPERATING INCOME

	2016	2015
Gains on sale of non-current assets	0.9	1.0
Rental income	1.2	1.5
Services	2.6	2.3
Sale of scrap and waste	0.1	0.1
Income from royalties, know-how and licenses	0.0	0.1
Other income from operations	0.3	2.1
Total	**5.1**	**7.1**

4. OPERATING EXPENSES

	2016	2015
Change in inventories of finished goods (inventory increase + / decrease -)	3.6	11.0
Own work capitalized [1]	-2.7	-2.3
Total	**0.9**	**8.7**
Materials and services [2]		
Materials and supplies		
Purchases during the financial year	1,389.0	1,426.8
Change in inventories of materials and supplies (inventory increase + / decrease -)	6.3	-1.4
External services	36.7	33.8
Total	**1,432.0**	**1,459.2**
Employee benefit expenses	364.6	356.0
Other operating expenses [2]		
Rents	53.6	47.6
Loss on sales of property, plant and equipment	0.0	0.1
Other expenses [3]	233.1	244.8
Total	**286.7**	**292.5**
Total operating expenses	**2,084.2**	**2,116.4**

1) Own work capitalized mainly comprises wages, salaries and other personnel expenses, and changes in inventories relating to self-constructed property, plant and equipment for own use.
2) The Group has revised presentation of the items and year 2015 has been restated.
3) In 2016, other operating expenses include research and development expenses of EUR 32.1 million (31.9). Government grants received for R&D were EUR 0.8 million (1.2). The extent of grants received reduces research and development expenses.

	Note	2016	2015
EMPLOYEE BENEFIT EXPENSES			
Wages and salaries			
Wages		280.7	274.4
Emoluments of Kemira Oyj's CEO and the Board of Directors	31	1.9	1.1
Share-based payments	5	2.3	2.1
Total		**284.9**	**277.6**
Indirect employee benefit expenses			
Expenses for defined benefit plans	22	3.6	3.4
Pension expenses for defined contribution plans		22.5	20.8
Other employee benefit costs		53.6	54.2
Total		**79.7**	**78.4**
Total employee benefit expenses		**364.6**	**356.0**

	2016	2015
NUMBER OF PERSONNEL		
Average number of personnel by geographical area		
Europe, Middle East and Africa	2,609	2,536
Americas	1,578	1,550
Asia Pacific	615	473
Total	**4,802**	**4,559**
Personnel in Finland, average	807	793
Personnel outside Finland, average	3,995	3,766
Total	**4,802**	**4,559**
Number of personnel at 31 Dec	**4,818**	**4,685**

	2016	2015
DELOITTE & TOUCHE OY'S FEES AND SERVICES		
Audit fees	1.5	1.5
Tax services	0.2	0.3
Other services	0.4	0.5
Total	**2.1**	**2.3**

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

5. SHARE-BASED PAYMENTS

LONG-TERM SHARE INCENTIVE PLAN 2015–2017

Kemira's long-term share incentive plan comprises three performance periods: calendar years 2015, 2016, and 2017. The Board of Directors of Kemira will decide on the Plan's performance criteria and on the required performance levels for each criterion at the beginning of each performance period. The Plan reward for the performance period 2015 and 2016 was based on the Group's revenue and on the Group's operative EBITDA margin. For the earning period 2015, the shares of 294.445 pcs were delivered to 84 participants under the rule. For the earning period 2016, the Plan financial targets were not achieved, and thus there will be no reward payout.

The rewards for the performance periods will be paid partly in Kemira's shares and partly in cash. The cash proportion is intended to cover taxes and tax-related costs arising from the reward to the participant. As a rule, no reward will be paid if a participant's employment or service ends before the reward payment.

The shares paid as reward may not be transferred during the restriction period, which will end two years after the end of the performance period. Should a participant's employment or service end during the restriction period, as a rule, he or she must gratuitously return the shares given as reward.

LONG-TERM SHARE INCENTIVE PLAN 2015

The key assumptions for the fair value of the rewards relating to the performance period 2015 are presented in the following table.

Performance period (calendar year)	2015
Lock-up period of shares	2 years
Number of shares at December 31, 2016	292,572
Number of participants at December 31, 2016	83

THE EFFECT OF SHARE-BASED PAYMENTS ON OPERATING PROFIT

	2016	2015
Rewards provided in shares	**0.9**	0.9
Rewards provided in cash	**1.4**	1.2
Total	**2.3**	2.1

6. DEPRECIATION, AMORTIZATION AND IMPAIRMENTS

	2016	2015
Amortization of intangible assets		
Other intangible assets 1)	**26.6**	25.7
Development costs	**1.7**	3.8
Total	**28.3**	29.5
Depreciation of property, plant and equipment		
Buildings and constructions	**16.9**	16.2
Machinery and equipment	**81.7**	78.1
Other tangible assets	**5.5**	5.9
Total	**104.1**	100.2
Impairment of intangible assets and property, plant and equipment		
Other intangible assets	**1.8**	0.0
Goodwill	**0.1**	0.8
Land	**0.4**	0.7
Buildings and constructions	**0.3**	0.0
Machinery and equipment	**2.2**	0.0
Total	**4.8**	1.5
Total depreciation, amortization and impairments	**137.2**	131.2

1) Includes amortization of EUR 14.0 million (7.4) during financial year 2016 related to AkzoNobel paper chemicals business, Soto Industries LLC and Polymer Services LLC acquisitions. More information on the acquisitions is disclosed in Notes 12 and 26. Total amortization related to business acquisitions is EUR 19.2 million (12.6) during financial year 2016.

Goodwill impairment tests is disclosed in Note 11.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

7. FINANCE INCOME AND EXPENSES

	2016	2015
Finance income		
Dividend income	0.1	0.0
Interest income		
Interest income from loans and receivables [1]	1.7	4.0
Interest income from financial assets at fair value through profit or loss	0.4	0.7
Other finance income [2]	7.3	0.4
Total	9.5	5.1
Finance expense		
Interest expenses		
Interest expenses from other liabilities	-19.9	-17.7
Interest expenses from financial assets at fair value through profit or loss	-3.8	-7.7
Other finance expenses [3]	-3.8	-8.5
Total	-27.5	-33.9
Exchange gains and losses		
Exchange gains and losses from financial assets and liabilities at fair value through profit or loss	-1.9	0.0
Exchange gains and losses from loans and other receivables	-3.0	-1.7
Exchange gains and losses from other liabilities	3.8	-0.3
Total	-1.1	-2.0
Total finance income and expenses	-19.1	-30.8
Net finance expenses as a percentage of revenue	0.8	1.3
Net interest as a percentage of revenue	0.9	0.9
Change in Consolidated Statement of Comprehensive Income from hedge accounting instruments		
Cash flow hedge accounting: Amount recognized in the Consolidated Statement of Comprehensive Income	8.5	-2.5
Total	8.5	-2.5
Exchange differences		
Realized	0.3	-5.1
Unrealized	-1.4	3.1
Total	-1.1	-2.0

1) In 2015 includes interest income from income taxes of EUR 3 million.
2) In 2016 includes EUR 5 million gain from sale of electricity production assets (Pohjolan Voima Oy) and changes in fair values of electricity derivatives EUR 2.2 million.
3) In 2015 includes write-down of EUR -2.3 million a shareholder's loan related to Kemira's ownership in TVO (Teollisuuden Voima Oyj), a Finnish power company and ineffective portion of electricity hedge EUR -0.8 million.

8. INVESTMENTS IN ASSOCIATES

	2016	2015
Net book value at 1 Jan	1.2	0.9
Dividends received	-0.1	0.0
Share of the results of associates	0.1	0.3
Net book value at 31 Dec	1.2	1.2

The Group does not have any significant individual associate. The Group's associates and ownership of shares has been presented in Note 33.

Summary of the associates financial information is presented in the following table. The presented figures equal the figures in the financial statements of the each associate, not the portion of Kemira Group.

	2016	2015
Assets	19.3	21.4
Liabilities	17.4	19.2
Revenue	6.6	7.5
Profit (+) / loss (-) for the period	0.2	0.5

Related party transactions carried out with associates are disclosed in Note 31.

9. INCOME TAXES

	2016	2015
Current taxes	-19.6	-24.2
Taxes for prior years	-1.8	4.8
Change in deferred taxes	-8.7	-5.5
Total	-30.1	-24.9

Subsidiaries have EUR 108.1 million (143.9) tax losses, of which no deferred tax benefits have been recognized. Subsidiaries' tax losses have been used during the fiscal year and deferred tax benefits have been recognized. Subsidiaries' tax losses are incurred in different currencies and therefore exchange rate differences affect the amount of the tax losses.

Due to the Group's wide global business operations, the Group has several tax audits on going at all times. Prior tax audits have not resulted in material adjustments to income tax assessments. In addition, the Group has a tax dispute pending at the Administrative Court in Finland due to the appeal of the Tax Recipients' Legal Services Unit. In case of an unfavorable decision, there will be no tax effect for the Group.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

RECONCILIATION BETWEEN TAX EXPENSE AND TAX CALCULATED AT DOMESTIC TAX RATE

	2016	2015
Profit before tax	128.0	102.1
Tax at parent's tax rate 20%	-25.6	-20.4
Foreign subsidiaries' different tax rate	-3.0	2.0
Non-deductible expenses and tax-exempt profits	-2.9	-1.2
Share of profit or loss of associates	0.0	0.1
Tax losses	-5.5	-7.4
Tax for prior years	-1.8	4.8
Effect of change in tax rates	-0.2	0.0
Tax credit from WHT related to prior years	3.1	0.0
Changes in deferred taxes related to prior years	5.8	-2.8
Others	0.0	0.0
Total taxes	-30.1	-24.9

THE TAX RELATING TO COMPONENTS OF OTHER COMPREHENSIVE INCOME

	2016			2015		
	Before tax	Tax charge (-) / credit (+)	After tax	Before tax	Tax charge (-) / credit (+)	After tax
Available-for-sale financial assets	-39.5	7.9	-31.6	-26.3	5.3	-21.0
Exchange differences on translating foreign operations	23.4	-12.1	11.3	26.2	0.0	26.2
Cash flow hedges	10.6	-2.1	8.5	-3.1	0.6	-2.5
Remeasurements on defined benefit plans	-17.3	6.6	-10.7	44.8	-8.9	35.9
Other comprehensive income	-22.8	0.3	-22.5	41.6	-3.0	38.6

10. EARNINGS PER SHARE

	2016	2015
Earnings per share, basic		
Net profit attributable to equity owners of the parent	91.8	71.0
Weighted average number of shares 1)	152,314,390	152,059,309
Basic earnings per share, EUR	0.60	0.47
Earnings per share, diluted		
Net profit attributable to equity owners of the parent	91.8	71.0
Weighted average number of shares 1)	152,314,390	152,059,309
Adjustments for:		
Treasury shares possibly subject to emission in share-based payments	211,454	335,317
Weighted average number of shares for diluted earnings per share	152,525,844	152,394,626
Diluted earnings per share, EUR	0.60	0.47

1) Weighted average number of shares outstanding, excluding the number of treasury shares.

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

11. GOODWILL

	Note	2016	2015
Net book value at 1 Jan		518.3	485.6
Acquisition of subsidiaries and business acquisitions [1]	26	0.0	21.3
Decreases and other changes		-0.1	-0.8
Exchange differences		4.2	12.2
Net book value at 31 Dec		522.4	518.3

1) In 2015, goodwill has increased by EUR 21.3 million, which is related to the acquired AkzoNobel paper chemicals business.

GOODWILL IMPAIRMENT TESTING

The Group performs its annual impairment testing of goodwill on September 30. Impairment testing for goodwill is also carried out when changes in circumstances indicate that the carrying amount may not be recoverable. The recoverable amounts of cash-generating units have been determined based on value in use calculations. The key assumptions are long-term growth rate and discount rate. In 2016, impairment testing did not indicate any impairment (2015: no impairment).

Goodwill is allocated to three individual cash-generating unit that are the Group's reportable segements. The reportable segment represents the lowest level within the Group at which the goodwill is monitored for internal management purposes. The Group's three reportable segments are Pulp & Paper, Oil & Mining and Municipal & Industrial. A summary of the net book value and goodwill to the Group's reportable segments is presented in the following table.

	Dec 31, 2016	
	Net book value	of which goodwill
Pulp & Paper	1,086	360
Oil & Mining	282	83
Municipal & Industrial	302	79
Total	1,670	522

	Dec 31, 2015	
	Net book value	of which goodwill
Pulp & Paper	1,025	357
Oil & Mining	255	83
Municipal & Industrial	300	78
Total	1,580	518

KEY ASSUMPTIONS FOR IMPAIRMENT TESTING OF GOODWILL

LONG-TERM GROWTH RATE

The long-term growth rate used is purely for the impairment testing of goodwill. The assumptions of the long-term growth rate were used based on the Group's financial forecasts prepared and approved by the management covering a five-year horizon. Forecasts for cash flow growth reflect the management's perception of developments in sales and cost items during the forecast period. The growth rate used to extrapolate cash flows subsequent to the five-year forecast period was assumed to be zero.

DISCOUNT RATE

The discount rates applied were based on the Group's adjusted weighted average cost of capital (WACC). The risk-adjusted WACC rate was defined separately for each cash-generating unit. The discount rates used in performing the impairment tests of the Group's reportable segments are presented in the following table.

%	2016	2015
Pulp & Paper	6.5	6.1
Oil & Mining	6.8	6.7
Municipal & Industrial	6.5	5.4

SENSITIVITY ANALYSIS

The sensitivity analyses were made under the assumption that there would be a decline in the growth rate of cash flows during and after the forecast period. A general increase in interest rates has also been taken into consideration as well as a decrease in profitability. A decrease of 10% in the estimated cash flow or an increase of 2 percentage points in the discount rate would not result in any impairment losses to be recorded on the reportable segment level.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

12. OTHER INTANGIBLE ASSETS

2016	Internally generated development costs	Other intangible assets	Prepayments	Total
Acquisition cost at 1 Jan	47.2	208.5	12.8	**268.5**
Additions		22.8	-8.5	**14.3**
Acquisitions of subsidiaries and business acquisitions		-4.0		**-4.0**
Decreases and other changes		-6.6	-0.1	**-6.7**
Exchange rate differences		1.5		**1.5**
Acquisition cost at 31 Dec	47.2	222.2	4.2	**273.6**
Accumulated amortization at 1 Jan	-45.5	-88.3		**-133.8**
Accumulated amortization relating to decreases and transfers		6.8		**6.8**
Amortization during the financial year	-1.7	-26.9		**-28.6**
Impairments		-1.8		**-1.8**
Exchange rate differences		-0.3		**-0.3**
Accumulated amortization at 31 Dec	-47.2	-110.5		**-157.7**
Net book value at 31 Dec	**0.0**	**111.7**	**4.2**	**115.9**

2015	Internally generated development costs	Other intangible assets	Prepayments	Total
Acquisition cost at 1 Jan	47.2	185.9	13.5	246.6
Additions		8.8	2.6	11.4
Acquisitions of subsidiaries and business acquisitions [1)]		75.6	-0.1	75.5
Decreases and other changes		-62.8	-3.7	-66.5
Exchange rate differences		1.0	0.5	1.5
Acquisition cost at 31 Dec	47.2	208.5	12.8	268.5
Accumulated amortization at 1 Jan	-41.7	-128.6		-170.3
Accumulated amortization relating to decreases and transfers		66.6		66.6
Amortization during the financial year	-3.8	-25.7		-29.5
Exchange rate differences		-0.6		-0.6
Accumulated amortization at 31 Dec	-45.5	-88.3		-133.8
Net book value at 31 Dec	1.7	120.2	12.8	134.7

1) Other intangible assets include AkzoNobel's paper chemicals business, Soto Industries LLC, and Polymer Services LLC, of which acquisition value EUR 75,6 million was allocated to intangible assets as customer relationships, non-compete agreements, patents and technologies.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

13. PROPERTY, PLANT AND EQUIPMENT

2016	Land	Buildings and constructions	Machinery and equipment	Other property, plant and equipment	Prepayments and non-current assets under construction 1)	Total
Acquisition cost at 1 Jan	54.5	446.3	1,319.2	54.7	127.8	**2,002.5**
Additions		39.0	130.4	6.5	22.4	**198.3**
Decreases and other changes	-0.6	-2.2	-0.5	-0.7	-0.7	**-4.7**
Reclassifications		0.1	4.2	0.4	-4.7	**0.0**
Exchange rate differences	-0.8	-2.3	-0.6	0.8	9.6	**6.7**
Acquisition cost at 31 Dec	53.1	480.9	1,452.7	61.7	154.4	**2,202.8**
Accumulated depreciation at 1 Jan .	-9.5	-247.2	-905.5	-25.0		**-1,187.2**
Accumulated depreciation related to decreases and transfers		1.6	1.2	0.6		**3.4**
Depreciation during the financial year		-17.1	-83.4	-5.6		**-106.1**
Impairments	-0.4	-0.3	-2.2			**-2.9**
Exchange rate differences		1.8	4.5	-0.7		**5.6**
Accumulated depreciation at 31 Dec	-9.9	-261.2	-985.4	-30.7		**-1,287.2**
Net book value at 31 Dec	**43.2**	**219.7**	**467.3**	**31.0**	**154.4**	**915.6**

2015	Land	Buildings and constructions	Machinery and equipment	Other property, plant and equipment	Prepayments and non-current assets under construction 1)	Total
Acquisition cost at 1 Jan	51.0	424.9	1,221.2	53.1	65.6	1,815.8
Additions		10.1	67.1	2.0	86.8	166.0
Acquisitions of subsidiaries and business acquisitions 2)	2.6	5.1	13.1	0.1	1.7	22.6
Decreases and other changes	-0.4	-9.3	-39.4	-3.2	-0.1	-52.4
Reclassifications		3.6	16.5	0.7	-20.8	0.0
Exchange rate differences	1.3	11.9	40.7	2.0	-5.4	50.5
Acquisition cost at 31 Dec	54.5	446.3	1,319.2	54.7	127.8	2,002.5
Accumulated depreciation at 1 Jan	-8.8	-234.8	-844.1	-21.9		-1,109.6
Accumulated depreciation related to decreases and transfers		9.3	38.6	3.1		51.0
Depreciation during the financial year		-16.2	-78.3	-5.7		-100.2
Impairments	-0.7					-0.7
Exchange rate differences		-5.5	-21.7	-0.5		-27.7
Accumulated depreciation at 31 Dec	-9.5	-247.2	-905.5	-25.0		-1,187.2
Net book value at 31 Dec	45.0	199.1	413.7	29.7	127.8	815.3

1) Prepayment and non-current assets under construction mainly comprises of plant investments.
2) Property, plant and equipment includes acquisitions of AkzoNobel's paper chemicals business, Soto Industries LLC, and Polymer Services LLC with book value of EUR 22.6 million.

FINANCE LEASE ASSETS

Property, plant and equipment where the Group is a lessee under a finance lease includes the following amounts:

	2016	2015
Acquisition cost – capitalized finance leases	**3.5**	6.0
Accumulated depreciation	**-2.0**	-2.5
Net book value at 31 Dec	**1.5**	3.5

The Group leases buildings and constructions, machinery and equipment and other property, plant and equipment under finance lease agreements.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

14. AVAILABLE-FOR-SALE FINANCIAL ASSETS

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

	2016	2015
Net book value at 1 Jan	**271.6**	293.7
Additions	**0.0**	4.2
Decreases [1)]	**-29.6**	-0.1
Change in fair value	**-39.5**	-26.2
Net book value at 31 Dec	**202.5**	271.6

1) In 2016, Kemira sold 43.33% of its holding of class B shares in Pohjolan Voima Oy to Etelä-Suomen Voima Oy. The transaction price was EUR 35 million and recognized capital gain was EUR 5 million.

THE SHARES OF POHJOLAN VOIMA GROUP

The available-for-sale financial assets total EUR 202.5 million (271.6) include the shares in Pohjolan Voima Group of EUR 201.0 million (270.0); their valuation principles are described in more detail in Kemira Group's accounting policies. Kemira Oyj owns 5% of Pohjolan Voima Oy, and 1% of its subsidiary Teollisuuden Voima Oyj.

	Class of shares	Holding %	Class of assets	2016 Fair value	2015 Fair value
Pohjolan Voima Oy	A	5	hydro power	**65.2**	75.6
Pohjolan Voima Oy [1)]	B	2	nuclear power	**31.9**	72.8
Pohjolan Voima Oy	B2	7	nuclear power	**18.0**	18.0
Teollisuuden Voima Oyj	A	2	nuclear power	**61.5**	79.4
Muut Pohjolan Voima Oy ja Teollisuuden Voima Oyj	C, C2, G5, G6, M	several	several	**24.4**	24.2
Total				**201.0**	270.0

The fair value of the shares is based on the discounted cash flow resulting from the difference between the market price and the production cost of electricity. The discount rate used to calculate the net present value at the year-end is an annually defined weighted average cost of capital. The short-term discount rate in 2016 was 3.7% (4.2%) and the long-term discount rate was 4.4% (4.8%). A 10% decrease in the electricity market future price would decrease the fair value of shares by approximately EUR 31 million. An increase of 1 percentage point in the discount rate would decrease the fair value by approximately EUR 27 million.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

15. CARRYING AMOUNTS OF FINANCIAL ASSETS AND LIABILITIES BY MEASUREMENT CATEGORIES

2016	Note	Financial instruments under hedge accounting	Financial assets at fair value through profit and loss	Financial assets at fair value through profit and loss (fair value hedging)	Loans and other receivables	Available-for-sale investments	Other liabilities	Total carrying amounts by balance sheet item	Total fair value
Non-current financial assets									
Investments									
Available-for-sale financial assets [1]	14					202.5		**202.5**	**202.5**
Other assets					4.4			**4.4**	**4.4**
Current financial assets									
Receivables [2]	17								
Interest-bearing receivables					0.2			**0.2**	**0.2**
Non-interest-bearing receivables									
Trade receivables					291.1			**291.1**	**291.1**
Other receivables [3] [4]		3.8	2.8	3.4				**10.0**	**10.0**
Total		3.8	2.8	3.4	295.7	202.5		**508.2**	**508.2**
Non-current financial liabilities									
Interest-bearing liabilities	19								
Loans from financial institutions							294.7	**294.7**	**307.7**
Bonds [5]							352.3	**352.3**	**363.3**
Other liabilities							2.4	**2.4**	**2.5**
Other liabilities							21.4	**21.4**	**21.4**
Current financial liabilities									
Interest-bearing liabilities	19								
Loans from financial institutions							63.0	**63.0**	**65.7**
Other liabilities							95.0	**95.0**	**99.2**
Non-interest-bearing current liabilities	24								
Trade payables							159.6	**159.6**	**159.6**
Other liabilities [3]		3.0	4.1				33.6	**40.7**	**40.7**
Total		3.0	4.1				1,022.0	**1,029.1**	**1,060.1**

1) The available-for-sale financial assets mainly include shares of the Pohjolan Voima Group.
2) The carrying amount represents the maximum credit risk.
3) Other receivables and liabilities are financial assets at fair value through profit and loss or financial instruments under hedge accounting.
4) Other receivables include electricity derivative transactions related to collateral of EUR 0.0 million (0.3) paid to counterparties.
5) Includes hedge accounting adjustment of EUR 2.3 million (2.4).

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

2015	Note	Financial instruments under hedge accounting	Financial assets at fair value through profit and loss	Financial assets at fair value through profit and loss (fair value hedging)	Loans and other receivables	Available-for-sale investments	Other liabilities	Total carrying amounts by balance sheet item	Total fair value
Non-current financial assets									
Investments									
Available-for-sale financial assets [1]	14					271.6		271.6	271.6
Other assets					5.8			5.8	5.8
Current financial assets									
Receivables [2]	17								
Interest-bearing receivables					0.2			0.2	0.2
Non-interest-bearing receivables									
Trade receivables					295.4			295.4	295.4
Other receivables [3] [4]			5.2	3.3	0.3			8.8	8.8
Total			5.2	3.3	301.7	271.6		581.8	581.8
Non-current financial liabilities									
Interest-bearing liabilities	19								
Loans from financial institutions							315.2	315.2	333.1
Bonds [5]							352.4	352.4	359.2
Other liabilities							3.3	3.3	3.4
Other liabilities							21.4	21.4	21.4
Current financial liabilities									
Interest-bearing liabilities	19								
Loans from financial institutions							36.7	36.7	38.1
Other liabilities							86.0	86.0	89.2
Non-interest-bearing current liabilities	24								
Trade payables							162.4	162.4	162.4
Other liabilities [3]		12.2	2.1				32.4	46.7	47.9
Total		12.2	2.1				1,009.8	1,024.1	1,054.7

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

FAIR VALUE OF FINANCIAL ASSETS

FAIR VALUE HIERARCHY	2016 Level 1	Level 2	Level 3	Total net	2015 Level 1	Level 2	Level 3	Total net
Available-for-sale financial assets	-	-	202.5	**202.5**	-	-	271.6	271.6
Other investments	-	4.4	-	**4.4**	-	5.8	-	5.8
Currency investments	-	2.8	-	**2.8**	-	5.2	-	5.2
Interest rate instruments, hedge accounting	-	3.4	-	**3.4**	-	3.3	-	3.3
Other instruments	-	3.8	-	**3.8**	-	-	-	-
Other receivables	-	0.2	-	**0.2**	-	0.2	-	0.2
Trade receivables	-	291.1	-	**291.1**	-	295.4	-	295.4
Total	-	**305.7**	**202.5**	**508.2**	-	309.9	271.6	581.5

Level 1: Fair value is determined based on quoted market prices.

Level 2: Fair value is determined by using valuation techniques. The fair value refers to the value that is observable from the market value of elements of the financial instrument or the market value of corresponding financial instrument; or the value that is observable by using commonly accepted valuation models and techniques if the market value can be reliably measured with them.

Level 3: Fair value is determined by using valuation techniques, which use inputs that have a significant effect on the recorded fair value, and inputs are not based on observable market data. Level 3 includes mainly the shares of Pohjolan Voima Group.

There is no transfers between levels 1–3 during the financial year.

LEVEL 3 SPECIFICATION	Level 3 Total net 2016	Level 3 Total net 2015
Instrument		
Net book value at 1 Jan	**271.6**	293.7
Effect on the Statement of Comprehensive Income	**-39.5**	-26.3
Increases	**0.0**	4.2
Decreases	**-29.6**	0.0
Net book value at 31 Dec	**202.5**	271.6

FAIR VALUE OF FINANCIAL LIABILITIES

FAIR VALUE HIERARCHY	2016 Level 1	Level 2	Level 3	Total net	2015 Level 1	Level 2	Level 3	Total net
Non-current interest-bearing liabilities	-	673.5	-	**673.5**	-	695.1	-	695.1
Repayments from non-current interest-bearing liabilities	-	65.7	-	**65.7**	-	38.1	-	38.1
Non-current other liabilities	-	21.4	-	**21.4**	-	21.4	-	21.4
Finance lease liabilities	-	0.5	-	**0.5**	-	1.2	-	1.2
Loans from financial institutions	-	98.7	-	**98.7**	-	88.6	-	88.6
Current other liabilities	-	33.6	-	**33.6**	-	33.6	-	33.6
Currency instruments	-	4.1	-	**4.1**	-	2.1	-	2.1
Interest rate instruments, hedge accounting	-	2.2	-	**2.2**	-	1.7	-	1.7
Other instruments, hedge accounting	-	0.8	-	**0.8**	-	10.5	-	10.5
Trade payables	-	159.6	-	**159.6**	-	162.4	-	162.4
Total	-	**1,060.1**	-	**1,060.1**	-	1,054.7	-	1,054.7

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

16. INVENTORIES

	2016	2015
Materials and supplies	**69.0**	66.8
Finished goods	**134.9**	131.3
Prepayments	**13.0**	8.9
Total	**216.9**	207.0

In 2016, EUR 1.7 million (2.5) of the inventory value was recognized as an expense in order to decrease the book values of inventories to correspond with their net realizable value.

17. TRADE RECEIVABLES AND OTHER RECEIVABLES

	Note	2016	2015
Trade and other receivables			
Trade receivables	28	**291.1**	295.4
Prepayments		**4.3**	4.5
Prepaid expenses and accrued income		**40.6**	45.1
Other receivables		**50.1**	44.8
Total		**386.1**	389.8
Interest-bearing receivables			
Loan receivables		**0.2**	0.2

In 2016, items that are due in a time period longer than one year include trade receivables of EUR 0.0 million (0.5), prepaid expenses and accrued income of EUR 5.5 million (0.8) and non-interest-bearing receivables of EUR 13.3 million (6.5), prepayments 0.9 million (0.0), loans receivable 0.1 million (0.0).

	Note	2016	2015
Net working capital			
Inventories	16	**216.9**	207.0
Trade receivables and other receivables	17	**386.1**	389.8
Excluding financing items in other receivables		**-16.8**	-13.1
Trade payables and other liabilities	24	**405.2**	388.7
Excluding financing items in other liabilities		**-13.6**	-22.8
Total		**194.6**	217.8

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

18. SHAREHOLDERS' EQUITY

SHARE CAPITAL

	Number of shares outstanding (1,000)	Share capital
January 1, 2015	152,051	221.8
Treasury shares issued to the Board of Directors	11	
December 31, 2015	152,062	221.8
January 1, 2016	**152,062**	**221.8**
Treasury shares issued to key personnel based on long-term share incentive plan 2015	**294**	
Treasury shares issued to the Board of Directors	**13**	
Treasury shares given back	**-2**	
December 31, 2016	**152,367**	**221.8**

Kemira Oyj has one class of shares. Each share entitles its holder to one vote at the Annual General Meeting. On December 31, 2016, the share capital was EUR 221.8 million and the total number of shares issued was 155,342,557 including 2,975,327 treasury shares. Under the Articles of Association of Kemira Oyj, the company does not have a minimum or maximum share capital or a par value for a share. All issued shares have been fully paid.

SHARE PREMIUM

The share premium is a reserve accumulated through subscriptions entitled by the management stock option program of 2001. This reserve is based on the old Finnish Companies Act (734 / 1978), which will not change anymore.

FAIR VALUE RESERVES

The fair value reserve is a reserve accumulated based on available-for-sale financial assets (shares) measured at fair value and hedge accounting.

OTHER RESERVES

Other reserves originate from local requirements of subsidiaries. On December 31, 2016, other reserves were EUR 5.0 million (4.0).

UNRESTRICTED EQUITY RESERVE

The unrestricted equity reserve includes other equity type investments and the subscription price of shares to the extent that they will not, based on the specific decision, be recognized in share capital.

EXCHANGE DIFFERENCES

The foreign currency exchange differences arise from the translation of foreign subsidiaries' financial statements. Also, foreign subsidiaries loans have been granted in replacement of their equity, and the exchange differences have been included in foreign currency exchange differences.

TREASURY SHARES

Kemira had 2,975,327 (3,280,602) of its treasury shares in possession on December 31, 2016. The average share price of treasury shares was EUR 6,73 and they represented 1.9% (2.1%) of the share capital, and the aggregate number of votes conferred by all shares. The aggregate par value of the treasury shares is EUR 4.2 million.

NON-CONTROLLING INTERESTS

	2016	2015
Net book value at 1 Jan	**12.9**	12.6
Dividends	**-5.8**	-5.9
Decreases	**0.0**	0.0
Share of the profit for the period	**6.1**	6.2
Exchange rate differences	**-0.3**	0.0
Net book value at 31 Dec	**12.9**	12.9

The Group's subsidiaries in which is a non-controlling interest has been disclosed in Note 33.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

19. INTEREST-BEARING LIABILITIES

	2016	2015
Interest-bearing current liabilities		
Loans from financial institutions	63.0	36.7
Finance lease liabilities	0.4	0.6
Other current liabilities	94.5	85.4
Total	157.9	122.7
Interest-bearing non-current liabilities		
Loans from financial institutions	294.7	315.2
Bonds	352.3	352.4
Finance lease liabilities	0.1	0.6
Other non-current liabilities	2.4	2.7
Total	649.5	670.9
Interest-bearing non-current liabilities maturing in		
2018 (2017)	79.4	67.6
2019 (2018)	210.4	83.0
2020 (2019)	209.7	210.1
2021 (2020)	-	160.2
2022 (2021) or later	150.0	150.0
Total	649.5	670.9
Interest-bearing liabilities maturing in five years or over a longer period of time		
Bond	150.0	150.0
Loans from financial institutions	-	-
Total	150.0	150.0

The foreign currency breakdown of non-current loans is disclosed in Note 28 'Management of financial risks'. The Group's liabilities include neither debentures nor convertible bonds.

Interest-bearing net liabilities	2016	2015
Interest-bearing non-current liabilities	649.5	670.9
Interest-bearing current liabilities	157.9	122.7
Interest-bearing liabilities	807.4	793.6
Cash and cash equivalents	173.4	151.5
Total	634.0	642.1

20. FINANCE LEASE LIABILITIES

	2016	2015
Maturity of minimum lease payments		
No later than 1 year	0.4	0.6
1–5 years	0.1	0.7
Later than 5 years	0.0	0.0
Total minimum lease payments	0.5	1.3
Present value of finance lease liabilities		
Total minimum lease payments	0.5	1.3
Future finance charges on finance leases	0.0	-0.1
Total	0.5	1.2
Maturity of the present value of finance lease liabilities		
No later than 1 year	0.4	0.6
1–5 years	0.1	0.6
Later than 5 years	0.0	0.0
Total present value of finance lease liabilities	0.5	1.2

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

21. DEFERRED TAX LIABILITIES AND ASSETS

	Jan 1, 2016	Recognized in the income statement	Recognized in other comprehensive income	Recognized in equity	Acquired and disposed subsidiaries	Exchange differences and reclassifications	Dec 31, 2016
Deferred tax liabilities							
Depreciation difference and untaxed reserves	59.2					-2.4	**56.8**
Available-for-sale financial assets	24.6		-7.9				**16.7**
Defined benefit pensions	11.3	0.1	-3.5			-0.1	**7.8**
Fair value adjustments of net assets acquired [1]	9.8	-2.2				-0.3	**7.3**
Other	12.3	-6.7	11.9	0.2		1.0	**18.7**
Total	117.2	-8.8	0.5	0.2	0.0	-1.8	**107.3**
Deferred tax assets deducted	-61.3						**-44.1**
Deferred tax liabilities in the balance sheet	55.9						**63.2**
Deferred tax assets							
Provisions	17.7	-2.6				1.0	**16.1**
Tax losses	32.3	-5.6				-3.9	**22.8**
Defined benefit pensions	4.7	0.2	2.8			0.4	**8.1**
Other	36.1	-9.5	-2.3			0.3	**24.6**
Total	90.8	-17.5	0.5	0.0	0.0	-2.2	**71.6**
Deferred tax liabilities deducted	-61.3						**-44.1**
Deferred tax assets in the balance sheet	29.5						**27.5**

	Jan 1, 2015	Recognized in the income statement	Recognized in other comprehensive income	Recognized in equity	Acquired and disposed subsidiaries	Exchange differences and reclassifications	Dec 31, 2015
Deferred tax liabilities							
Depreciation difference and untaxed reserves	55.2	0.7				3.3	59.2
Available-for-sale financial assets	29.8		-5.2				24.6
Defined benefit pensions	2.6	-0.2	8.5			0.4	11.3
Fair value adjustments of net assets acquired [1]	7.6	-1.7			3.8	0.1	9.8
Other	2.7	9.2	0.3			0.1	12.3
Total	97.9	8.0	3.6	0.0	3.8	3.9	117.2
Deferred tax assets deducted	-51.5						-61.3
Deferred tax liabilities in the balance sheet	46.4						55.9
Deferred tax assets							
Provisions	4.9	5.9				6.9	17.7
Tax losses	56.7	-17.4				-7.0	32.3
Defined benefit pensions	4.2	0.8	-0.2			-0.1	4.7
Other	19.4	13.2	0.8		0.6	2.1	36.1
Total	85.2	2.5	0.6	0.0	0.6	1.9	90.8
Deferred tax liabilities deducted	-51.5						-61.3
Deferred tax assets in the balance sheet	33.7						29.5

1) The identifiable assets acquired and liabilities assumed in a business combination are recognized at their fair values. The resulting deferred taxes affect goodwill.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

22. DEFINED BENEFIT PENSION PLANS AND EMPLOYEE BENEFITS

The Group has several defined benefit pension plans and other employee benefits obligations. The main defined benefit pension plans are in Finland, Sweden, Germany, UK, Norway and Canada.

FINLAND

The Group's most significant defined benefit plan is in Finland through the Pension Fund Neliapila that takes care of the part of some employees' supplementary pension benefits. The Pension Fund Neliapila covers employees whose employment has begun prior to 1.1.1991 in Kemira, meaning that the fund is closed for new employees. The plan is a final average pay pension plan concerning supplementary pension benefits. Pension Fund Neliapila's obligations are a total of EUR 258.0 million (241.2) and the plan assets are EUR 288.5 million (287.5).

The Pension Fund Neliapila's supplementary benefit is old-age pensions, disability pensions, survivors' pensions and funeral grants. The aggregated pension benefit is 66% of the pension salary. To qualify a full pension the employee must have a pensionable service of 25 years. The supplementary pension benefits is the difference between aggregated and compulsory pension benefits. In the beginning of 2017, the pension legislation was amended that the retirement age will rise gradually from 63 years upwards. Under the new rules the Pension Fund Neliapila will replace a portion of this increase in the retirement age. This will have no material impact on the pension fund's liabilities.

The 2017 pension reform legislation and associated mortality rate assumption affects the calculation of supplementary benefits for persons under Pension Fund Neliapila. In the IFRS financial statements for 2015, the new assumed mortality is recognized in other comprehensive income. The pension reform legislation change of EUR 0.5 million is recognized in profit or loss as past service cost in the IFRS financial statements for 2016.

SWEDEN

A significant defined benefit pension plan is the ITP 2 plan for white-collar employees. To qualify for a full pension, the employee must have a projected period of pensionable service, from the date of entry until retirement age, of at least 30 years. The pension arrangements comprise normal retirement pension, complementary retirement pensions and survivors' pension. In addition, Kemira must have a credit insurance from PRI Pensionsgaranti Mutual Insurance Company for the ITP 2 plan pension liability. The defined benefit obligations in Sweden is a total of EUR 43.8 million (46.9).

ASSETS AND LIABILITIES OF DEFINED BENEFIT PLANS RECOGNIZED IN THE BALANCE SHEET

	2016	2015
Defined benefit obligations	359.0	337.5
Fair value of plan assets	-311.3	-309.1
Net recognized assets (-) / liabilities (+) in the balance sheet	**47.7**	28.4
Liabilities of defined benefit plans	79.8	77.3
Receivables for defined benefit plans	-32.1	-48.9
Net recognized receivables (-) / liabilities (+) of defined benefit plans in the balance sheet	**47.7**	28.4

AMOUNT OF DEFINED BENEFIT PLANS RECOGNIZED IN THE COMPREHENSIVE INCOME

	2016	2015
Service cost	3.6	3.4
Net interest cost [1]	1.0	1.7
Components of defined benefit expenses (+) / income (-) recorded in the income statement	**4.6**	5.1

1) Net interest costs are presented in net finance costs, in the Income Statement.

DEFINED BENEFIT PLANS RECOGNISED IN OTHER COMPREHENSIVE INCOME

	2016	2015
Items resulting from remeasurements on defined benefit pensions [2]		
Actuarial gains (-) / losses (+) on defined benefit obligation arising from changes in demographic assumptions [3]	-2.8	-8.8
Actuarial gains (-) / losses (+) on defined benefit obligation arising from changes in financial assumptions [4]	36.1	-29.0
Actuarial gains (-) / losses (+) on defined benefit obligation arising from experience assumptions	-3.9	3.1
Actuarial gains (-) / losses (+) on plan assets	-12.1	-10.1
Other comprehensive income for defined benefit plans expenses (+) / income (-)	**17.3**	-44.8

2) The remeasurements of defined benefit plans are included in the Statement of Comprehensive Income as part of other comprehensive income. The item has been disclosed net of tax and the related income tax is disclosed in Note 9.
3) In 2016, the result represents an actuarial gain and is mainly due to the changed mortality table in the ITP 2 plan in Sweden. In 2015, the actuarial gains are affected by EUR 8.8 million of revised mortality rates related to Pension Fund Neliapila. The updated mortality rate is treated as demographic assumption in the IAS 19 calculation.
4) In 2016 and 2015, the actuarial gains / losses are mainly due to the changes in the discount rates.

Note
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

THE MOVEMENT IN THE DEFINED BENEFIT OBLIGATIONS OVER THE PERIOD

	2016	2015
Defined benefit obligation at 1 Jan	337.5	375.2
Current service cost	2.8	3.0
Interest cost	7.3	6.7
Actuarial losses (+) / gains (-) on obligation	29.4	-34.7
Exchange differences on foreign plans	-1.5	0.3
Effect of business combinations and divestments [5)]	0.0	4.8
Benefits paid	-19.7	-19.8
Curtailments and settlements	-0.3	-0.1
Past service cost	0.5	0.3
Other movements	3.0	1.8
Defined benefit obligation at 31 Dec	359.0	337.5

THE MOVEMENT IN THE FAIR VALUE OF PLAN ASSETS OVER THE PERIOD IN DEFINED BENEFIT PLANS

	2016	2015
Fair value at 1 Jan	309.1	309.6
Interest income	6.3	5.0
Contributions	0.9	2.2
Actuarial losses (-) / gains (+) on plan assets	12.1	10.1
Exchange differences on foreign plans	0.1	-0.7
Effect of business combinations and divestments [5)]	0.0	0.5
Benefits paid	-16.8	-17.1
Other movements	-0.4	-0.5
Fair value of plan assets at 31 Dec	311.3	309.1

5) In 2015 Kemira acquired AkzoNobel paper chemicals business. As a result of the acquisition, the transferred defined benefits plans to Kemira are mainly located in Germany, France, Italy, Indonesia, Thailand, Korea and Australia.

ANALYSIS OF PLAN ASSETS BY ASSET CATEGORY IN DEFINED BENEFIT PLANS

	2016	2015
Interest rate investments and other assets	189.8	175.1
Shares and share funds	104.6	117.2
Properties occupied by the Group	15.5	15.5
Kemira Oyj's shares	1.4	1.3
Total assets	311.3	309.1

The Finnish Pension Fund Neliapila, which has the most of the defined benefit plan's assets EUR 288.5 million (287.5), consist of interest rate investments and other assets EUR 180.1 million (165.9); shares and share funds EUR 91.5 million (104.8); properties EUR 15.5 million (15.5) and Kemira Oyj´s shares EUR 1.4 million (1.3). In Pension Fund Neliapila, the investment positions are managed within an asset-liability matching (ALM) framework that has been developed to combine long-term investments in line with the obligations under the pension scheme. In Pension Fund Neliapila, a significant investment risk can be considered as market risk. Financial market cyclical fluctuations due to market risk are managed by ensuring that the investment position is sufficiently diversified.

The income (+) / expense (-) of actual return on plan assets of the Group's defined benefit plan was EUR 18.5 million (14.7).

SIGNIFICANT ACTUARIAL ASSUMPTIONS, %

	2016	2015
Discount rate	1.3–3.6	2.0–4.0
Inflation rate	1.1–2.5	1.5–2.5
Future salary increases	1.7–3.0	1.5–3.0
Future pension increases	1.1–3.0	1.7–3.0

The significant assumptions used in calculating the obligations of the Finnish Pension Fund Neliapila were as follows: discount rate 1.3% (2.0%), inflation rate 1.7% (1.5%), future salary increases 1.7% (1.5%) and future pension increases 2.0% (1.7%).

SENSITIVITY ANALYSES

The sensitivity analysis is based on maintaining other assumptions stagnant even through one assumption changes. In practice, this is unlikely to occur and changes in some of the assumptions may correlate. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method has been applied as when calculating the pension liability recognized within the balance sheet.

If the discount rate would be 0.5 percentage points lower, the defined benefit obligation would increase by EUR 23.6 million (6.6%) in case all other assumptions were held constant.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

PENSION FUND NELIAPILA IN FINLAND

	Defined benefit obligation	Impact on defined benefit obligation
Discount rate 1.3% (December 31, 2016)	258.0	
Discount rate +0.5%	242.7	-5.9%
Discount rate -0.5%	275.0	6.6%
Future pension increases 2.0% (December 31, 2016)	258.0	
Future pension increases +0.5%	273.1	5.9%
Future pension increases -0.5%	244.2	-5.3%

Change in mortality assumption in which an increase in life expectancy by one year will increase defined benefit obligation to EUR 11.3 million (4.4%).

ITP 2 IN SWEDEN

	Defined benefit obligation	Impact on defined benefit obligation
Discount rate 2.5% (December 31, 2016)	43.8	
Discount rate +0.5%	40.7	-7.1%
Discount rate -0.5%	47.3	8.0%
Future salary increases 2.5% (December 31, 2016)	43.8	
Future salary increases +0.5%	44.9	2.5%
Future salary increases -0.5%	42.8	-2.2%

Change in mortality assumption in which an increase in life expectancy by one year will increase defined benefit obligation to EUR 1.8 million (4.1%).

Expected contributions to the defined benefit plans for the year ended December 31, 2017, are EUR 3.4 million.

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

23. PROVISIONS

	Personnel related provisions	Restructuring provisions	Environmental provisions	Other provisions	Total
Non-current provisions					
At January 1, 2016	3.4	0.7	16.6	7.4	**28.1**
Exchange rate differences	0.1		0.2	0.5	**0.8**
Additional provisions and increases in existing provisions		3.5	1.4	0.3	**5.2**
Used during the financial year	-0.2	-0.2	-1.0		**-1.4**
Unused amounts reversed	-0.1			-3.8	**-3.9**
Reclassification	-2.5	-0.5		0.7	**-2.3**
At December 31, 2016	**0.7**	**3.5**	**17.2**	**5.1**	**26.5**
Current provisions					
At January 1, 2016	3.9	8.2	2.6	0.2	**14.9**
Exchange rate differences					**0.0**
Additional provisions and increases in existing provisions	7.0	1.1	1.5		**9.6**
Used during the financial year	-4.0	-3.0	-1.5	-0.2	**-8.7**
Unused amounts reversed	-1.0	-0.6	-0.4		**-2.0**
Reclassification	4.1	-3.7			**0.4**
At December 31, 2016	**10.0**	**2.0**	**2.2**	**0.0**	**14.2**

	2016	2015
Analysis of total provisions		
Non-current provisions	**26.5**	28.1
Current provisions	**14.2**	14.9
Total	**40.7**	43.0

In 2016, increases in provisions are mainly related to plant closures and environmental clean-up work in those plants. More information on environmental risks and liabilities can be found in Note 30.

24. TRADE PAYABLES AND OTHER CURRENT LIABILITIES

	2016	2015
Trade payables and other liabilities		
Prepayments received	**1.2**	1.7
Trade payables	**159.6**	162.4
Accrued expenses	**210.8**	192.8
Other non-interest-bearing current liabilities	**33.6**	31.8
Total	**405.2**	388.7
Accrued expenses		
Employee benefits	**60.5**	62.6
Items related to revenues and purchases	**105.9**	80.3
Interest	**9.1**	9.9
Exchange rate differences	**0.2**	0.3
Other	**35.1**	39.7
Total	**210.8**	192.8

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

25. CASH FLOW FROM DISPOSALS OF SUBSIDIARIES

	2016	2015
Disposal of subsidiaries		
Proceeds from the disposals [1)]	-	1.1
Cash and cash equivalents in disposed companies	-	-
Total cash flow on disposals of subsidiaries	-	1.1
Assets and liabilities disposed of subsidiaries		
Net working capital	-	-
Property, plant and equipment and intangible assets	-	-
Other non-interest-bearing receivables	-	-
Non-controlling interests	-	-
Interest-bearing liabilities	-	-
Non-interest-bearing liabilities	-	-
Total assets and liabilities of disposed subsidiaries	-	-

1) In 2015, proceeds from the disposals includes a final payment related to the sold business in Brazil. Kemira sold Brazilian coagulant business to Bauminas Química Ltda. in 2013.

26. BUSINESS COMBINATIONS

2015: ACQUISITION OF AKZONOBEL PAPER CHEMICALS BUSINESS

On May 4, 2015 Kemira acquired AkzoNobel paper chemicals business. As a result of the acquisition, six AkzoNobel paper chemicals production sites and about 350 employees transferred to Kemira. The transferred production sites are located in South Korea, Thailand, Indonesia, Australia, Spain and Italy. The acquisition strengthens Kemira's market position especially in the APAC region. It also enables efficiency improvements in global paper chemicals manufacturing network.

The consideration of EUR 127.1 million was paid in cash and it does not involve the contingent consideration. Kemira acquired a 100% interest in acquired business and the acquired business has been consolidated into Pulp & Paper segment. A provisional goodwill of EUR 21.3 million arises from the expected synergy in the business combination.

Based on the acquisition calculation under IFRS 3 EUR 62.0 million was allocated to intangible assets as customer relationships, non-compete agreements, patents and technologies. Acquired intangible assets will be amortized within an average of six years.

The following table summarizes the consideration paid for AkzoNobel paper chemicals business, and the amounts of the assets acquired and liabilities assumed recognized on the acquisition date:

	Note	
Purchase consideration, paid in cash, total		127.1
The assets and liabilities recognized as a result of the acquisition		
Intangible assets	12	62.0
Property, plant and equipment	13	21.9
Inventories		14.8
Trade receivables		8.1
Other receivables		3.5
Cash and cash equivalents		13.6
Deferred tax liabilities		-3.9
Provisions, trade payables and other payables		-14.2
Net assets acquired in fair value		105.8
Goodwill	11	21.3
Total		127.1

Acquisition-related costs of EUR 7.7 million have been included in other operating expenses in the Consolidated Income Statement for the year ended 31 December 2015.

The revenue included in the Consolidated Income Statement since 4 May 2015 contributed by AkzoNobel paper chemicals business was EUR 146 million. It also contributed EBITDA of EUR 13 million over the same period.

Had AkzoNobel paper chemicals business been consolidated from 1 January 2015, the consolidated income statement would show pro forma revenue of EUR 219 million and pro forma EBITDA of EUR 19 million. The pro forma amounts are provided for comparative purposes only and do not necessarily reflect the actual result that would have occurred, nor is it necessarily indicative of future results of operations of the combined companies.

2015: ACQUISITIONS OF SOTO INDUSTRIES LLC AND POLYMER SERVICES LLC

On September 2, 2015, Kemira announced that it has acquired certain assets of Soto Industries, LLC, a privately owned company, headquartered in Charlotte, North Carolina. Soto specializes in the application of scale control products, defoamers, and settling agents for the pulp and paper industry. The acquisition is consolidated to Pulp & Paper segment.

On December 8, 2015, Kemira acquired certain assets of Polymer Services, LLC, a privately owned company, headquartered in Plainville, Kansas. Polymer Services, LLC is a highly specialized company focusing on the field application of polymer gel treatments for enhanced or improved oil recovery. The acquisition is consolidated to Oil & Mining segment.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

27. DERIVATIVE INSTRUMENTS

NOMINAL VALUES	2016 < 1 year	2016 > 1 year	2016 Total	2015 < 1 year	2015 > 1 year	2015 Total
Currency instruments						
Forward contracts	260.9	-	**260.9**	402.3	-	402.3
Interest rate instruments						
Interest rate swaps	31.3	273.5	**304.8**	65.9	282.9	348.8
of which cash flow hedges	31.3	173.5	**204.8**	65.9	182.9	248.8
of which fair value hedges	-	100.0	**100.0**	-	100.0	100.0
Other instruments						
Electricity forward contracts, bought (GWh)	709.5	1,262.0	**1,971.5**	562.2	893.5	1,455.7
of which cash flow hedges (GWh)	709.5	1,262.0	**1,971.5**	562.2	893.5	1,455.7

Nominal values of the financial instruments do not necessarily correspond to the actual cash flows between the counterparties, and individual items do not therefore give a fair view of the Group's risk position.

FAIR VALUES	2016 Assets gross	2016 Liabilities gross	2016 Total net	2015 Assets gross	2015 Liabilities gross	2015 Total net
Currency instruments						
Forward contracts	2.8	-4.1	**-1.3**	5.2	-2.1	3.1
Interest rate instruments						
Interest rate swaps	3.4	-2.2	**1.2**	3.3	-1.7	1.6
of which cash flow hedges	-	-2.2	**-2.2**	-	-1.7	-1.7
of which fair value hedges	3.4	-	**3.4**	3.3	-	3.3
Other instruments						
Electricity forward contracts, bought	3.8	-0.8	**3.0**	-	-10.5	-10.5
of which cash flow hedges	3.8	-0.8	**3.0**	-	-10.5	-10.5

FAIR VALUES	2016 Assets gross < 1 year	2016 Assets gross > 1 year	2016 Liabilities gross < 1 year	2016 Liabilities gross > 1 year	2015 Assets gross < 1 year	2015 Assets gross > 1 year	2015 Liabilities gross < 1 year	2015 Liabilities gross > 1 year
Currency instruments								
Forward contract	**2.8**	**-**	**-4.1**	**-**	5.2	-	-2.1	-
Interest rate instruments								
Interest rate swaps	**-**	**3.4**	**-**	**-2.2**	-	3.3	-0.6	-1.1
of which cash flow hedges	**-**	**-**	**-**	**-2.2**	-	-	-0.6	-1.1
of which fair value hedges	**-**	**3.4**	**-**	**-**	-	3.3	-	-
Other instruments								
Electricity forward contracts, bought	**1.5**	**2.3**	**-0.1**	**-0.7**	-	-	-5.2	-5.3
of which cash flow hedges	**1.5**	**2.3**	**-0.1**	**-0.7**	-	-	-5.2	-5.3

28. MANAGEMENT OF FINANCIAL RISKS

The Group Treasury manages financial risks in accordance with the treasury policy in force. Approved by the Board of Directors, the treasury policy defines treasury management principles. The Board of Directors approves the annual Treasury plan and the maximum permissible financial risk levels.

Financial risk management aims to protect the Company from unfavorable changes in financial markets, thus contributing to safeguarding the Company's profit performance and shareholders' equity. Kemira employs various financial instruments within the set limits. The Group uses only instruments of which market values and risks can be monitored continuously and reliably. It uses derivative instruments only for hedging purposes, not for speculation. Management of foreign exchange and interest rate risk is centralized in the Group Treasury.

FOREIGN EXCHANGE RISK

Foreign currency transaction risk arises from net currency flows denominated in currencies other than the domestic currency within and outside the eurozone. The Group's most significant transaction currency risks arise from the Swedish krona, the U.S. dollar and the Canadian dollar. At the end of the year the denominated exchange rate risk of the Swedish krona had an equivalent value of approximately EUR 56 million (60), the average hedging rate being 68% (58%). The U.S. dollar denominated exchange rate risk was approximately EUR 42 million (14), the average hedging rate being 51% (65%). The Canadian dollar's denominated exchange rate risk had an equivalent value of approximately EUR 23 million (39), the average hedging rate being 64% (54%). Kemira is exposed to smaller transaction risks in relation to the Chinese renminbi, the Norwegian krona and Brazilian real with the annual exposure in those currencies being approximately EUR 49 million. 49% of NOK's exposure was hedged on an average basis.

Kemira mainly uses forwards and currency options in hedging against foreign exchange risks. The table below shows an estimate of the largest group-level foreign currency cash flow risks.

Transaction exposure (EUR million)	2016				2015			
	SEK	CAD	USD	Other	SEK	CAD	USD	Other
Operative cash flow forecast [1]	-56.6	22.6	41.6	0.2	-60.4	38.9	14.1	34.6
Loans, net	-2.8	-	408.0	51.1	2.7	1.5	430.7	17.3
Derivatives, operative cash flow hedging	36.1	-15.5	-21.3	-0.3	39.2	-23.2	-9.2	-8.5
Derivatives, hedging of loans, net	-	-	1.0	-48.2	-2.7	-1.5	-65.9	-73.9
Total	-23.3	7.1	429.3	2.8	-21.2	15.7	369.7	-30.5

1) Based on 12-month foreign currency operative cash flow forecast.

At the turn of 2016/2017, the foreign currency operative cash flow forecast for 2017 was EUR 193 million of which 43% was hedged (41%). The hedge ratio is monitored daily. In hedging the total cash flow risk, a neutral level is achieved when 50% of the forecasted net foreign currency cash flow is hedged. A minimum of 30% and a maximum of 100% of the forecast flow must always be hedged. A 10% fall in foreign exchange rates against the euro, based on the average exchange rates, and without hedging, would increase EBITDA by approximately EUR 1 million.

Since Kemira's consolidated financial statements are compiled in euros, Kemira is subject to currency translation risk to the extent that the income statement and balance sheet items of subsidiaries located outside Finland are reported in some other currency than the euro. Most significant translation risk currencies are the U.S. dollar, the Swedish krona, the Canadian Dollar, Chinese Renminbi and the Brazilian real.

Kemira's main equity items denominated in foreign currencies are in the Swedish krona and U.S. dollar. The objective is to hedge the balance sheet risk by maintaining a balance between foreign currency denominated liabilities and assets, currency by currency. In hedging the net investment in its units abroad, Kemira monitors the equity ratio. Long-term loans and currency derivatives can be used for hedging of net investments in foreign subsidiaries. These hedges do not apply hedge accounting. To the some foreign subsidiaries loans in U.S. dollar have been granted in replacement of their equity, and currency differences have been included in foreign currency translation differences.

INTEREST RATE RISK

In accordance with the treasury policy the Group's interest rate risk is measured with the duration which describes average repricing moment of the loan portfolio. The duration must be in the range of 6–60 months. The Group may borrow in either fixed or floating rate and use both interest rate swaps and interest rate options as well as forward rate agreements and interest rate futures in order to meet the goal set under the related policy.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

The duration of the Group's interest-bearing loan portfolio was 26 months at the end of 2016 (31 months). Excluding the interest rate derivatives, the duration was 22 months (27 months). At the end of 2016, 72% of the Group's entire net debt portfolio, including derivatives and pension loans, was fixed (80%). The net financing cost of the Group was 2.2% (3.9%). This figure is attained by dividing yearly net interest and other financing expenses, excluding exchange rate differences and dividends by the average interest bearing net debt figure for the corresponding period. The most significant impact on the net financing cost arises from variation in the interest rate levels of the euro and the U.S. dollar-denominated debt. On the balance sheet date, the average interest rate of loan portfolio was approximately 2.1%.

Financial assets and liabilities with fixed interest rate are exposed to price risks arising from changes in interest rates. Financial assets and liabilities with floating interest rate, of which changes alongside market interest rates, are exposed to cash flow risks due to interest rates.

The table below shows the time for interest rate fixing of the loan portfolio.

Time to interest rate fixing at Dec 31, 2016	<1 year	1–5 years	> 5 year	Total
Floating net liabilities	179.2	-	-	179.2
Fixed net liabilities	31.3	273.5	150.0	454.8
Total	210.5	273.5	150.0	634.0

Time to interest rate fixing at Dec 31, 2015	<1 year	1–5 years	> 5 year	Total
Floating net liabilities	128.3	-	-	128.3
Fixed net liabilities	65.9	297.9	150.0	513.8
Total	194.2	297.9	150.0	642.1

As a consequence of treasury policy, the Group's average interest rate is generally higher than the short-term market interest rates when low rates prevail and, on the other hand, lower than the market interest rates when high rates prevail. If interest rates would rise by one percentage point on January 1, 2017, the resulting interest expenses before taxes incurred by the Group over the next 12 months would increase by approximately EUR 0.5 million (0.4). During 2017, Kemira will reprice 19% (20%) of the Group's net debt portfolio, including derivatives.

On the balance sheet date, the Group had outstanding interest rate derivatives related to cash flow hedging with a market value of EUR -2.2 million (-1.7) and fair value hedging with market value of EUR 3.4 million (3.3). All interest rate swaps are used to hedge the Group's loan portfolio, and are accounted for in accordance with the principles of hedge accounting set out in IAS 39. The Group's accounting policies section describes the Group policy regarding hedge accounting. One percentage point increase in interest rates would have positive impact in market valuation of interest rate swaps of EUR 0.4 million (0.3) in equity.

PRICE RISK

The price of electricity varies greatly according to the market situation. Kemira Group takes hedging measures with respect to its electricity purchases in order to even out the raw material costs. In line with its hedging policy, the Group hedges its existing sales agreements in such a way that the hedges cover the commitments made. The company primarily uses electricity forwards on the power exchange as hedging instruments. Currency and regional price risks connected with hedges are hedged by making agreements in Finland, mainly in HELEUR amounts and, in Sweden, mainly in MALSEK amounts. The outstanding electricity derivatives are treated in accordance with cash flow hedge accounting, as discussed above. The forecast for physical deliveries of the underlying asset, or purchases, are not recorded until the delivery period. A + / - 10% change in the market price of electricity hedging contracts would impact the valuation of these contracts EUR +/-5.5 million (+/- 3.5). This impact would be mainly in equity.

CREDIT AND COUNTERPARTY RISK

The Group's treasury policy defines the credit rating requirements for counterparties of investment activities and derivative agreements as well as the related investment policy. The Group seeks to minimize its counterparty risk by dealing solely with counterparties that are financial institutions with a good credit rating as well as by decentralizing agreements among them.

The Group Treasury approves the new banking relationships of subsidiaries. At present, there are 10 approved financial institution counterparties used by the Group Treasury, all of which have a credit rating of at least investment grade based on Standard & Poor's credit rating information. The maximum risk assignable to the Group's financial institution counterparties on the balance sheet date amounted to EUR 179.6 million (160.0). Kemira monitors its counterparty risk on a monthly basis by defining the maximum risk associated with each counterparty based on the market value of receivables. Kemira has defined an approved limit for each financial institution. Credit risks associated with financing transactions did not result in credit losses during the financial year.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

The counterparty risk in treasury operations is due to the fact that a contractual party to a financing transaction is not necessarily able to fulfill its contractual obligations. Risks are mainly related to investment activities and the counterparty risks associated with derivative contracts. The Group Treasury may invest a maximum of EUR 150 million in liquid assets in the commercial papers of Finnish companies and certificates of deposit. The maximum single investment is EUR 25 million for a period of up to three months.

Kemira has a group wide credit policy. According to the policy each customer has a pre-defined risk category and credit limit which are constantly monitored. Based on the customer evaluation Kemira decides the applicable payment terms to minimize credit risk. Pre-approved payment terms have been defined on group level. If necessary, also securities and documentary credit, like letters of credit, are applied. The group does not have any significant credit risk concentrations due to its extensive customer base across the world. The age distribution of outstanding trade receivables at the end of the year 2016 is shown in the following chart.

AGEING OF TRADE RECEIVABLES	2016	2015
Undue trade receivables	**240.2**	248.7
Trade receivables 1–90 days overdue	**48.1**	44.4
Trade receivables more than 91 days overdue	**2.8**	2.3
Total	**291.1**	295.4

In 2016, impairment loss of trade receivables amounted to EUR 2.2 million (2.9).

In USA, Kemira has an accounts receivable purchase facility worth USD 38 million, enabling Group companies in the USA to sell certain account receivables to the counter-party. The credit risk of the accounts receivables is transferred to the counterparty and 96.9% of the receivables transferred are derecognized from the balance sheet. The amount of outstanding receivables transferred, which also reflects the carrying value of the receivables before the transfer was EUR 30.4 million (28.8) at 31 December 2016. The amounts recognized in the balance sheet at 31 December 2016 due to the continuing involvement are EUR 1.1 million (0.6) in assets and EUR 0.5 million (0.3) in liabilities.

LIQUIDITY AND REFINANCING RISKS

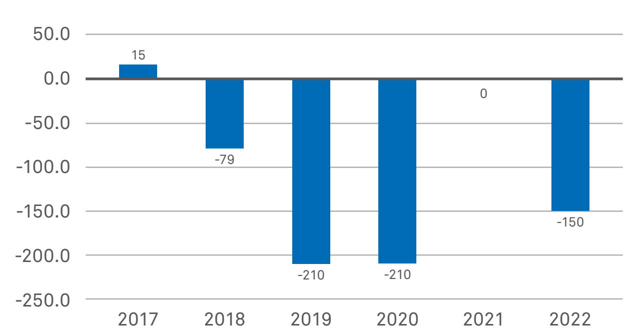
In order to secure its liquidity, the Group uses account overdrafts, money market investments, and revolving credit facility. At the end of 2016 the Group's cash and cash equivalents stood at EUR 173.4 million (151.5), of which short-term investment accounted for EUR 78.3 million (45.4) and bank deposits EUR 95.1 million (106.1).

The Group diversifies its refinancing risk by raising financing from various sources. The Group has bank loans, insurance company loans as well as a short-term domestic commercial paper program, with the objective of balancing the maturity schedule of the loan portfolio and maintaining a sufficiently long maturity for long-term loans.

In accordance with the Group Treasury policy, the average maturity of outstanding loans should always be at least 3 years. The Group must have committed credit facilities to cover planned funding needs, the current portion of long term debt, commercial paper borrowings, and other uncommitted short-term loans in the next 12 months. Moreover, the maturity profile of the long-term debt portfolio and refinancing should be planned so that a maximum of 30% of the total debt portfolio will mature during the next 12 months. The average maturity of debt at the end of 2016 was 3.5 years.

The Group has a EUR 600 million domestic commercial paper program enabling it to issue commercial papers with a maximum maturity of one year. At the end of 2016, there were no commercial papers outstanding on the market. Simultaneously, the Group had EUR 173.4 million of outstanding liquid short-term investments. In addition, the Group has revolving credit facility of EUR 400 million which will mature on August 29, 2020. At the turn of the year 2016/2017, the revolving credit facility was undrawn. The revolving credit facility represents a flexible form of both short-term and long-term financing with a predictable fee structure.

MATURITY SPLIT OF INTEREST-BEARING NET DEBT



Note
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

CAPITAL STRUCTURE MANAGEMENT

The Group's mid- to long-term objective is to maintain a gearing ratio below 60%. To calculate the gearing ratio, interest-bearing net liabilities (interest-bearing liabilities less cash and cash equivalents) are divided by shareholders' equity. The revolver credit facility agreement contains a covenant according to which the company gearing must be below 100%.

Besides gearing, certain other bilateral loan agreements contain a covenant according to which the Company represents and warrants that its financial status will remain such that the consolidated shareholders' equity is always at least 25% of the consolidated total assets (equity ratio).

The Board of Directors will propose a per-share dividend of EUR 0.53 for 2016 (EUR 0.53), corresponding to a dividend payout ratio of 88% (114%). Kemira's dividend policy aims at paying a stable and competitive dividend.

	2016	2015
Interest-bearing liabilities	**807.4**	793.6
Cash and cash equivalents	**173.4**	151.5
Interest-bearing net liabilities	**634.0**	642.1
Equity	**1,182.9**	1,193.2
Total assets	**2,620.9**	2,595.2
Gearing	**54%**	54%
Equity ratio	**45%**	46%

CASH AND CASH EQUIVALENTS

	2016		2015	
	Book value	**Fair value**	Book value	Fair value
Cash and cash equivalents	**95.1**	**95.1**	106.1	106.1
Money market investments	**78.3**	**78.3**	45.4	45.4
Total	**173.4**	**173.4**	151.5	151.5

Money market investments are short-term.

NON-CURRENT INTEREST-BEARING LOANS AND AMORTIZATIONS OF NON-CURRENT INTEREST-BEARING LOANS

	Dec 31, 2016		Maturity					
Currency	**Fair value**	**Book value**	2017	2018	2019	2020	2021	2022-
EUR	**617.9**	**599.0**	19.3	10.0	210.0	209.7	-	150.0
USD	**117.7**	**112.7**	43.7	69.0	-	-	-	-
Other	**1.1**	**1.1**	0.4	0.4	0.3	-	-	-
Total	**736.7**	**712.8**	63.4	79.4	210.3	209.7	-	150.0

	Dec 31, 2015		Maturity					
Currency	Fair value	Book value	2016	2017	2018	2019	2020	2021-
EUR	607.2	586.6	25.8	24.8	15.9	209.9	160.2	150.0
USD	124.9	120.5	11.5	42.2	66.8	-	-	-
Other	1.1	1.1	-	0.6	0.3	0.2	-	-
Total	733.2	708.2	37.3	67.6	83.0	210.1	160.2	150.0

The figures include the amortizations planned for 2017 (2016) excluding other current loans.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

CASH FLOW FROM ALL FINANCIAL LIABILITIES

	Dec 31, 2016		Maturity					
Loan type	**Drawn**	**Undrawn**	2017	2018	2019	2020	2021	2022-
Long-term interest-bearing liabilities	**360.0**		63.0	79.4	7.9	209.7		
financial expenses			7.6	6.2	4.6	4.4		
Bonds 1)	**352.3**				202.3			150.0
financial expenses			8.4	8.4	5.9	3.4	3.4	1.7
Revolving credit facility	**-**	**400.0**						
financial expenses			0.8	0.8	0.8	0.6		
Finance lease liabilities	**0.5**		0.4	0.1				
financial expenses			0.1					
Commercial paper program	**-**	**600.0**						
financial expenses								
Other interest-bearing current loans	**94.6**		94.6					
financial expenses			3.0					
Interest-bearing loans total	**807.4**	**1,000.0**	177.9	94.9	221.5	218.1	3.4	151.7
Trade payables	**159.6**							
Forward contracts								
liabilities	**4.1**		4.1					
assets	**-2.8**		-2.8					
Other derivatives 2)	**3.0**		0.1	0.2	0.5	2.2		
Trade payables and derivatives total	**163.9**		1.4	0.2	0.5	2.2		
Total	**971.3**	**1,000.0**	179.3	95.1	222.0	220.3	3.4	151.7
Guarantees			3.1					

	Dec 31, 2015		Maturity					
Loan type	Drawn	Undrawn	2016	2017	2018	2019	2020	2021-
Long-term interest bearing liabilities	354.6	50.0	36.7	67.4	82.8	7.5	160.2	-
financial expenses			7.1	6.4	5.1	3.4	3.2	
Bonds 1)	352.4					202.4		150.0
financial expenses			8.4	8.4	8.4	8.4	5.9	3.4
Revolving credit facility	-	400.0						
financial expenses			0.8	0.8	0.8	0.8	0.6	
Finance lease liabilities	1.2		0.6	0.2	0.2	0.2		
financial expenses			0.1					
Commercial paper program	-	600.0						
financial expenses								
Other interest-bearing current loans	85.4		85.4					
financial expenses			3.0					
Interest-bearing loans total	793.6	1,050.0	142.1	83.2	97.3	222.7	169.9	153.4
Trade payables	162.4							
Forward contracts								
liabilities	2.1		2.1					
assets	-5.2		-5.2					
Other derivatives 2)	12.2		5.6	3.3	2.1	0.4	0.8	
Trade payables and derivatives total	171.5		2.5	3.3	2.1	0.4	0.8	
Total	965.1	1,050.0	144.6	86.5	99.4	223.1	170.7	153.4
Guarantees			3.0					

1) Includes hedge accounting adjustment of EUR 2.3 million (2.4).
2) Interest rate swaps and electricity forwards.

Note
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

29. COMMITMENTS AND CONTINGENT LIABILITIES

COMMITMENTS	2016	2015
Assets pledged		
On behalf of own commitments	5.9	6.1
Guarantees		
On behalf of own commitments	54.4	52.9
On behalf of others	3.1	3.0
Operating lease commitments – the Group as lessee		
Minimum lease payments under operating leases are as follows:		
No later than 1 year	39.7	37.5
Later than 1 year and no later than 5 years	88.7	89.5
Later than 5 years	82.8	95.2
Total	211.2	222.2
Other obligations		
On behalf of own commitments	1.1	1.1
On behalf of associates	0.4	0.6

THE MOST SIGNIFICANT OFF-BALANCE SHEET INVESTMENTS COMMITMENTS

On December 31, 2016, major amounts of contractual commitments for the acquisition of property, plant and equipment were about EUR 48.4 million (22.6) for plant investments.

LITIGATION

On August 19, 2009, Kemira Oyj received a summons stating that Cartel Damage Claims Hydrogen Peroxide SA had filed an action against six hydrogen peroxide manufacturers, including Kemira, for violations of competition law applicable to the hydrogen peroxide business. In its claim, Cartel Damage Claims Hydrogen Peroxide SA seeks an order from the Regional Court of Dortmund in Germany to obtain an unabridged and full copy of the decision of the European Commission, dated May 3, 2006, and demands that the defendants, including Kemira, are jointly and severally ordered to pay damages together with accrued interest on the basis of such decision.

Cartel Damage Claims Hydrogen Peroxide SA stated that it will specify the amount of the damages at a later stage after the full copy of the decision of the European Commission has been obtained by it. In order to provide initial guidance as to the amount of such damages, Cartel Damage Claims Hydrogen Peroxide SA presented in its claim a preliminary calculation of the alleged overcharge having been paid to the defendants as a result of the violation of the applicable competition rules by the parties which have assigned and sold their claim to Cartel Damage Claims Hydrogen Peroxide SA. In the original summons such alleged overcharge, together with accrued interest until December 31, 2008, was stated to be EUR 641.3 million.

Thereafter Cartel Damage Claims Hydrogen Peroxide SA delivered to the attorneys of the defendants an April 14, 2011 dated brief addressed to the court and an expert opinion. In the said brief the minimum damage including accrued interest until December 31, 2010, based on the expert opinion, was stated to be EUR 475.6 million. It is further stated in the brief that the damages analysis of the expert does not include lost profit.

The process is currently pending in the Regional Court of Dortmund, Germany. By its decision on April 29, 2013 it decided to suspend the case and to ask a preliminary ruling on jurisdiction from the Court of Justice of the European Union which has given its ruling on May 21, 2015. Thereafter, on request by Regional Court of Dortmund, the parties have filed their briefs on admissibility of the proceedings. In its brief responding to the said request of the court Cartel Damage Claims Hydrogen Peroxide SA has additionally waived seeking an order to obtain an unabridged and full copy of the decision of the European Commission, dated May 3, 2006, and demanded from Kemira and the three other defendants jointly and severally damages an amount to be decided by the court but at least EUR 196.2 million together with accrued interest calculated from August 24, 2009 at an interest rate exceeding by 5 per cent the base rate at a time, and other interest of EUR 97.6 million. Kemira defends against the claim of Cartel Damage Claims Hydrogen Peroxide SA.

Kemira Oyj has additionally been served on April 28, 2011 a summons stating that Cartel Damage Claims Hydrogen Peroxide SA had filed an application for summons in the municipal court of Helsinki for violations of competition law applicable to the hydrogen peroxide business claiming from Kemira Oyj as maximum compensation EUR 78.0 million as well as overdue interest starting from November 10, 2008 as litigation expenses with overdue interest. The referred violations of competition law are the same as those on basis of which CDC has taken legal action in Germany in Dortmund. The municipal court made on July 4, 2013 a decision which could not be appealed separately. In its decision the municipal court considered to have jurisdiction and that the claims made by the claimant were at least not totally time-barred. On May 19, 2014 Kemira announced that it had signed an agreement with Cartel Damage Claims Hydrogen Peroxide SA and CDC Holding SA (together "CDC") to settle the lawsuit in Helsinki, Finland. Based on the settlement CDC withdrew the damages claims and Kemira paid to CDC a compensation of EUR 18.5 million and compensated CDC for its legal costs. The settlement also includes significant limitations of liabilities for Kemira regarding the pending legal actions filed by CDC entities in Dortmund, Germany (mentioned above) and in Amsterdam, the Netherlands (mentioned below).

Kemira Oyj's subsidiary Kemira Chemicals Oy (former Finnish Chemicals Oy) has on June 9, 2011 received documents where it was stated that CDC Project 13 SA has filed an action against four companies in municipal court of Amsterdam, including Kemira, asking damages for violations of competition law applicable to the sodium chlorate business. The European Commission set on June 2008 a fine of EUR 10.15 million on Finnish Chemicals Oy for antitrust activity in the company's sodium chlorate business during 1994–2000. Kemira Oyj acquired Finnish Chemicals in 2005. The municipal court of Amsterdam decided on June 4, 2014 to have jurisdiction over the case. The said decision on jurisdiction was appealed by Kemira to the court of appeal of Amsterdam. According to the decision by the court of appeal on July 21, 2015, the municipal court of Amsterdam has jurisdiction over the case. The proceedings now continue at the municipal court of Amsterdam where Kemira is the only defendant after the other defendants have settled the claim with CDC Project 13 SA. CDC Project 13 SA claims from Kemira in its brief filed to the municipal court of Amsterdam EUR 61,1 million as damages and interested calculated until December 2, 2015 from which amount CDC Project 13 SA asks the court to deduct the share of the earlier other defendants for other sales than made by them directly, and statutory interest on so defined amount starting from December 2, 2015. Kemira defends against the claim of CDC Project 13 SA.

As mentioned above the settlement between Kemira and CDC relating the Helsinki litigation also includes significant limitations of liabilities for Kemira regarding the pending legal actions filed by CDC entities in Dortmund, Germany and in Amsterdam, the Netherlands. However, regardless of such limitations of liabilities, Kemira is currently not in a position to make any estimate regarding the duration or the likely outcome of the said processes. No assurance can be given as to the outcome of the processes, and unfavorable judgments against Kemira could have a material adverse effect on Kemira's business, financial condition or results of operations. Due to its extensive international operations the Group, in addition to the above referred claims, is involved in a number of other legal proceedings incidental to these operations and it does not expect the outcome of these other currently pending legal proceedings to have materially adverse effect upon its consolidated results or financial position.

30. ENVIRONMENTAL RISKS AND LIABILITIES

The bulk of Kemira's business is in the chemical industry. Our operations are governed by numerous international agreements and regional and national legislation all over the world. The Group treats its environmental liabilities and risks in the consolidated financial statements in accordance with IFRS and observes the established internal environmental principles and procedures. Provisions for environmental remediation totaled EUR 19.4 million (19.2). The biggest provisions relate to site closures and the limited reconditioning of the sediment of a lake adjacent in Vaasa, Finland.

EMISSION ALLOWANCES

The Group holds assigned emissions allowances under the EU Emissions Trading System in Sweden. At Group level, the allowances showed a net surplus of 56,165 tons in 2016 (a net surplus of 62,349 tons).

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

31. RELATED PARTIES

Parties are considered to be related if one party has the ability to control the other party or exercise significant influence, or exercise joint control in making financial and operating decisions. The Group's related parties include the parent company, subsidiaries, associates, joint-ventures and the Pension Fund Neliapila. Related parties also include the members of the Board of Directors and the Group's Management Boards, the CEO and his Deputy and, their immediate family members.

EMPLOYEE BENEFITS OF CEO, DEPUTY CEO AND MEMBERS OF MANAGEMENT BOARD

	Salaries and other benefits, EUR	Bonuses, EUR	Share-based payments, EUR [1]	Severance payments, EUR	2016	2015
CEO Jari Rosendal	567,000	324,000	603,177	-	**1,494,177**	669,765
Deputy CEO Jukka Hakkila [2]	181,653	86,502	211,117	-	**479,272**	225,242
Other members of Management Board [3]	2,194,639	997,872	1,805,836	-	**4,998,347**	2,519,733
Total	2,943,292	1,408,374	2,620,130	-	**6,971,796**	3,414,740

1) Share-based incentive plans for management and key personnel are disclosed in Note 5.
2) Jukka Hakkila is not a member of the Management Board.
3) Members of the Management Board who are employed by a Finnish Kemira company do not have any supplementary pension arrangements in addition to the statutory pensions. The members of the Management Board who are employed by a foreign Kemira company participate in the pension systems based on statutory pension arrangements and market practices in their local countries. The Kemira policy is that all new supplementary pension arrangements are defined contribution plans.

EMPLOYMENT TERMS AND CONDITIONS OF CEO

Remuneration of CEO comprises a monthly salary including a car benefit and a mobile phone benefit, and performance-based incentives. The performance-based incentives consist of an annual short-term bonus plan and a long term share incentive plan. The annual short-term bonus plan is based on terms approved by the Board of Directors and the maximum bonus is 60 percent of the annual salary. The long-term share incentive plan is based on the terms of the plan. The maximum reward is determined as a number of shares and a cash portion to cover taxes and the tax-related costs arising from the reward.

CEO Jari Rosendal belongs to the Finnish Employees' Pension Act (TyEL) scheme, which provides pension security based on the years of service and earnings as stipulated by law. CEO's retirement age is determined by TyEL. CEO has not a separate supplementary pension arrangement.

A mutual termination notice period of six months applies to CEO. CEO is entitled to an additional severance pay of 12 months' salary, in case the company will terminate his service.

THE BOARD OF DIRECTORS' EMOLUMENTS

On March 21, 2016, the Annual General Meeting decided that the annual fee shall be paid as a combination of the company's shares and cash in such a manner that 40% of the annual fee is paid with the Kemira shares owned by the company or, if this is not possible, Kemira shares acquired from the securities market, and 60% is paid in cash. The shares will be transferred to the members of the Board of Directors within two weeks after the release of Kemira's Interim Report January 1 - March 31, 2016.

There are no special terms or conditions associated with owning these shares received as the annual fee. The members of the Board of Directors are not eligible for any short-term bonus plans, long-term share incentive plans or supplementary pension plans of Kemira Oyj.

The meeting fees are paid in cash and travel expenses are paid according to Kemira's travel policy.

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

MEMBERS OF THE BOARD OF DIRECTORS

	Number of shares	Share value, EUR	Cash compensation, EUR [4)]	2016 Total, EUR	2015 Total, EUR
Jari Paasikivi, Chairman	3,043	31,561	59,934	**91,495**	92,107
Kerttu Tuomas, Vice Chairman	1,864	19,333	37,758	**57,091**	58,899
Wolfgang Büchele	1,483	15,381	35,373	**50,754**	53,160
Winnie Fok	1,483	15,381	49,773	**65,154**	69,960
Juha Laaksonen	1,864	19,333	41,358	**60,691**	61,299
Timo Lappalainen	1,483	15,381	32,973	**48,354**	48,960
Kaisa Hietala (since March 21, 2016)	1,483	15,381	31,773	**47,154**	-
Total	12,703	131,751	288,942	**420,693**	384,385

4) Includes the annual fees and the meeting fees.

TRANSACTIONS CARRIED OUT WITH RELATED PARTIES

	2016	2015
Revenue		
Associated companies	**1.5**	1.7
Purchases		
Associated companies	**3.3**	3.2
Pension Fund Neliapila	**1.2**	1.1
Total	**4.5**	4.3
Receivables		
Associated companies	**0.1**	0.1
Liabilities		
Associated companies	**0.3**	0.3

The amount of contingent liabilities on behalf of associates are presented in Note 29.

Related parties include Pension Fund Neliapila, which is a separate legal entity. Pension Fund Neliapila manages Kemira Oyj's voluntarily organized additional pension fund. Pension Fund Neliapila manages part of the pension assets of the Group's personnel in Finland. The assets include Kemira shares representing 0.07% of the company's outstanding shares. Supplementary benefit in Pension Fund Neliapila are presented in more detail in Note 22.

No loans had been granted to the key persons of the management at year-end of 2015 and 2016, nor were there contingency items or commitments on behalf of key management personnel. Persons close to key management personnel with the related parties do not have any significant business relationship with the Group.

32. CHANGES IN THE GROUP STRUCTURE

DIVESTMENTS OF GROUP COMPANIES

- TRICHEM SOLUTIONS PRIVATE LIMITED was sold on February 6, 2016.
- Kemira Asia Pacific Pte. Ltd. was dissolved on February 19, 2016.
- Kemira de Mexico S.A. de C.V. was dissolved on February 24, 2016.

CHANGES IN THE HOLDINGS OF GROUP COMPANIES WITHIN THE GROUP

- Kemira Korea Corporation was merged with and into Kemira Chemicals Korea Corporation on January 1, 2016.
- Kemira Logistics, Inc. merged with and into Kemira Water Solutions, Inc. on March 31, 2016.
- PT Kemira Indonesia sold shares of PT Kemira Chemicals Indonesia to Kemira Oyj on August 15, 2016.
- Kemira Oyj sold shares of Kemira Chemicals Germany GmbH to Kemira Germany GmbH on October 14, 2016.
- Kemira Germany Sales GmbH merged with and into Kemira Chemicals Germany GmbH on December 15, 2016.

NAME CHANGES

Former name	New name
Kemira Chemicals India Private Limited	TRICHEM SOLUTIONS PRIVATE LIMITED

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34

33. THE GROUP'S SUBSIDIARIES AND INVESTMENT IN ASSOCIATES

SUBSIDIARIES

	City	Country	Kemira Group's Holding %	Kemira Oyj's Holding %	Non-controlling interest's Holding %
Kemira Oyj (parent company)	Helsinki	Finland			
Aliada Quimica de Portugal Lda.	Estarreja	Portugal	50.1		49.9
AS Kemivesi	Tallinn	Estonia	100.0	100.0	
CJSC "Kemira HIM"	St. Petersburg	Russia	100.0		
Corporación Kemira Chemicals de Venezuela, C.A.	Caracas	Venezuela	100.0		
Industry Park i Helsingborg Förvaltning AB	Helsingborg	Sweden	100.0		
Kemifloc a.s.	Přerov	Czech Republic	51.0		49.0
Kemifloc Slovakia S.r.o.	Prešov	Slovakia	51.0		49.0
Kemipol Sp. z o.o.	Police	Poland	51.0		49.0
Kemira (Asia) Co., Ltd.	Shanghai	China	100.0		
Kemira Argentina S.A.	Buenos Aires	Argentina	100.0	15.8	
Kemira Australia Pty Ltd	Hallam	Australia	100.0		
Kemira Cell Sp.z.o.o	Ostroleka	Poland	55.0	55.0	45.0
Kemira Chemicals (Nanjing) Co. Ltd.	Nanjing	China	100.0	100.0	
Kemira Chemicals (Shanghai) Co. Ltd.	Shanghai	China	100.0	100.0	
Kemira Chemicals (UK) Ltd.	Harrogate	United Kingdom	100.0	100.0	
Kemira Chemicals (Yanzhou) Co., Ltd.	Yanzhou City	China	100.0	100.0	
Kemira Chemicals AS	Gamle Fredrikstad	Norway	100.0		
Kemira Chemicals Brasil Ltda	São Paulo	Brazil	100.0	99.9	
Kemira Chemicals Canada Inc.	Maitland	Canada	100.0	100.0	
Kemira Chemicals Germany GmbH	Frankfurt am Main	Germany	100.0		
Kemira Chemicals Korea Corporation	Gunsan-City	Korea	100.0	100.0	
Kemira Chemicals NV	Aartselaar	Belgium	100.0		
Kemira Chemicals Oy	Helsinki	Finland	100.0		
Kemira Chemicals, Inc.	Atlanta, GA	United States	100.0		
Kemira Chemicals Spain S.A.	Barcelona	Spain	100.0		
Kemira Chemie Ges.mbH	Krems	Austria	100.0	100.0	
Kemira Chile Comercial Limitada	Santiago	Chile	100.0	99.0	
Kemira Chimie S.A.S.U.	Lauterbourg	France	100.0		
Kemira Europe Oy	Helsinki	Finland	100.0	100.0	
Kemira Finance Solutions B.V.	Rotterdam	Netherlands	100.0		
Kemira France SAS	Lauterbourg	France	100.0		
Kemira Gdańsk Sp. z o.o.	Gdansk	Poland	100.0		
Kemira Germany GmbH	Leverkusen	Germany	100.0	100.0	
Kemira GrowHow A / S	Fredericia	Denmark	100.0	100.0	
Kemira Hong Kong Company Limited	Hong Kong	China	100.0	100.0	
Kemira Ibérica S.A.	Barcelona	Spain	100.0		
Kemira Ibérica Sales and Marketing S.L.	Barcelona	Spain	100.0		
Kemira International Finance B.V.	Rotterdam	Netherlands	100.0		
Kemira Italy S.p.A.	San Giorgio di Nogaro	Italy	100.0		
Kemira Japan Co., Ltd.	Tokyo	Japan	100.0		
Kemira Kemi AB	Helsingborg	Sweden	100.0		
Kemira Kopparverket KB	Helsingborg	Sweden	100.0		
Kemira KTM d.o.o.	Ljubljana	Slovenia	100.0	100.0	
Kemira Nederland Holding B.V.	Rotterdam	Netherlands	100.0	100.0	
Kemira Operon Oy	Helsinki	Finland	100.0	100.0	
Kemira Rotterdam B.V.	Rotterdam	Netherlands	100.0		
Kemira South Africa (Pty) Ltd.	Weltevredenpark	South Africa	100.0		
Kemira Świecie Sp. z o.o.	Swiecie	Poland	100.0	100.0	

CONSOLIDATED FINANCIAL STATEMENTS • Notes to Consolidated Financial Statements (EUR million)

	City	Country	Kemira Group's Holding %	Kemira Oyj's Holding %	Non-controlling interest's Holding %
Kemira Taiwan Corporation	Taipei	Taiwan	100.0		
Kemira (Thailand) Co., Ltd.	Bangkok	Thailand	100.0		
Kemira Uruguay S.A.	Montevideo	Uruguay	100.0		
Kemira Water Danmark A / S	Esbjerg	Denmark	100.0	100.0	
Kemira Water Solutions Brasil -Produtos para tratamento de agua Ltda.	São Paulo	Brazil	100.0	100.0	
Kemira Water Solutions Canada Inc.	Varennes Qs	Canada	100.0		
Kemira Water Solutions, Inc.	Atlanta, GA	United States	100.0		
Kemwater Brasil S.A.	Camaçari	Brazil	100.0		
Kemwater ProChemie s.r.o.	Kosmonosy	Czech Republic	95.1		4.9
PT Kemira Indonesia	Jakarta	Indonesia	100.0	74.8	
PT Kemira Chemicals Indonesia	Pasuruan	Indonesia	99.8		0.2
Scandinavian Tanking System A / S	Copenhagen	Denmark	100.0		
ZAO Avers	St. Petersburg	Russia	100.0		

ASSOCIATES

	City	Country	Kemira Group's Holding %	Kemira Oyj's Holding %
FC Energia Oy	Ikaalinen	Finland	34.0	
FC Power Oy	Ikaalinen	Finland	34.0	
Haapaveden Ympäristöpalvelut Oy	Haapavesi	Finland	40.5	
Honkalahden Teollisuuslaituri Oy	Joutseno	Finland	50.0	

34. EVENTS AFTER THE BALANCE SHEET DATE

The Group has no significant events after the balance sheet date.

KEMIRA OYJ INCOME STATEMENT (FAS)

		Year ended 31 December	
	Note	**2016**	2015
Revenue	2	**1,364,211,556.79**	1,347,012,217.00
Change in inventories of finished goods	4	**2,755,294.03**	3,953,695.97
Other operating income	3	**2,273,459.05**	3,002,062.57
Materials and services	4	**-851,640,194.15**	-866,441,566.01
Personnel expenses	5	**-47,003,676.91**	-42,156,568.73
Depreciation, amortization and impairments	6	**-38,511,189.49**	-38,197,982.33
Other operating expenses	4	**-393,603,485.01**	-336,150,104.02
Operating profit / loss		**38,481,764.31**	71,021,754.45
Financial income and expenses	7	**182,211,554.97**	104,816,107.86
Profit / loss before appropriations and taxes		**220,693,319.28**	175,837,862.31
Appropriations	8	**2,694,417.39**	2,235,818.95
Income taxes	9	**-7,605,755.19**	-12,917,723.00
Net profit for the period		**215,781,981.48**	165,155,958.26

KEMIRA OYJ BALANCE SHEET (FAS)

	Note	As at 31 December 2016	2015
ASSETS			
NON-CURRENT ASSETS			
Intangible assets	10	**82,956,948.85**	100,880,994.96
Property, plant and equipment	11	**30,383,281.23**	33,434,220.14
Investments	12		
Shares in subsidiaries		**2,103,542,628.42**	2,083,703,472.85
Other investments		**118,574,547.83**	148,222,158.17
Total investments		**2,222,117,176.25**	2,231,925,631.02
Total non-current assets		**2,335,457,406.33**	2,366,240,846.12
CURRENT ASSETS			
Inventories	13	**83,345,318.15**	85,390,061.32
Non-current receivables	14	**310,822,574.15**	266,310,037.66
Current receivables	14	**290,600,971.41**	317,022,561.67
Money market investments	15	**70,719,098.15**	30,394,906.22
Cash and cash equivalents		**57,070,058.22**	63,910,883.58
Total current assets		**812,558,020.08**	763,028,450.45
Total assets		**3,148,015,426.41**	3,129,269,296.57
EQUITY AND LIABILITIES			
EQUITY	16		
Share capital		**221,761,727.69**	221,761,727.69
Share premium		**257,877,731.94**	257,877,731.94
Fair value reserve		**2,717,240.52**	-4,657,093.00
Unrestricted equity reserve		**199,963,876.20**	199,963,876.20
Retained earnings		**406,303,596.51**	319,793,483.44
Net profit / loss for the financial year		**215,781,981.48**	165,155,958.26
Total equity		**1,304,406,154.34**	1,159,895,684.53
Appropriations	17	**6,901,698.88**	9,596,116.27
Obligatory provisions	18	**21,514,581.37**	19,484,405.66
LIABILITIES			
Non-current liabilities	19	**610,798,960.37**	601,111,567.30
Current liabilities	20	**1,204,394,031.45**	1,339,181,522.81
Total liabilities		**1,815,192,991.82**	1,940,293,090.11
Total equity and liabilities		**3,148,015,426.41**	3,129,269,296.57

KEMIRA OYJ CASH FLOW STATEMENT (FAS)

	2016	2015
CASH FLOW FROM OPERATING ACTIVITIES		
Net profit for the period	215,781,981.48	165,155,958.26
Adjustments for		
Depreciation, amortization and impairments	38,511,189.49	38,197,982.33
Income taxes	7,605,755.19	12,917,723.00
Finance expenses, net	-182,211,554.97	-104,816,107.86
Other non-cash items and expenses not involving cash flow	11,774,509.54	14,182,127.73
Operating profit before change in working capital	91,461,880.73	125,637,683.46
Change in working capital		
Increase (-) / decrease (+) in inventories	2,044,743.17	-8,106,386.66
Increase (-) / decrease (+) in trade and other receivables	30,500,627.07	-47,042,548.95
Increase (+) / decrease (-) in trade payables and other liabilities	-20,456,698.29	30,052,413.06
Change in working capital	12,088,671.95	-25,096,522.55
Cash generated from operations before financing items and taxes	103,550,552.68	100,541,160.91
Interest and other finance cost paid	-27,030,509.80	-40,242,953.02
Interest and other finance income received	21,655,705.11	9,273,523.73
Realized exchange gains and losses	-9,324,161.58	-5,553,184.83
Dividends received	173,072,698.42	134,536,455.90
Income taxes paid	-5,345,063.26	-1,141,217.06
Net cash generated from operating activities	256,579,221.57	197,413,785.63
CASH FLOW FROM INVESTING ACTIVITIES		
Acquisitions of subsidiaries and increases in subsidiaries	-19,906,487.93	-534,837,144.91
Acquisitions of associated companies, and other shares	0.00	-4,224,953.64
Purchases of intangible assets	-13,498,891.85	-45,749,471.95
Purchases of property, plant and equipment	-4,183,211.65	-10,927,742.35
Proceeds from sale of subsidiaries and other shares	38,649,269.00	134,852.81
Proceeds from sale of other plant, property and equipment and intangible assets	276,510.56	3,148.42
Change in loan receivables, net increase (-) / decrease (+)	-44,512,536.49	-84,058,933.99
Net cash used in investing activities	-43,175,348.36	-679,660,245.61
Cash flow before financing	213,403,873.21	-482,246,459.98
CASH FLOW FROM FINANCING ACTIVITIES		
Proceeds from non-current interest-bearing liabilities (+)	50,000,000.00	250,000,000.00
Repayment from non-current interest-bearing liabilities (-)	-40,312,606.93	-31,792,432.89
Short-term financing, net increase (+) / decrease (-)	-110,808,548.15	353,737,864.80
Dividends paid	-80,748,892.00	-80,587,227.16
Received group contribution	2,850,000.00	4,051,000.00
Net cash used in financing activities	-179,020,047.08	495,409,204.75
Net increase (+) / decrease (-) in cash and cash equivalents	34,383,826.13	13,162,744.77
Cash and cash equivalents at 31 Dec	127,789,156.37	94,305,789.80
Exchange gains (+) / losses (-) on cash and cash equivalents	-900,459.56	-4,503,177.80
Cash and cash equivalents at 1 Jan	94,305,789.80	85,646,222.83
Net increase (+) / decrease (-) in cash and cash equivalents	34,383,826.13	13,162,744.77

NOTES TO KEMIRA OYJ FINANCIAL STATEMENTS

1. THE PARENT COMPANY'S ACCOUNTING POLICIES FOR THE FINANCIAL STATEMENTS

BASIS OF PREPARATION

The parent company's financial statements have been prepared in compliance with the relevant acts and regulations in force in Finland (FAS). Changes in Finnish Accounting Act have been adopted and prior year has been reclassified accordingly. Kemira Group's financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS), and the parent company observes the Group's accounting policies according to FAS whenever it has been possible. Mainly the accounting policies are presented below, in which the practice differs from the Group's accounting policies. In other respects the Group's accounting policies are observed.

REVENUE

Kemira Oyj's revenue consists of mainly revenues from the sale of goods and services. Revenue includes also intercompany service charges due to change in definition of Accounting Act effective 2016. Reclassifications have been applied also to comparison figures.

PENSION ARRANGEMENTS

The company's statutory pensions are handled by pension insurance companies and supplemental pensions mainly by Kemira's own pension fund. Pension costs consist of payments to pension insurance companies and possible contributions to pension fund and are recognized in the income statement.

SHARE-BASED INCENTIVE PLANS

The treatment of share-based plans is described in the Group's accounting policies. In the parent company, cash proportion of share-based incentive plans is recognized as an expense in the performance year and share proportion in the year shares are given using the average share price.

INCOME TAXES

The Group's accounting policies are applied to income taxes and deferred tax assets and liabilities as permitted under Finnish GAAP. Deferred tax liability for the appropriations is stated in the notes to financial statements.

LEASE

Lease payments are treated as rental expenses.

FINANCIAL ASSETS, FINANCIAL LIABILITIES AND DERIVATIVE CONTRACTS

All financial assets (including shares) and liabilities are recognized at their acquisition value or their acquisition value less write-downs, with the exception of derivative instruments, which are measured at their fair value.

Changes in the value of the financial assets and liabilities, including derivatives, are booked as a credit or charge into income statement under financial income and expenses, with the exception of other derivatives used for hedging purposes, the efficient part of which is booked to a fair value reserve. Inefficient part of other derivative instruments used for hedging purposes is booked as profit or loss into the income statement.

The valuation methods of derivative instruments are described in the Group's accounting policies and in Note 28 in the Consolidated Financial Statements.

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

2. REVENUE

	2016	2015
Revenue by segments		
Pulp & Paper	724,290,860.70	722,951,092.02
Oil & Mining	121,216,154.43	107,914,648.61
Municipal & Industrial	278,400,094.75	282,421,395.13
Intercompany revenue	240,304,446.91	233,725,081.24
Total	1,364,211,556.79	1,347,012,217.00
Distribution of revenue by geographical areas as a percentage of total revenue		
Finland, domicile of the parent company	27	28
Other Europe, Middle East and Africa	59	59
Americas	7	7
Asia Pacific	7	6
Total	100	100

3. OTHER OPERATING INCOME 1)

	2016	2015
Gain on the sale of property, plant and equipment	122,813.14	3,148.42
Rent income	975,904.36	1,184,262.09
Other income from operations	1,174,741.55	1,814,652.06
Total	2,273,459.05	3,002,062.57

1) Some items presented earlier in other operating income have been transferred to revenue due to change in definition of Accounting Act effective 2016. Reclassifications have been applied also to comparison figures.

4. COSTS

	2016	2015
Change in inventories of finished goods	-2,755,294.03	-3,953,695.97
Materials and services		
Materials and supplies		
Purchases during the financial year	840,073,110.26	857,552,177.95
Change in inventories of materials and supplies	1,690,639.92	-702,429.06
External services	9,876,443.97	9,591,817.12
Total materials and services	851,640,194.15	866,441,566.01
Personnel expenses	47,003,676.91	42,156,568.73
Other operating expenses		
Rents	9,586,333.83	5,970,972.97
Intercompany tolling manufacturing charges	179,941,960.81	179,054,783.95
Other intercompany charges	149,981,501.52	92,401,538.68
Other expenses	54,093,688.85	58,722,808.42
Total other operating expenses	393,603,485.01	336,150,104.02
Total costs	1,289,492,062.04	1,240,794,542.79

In 2016, the costs included a net increase in the obligatory provisions of EUR +2.0 million (personnel expenses EUR -0.3 million, rents EUR +2.4 million and other expenses EUR -0.1 million), and in 2015, the costs included a net decrease in the obligatory provisions of EUR -0.4 million (personnel expenses EUR -0.7 million, rents EUR -0.4 million and other expenses EUR +0.7 million).

DELOITTE & TOUCHE OY'S FEES AND SERVICES

	2016	2015
Audit fees	**423,500.00**	415,000.00
Tax services	**130,530.00**	50,000.00
Other services [1]	**412,554.00**	445,000.00

1) In 2016, other services include fees mainly related to the internal rationalization projects and AkzoNobel's global paper chemicals business acquisition. In 2015, other services include fees mainly related to the AkzoNobel's global paper chemicals business acquisition.

5. PERSONNEL EXPENSES AND NUMBER OF PERSONNEL

	2016	2015
Emoluments of the Board of Directors, the CEOs and his Deputy [1]	**2,394,141.66**	1,279,391.34
Other wages and salaries	**35,867,385.14**	32,508,815.66
Pension expenses	**6,823,398.55**	6,324,848.06
Other personnel expenses	**1,918,751.56**	2,043,513.67
Total	**47,003,676.91**	42,156,568.73

1) The emolument of the Kemira Oyj's CEO was EUR 1,494,177 (669,765) including bonuses and share-based payments of EUR 927,177 (109,965). The emolument of the Kemira Oyj's Deputy CEO was EUR 479,272 (225,242) including bonuses and share-based payments of EUR 297,619 (44,287).

Other transactions between related parties are presented in Note 31 in the Notes to the Consolidated Financial Statements.

	2016	2015
Personnel at 31 Dec		
Pulp & Paper	**91**	83
Oil & Mining	**5**	5
Municipal & Industrial	**31**	28
Other, of which	**366**	371
R&D and Technology	**162**	173
Total	**493**	487
Personnel, average	**495**	483

6. DEPRECIATION, AMORTIZATION AND IMPAIRMENTS

	2016	2015
Depreciation according to plan and impairments		
Intangible assets		
Intangible rights	**12.268.318.14**	10.452.379.69
Other intangible assets	**19.154.619.82**	21.147.260.08
Tangible assets		
Impairment of land and water	**109.776.05**	0.00
Buildings and constructions	**351.731.82**	346.416.22
Machinery and equipment	**6.611.898.84**	6.232.973.18
Other property, plant and equipment	**14.844.82**	18.953.16
Total	**38.511.189.49**	38.197.982.33

7. FINANCE INCOME AND EXPENSES

	2016	2015
Dividend income		
From the Group companies	**172,934,588.42**	134,501,680.90
From others	**138,110.00**	34,775.00
Total	**173,072,698.42**	134,536,455.90
Interest income		
From the Group companies	**14,394,515.64**	11,071,308.86
From others	**436,754.97**	765,614.19
Total	**14,831,270.61**	11,836,923.05
Interest expenses		
To the Group companies	**-846,093.05**	-696,132.31
To others	**-16,928,675.43**	-18,333,242.85
Total	**-17,774,768.48**	-19,029,375.16
Other finance income		
From the Group companies	**3,841,440.59**	894,798.55
From others	**7,610,429.09**	134,852.81
Total	**11,451,869.68**	1,029,651.36
Other finance expenses		
To the Group companies 1)	**0.00**	-16,579,854.88
To others	**-2,305,296.97**	-8,397,520.47
Total	**-2,305,296.97**	-24,977,375.35
Exchange gains and losses		
From the Group companies	**8,043,452.25**	3,277,812.55
From others	**-5,107,670.54**	-1,857,984.49
Total	**2,935,781.71**	1,419,828.06
Total finance income and expenses	**182,211,554.97**	104,816,107.86
Exchange gains and losses		
Realized	**-9,324,161.58**	-5,553,184.83
Unrealized	**12,259,943.29**	6,973,012.89
Total	**2,935,781.71**	1,419,828.06

1) In 2016, other finance expenses from the Group companies include impairment of subsidiary shares of EUR 0.0 million (16.6).

8. APPROPRIATIONS

	2016	2015
Change in difference between scheduled and actual depreciation (increase - / decrease +)		
Intangible rights	**14,493.48**	-907,451.08
Other intangible assets	**1,546,056.00**	-588,848.12
Buildings and constructions	**140,150.29**	147,774.12
Machinery and equipment	**983,870.47**	735,433.53
Other property, plant and equipment	**9,847.15**	-1,089.50
Total	**2,694,417.39**	-614,181.05
Group contribution		
Group contributions received	**0.00**	2,850,000.00
Total	**0.00**	2,850,000.00
Total appropriations	**2,694,417.39**	2,235,818.95

9. INCOME TAXES

(income +, expense -)	2016	2015
Income taxes, current year	**-4,699,620.09**	-1,271,420.66
Income taxes, previous years	**336,118.20**	300,000.00
Deferred taxes	**-1,134,094.13**	-9,170,081.91
Other taxes	**-2,108,159.17**	-2,776,220.43
Total	**-7,605,755.19**	-12,917,723.00

10. INTANGIBLE ASSETS

2016	Intangible rights	Goodwill	Prepayments and non-current assets under constructions	Other intangible assets	Total
Acquisition cost at 1 Jan	72,758,028.28	6,181,419.27	12,496,146.08	183,989,932.81	**275,425,526.44**
Additions	5,300,284.73		3,861,735.49	394,355.93	**9,556,376.15**
Decreases	-599,633.99			-801,224.21	**-1,400,858.20**
Transfers	9,970,823.35		-12,444,146.08	6,415,838.43	**3,942,515.70**
Acquisition cost at 31 Dec	87,429,502.37	6,181,419.27	3,913,735.49	189,998,902.96	**287,523,560.09**
Accumulated amortization at 1 Jan	-26,295,330.61	-6,181,419.27	0.00	-142,067,781.60	**-174,544,531.48**
Accumulated amortization relating to decreases and transfers	599,633.99			801,224.21	**1,400,858.20**
Amortization and impairments during the financial year	-12,268,318.14			-19,154,619.82	**-31,422,937.96**
Accumulated amortization at 31 Dec	-37,964,014.76	-6,181,419.27	0.00	-160,421,177.21	**-204,566,611.24**
Net book value at 31 Dec	**49,465,487.61**	**0.00**	**3,913,735.49**	**29,577,725.75**	**82,956,948.85**

2015	Intangible rights	Goodwill	Prepayments and non-current assets under constructions	Other intangible assets	Total
Acquisition cost at 1 Jan	44,049,063.67	6,181,419.27	9,815,011.73	185,832,090.74	245,877,585.41
Additions	30,715,935.10		7,029,411.36	8,004,125.49	45,749,471.95
Decreases	-4,553,037.42			-11,648,493.50	-16,201,530.92
Transfers	2,546,066.93		-4,348,277.01	1,802,210.08	0.00
Acquisition cost at 31 Dec	72,758,028.28	6,181,419.27	12,496,146.08	183,989,932.81	275,425,526.44
Accumulated amortization at 1 Jan	-20,395,988.34	-6,181,419.27	0.00	-132,569,015.02	-159,146,422.63
Accumulated amortization relating to decreases and transfers	4,553,037.42			11,648,493.50	16,201,530.92
Amortization and impairments during the financial year	-10,452,379.69			-21,147,260.08	-31,599,639.77
Accumulated amortization at 31 Dec	-26,295,330.61	-6,181,419.27	0.00	-142,067,781.60	-174,544,531.48
Net book value at 31 Dec	46,462,697.67	0.00	12,496,146.08	41,922,151.21	100,880,994.96

11. PROPERTY, PLANT AND EQUIPMENT

2016	Land and water areas	Buildings and constructions	Machinery and equipment	Other property, plant and equipment	Prepayments and non-current assets under construction	Total
Acquisition cost at 1 Jan	1,175,482.19	17,107,512.52	98,934,631.85	553,073.82	7,735,350.77	**125,506,051.15**
Additions		64,377.03	3,023,625.19		5,037,725.13	**8,125,727.35**
Decreases	-91,989.24	-38,411.60	-2,490,537.21			**-2,620,938.05**
Transfers		297,187.68	3,203,917.25		-7,443,620.63	**-3,942,515.70**
Acquisition cost at 31 Dec	1,083,492.95	17,430,665.63	102,671,637.08	553,073.82	5,329,455.27	**127,068,324.75**
Accumulated depreciation at 1 Jan	0.00	-13,156,663.18	-78,447,990.22	-467,177.61	0.00	**-92,071,831.01**
Accumulated depreciation relating to decreases and transfers		25,844.40	2,449,194.62			**2,475,039.02**
Depreciation and impairments during the financial year	-109,776.05	-351,731.82	-6,611,898.84	-14,844.82		**-7,088,251.53**
Accumulated depreciation at 31 Dec	-109,776.05	-13,482,550.60	-82,610,694.44	-482,022.43	0.00	**-96,685,043.52**
Net book value at 31 Dec	**973,716.90**	**3,948,115.03**	**20,060,942.64**	**71,051.39**	**5,329,455.27**	**30,383,281.23**

2015	Land and water areas	Buildings and constructions	Machinery and equipment	Other property, plant and equipment	Prepayments and non-current assets under construction	Total
Acquisition cost at 1 Jan	1,179,973.51	17,051,549.47	91,824,049.57	567,573.82	5,122,363.77	115,745,510.14
Additions		6,652.37	5,917,852.48		5,001,901.24	10,926,406.09
Decreases	-4,491.32	-1,841.67	-1,145,032.09	-14,500.00		-1,165,865.08
Transfers		51,152.35	2,337,761.89		-2,388,914.24	0.00
Acquisition cost at 31 Dec	1,175,482.19	17,107,512.52	98,934,631.85	553,073.82	7,735,350.77	125,506,051.15
Accumulated depreciation at 1 Jan	0.00	-12,812,088.63	-73,336,030.88	-462,724.45	0.00	-86,610,843.96
Accumulated depreciation relating to decreases and transfers		1,841.67	1,121,013.84	14,500.00		1,137,355.51
Depreciation and impairments during the financial year		-346,416.22	-6,232,973.18	-18,953.16		-6,598,342.56
Accumulated depreciation at 31 Dec	0.00	-13,156,663.18	-78,447,990.22	-467,177.61	0.00	-92,071,831.01
Net book value at 31 Dec	1,175,482.19	3,950,849.34	20,486,641.63	85,896.21	7,735,350.77	33,434,220.14

12. INVESTMENTS

2016	Shares in subsidiaries	Other shares and holdings	Total
Net book value at 1 Jan	2,083,703,472.85	148,222,158.17	**2,231,925,631.02**
Additions	19,906,487.93		**19,906,487.93**
Decreases and transfers	-67,332.36	-29,647,610.34	**-29,714,942.70**
Net book value at 31 Dec	**2,103,542,628.42**	**118,574,547.83**	**2,222,117,176.25**

2015	Shares in subsidiaries	Other shares and holdings	Total
Net book value at 1 Jan	1,570,433,661.40	144,105,359.93	1,714,539,021.33
Additions	534,837,144.91	4,224,953.64	539,062,098.55
Decreases and transfers	-4,987,478.58		-4,987,478.58
Impairments	-16,579,854.88	-108,155.40	-16,688,010.28
Net book value at 31 Dec	2,083,703,472.85	148,222,158.17	2,231,925,631.02

13. INVENTORIES

	2016	2015
Raw materials and supplies	**21,580,105.35**	23,270,745.27
Finished goods	**57,372,095.55**	54,616,801.52
Prepayments	**4,393,117.25**	7,502,514.53
Total	**83,345,318.15**	85,390,061.32

Note

14. RECEIVABLES

	2016	2015
Non-current receivables		
Interest-bearing non-current receivables		
Loan receivables		
From the Group companies	302,197,671.84	254,707,458.08
Total interest-bearing non-current receivables	302,197,671.84	254,707,458.08
Interest-free non-current receivables		
Deferred taxes	8,624,902.31	11,602,579.58
Total interest-free non-current receivables	8,624,902.31	11,602,579.58
Total non-current receivables	310,822,574.15	266,310,037.66
Current receivables		
Interest-bearing current receivables		
From the Group companies	77,669,312.79	69,631,225.71
Total interest-bearing current receivables	77,669,312.79	69,631,225.71
Interest-free current receivables		
Advances paid		
To the Group companies	18,836,395.50	18,836,395.50
Total	18,836,395.50	18,836,395.50
Trade receivables		
From the Group companies	27,183,225.37	53,656,850.36
From others	127,246,884.44	133,153,754.73
Total	154,430,109.81	186,810,605.09
Accrued income		
From the Group companies	4,828,844.62	6,324,773.43
From others	24,100,931.78	21,691,409.18
Total	28,929,776.40	28,016,182.61
Other short-term interest-free receivables		
From the Group companies	525,573.92	266,006.46
From others	10,209,802.99	13,462,146.30
Total	10,735,376.91	13,728,152.76
Total interest-free current receivables	212,931,658.62	247,391,335.96
Total current receivables	290,600,971.41	317,022,561.67
Total receivables	601,423,545.56	583,332,599.33

	2016	2015
Accrued income		
Interests	7,597,612.88	6,779,178.07
Taxes	2,318,381.95	16,780.32
Exchange differences	10,891,391.47	7,082,391.10
The Group contributions	0.00	2,850,000.00
Other	8,122,390.10	11,287,833.12
Total	28,929,776.40	28,016,182.61

15. MONEY-MARKET INVESTMENTS

	2016	2015
Money-market investments		
Book value	70,719,098.15	30,394,906.22
Fair value	70,719,098.15	30,394,906.22
Difference	0.00	0.00

Money-market investments include company's short-term investments.

16. EQUITY

	2016	2015
Restricted equity		
Share capital at 1 Jan	221,761,727.69	221,761,727.69
Share capital at 31 Dec	221,761,727.69	221,761,727.69
Share premium account at Jan 1	257,877,731.94	257,877,731.94
Share premium account at 31 Dec	257,877,731.94	257,877,731.94
Fair value reserve at 1 Jan	-4,657,093.00	-2,963,940.82
Fair value reserve at 31 Dec	2,717,240.52	-4,657,093.00
Total restricted equity at 31 Dec	482,356,700.15	474,982,366.63
Unrestricted equity reserve		
Unrestricted equity reserve at 1 Jan	199,963,876.20	199,963,876.20
Unrestricted equity reserve at 31 Dec	199,963,876.20	199,963,876.20
Retained earnings at 1 Jan [1)]	484,949,441.70	400,262,709.85
Net profit for the period	215,781,981.48	165,155,958.26
Dividends paid	-80,748,892.00	-80,587,227.16
Share-based incentive plan		
Shares given	2,103,046.81	118,000.75
Retained earnings and net profit for the period ending at 31 Dec	622,085,577.99	484,949,441.70
Total unrestricted equity at 31 Dec	822,049,454.19	684,913,317.90
Total equity at 31 Dec	1,304,406,154.34	1,159,895,684.53
Total distributable funds at 31 Dec	822,049,454.19	684,913,317.90

1) The company owns 2.975.327 treasury shares, the acquisition value of which totals EUR 20.028.053.10.

Change in treasury shares	EUR	Number of shares
Acquisition value / number at Jan 1, 2016	22,082,955.54	3,280,602
Change	-2,054,902.44	-305,275
Acquisition value / number at Dec 31, 2016	20,028,053.10	2,975,327

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

17. ACCUMULATED APPROPRIATIONS

	2016	2015
Appropriations		
Appropriations in the property, plant and equipment by asset classes are as follows		
Buildings and constructions	**821,792.60**	961,942.89
Machinery and equipment	**2,707,221.32**	3,691,091.79
Other property, plant and equipment	**23,048.75**	32,895.90
Intangible rights	**495,672.44**	510,165.92
Other intangible assets	**2,853,963.77**	4,400,019.77
Total	**6,901,698.88**	9,596,116.27
Change in appropriations		
Appropriations at 1 Jan	**9,596,116.27**	8,981,935.22
Change in untaxed reserves in income statement	**-2,694,417.39**	614,181.05
Appropriations at 31 Dec	**6,901,698.88**	9,596,116.27

On December 31, 2016, deferred tax liabilities on accumulated appropriations were EUR 1.4 million (1.9).

18. OBLIGATORY PROVISIONS

	2016	2015
Non-current provisions		
Pension provisions	**6,062,164.00**	6,223,992.00
Other obligatory provisions		
Environmental provisions	**10,227,914.39**	10,032,827.51
Restructuring provisions	**3,515,000.00**	654,761.20
Total other obligatory provisions	**13,742,914.39**	10,687,588.71
Total non-current provisions	**19,805,078.39**	16,911,580.71
Current provisions		
Other obligatory provisions		
Personnel related provisions	**694,011.93**	1,018,072.95
Restructuring provisions	**1,015,491.05**	1,554,752.00
Total current provisions	**1,709,502.98**	2,572,824.95
Total provisions	**21,514,581.37**	19,484,405.66
Change in obligatory provisions		
Obligatory provisions at 1 Jan	**19,484,405.66**	19,907,801.98
Decrease of provisions during the year	**-2,740,134.67**	-3,634,335.32
Provisions reversed during the year	**-326,291.05**	-599,061.00
Increase during financial year	**5,096,601.43**	3,810,000.00
Obligatory provisions at 31 Dec	**21,514,581.37**	19,484,405.66

19. NON-CURRENT LIABILITIES

	2016	2015
Loans from financial institutions	**237,095,621.37**	229,688,199.30
Other non-current liabilities	**373,703,339.00**	371,423,368.00
Total	**610,798,960.37**	601,111,567.30
Long-term liabilities maturing in		
2018 (2017)	**22,295,621.37**	35,524,028.48
2019 (2018)	**212,179,971.00**	26,610,139.60
2020 (2019)	**204,900,000.00**	209,900,000.00
2021 (2020) or later	**171,423,368.00**	329,077,399.22
Total	**610,798,960.37**	601,111,567.30
Liabilities maturing in 5 years or more		
Loans from financial institutions	**0.00**	157,654,031.22
Other non-current liabilities	**171,423,368.00**	171,423,368.00
Total	**171,423,368.00**	329,077,399.22

Other non-current liabilities include EUR 200 million bond, which matures on May 27, 2019 and EUR 150 million bond, which matures on May 13, 2022.

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

20. CURRENT LIABILITIES

	2016	2015
Interest-bearing current liabilities		
Loans from financial institutions	31,009,515.48	35,626,179.89
Other interest-bearing current liabilities		
To the Group companies	959,043,155.65	1,070,240,243.20
To others	24,197,339.16	19,192,135.35
Total interest-bearing current liabilities	1,014,250,010.29	1,125,058,558.44
Interest-free current liabilities		
Prepayments received		
From the Group companies	0.00	136,764.13
From others	660,527.45	1,153,676.10
Total	660,527.45	1,290,440.23
Trade payables		
To the Group companies	42,095,195.21	60,861,950.95
To others	57,637,340.34	69,855,984.68
Total	99,732,535.55	130,717,935.63
Accrued expenses		
To the Group companies	7,883,757.27	4,512,263.86
To others	72,550,079.73	69,706,311.25
Total	80,433,837.00	74,218,575.11
Total other interest-free liabilities	9,317,121.16	7,896,013.40
Total interest-free current liabilities	190,144,021.16	214,122,964.37
Total current liabilities	1,204,394,031.45	1,339,181,522.81
Accrued expenses		
Salaries	10,893,082.28	11,452,788.92
Interests and exchange differences	12,759,960.24	19,710,404.59
Other	56,780,794.48	43,055,381.60
Total	80,433,837.00	74,218,575.11

21. COLLATERAL AND CONTINGENT LIABILITIES

	2016	2015
Guarantees		
On behalf of the Group companies		
For loans	401,271,034.00	388,809,015.00
For other obligations	54,437,160.00	52,920,895.00
On behalf of others	2,686,798.00	2,558,342.00
Total	458,394,992.00	444,288,252.00
Leasing liabilities		
Maturity within one year	4,968,769.00	4,699,217.00
Maturity after one year	17,907,785.00	17,215,651.00
Total	22,876,554.00	21,914,868.00

Environmental risks and liabilities are disclosed in Note 30 in the Notes to the Consolidated Financial Statements.

22. SHARES AND HOLDINGS OWNED BY KEMIRA OYJ

Note
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Shares in subsidiaries	Group holding %	Kemira Oyj holding %
AS Kemivesi	100.00	100.00
Kemira Argentina S.A.	100.00	15.80
Kemira Cell Sp. z.o.o.	55.00	55.00
Kemira Chemicals (Nanjing) Co.,Ltd.	100.00	100.00
Kemira Chemicals (Shanghai) Co.,Ltd.	100.00	100.00
Kemira Chemicals (UK) Ltd.	100.00	100.00
Kemira Chemicals (Yanzhou) Co.,Ltd.	100.00	100.00
Kemira Chemicals Brasil Ltda	100.00	99.87
Kemira Chemicals Canada Inc.	100.00	100.00
Kemira Chemicals Korea Corporation	100.00	100.00
Kemira Chemie Ges.mbH	100.00	100.00
Kemira Chile Comercial Limitada	100.00	99.00
Kemira Europe Oy	100.00	100.00
Kemira Germany GmbH	100.00	100.00
Kemira GrowHow A / S	100.00	100.00
Kemira Hong Kong Company Limited	100.00	100.00
Kemira KTM d.o.o.	100.00	100.00
Kemira Nederland Holding B.V.	100.00	100.00
Kemira Operon Oy	100.00	100.00
Kemira Świecie Sp. z o.o.	100.00	100.00
Kemira Water Danmark A / S	100.00	100.00
Kemira Water Solutions Brasil	100.00	100.00
PT Kemira Indonesia	100.00	74.80

SHARES AND SHAREHOLDERS

SHARES AND SHARE CAPITAL

On December 31, 2016 Kemira Oyj's share capital amounted to EUR 221.8 million and the number of shares was 155,342,557. Each share entitles to one vote at the general meeting. Kemira Oyj's shares are registered in the book-entry system maintained by Euroclear Finland Ltd.

SHAREHOLDERS

At the end of 2016, Kemira Oyj had 32,622 registered shareholders (32,601). Foreign shareholding of Kemira Oyj shares increased 17% during the year and was 25.1% of the shares (21.4%), including nominee-registered holdings. Households owned 16% of the shares (16.1%). At year-end, Kemira held 2,975,327 treasury shares (3,280,602), representing 1.9% (2.1%) of all company shares. A list of Kemira's largest shareholders is updated monthly and can be found on the company website at www.kemira.com/investors.

LISTING AND TRADING

Kemira Oyj's shares are listed on Nasdaq Helsinki. The trading code for the shares is KEMIRA and the ISIN code is FI0009004824.

Kemira Oyj's share closed at EUR 12.13 at the Nasdaq Helsinki at the end of 2016 (10.88). The share price increased 11% during the year while Helsinki Cap index increased 8%. STOXX Chemicals (Europe), chemical sector benchmark index for Kemira increased 5% in 2016 (2%). Shares registered a high of EUR 12.55 (12.27) and a low of EUR 8.92 (9.14). The average share price of Kemira was EUR 10.96 (10.86).

Kemira's market capitalization, excluding treasury shares, was EUR 1,848 million at the end of the year 2016 (1,654).

In 2016, Kemira Oyj's share trading volume on Nasdaq Helsinki was 65 million (75) shares. Share turnover value decreased 14% and was EUR 702.7 million (814.7). The average daily trading volume was 256,233 (298,313) shares.

In addition to Nasdaq Helsinki, Kemira shares are traded on several alternative market places or multilateral trading facilities (MTF), for example at BATS, Chi-X and Turquoise. The total value of Kemira Oyj's share trading in 2016 was EUR 95 million (112), of which 32% (33%) was executed on other trading facilities than on Nasdaq Helsinki. Source: Kemira.com.

Up-to-date information on Kemira's share price is available on the company's website at www.kemira.com/investors.

DIVIDEND POLICY AND DIVIDEND DISTRIBUTION

Kemira's dividend policy aims to pay a stable and competitive dividend.

The company's Board of Directors will propose to the Annual General Meeting that a per-share dividend of EUR 0.53 (0.53) totaling EUR 81 million (81) be paid for the financial year 2016. The Annual General Meeting will be held on March 24, 2017. The dividend ex-date is March 27, 2017, dividend record date March 28, 2017, and payment date April 11, 2017.

In 2016, a dividend of EUR 0.53 per share was paid for the financial year that ended December 31, 2015. The dividend record date was March 23, 2016, and the payment (EUR 81 million in total) date April 6, 2016.

BOARD AUTHORIZATIONS

The Annual General Meeting on March 21, 2016 authorized the Board of Directors to decide upon repurchase of a maximum of 4,800,000 company's own shares ("Share repurchases authorization"). Shares will be repurchased by using unrestricted equity either through a tender offer with equal terms to all shareholders at a price determined by the Board of Directors or otherwise than in proportion to the existing shareholdings of the company's shareholders in public trading on the Nasdaq Helsinki Ltd (the "Helsinki Stock Exchange") at the market price quoted at the time of the repurchase. The price paid for the shares repurchased through a tender offer under the authorization shall be based on the market price of the company's shares in public trading. The minimum price to be paid would be the lowest market price of the share quoted in public trading during the authorization period and the maximum price the highest market price quoted during the authorization period.

Shares shall be acquired and paid for in accordance with the Rules of the Helsinki Stock Exchange and Euroclear Finland Ltd. Shares may be repurchased to be used in implementing or financing mergers and acquisitions, developing the company's capital structure, improving the liquidity of the company's shares or to be used for the payment of the annual fee payable to the members of the Board of Directors or implementing the company's share-based incentive plans. In order to realize the aforementioned purposes, the shares acquired may be retained, transferred further or cancelled by the company. The Board of Directors will decide upon other terms related to share repurchases. The share repurchase authorization is valid until the end of the next Annual General Meeting. The Board had not exercised its authorization by December 31, 2016.

The AGM authorized the Board of Directors to decide to issue a maximum of 15,600,000 new shares and / or transfer a maximum of 7,800,000 company's own shares held by the company ("Share issue authorization"). The new shares may be issued and the company's own shares held by the company may be transferred either for consideration or without consideration. The new shares may be issued and the company's own shares held by the company may be transferred to the company's shareholders in proportion to their current shareholdings in the company, or by displaying the shareholders' pre-emption right, through a directed share issue, if the company has a weighty financial reason to do so, such as financing or implementing mergers and acquisitions, developing the capital structure of the company, improving the liquidity of the company's shares or if this is justified for the payment of the annual fee payable to the members of the Board of Directors or implementing the company's share-based incentive plans. The directed share issue may be carried out without consideration only in connection with the implementation of the company's share-based incentive plan. The subscription price of new shares shall be recorded to the invested unrestricted equity reserves. The consideration payable for company's own shares shall be recorded to the invested unrestricted equity reserves. The Board of Directors will decide upon other terms related to the share issues. The share issue authorization is valid until May 31, 2017. The authorization from the AGM 2016 has been used in connection with the remuneration of Board of Directors and the authorization from the AGM 2015 has been used for the remuneration of key employees in 2016.

MANAGEMENT SHAREHOLDING

The members of the Board of Directors as well as the President and CEO and his Deputy held 458,133 (406,691) Kemira Oyj shares on December 31, 2016, or 0.29% (0.26%) of all outstanding shares and voting rights (including treasury shares and shares held by the related parties and controlled corporations). Jari Rosendal, President and CEO, held 40,000 shares on December 31, 2016. Board members are not covered by the share-based incentive plan. Members of the Management Board, excluding the President and CEO and his Deputy, held a total of 106,355 shares on December 31, 2016 (32,089), representing 0.07% (0.02%) of all outstanding shares and voting rights (including treasury shares and shares held by the related parties and controlled corporations). Up-to-date information regarding the shareholdings of the Board of Directors and Management is available on Kemira's website at www.kemira.com/investors.

LARGEST SHAREHOLDERS DECEMBER 31, 2016

	Shareholder	Number of shares	% of shares and votes
1	Oras Invest Ltd	28,278,217	18.2
2	Solidium Oy	25,896,087	16.7
3	Varma Mutual Pension Insurance Company	8,164,836	5.3
4	Ilmarinen Mutual Pension Insurance Company	4,800,451	3.1
5	Nordea funds	1,783,056	1.2
6	Skagen Vekst Verdipapierfond	1,350,000	0.9
7	The State Pension Fund	1,190,000	0.8
8	Veritas Pension Insurance Company Ltd.	1,131,112	0.7
9	Etola Erkki Olavi	1,000,000	0.6
10	Etera Mutual Pension Insurance Company	609,331	0.4
11	Aktia Funds	470,000	0.3
12	LähiTapiola Funds	465,829	0.3
13	Alfred Berg Funds	455,325	0.3
14	Pohjola Funds Managment	428,594	0.3
15	OP-Henkivakuutus Ltd.	413,689	0.3
	Kemira Oyj	2,975,327	1.9
	Nominee registered and foreign shareholders	38,946,080	25.1
	Others, total	36,984,623	23.6
	Total	**155,342,557**	**100.0**

SHAREHOLDING BY NUMBER OF SHARES HELD DECEMBER 31, 2016

Number of shares	Number of shareholders	% of shareholders	Shares total	% of shares and votes
1–100	7,598	23.3	463,931	0.3
101–500	13,998	42.9	3,819,909	2.5
501–1,000	5,135	15.8	3,923,221	2.5
1,001–5,000	4,934	15.1	10,247,683	6.6
5,001–10,000	500	1.5	3,612,609	2.3
10,001–50,000	350	1.1	6,643,382	4.3
50,001–100,000	43	0.1	3,291,981	2.1
100,001–500,000	49	0.2	10,583,444	6.8
500,001–1,000,000	3	0.0	2,118,813	1.4
1,000,001–	12	0.0	110,637,584	71.2
Total	**32,622**	**100.0**	**155,342,557**	**100.0**

KEMIRA OYJ'S BOARD OF DIRECTORS' PROPOSAL TO THE ANNUAL GENERAL MEETING FOR THE DISTRIBUTION OF DISTRIBUTABLE FUNDS AND SIGNING OF THE FINANCIAL STATEMENTS AND BOARD OF DIRECTORS' REVIEW

On December 31, 2016, Kemira Oyj's distributable funds are EUR 822,049,454 of which net profit for the period amounts to EUR 215,781,981.

The Board of Directors proposes to the Annual General Meeting to be held on March 24, 2017 that a dividend of EUR 0.53 per share will be distributed. No dividend will be paid on own shares held by the company as treasury shares on the dividend record date.

On the date of this proposal for the distribution of profits, a total of 152,367,230 shares are held outside the company, the total dividends paid would amount to EUR 80,754,632. The distributable funds of EUR 741,294,822 to be retained as equity.

There have been no material changes in the company's financial position since December 31, 2016. The liquidity of the company remains good, and the proposed dividend payment does not risk the solvency of the company.

Helsinki, February 7, 2017

Jari Paasikivi Chairman	Kerttu Tuomas Vice Chairman
Winnie Fok	Juha Laaksonen
Wolfgang Büchele	Timo Lappalainen
Kaisa Hietala	Jari Rosendal CEO

AUDITOR'S REPORT

(Translation from the Finnish original)

TO THE ANNUAL GENERAL MEETING OF KEMIRA OYJ

REPORT ON THE AUDIT OF FINANCIAL STATEMENTS

OPINION

We have audited the financial statements of Kemira Oyj (business identity code 0109823-0) for the year ended 31 December, 2016. The financial statements comprise the consolidated statement of financial position, income statement, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes, including a summary of significant accounting policies, as well as the parent company's balance sheet, income statement, cash flow statement and notes to the financial statements.

IN OUR OPINION

- the consolidated financial statements give a true and fair view of the group's financial performance and financial position in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and
- the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

BASIS FOR OPINION

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of Financial Statements section of our report.

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

KEY AUDIT MATTER	HOW OUR AUDIT ADDRESSED THE KEY AUDIT MATTER
Goodwill impairment testing Consolidated financial statements as of 31.12.2016 includes Goodwill amounting to EUR 522,4 million. Management has conducted goodwill impairment testing and as a result of the testing conducted, Kemira has not accounted for any impairments over goodwill as at 31.12.2016. Goodwill impairment testing requires substantial management judgment over the recoverable amounts over: • estimations over the projected future cash flow. • long term growth assumptions. • applied discount rate. For further details over the goodwill impairment testing conducted by the management is presented in the note 11 within the consolidated financial statements.	As part of our audit procedures we have evaluated the estimates over the future recoverable cash flows and we have compared, that the forecasts used in the impairment tests are based on approved long term forecast and budgets approved. We have assessed the impairment testing by: • evaluating the key assumptions applied per segment applied. • assessing the growth estimates and comparing them to historical performance. • comparing applied discount rates to independent third party sources. • assessing the sensitivity analysis over the long term assumptions and discount rate. We have assessed the sensitivity analysis, which is disclosed in the consolidated financial statements note 11. We have also assessed those key assumptions, where material change could lead to substantial impairment of goodwill.

KEY AUDIT MATTER	HOW OUR AUDIT ADDRESSED THE KEY AUDIT MATTER
Fair value measurement of available for sale financial instruments Consolidated financial statements as of 31.12.2016 includes Available for Sale Financial assets amounting to EUR 202,5 million. This item consist mainly from shares of Pohjolan Voima Oy (PVO) and Teollisuuden Voima Oyj (TVO) share which fair value is approximately EUR 201,0 million. Fair value measurement of these shares require substantial management judgment relating to the following estimates: • future electricity market prices in Finland. • future electricity production costs. • applied discount rate. For further details over the fair value measurement conducted by the management is presented in the notes 14 and 15 within the consolidated financial statements.	Our audit procedures included assessment of the underlying electricity price and production cost assumptions used in the management's valuation model against the available third party information. We have assessed the processes relating to fair value measurement and reasonableness of the valuation model applied by the management. We have assessed the assumptions that management has applied in the Weighted Average Cost of Capital (WACC) rate which is used as discount rate. We have compared the assumptions and estimates applied by management to other available third party estimates and assessed the reasonableness of these assumptions.

RESPONSIBILITIES OF THE BOARD OF DIRECTORS AND THE CHIEF EXECUTIVE OFFICER FOR THE FINANCIAL STATEMENTS

The Board of Directors and the Chief Executive Officer are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland an comply with statutory requirements. The Board of Directors and the Chief Executive Officer are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the Chief Executive Officer are responsible for assessing the parent company's and the group's ability to continue as going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or cease operations, or there is no realistic alternative but to do so.

AUDITOR'S RESPONSIBILITIES IN THE AUDIT OF FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance on whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with good auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the parent company's or the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the Chief Executive Officer use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the parent company's or the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit. We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

OTHER REPORTING REQUIREMENTS

OTHER INFORMATION

The Board of Directors and the Chief Executive Officer are responsible for the other information. The other information comprises information included in the Board of Directors Review and in the Annual Report, but does not include the financial statements and our report thereon. We obtained the Board of Directors Review prior to the date of the auditor's report, and the Annual Report is expected to be made available to us after the date of the auditor's report.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to Board of Directors Review, our responsibility also includes considering whether the Board of Directors Review has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the Board of Directors Review is consistent with the information in the information in the financial statements and the Board of Directors Review has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed, we conclude that there is a material misstatement in of the information included in the Board of Directors Review, we are required to report this fact. We have nothing to report in this regard.

OTHER OPINIONS

We support that the financial statements should be adopted. The proposal by the Board of Directors regarding the use of the profit shown on the balance sheet is in compliance with the Limited Liability Companies Act. We support that the Board of Directors of the parent company and the Chief Executive Officer should be discharged from liability for the financial period audited by us.

Helsinki, 7 February 2017

Deloitte & Touche Oy
Audit Firm

Jukka Vattulainen
Authorised Public Accountant (KHT)

Quarterly Earnings Performance (EUR million)

QUARTERLY EARNINGS PERFORMANCE

(The figures are unaudited)

	2016					2015				
	1–3	4–6	7–9	10–12	Total	1–3	4–6	7–9	10–12	Total
Revenue										
Pulp & Paper	362.4	361.1	365.2	368.6	1,457.3	314.6	351.3	379.1	372.3	1,417.3
Oil & Mining	75.5	72.7	79.6	81.7	309.5	93.9	89.7	90.1	76.4	350.1
Municipal & Industrial	144.8	154.0	151.5	146.2	596.5	144.5	153.8	155.9	151.5	605.7
Total	582.7	587.8	596.3	596.5	2,363.3	553.0	594.8	625.1	600.2	2,373.1
EBITDA [1]										
Pulp & Paper	46.7	46.2	50.5	44.4	187.8	35.0	34.4	44.9	42.8	157.1
Oil & Mining	6.1	-0.4	3.6	2.3	11.6	11.0	9.5	7.0	3.3	30.8
Municipal & Industrial	18.3	23.5	24.2	18.8	84.8	19.2	22.2	22.9	11.6	75.9
Total	71.1	69.3	78.3	65.5	284.2	65.2	66.1	74.8	57.7	263.8
EBIT [1]										
Pulp & Paper	27.0	25.8	28.5	20.3	101.6	19.6	16.2	25.2	21.6	82.6
Oil & Mining	0.4	-7.4	-2.3	-2.8	-12.1	5.7	2.4	1.3	-6.5	2.9
Municipal & Industrial	11.8	16.5	17.5	11.7	57.5	12.5	15.7	16.2	2.7	47.1
Total	39.2	34.9	43.7	29.2	147.0	37.8	34.3	42.7	17.8	132.6
Finance costs, net	-6.0	-0.3	-6.9	-5.9	-19.1	-7.5	-9.3	-8.2	-5.8	-30.8
Share of the results of associates	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.3
Profit before tax	33.3	34.6	36.8	23.3	128.0	30.5	25.1	34.5	12.0	102.1
Income taxes	-7.6	-7.9	-9.5	-5.1	-30.1	-4.1	-5.8	-7.4	-7.6	-24.9
Net profit for the period	25.7	26.7	27.3	18.2	97.9	26.4	19.3	27.1	4.4	77.2
Net profit attributable to										
Equity owners of the parent	24.5	25.0	25.6	16.7	91.8	25.0	17.6	25.5	2.9	71.0
Non-controlling interests	1.2	1.7	1.7	1.5	6.1	1.4	1.7	1.6	1.5	6.2
Net profit for the period	25.7	26.7	27.3	18.2	97.9	26.4	19.3	27.1	4.4	77.2
Earning per share, basic and diluted, EUR	0.16	0.17	0.16	0.11	0.60	0.16	0.12	0.17	0.02	0.47
NET WORKING CAPITAL										
Inventories	215.4	214.0	214.0	216.9	216.9	220.0	236.0	226.1	207.0	207.0
Trade receivables and other receivables	404.6	404.9	398.9	386.1	386.1	365.4	404.8	399.8	389.8	389.8
Excluding financing items in other receivables	-26.0	-19.3	-15.3	-16.8	-16.8	-10.0	-7.9	-12.5	-13.1	-13.1
Trade payables and other liabilities	462.3	359.1	377.5	405.2	405.2	348.8	354.0	365.8	388.7	388.7
Excluding financing items in other liabilities	-119.1	-20.4	-16.7	-13.6	-13.6	-22.5	-16.7	-23.3	-22.8	-22.8
Net working capital	250.8	260.9	236.8	194.6	194.6	249.1	295.6	270.9	217.8	217.8
INTEREST-BEARING NET LIABILITIES										
Non-current interest-bearing liabilities	666.6	676.8	656.8	649.5	649.5	462.4	692.4	680.3	670.9	670.9
Current interest-bearing liabilities	133.7	167.4	170.7	157.9	157.9	224.9	128.3	134.8	122.7	122.7
Interest-bearing liabilities	800.3	844.2	827.5	807.4	807.4	687.3	820.7	815.1	793.6	793.6
Cash and cash equivalents	156.2	154.3	161.9	173.4	173.4	125.5	109.3	125.2	151.5	151.5
Interest-bearing net liabilities	644.1	689.9	665.6	634.0	634.0	561.8	711.4	689.9	642.1	642.1

1) Includes items affecting comparability.

Quarterly Earnings Performance (EUR million)

	2016					2015				
	1–3	4–6	7–9	10–12	Total	1–3	4–6	7–9	10–12	Total
ITEMS AFFECTING COMPARABILITY IN EBITDA AND EBIT										
Operative EBITDA										
Pulp & Paper	47.9	49.3	51.8	46.3	195.3	36.1	41.3	46.7	46.9	171.0
Oil & Mining	6.5	4.5	4.2	3.2	18.4	11.1	11.4	7.4	3.6	33.5
Municipal & Industrial	18.4	25.1	24.8	20.5	88.8	19.2	22.0	24.1	17.5	82.8
Total	72.8	78.9	80.8	70.0	302.5	66.4	74.7	78.2	68.0	287.3
Total Items affecting comparability	-1.7	-9.6	-2.5	-4.5	-18.3	-1.2	-8.6	-3.4	-10.3	-23.5
EBITDA	71.1	69.3	78.3	65.5	284.2	65.2	66.1	74.8	57.7	263.8
Operative EBIT										
Pulp & Paper	28.2	28.9	30.0	24.5	111.6	20.7	23.2	27.0	25.9	96.8
Oil & Mining	0.8	-1.1	-1.6	-1.9	-3.8	5.8	6.0	1.7	-2.4	11.1
Municipal & Industrial	11.9	18.8	18.1	13.5	62.3	12.6	15.6	17.4	9.6	55.2
Total	40.9	46.6	46.5	36.1	170.1	39.1	44.8	46.1	33.1	163.1
Total Items affecting comparability	-1.7	-11.7	-2.8	-6.9	-23.1	-1.3	-10.5	-3.4	-15.3	-30.5
EBIT	39.2	34.9	43.7	29.2	147.0	37.8	34.3	42.7	17.8	132.6
Operative EBITDA	72.8	78.9	80.8	70.0	302.5	66.4	74.7	78.2	68.0	287.3
Restructuring and streamlining programs	0.0	-4.3	-0.4	-1.1	-5.8	0.0	-0.7	-1.6	-3.4	-5.7
Transaction and integration expenses in acquisition	-1.4	-1.9	-0.5	-1.2	-5.0	-1.0	-6.9	-1.1	-4.0	-13.0
Divestment of businesses and other disposals	0.3	0.0	0.2	0.0	0.5	0.1	-0.2	-0.2	-1.5	-1.8
Other items	-0.6	-3.4	-1.8	-2.2	-8.0	-0.3	-0.8	-0.5	-1.4	-3.0
Total Items affecting comparability	-1.7	-9.6	-2.5	-4.5	-18.3	-1.2	-8.6	-3.4	-10.3	-23.5
EBITDA	71.1	69.3	78.3	65.5	284.2	65.2	66.1	74.8	57.7	263.8
Operative EBIT	40.9	46.6	46.5	36.1	170.1	39.1	44.8	46.1	33.1	163.1
Total Items affecting comparability in EBITDA	-1.7	-9.6	-2.5	-4.5	-18.3	-1.2	-8.6	-3.4	-10.3	-23.5
Items affecting comparability in depreciation, amortization and impairments	0.0	-2.1	-0.3	-2.4	-4.8	-0.1	-1.9	0.0	-5.0	-7.0
Operating profit (EBIT)	39.2	34.9	43.7	29.2	147.0	37.8	34.3	42.7	17.8	132.6
ROCE AND OPERATIVE ROCE										
Operative EBIT	40.9	46.6	46.5	36.1	170.1	39.1	44.8	46.1	33.1	163.1
Operating profit (EBIT)	39.2	34.9	43.7	29.2	147.0	37.8	34.3	42.7	17.8	132.6
Share of profit or loss of associates	0.1	0.0	0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.3
Capital Employed	1,697.8	1,709.6	1,711.5	1,718.2	1,718.2	1,466.2	1,534.0	1,601.6	1,659.5	1,659.5
Operative ROCE, %	9.7	9.8	9.8	9.9	9.9	11.0	11.0	10.6	9.8	9.8
ROCE, %	7.9	7.9	7.9	8.6	8.6	9.3	10.5	10.0	8.0	8.0

INFORMATION FOR INVESTORS

FINANCIAL REPORTS IN 2017

Kemira will publish three interim reports in 2017.

April 26, 2017: Interim report for January–March
July 21, 2017: Interim report for January–June
October 25, 2017: Interim report for January–September

The interim reports and related presentation material are available on Kemira's website at www.kemira.com/investors. Furthermore, Kemira's press releases, Annual Reports (incl. Corporate Responsibility Report and Financial Statements) and other investor information are also available on the website. On the site, visitors can register to receive press releases by e-mail and order the company's Financial Statements. Financial Statements can also be ordered from Kemira Oyj, Group Communications, tel. +358 10 8611.

INVESTOR COMMUNICATIONS

The purpose of Kemira's investor communications is to provide capital markets with open and reliable information on the company and its operating environment in order to give market participants a factual overview of Kemira as an investment.

Kemira's investor communications aims to ensure that everyone operating in the markets has equal access to sufficient and correct information concerning the company, and to ensure that information is disclosed consistently and without delay.

Kemira Oyj is domiciled in Helsinki, Finland, and the company's shares are listed on Nasdaq Helsinki. Kemira Oyj complies with the laws of Finland and the regulations of Nasdaq Helsinki and Finland's Financial Supervisory Authority.

SILENT PERIOD

Kemira observes a silent period before issuing financial statements or interim reports. During the period, Kemira's representatives do not comment on Kemira's financial statements or interim reports for the ongoing reporting period the specific silent period relates to. The schedule for the silent period and publication of financial information and closed periods is displayed on Kemira's website under Investors > Investor Calendar. Kemira's Investor Relation function is responsible for keeping the calendar up-to-date.

ANNUAL GENERAL MEETING

Kemira's Annual General Meeting will be held on Friday, March 24, 2017 at 10.00 a.m. in Marina Congress Center, Katajanokanlaituri 6, Helsinki, Finland. A shareholder who on the record date of the Annual General Meeting, March 14, 2017, is registered in the company's shareholders' register maintained by Euroclear Finland Ltd, is entitled to attend and participate in the Annual General Meeting.

Registration to the Annual General Meeting begins on February 23, 2017 and registration instructions will be published on that day as a stock exchange release and at Kemira's web site at www.kemira.com > Investors > Corporate Governance > Annual General Meeting > Annual General Meeting 2017.

Kemira will release a stock exchange release on the Annual General Meeting's decisions immediately after the meeting.

DIVIDEND DISTRIBUTION

For dividend proposal, please see page 86.

CHANGE OF ADDRESS

Kemira's shareholders are kindly requested to report any change of address to the bank or brokerage firm in which they have their book-entry account. This will also update information in registers, maintained by Euroclear Finland Ltd, which Kemira uses to send mail to its shareholders. If the book-entry account is held by Finnish Central Securities Depository Ltd, changes of address should be reported there directly.

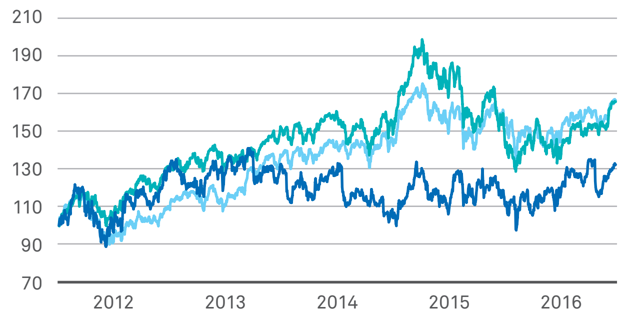
INVESTOR RELATIONS

Olli Turunen, Vice President, Investor Relations
tel. +358 10 862 1255
e-mail: olli.turunen@kemira.com

BASIC SHARE INFORMATION

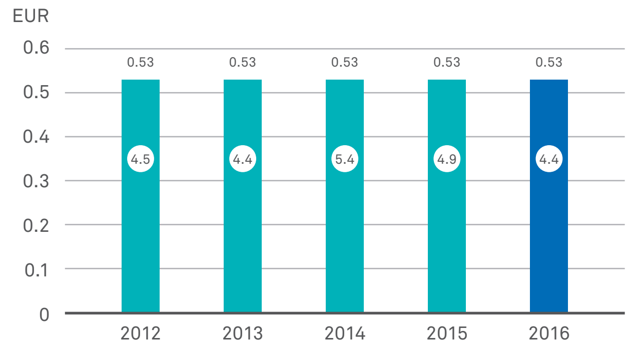
Listed on: Nasdaq Helsinki Ltd
Trading code: KEMIRA
ISIN code: FI0009004824
Industry group: Materials
Industry: Chemicals
Number of shares on December 31, 2016: 155,342,557
Listing date: November 10, 1994

SHARE PRICE 2012–2016



- Kemira Oyj
- EURO STOXX Chemicals
- OMX Helsinki

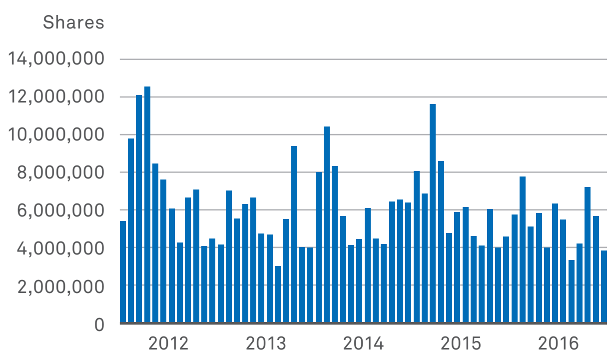
DIVIDEND PER SHARE AND DIVIDEND YIELD [1)]



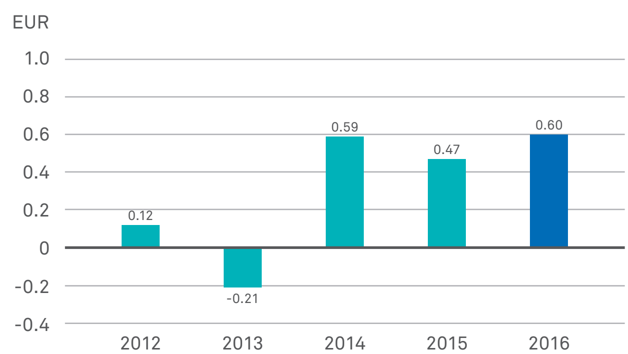
- Dividend per share [1)]
- Dividend yield, % [1)]

1) The dividend for 2016 is the Board of Directors' proposal to the Annual General Meeting.

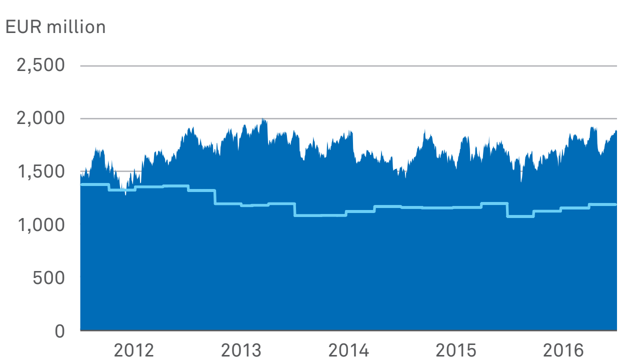
MONTHLY TRADING VOLUME ON NASDAQ HELSINKI 2012–2016



EARNINGS PER SHARE

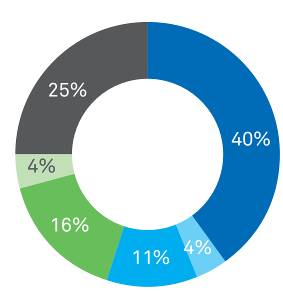


MARKET VALUE AND EQUITY 2012–2016



- Market value
- Total equity

OWNERSHIP DECEMBER 31, 2016



- Corporations
- Financial and insurance corporations
- General goverment
- Households
- Non-profit institutions
- Non-Finnish shareholders incl nominee register

Kemira
Where water meets chemistry™

Kemira Oyj
Porkkalankatu 3
P.O. Box 330
FI-00101 Helsinki
Finland
Tel. +358 10 8611
Fax +358 10 862 1119
www.kemira.com

Kemira is a global chemicals company serving customers in water intensive industries. We provide expertise, application know-how and chemicals that improve our customers' product quality, process and resource efficiency. Our focus is on pulp & paper, oil & gas, mining and water treatment. Kemira shares are listed on the Nasdaq Helsinki Ltd.

FSC
www.fsc.org
MIX
Paperi vastuullisista lähteistä
FSC® C001908

YMPÄRISTÖMERKKI
MILJÖMÄRKT
441 017
Painotuote