

PCC Group Annual Report 2015

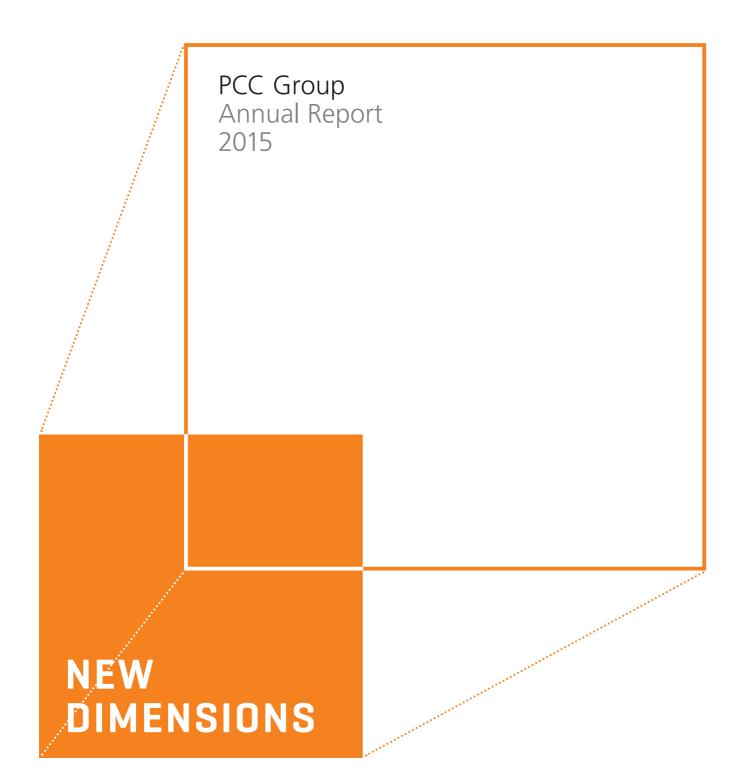


## **PCC AT A GLANCE**

Key figures and financials of the PCC Group per IFRS		2015	2014
Consolidated statement of income	0.0	F74.4	C 47.5
Sales	€m	571.1	647.3
Gross profit	€m	157.2	149.6
EBITDA*	€m	50.8	39.6
EBIT*	€m	26.9	17.6
EBT*	€m	1.2	-7.3
Net result	€m	-2.0	-8.9
Consolidated balance sheet			
Total assets	€m	824.4	682.6
Non-current assets	€m	592.2	455.4
Current assets	€m	232.0	227.2
Equity	€m	135.0	133.5
Non-current provisions and liabilities	€m	477.0	331.8
Current provisions and liabilities	€m	212.4	217.4
Key group indicators			
Equity ratio*	%	16.4	19.6
ROCE*	%	4.6	3.!
Gross cash flow	€m	39.4	41.
Capital expenditures	€m	160.1	103.
Employees at home and abroad (as of Dec. 31)		2,992	2,896
Consolidated sales by segment			
Polyols segment	€m	136.2	147.0
Surfactants segment	€m	101.1	98.8
Chlorine segment	€m	58.3	67.8
Speciality Chemicals segment	€m	161.7	222.
Consumer Products segment	€ m	38.6	42.!
Energy segment	€m	11.3	10.9
Logistics segment	€m	56.8	50.8
Holding/Projects segment	€m	7.0	7.4
Total sales	€m	571.1	647.
Consolidated sales by region			
Germany		122.0	167.7
Poland	€m	225.3	227.8
Other EU Member States	€m	121.3	131.9
Other Europe	€m	39.2	69.6
USA	€m	21.0	18.9
		25.6	
Asia Other Pegians	€m		26.9
Other Regions	€m	16.7	4.6
Total sales	€m	571.1	647.3

Rounding differences possible.

 $<sup>\</sup>mbox{\ensuremath{\star}}$  for explanations and definitions, see page 7.





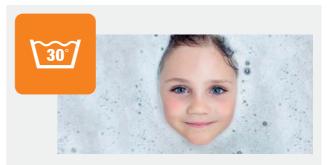
### THE SEGMENTS OF THE PCC GROUP



### **POLYOLS**

Polyols form the basis of polyurethane (PU) foam materials that serve a wide range of applications in many industries and sectors. Examples include our iPoltec® foam technology for the furniture and mattress industries and our PU foam systems for the effective thermal insulation of buildings.

Polyols segment	2015	2014
Total sales 1	€ 136.2 m	€147.0 m
EBITDA	€13.8 m	€12.6 m
Capital expenditures	€4.1 m	€2.4 m
Employees	171	145



### **SURFACTANTS**

Offering multiple effects in foaming, wetting, emulsifying and cleaning, surfactants are primary ingredients in many products. In toothpastes and shampoos they generate the foaming and cleaning action, while in dishwashing detergents they serve to dislodge dirt and grease from hard surfaces.

Surfactants segment	2015	2014
Total sales 1	€101.1 m	€98.8 m
EBITDA	€9.5 m	€6.6 m
Capital expenditures	€2.4 m	€2.8 m
Employees	259	243



### CHLORINE

Chlorine is one of the most important feedstocks for the chemicals industry, yet is also frequently encountered in our everyday lives – for example as a disinfectant in swimming pools. Customers come from sectors such as water treatment, petrochemicals and the food and beverage industries.

Chlorine segment	2015	2014
Total sales 1	€ 58.3 m	€67.8 m
EBITDA	€8.2 m	€8.1 m
Capital expenditures	€38.3 m	€50.7 m
Employees	344	245



### **SPECIALITY CHEMICALS**

This is our biggest-selling segment. Its products include phosphorus-based flame retardants, plasticisers and stabilisers, additives for hydraulic oils and admixtures to improve the flowability of fresh concrete. The biggest business in the segment is our traditional commodities trading unit.

Speciality Chemicals segment	2015	2014
Total sales <sup>1</sup>	€161.7 m	€222.1 m
EBITDA	€5.2 m	€3.9 m
Capital expenditures	€1.4 m	€2.8 m
Employees	363	380



### **CONSUMER PRODUCTS**

Our range of fast-moving consumer goods includes household and industrial cleaners, laundry detergents and personal care products – distributed under Polish brandnames such as "ROKO" and "Roko Eco". Likewise allocated to this segment is our matches and firelighters production.

Consumer Products segment	2015	2014
Total sales 1	€38.6 m	€42.5 m
EBITDA	€–0.1 m	€1.1 m
Capital expenditures	€3.1 m	€4.6 m
Employees	569	618



### **ENERGY**

We manage conventional power plants, primarily aligned to producing energy for our manufacturing activities, and build and operate small environmentally friendly hydropower plants as renewable energy generating facilities with the focus on sites in the Republic of Macedonia and in Bosnia-Herzegovina.

Energy segment	2015	2014
Total sales <sup>1</sup>	€11.3 m	€10.9 m
EBITDA	€7.3 m	€5.2 m
Capital expenditures	€3.4 m	€2.0 m
Employees	179	180



### **LOGISTICS**

With its five terminals, PCC is one of the leading providers of container transport services in Poland. Our logistics network extends from the Benelux countries to Eastern Europe and even China. Our tanker fleet specialises in the road transport of liquid chemicals and operates throughout Europe.

Logistics segment	2015	2014
Total sales 1	€56.8 m	€50.8 m
EBITDA	€4.9 m	€3.9 m
Capital expenditures	€31.2 m	€19.3 m
Employees	367	332



### **HOLDING/PROJECTS**

In this segment, we plan and develop future-aligned projects such as our ultra-modern and environmentally friendly production plant for silicon metal currently under construction in Iceland. The holding company also provides corporate services to the Group companies in fields such as finance and IT.

2015	2014
€7.0 m	€7.4 m
€1.9 m	€–1.8 m
€76.3 m	€18.5 m
740	753
	€7.0 m €1.9 m €76.3 m

## IN A WORD





The continuous creation of new value requires the ability to preserve what has already been achieved together with the well-founded self-confidence that comes from experience and acquired know-how. These form the foundation for the value-led growth of all our portfolio companies. However, in order to properly leverage our growth potential, we also need the determination to engage in new dimensions of entrepreneurial value creation. Hence, day by day, we in the PCC Group are constantly endeavouring to safeguard positions attained while expanding our expertise and looking for opportunities where courage might be rewarded. In this way, we are able to create the best possible conditions for innovation and the development of new fields of business.

Our new MCAA plant will significantly extend the value chain of the Chlorine segment.

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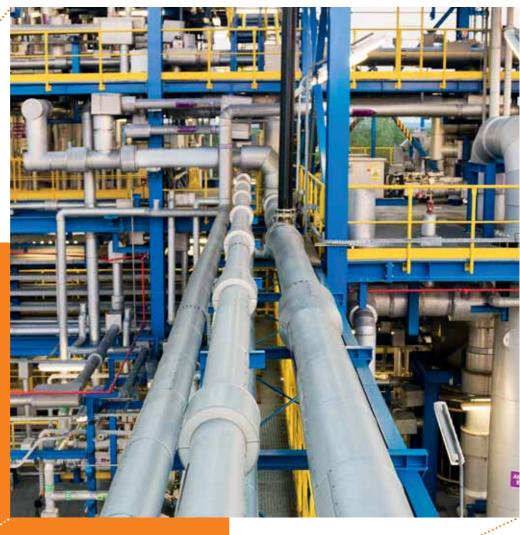
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# INFORMATION FOR OUR INVESTORS

In fiscal 2015, low commodity prices and a weaker Polish zloty resulted in consolidated sales decreasing by 11.8 % from  $\le$  647.3 million to  $\le$  571.1 million. On the purchasing side, however, this decline was more than offset. Gross profit came in at  $\le$  157.2 million and earnings before interest, taxes, depreciation and amortisation (EBITDA) amounted to  $\le$  50.8 million.

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## DEVELOPMENT OF SELECTED GROUP INDICATORS

<b>Key financials and data of the PCC Group</b> per IFRS		2015	2014	Absolute change	Relative change
Sales	€m	571.1	647.3	-76.3	-11.8%
Polyols segment	€m	136.2	147.0	-10.8	-7.4 %
Surfactants segment	€m	101.1	98.8	2.3	2.3 %
Chlorine segment	€m	58.3	67.8	-9.5	-13.9 %
Speciality Chemicals segment	€m	161.7	222.1	-60.3	-27.2 %
Consumer Products segment	€m	38.6	42.5	-3.9	-9.3 %
Energy segment	€m	11.3	10.9	0.4	3.7 %
Logistics segment	€m	56.8	50.8	5.9	11.6 %
Holding/Projects segment	€m	7.0	7.4	-0.4	-4.7 %
Gross profit	€m	157.2	149.6	7.6	5.1 %
EBITDA <sup>1</sup>	€m	50.8	39.6	11.2	28.3 %
EBIT <sup>2</sup>	€m	26.9	17.6	9.2	52.2 %
EBT <sup>3</sup>	€m	1.2	-7.3	8.5	116.6%
Net result	€m	-2.0	-8.9	6.9	77.6 %
Gross cash flow <sup>4</sup>	€m	39.4	41.1	-1.7	-4.2%
ROCE <sup>5</sup>	%	4.6	3.5	1.0°	29.9%
Net debt <sup>6</sup>	€m	439.0	346.5	92.5	26.7 %
Net debt/EBITDA		8.6	8.8	0.1	1.2 %
Group equity	€m	135.0	133.5	1.6	1.2 %
Equity ratio <sup>7</sup>	%	16.4	19.6	-3.2 <sup>9</sup>	-16.2 %
Return on equity <sup>8</sup>	%	-1.5	-6.9	5.4 <sup>9</sup>	78.3 %
Capital expenditures	€m	160.1	103.1	57.0	55.3 %
Employees (Dec. 31)		2,992	2,896	96	3.3 %
Germany		127	133	-6	-4.5%
International		2,865	2,763	102	3.7 %

Rounding differences possible.

<sup>1</sup> EBITDA (Earnings before Interest, Taxes, Depreciation and Amortisation)

<sup>2</sup> EBIT (Earnings before Interest and Taxes) = EBITDA – Depreciation and amortisation

<sup>3</sup> EBT (Earnings before Taxes) = EBIT – Interest and other financial items

<sup>4</sup> Gross cash flow = Net result adjusted for non-cash income and expenses

<sup>5</sup> ROCE (Return on Capital Employed = EBIT ÷ [Average equity + Average interest-bearing borrowings])

<sup>6</sup> Net debt = Interest-bearing borrowings – Liquid funds – Other current securities

<sup>7</sup> Equity ratio = Equity capital ÷ Total assets

<sup>8</sup> Return on equity = Net result for the year  $\div$  Average equity

<sup>9</sup> Change in percentage points



PREFACE BY THE CHAIRMAN OF THE ADMINISTRATIVE BOARD OF PCC SE

Waldemar Preussner, Chairman of the Administrative Board of PCC SE Dear Customors,
Business Partners and Invertors,
Colleagues, Employees,
Ladres and Gentlemen,

I am delighted to present to you herewith the 2015 Annual Report of the PCC Group. Within the Group, sales of most of our segments remained constant, with some increases also being achieved. Nevertheless, consolidated sales fell by 11.8%, due predominantly to the heavy decrease in commodity price levels. We were, however, able to profit from these decreases on the purchasing side, enabling us to improve our earnings result compared the previous year. Investments in 2015 reached a new high. These form the basis for future growth and a continuous increase of our enterprise value in the years to come.

### **GROSS PROFIT UP 5.1 % DESPITE LOWER SALES**

Fiscal 2015 saw gross profit grow from  $\leqslant$  149.6 million to  $\leqslant$  157.2 million, representing an increase of 5.1 %. Earnings before interest, taxes, depreciation and amortisation (EBITDA) came in at  $\leqslant$  50.8 million, representing a rise of  $\leqslant$  11.2 million or 28.3 % year on year. Earnings before taxes on income (EBT) rose by  $\leqslant$  8.5 million, reaching a value of  $\leqslant$  1.2 million in 2015. It should be noted that in the previous year the scope of consolidation was expanded due to revised materiality assessments, resulting in the inclusion of, among others, the Icelandic project company PCC Bakki-Silicon hf. This consolidation effect is retrospective, which means that the prior-year figures in the annual financial statements for 2015 have been restated as required by IFRS.

Sales in the year under review fell 11.8 % from €647.3 million to €571.1 million due to the heavy global decline in commodity prices and the effects of foreign exchange movements. The decline was predominantly felt by the Chemicals division, while the Logistics and the Energy divisions were able to report an increase in sales. Nevertheless, at €496.0 million, the Chemicals division remained by far the dominant revenue generator of the Group and once again made the biggest contribution to net earnings. However, business performance in the segments Polyols, Surfactants, Chlorine, Speciality Chemicals and Consumer Products was mixed. Overall, our strategic alignment to higher-grade, higher-value speciality products brought dividends. The switch successfully completed around the middle of 2015 which saw our chlorine production process discard amalgam technology for the more environmentally friendly and energy-efficient membrane technology also bore its first fruits. By contrast, final commissioning of the new plant for ultra-pure monochloroacetic acid (MCAA), with which we will significantly extend our value chain in the Chlorine segment, was delayed to beyond the turn of the year. From the middle of 2016, the MCAA business unit will then likewise be making a contribution to consolidated sales and earnings.

# >> INVESTMENTS IN 2015 REACHED A NEW HIGH. THESE FORM THE BASIS FOR FUTURE GROWTH AND A CONTINUOUS INCREASE OF OUR ENTERPRISE VALUE IN THE YEARS TO COME. <<

The Logistics division of the PCC Group was once again able to improve its year-on-year performance due in particular to increasing sales and profits generated by the Intermodal Transport business unit. With the completion of several container handling terminals in Poland in 2015, this division has successfully created a major platform for future growth.

Within the Energy division, the Conventional Energies business unit encompassing the power plant at our site in Brzeg Dolny and the combined heat and power generator PCC Energetyka Blachownia Sp. z o.o. remains the stronger performer. For the first time in 2015, however, the Renewable Energies business unit benefited from a total of five small hydropower plants being in operation throughout the year. The start of construction of a sixth power plant is planned for 2016.

In the Holding/Projects division, divestment of our telecommunications and data centre activities had a positive effect on earnings. The sale of these marginal operations represented a continuation of our strategy to steadily optimise our investment portfolio. In this division particularly, however, there were earnings-relevant changes in the prior-year figures due to the already mentioned inclusion of the Icelandic company PCC BakkiSilicon hf in the consolidated financial statements and other retrospective restatements in compliance with IFRS. The construction work on the silicon metal production plant in Iceland has been progressing to schedule since its inception around the middle of 2015. Income generation by this business unit is expected to start in 2018.

### MARKET CAPITALISATION OF PCC COMPANIES REACHES € 353 MILLION

The market value of affiliates successfully listed on the Warsaw Stock Exchange in recent years has developed well. The market capitalisation of PCC Rokita SA, PCC Exol SA and PCC Intermodal S.A. as of December 31, 2015 amounted to a total of €353 million, representing a year-on-year increase of €20 million or 5.9 %. PCC SE is the clear majority shareholder in respect of each of these portfolio companies. The market value of the share package held as of year end was €289 million.

### **EXPECTATIONS FOR 2016**

As in previous years, the strategy adopted by the PCC Group will continue to be aligned to sustainable investments and business development with respect to our portfolio companies, with our focus firmly fixed on continually increasing our enterprise value. As a growth-led investor, the holding company PCC SE intends to continue supporting its affiliates in the expansion and extension of their particular strengths over the long term – while also optimising and diversifying its investment portfolio along the way. The investments made in 2015 will, for the first time, make a full-year contribution to the Group earnings of fiscal 2016. In addition, further facilities are due to become operational in the course of the year, with the MCAA plant coming on stream and various expansion investments undertaken, for example, in the Polyols segment. Thus, once again in the current fiscal year, we will be consolidating our foundations for further growth with prospects for a continued increase in both enterprise value and operating profit. Taken overall, we anticipate that 2016 will end with a satisfactory, positive earnings result above that of the prior year.

### A WORD OF THANKS

As is the case every year, I would like to extend my particular thanks to you, our employees. It constantly gives me pride and delight to witness your commitment, your motivation and your creativity as you make your indispensable contribution to the achievements of PCC, helping to drive it forward to a sustainable, profitable future. My Administrative Board colleagues, the Group management and I know that these promising prospects owe much to your immense dedication, on which we continue to rely as an essential basis for our business development.









Again in 2015, the modernisation and expansion of our chemical production facilities was at the focus of our investment activity.

I would also like to extend my gratitude to our several thousand investors. As our financial backers, your confidence in and commitment to us are, of course, also essential to our success. By subscribing to our bonds, a large number of you have supported our progress over many years; indeed, many of you have accompanied us on our journey since our first bond issuance in 1998. The confidence you place in us means we bear a great responsibility, of which we are constantly conscious. Please be assured, therefore, that we will continue to dedicate our efforts to maintaining your faith in us as your partner.

I trust that PCC SE can look forward to enjoying your confidence and support as we pursue our long-term business goals aligned to creating and increasing enterprise value.

Duisburg, June 2016

Waldemar Preussner

Chairman of the Administrative Board of PCC SE

## CORPORATE BODIES

## ADMINISTRATIVE BOARD AND MANAGING DIRECTORS OF PCC SE



### **REINHARD QUINT**

### Member of the Administrative Board of PCC SE

Reinhard Quint (73) began supporting PCC in an advisory, non-executive role in 2002. Since the transformation of the Group in 2007 into a European corporation (Societas Europeae, abbreviated: SE), he has been a member of the Administrative Board of PCC SE. He also holds the following mandate: he is a member of the Corporate Development Council of Duisburger Hafen AG. Prior to that he was for many years Chairman of ThyssenKrupp Services AG (known today as ThyssenKrupp Materials International GmbH).

### **WALDEMAR PREUSSNER**

### Chairman of the Administrative Board of PCC SE

In 1993, Waldemar Preussner (57) established the company Petro Carbo Chem Rohstoffhandelsgesellschaft mbH (today: PCC Trade & Services GmbH) in order to take advantage of the new opportunities arising from market liberalisation in Eastern Europe. The company remains at the core of the current PCC Group. 1998 saw the carve-out of the holding company PCC AG, and in 2007 its corporate form was changed to that of a European corporation. Waldemar Preussner is the sole shareholder of PCC SE and is Chairman of its Administrative Board. He also holds a number of supervisory board mandates within the PCC Group.

The Administrative Board of PCC SE is made up of three members:

- ▶ Waldemar Preussner, Dipl.-Volkswirt (Chairman)
- Dr. rer. oec. (BY) Alfred Pelzer (Vice Chairman)
- ▶ Reinhard Quint

PCC SE is headed by its two Managing Directors:

- ▶ Ulrike Warnecke
- Dr. Alfred Pelzer



### **ULRIKE WARNECKE**

### **Managing Director of PCC SE**

Ulrike Warnecke (54) has held directorships with PCC since the company was established. As Managing Director of PCC SE, she is primarily responsible for Finance, Human Resources and Public Relations. Her operational responsibilities extend to the segments Speciality Chemicals and Consumer Products. She is the Managing Director of our most important trading company, the founding entity PCC Trade & Services GmbH, and is a member inter alia of the supervisory board of PCC Consumer Products S.A.

### DR. RER. OEC. (BY) ALFRED PELZER

## Vice Chairman of the Administrative Board and Managing Director of PCC SE

Dr. rer. oec. (BY) Alfred Pelzer (56) has been in managerial positions with PCC since 1995. In 2007, he was appointed Vice Chairman of the Administrative Board of PCC SE. He is also a Managing Director of PCC SE with primary responsibility for the operational areas of chemical production, logistics, sales and distribution. He holds a number of supervisory board mandates within the PCC Group, including at PCC Rokita SA, PCC Exol SA, PCC Synteza S.A. and PCC Intermodal S.A.

### THE DIREKTINVEST UNIT OF PCC SE

### PCC SE CORPORATE BONDS - SINCE 1998 AN ESSENTIAL INSTRUMENT IN FINANCING OUR GROWTH

The Group holding company PCC SE finances itself through a combination of equity funds and borrowings, whereby the issuance of corporate bonds (bearer debentures) constitutes an essential financing instrument. These enable us to respond promptly to newly emerging markets or investment opportunities and allow us to flexibly finance business purchases and also the organic growth of our Group without undue reliance on the banks.

Consequently, the issuance of bonds – primarily to a wide circle of private investors, but also and increasingly to institutional investors – will remain a central component of our financing strategy. At the same time, we are endeavouring to expand our funding platform in tandem with this approach through specific project-related and loan-based financing packages, and also through partial flotations of individual Group entities.

In keeping with our conservative business philosophy, we only create funds through our security emissions to the extent needed by us as a growth-led investor to promote the further development of the PCC Group.

### PCC SE bonds as of December 31, 2015

### **PCC. Direktinvest**

ISIN	Fixed coupon p. a.	Start of tenor	End of tenor	Listing	Nominal value in €k as of Dec. 31, 2015
DE000A11P9V6	4.75 %	Apr.1, 2014	Apr. 1, 2016 <sup>1</sup>	Frankfurt	7,311
DE000A1PGNR8	7.25 %	Jun. 1, 2012	Jul. 1, 2016	Frankfurt	12,968
DE000A12T7C5	4.25 %	Oct. 1, 2014	Oct. 1, 2016	Frankfurt	9,177
DE000A1PGS32	7.25 %	Oct. 1, 2012	Dec. 1, 2016	Frankfurt	29,995
DE000A1EWB67	6.50 %	Oct. 1, 2010	2012-2016 <sup>2</sup>	-	1,351
DE000A1EWRT6	6.50 %	Feb. 15, 2011	2012-2016 <sup>2</sup>	_	269
DE000A13R7R4	4.00 %	Dec. 1, 2014	Jan. 1, 2017	Frankfurt	10,000
DE000A14KJR0	4.00 %	May 1, 2015	Jul. 1, 2017	Frankfurt	12,005
DE000A1R1AN5	7.25 %	Feb. 1, 2013	Oct. 1, 2017	Frankfurt	29,768
DE000A162AN1	3.50 %	Oct. 1, 2015	Dec. 1, 2017	Frankfurt	9,378
DE000A1TM979	7.00 %	Jul. 1, 2013	Apr. 1, 2018	Frankfurt	15,654
DE000A1YCSY4	7.00 %	Dec. 1, 2013	Oct. 1, 2018	Frankfurt	19,996
DE000A13R5K3	6.50 %	Oct. 15, 2014	Jan. 1, 2019	Frankfurt	13,949
DE000A11QFD1	6.75 %	May 15, 2014	Apr. 1, 2019	Frankfurt	8,909
DE000A13R7S2	6.25 %	Dec. 1, 2014	Oct. 1, 2019	Frankfurt	20,000
DE000A14KJ35	6.00 %	May 1, 2015	Apr. 1, 2020	Frankfurt	19,278
DE000A162AP6	5.00 %	Oct. 1, 2015	Oct. 1, 2020	Frankfurt	8,591
DE000A13SH30	6.75 %	Dec. 1, 2014	Oct. 1, 2021	Frankfurt	20,000
DE000A14KJ43	6.50 %	May 1, 2015	Apr. 1, 2022	Frankfurt	16,261
DE000A162AQ4	6.00 %	Oct. 1, 2015	Oct. 1, 2022	Frankfurt	13,678

<sup>1</sup> This bond was redeemed on maturity as of April 1, 2016.

<sup>2</sup> The two redeemable bonds DE000A1EWB67 and DE000A1EWRT6 will be amortised from January 1, 2012 through to maturity on October 1, 2016 in regular quarterly instalments equating to 5 % of the nominal value of the issue at 100 %.

Relatively small issuance volumes ranging up to €40 million afford us the necessary flexibility to cover our financing needs. In addition, spreading our liabilities over a larger number of relatively small issuances prevents the occurrence of sudden financial burdens and creates a smoother process of fund generation and debt repayment.

PCC is one of Germany's most experienced issuers of corporate bonds: since the first issuance on October 1, 1998, PCC has – as of December 31, 2015 – issued 52 corporate bonds and one profit participation certificate. Of these instruments, we have redeemed 32 bonds as of the reporting date, with all interest payments made and debt servicing requirements satisfied to schedule.

### **PCC SE SECURITIES IN CIRCULATION**

As of December 31, 2015, there were a total of 20 bonds and one profit participation certificate in circulation, representing a combined nominal volume of around € 289.5 million. Since the reporting date, the 4.75 % bond DE000A11P9V6 with a placed volume of € 7.3 million was redeemed on maturity as of April 1, 2016. A new bond was issued on May 1, 2016. The corporate bonds of PCC SE currently available for subscription can be found on the internet at www.pcc-direktinvest.eu.

### PCC SE profit participation certificate as of December 31, 2015

### **PCC. Direktinvest**

ISIN	Basic interest rate p. a.	Start of tenor	End of tenor	Listing	Nominal value in €k as of Dec. 31, 2015
DE000A0MZC31	8.75 %	Oct. 1, 2007	Unlimited <sup>1</sup>	Frankfurt	10,997

### PCC SE bond redemptions 2015<sup>2</sup>

### **PCC. Direktinvest**

	End of tenor	Listing	in €k
Apr. 1, 2013	Apr. 1, 2015	Frankfurt	14,999
Apr. 1, 2011	Jul. 1, 2015	Frankfurt	26,665
Dec. 1, 2013	Oct. 1, 2015	Frankfurt	10,000
Oct. 1, 2011	Dec. 1, 2015	Frankfurt	21,903
	Apr. 1, 2011 Dec. 1, 2013	Apr. 1, 2011 Jul. 1, 2015 Dec. 1, 2013 Oct. 1, 2015	Apr. 1, 2011 Jul. 1, 2015 Frankfurt  Dec. 1, 2013 Oct. 1, 2015 Frankfurt

- 1 Callable with one year's notice, first date of redemption: December 31, 2017, thereafter to the end of each quarter.
- 2 The redemption volumes of the two redeemable bonds DE000A1EWB67 and DE000A1EWR76 have not been included in this table. They are being amortised from January 1, 2012 through to maturity on October 1, 2016 in regular quarterly instalments equating to 5 % of the nominal value of the issue at 100 %.

## MARKET CAPITALISATION OF PCC COMPANIES IN WARSAW REACHES € 353 MILLION

PCC now has three Group companies listed on the Warsaw Stock Exchange (GPW) in the form of PCC Rokita SA, PCC Exol SA and PCC Intermodal S.A. The market value of these PCC affiliates as of the reporting date totalled €353 million.

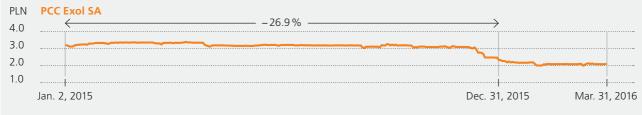
PCC SE remains the strategic investor in respect of all these listed subsidiaries. A transparent market price, a strengthened equity base and the opportunity of also funding future investments through additional equity measures are the motivations driving PCC's flotation policy.

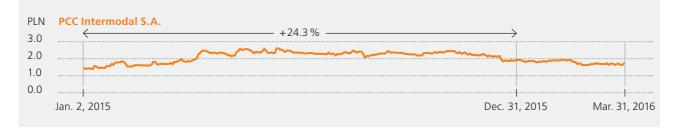
Most recently, PCC SE successfully floated our biggest chemicals company, PCC Rokita SA. Since the IPO in June 2014, the share price has almost doubled. As of December 31, 2015, the closing price of PCC Rokita SA shares (PLPCCRK00076) was PLN 48.20, representing an increase of 26.5 % year on year. At the end of the year, its market capitalisation amounted to the equivalent of €224 million. Its share value has continued to rise in the course of the current fiscal year, reaching a closing price of PLN 54.57 as of March 31, 2016.

At PLN 2.34, the closing price of surfactants manufacturer PCC Exol SA's shares (PLPCCEX00010) as of December 31, 2015 was 26.9 % down year on year, despite the fact that the company tripled its EBT (earnings before taxes). This lack of response to performance is primarily due to a limited free

### Price performance of PCC shares on the Warsaw Stock Exchange (GPW)









Production facilities at PCC Rokita SA in Brzeg Dolny. The share price of the company has almost doubled since its flotation in 2014.

float and resulted in a reduction in the company's market capitalisation to the equivalent of €95 million. There were no changes in share ownership in 2015. In March 2016, PCC SE purchased a share package from a minority shareholder, increasing our stake in PCC Exol SA's capital to 88.64%, thus further underlying our commitment to this segment.

The price of shares in PCC Intermodal S.A. (PLPCCIM00014) in fiscal 2015 rose by 24.3 %. The stock closed at PLN 1.89 as of December 31, 2015. The market capitalisation of this company as of the reporting date amounted to the equivalent of  $\in\!34$  million. The closing price on March 31, 2016 was PLN 1.82. In 2015, PCC SE acquired from a minority shareholder a share package in this company amounting to 7.1 % of its capital, increasing the PCC SE stake to 69.5 %.

## INVESTOR RELATIONS AT PCC SE ENSURING THAT OUR INVESTORS CONSTANTLY RECEIVE TRANSPARENT AND RELIABLE INFORMATION

Current corporate and financial data relating to the PCC Group can be found at any time on the internet under the Direktinvest section of www.pcc.eu and also at www.pcc-financialdata.eu. The certified consolidated financial statements of the PCC Group, which we publish each year in the form of an Annual Report, are also available for downloading in PDF form from an online archive. This archive contains all the annual reports since first published for fiscal 2003, and also all the quarterly reports that have been regularly published since 2001. The Direktinvest section on www.pcc.eu also contains information relating to new debt instrument issuances and bonds currently in circulation.

### PCC INVESTORS' DAY – GROUP MANAGE-MENT IN PERSONAL DISCUSSIONS WITH INVESTORS

Each year, traditionally in early summer, PCC SE invites its financial backers to its traditional Investors' Day at the PCC Villa, our Group headquarters in Duisburg-Homberg. On this festive occasion, we offer our investors opportunities to talk directly with our management on recent business performance, strategy and PCC's current and future investment programme. Over the years, between 1,000 and 1,500 of our investors have regularly availed themselves of this chance to interact personally with the Chairman of the Administrative Board, Waldemar Preussner, and the Managing Directors, Ulrike Warnecke and Dr. Alfred Pelzer, and also with the decision-makers and product managers of the German Group companies.

### PCC INFORMATION EVENINGS - PCC SE ROADSHOWS HELD IN NUMEROUS CITIES ACROSS GERMANY

In the fourth quarter of each year, we also invite investors and stakeholders to attend our PCC Information Evenings which we hold in various cities across Germany. During these events, members of the senior management present PCC as a company group and PCC SE as a bond issuer, while also making themselves available for one-on-one discussions.

## FINANCIAL REPORTING AT PCC SE IN ACCORDANCE WITH IFRS

PCC SE is the holding company of the PCC Group. The focus of its activities is on the sustainable investment management of its portfolio of majority and minority interests. One of our primary objectives in this regard is to create and continuously increase enterprise value.

The consolidated financial statements of the PCC Group are prepared in accordance with International Financial Reporting Standards (IFRS) as adopted and endorsed by the European Union. The following condensed financial information relating to PCC SE has likewise been prepared in accordance with IFRS.

The IFRS financial statements of PCC SE differ from those prepared according to the German Commercial Code (HGB, aka German GAAP) primarily in the valuation of financial assets. Several investments of PCC SE are listed on stock exchanges for which there are regular market prices available. These form the basis for determining their fair value. In the case of investments for which there are no market prices publicly available, the valuation basis is provided either by recent transactions or valuation models. Changes in the valuation of investments are recognised per IFRS in equity under other comprehensive income.

### PCC SE statement of comprehensive income per IFRS

Figures in € k	2015	2014
Result from investments and affiliated companies <sup>1</sup>	21,718	38,836
Other operating income	7,325	5,155
Other operating expenses	16,428	16,349
Depreciation & amortisation	701	664
Interest result, net	-11,687	-10,713
Other financial income (+), expenses (–)	-1,507	-1,953
Earnings before taxes (EBT)	-1,279	14,312
Taxes on income	74	-42
Net result	-1,353	14,354
Fair value measurement of financial assets <sup>2</sup>	84,666	-6,380
Deferred taxes recognised in OCI	-25,400	1,914
Total income and expenses recognised in equity	59,266	-4,466
Total comprehensive income	57,913	9,888

<sup>1</sup> Result from investments and affiliated companies contains gains/losses from disposal of financial assets, dividends, changes in investments accounted for using the equity method, and impairments.

<sup>2</sup> According to IAS 39 all financial investments have been classified as available-for-sale (AfS). Of these in 2015, three stock-listed investments plus one participation have been measured as level 1 (based on market prices), all other investments as level 3 (based on valuation methods). Level 3 measures were used as no market prices and no recent comparable information on transactions were available.

PCC SE's net debt decreased year on year from €228.5 million to €227.0 million. According to the IFRS statement reproduced here, its equity ratio amounts to 48.2 %, which means it has remained roughly constant with respect to the previous year. The primary assets of PCC SE are non-current

financial investments. The amount disclosed under investments accounted for using the equity method decreased due to the sale of the telecommunications activities in the year under review.

### **PCC SE** balance sheet per IFRS

Figures in €k	Dec. 31, 2015	Dec. 31, 2014	Jan. 1, 2014
Non-current assets	792,258	689,191	701,457
Intangible assets	251	106	149
Property, plant and equipment	7,651	6,940	6,183
Investment property	2,572	2,507	2,422
Investments accounted for using the equity method	37	6,123	13,031
Non-current financial investments	781,504	673,189	679,614
Other non-current financial assets	242	325	58
Current assets	87,582	63,060	58,855
Trade accounts receivable	6,839	14,496	15,727
Other receivables and other assets	15,856	30,487	28,524
Current financial investments	26,069	12,107	1,441
Cash and cash equivalents	38,818	5,970	13,164
Total assets	879,840	752,251	760,312
Equity	424,340	364,894	374,702
Non-current provisions and liabilities	386,821	307,220	317,934
Deferred tax liabilities	156,747	134,250	136,788
Non-current financial liabilities	230,074	172,970	181,146
Current provisions and liabilities	68,680	80,137	67,676
Other provisions	395	571	464
Trade accounts payable	978	1,732	1,406
Current financial liabilities	61,829	73,558	61,479
Other liabilities	5,478	4,276	4,327
Total liabilities	879,840	752,251	760,312

The following table shows the fair values of PCC SE's investment portfolio. In all, this investment portfolio of PCC SE comprising subsidiaries, associates, joint ventures and shareholdings, as of December 31, 2015, has a fair value of

### Fair value of the investment portfolio of PCC SE

Dec. 31, 2015	Dec. 31, 2014
288,549	269,576
188,881	148,974
75,765	103,384
23,902	17,218
433,068	340,357
194,534	87,857
62,079	33,786
61,602	92,147
35,322	34,751
33,285	12,760
19,949	13,150
5,751	7,971
2,506	5,035
18,041	52,900
721,617	609,933
	288,549 188,881 75,765 23,902 433,068 194,534 62,079 61,602 35,322 33,285 19,949 5,751 2,506 18,041

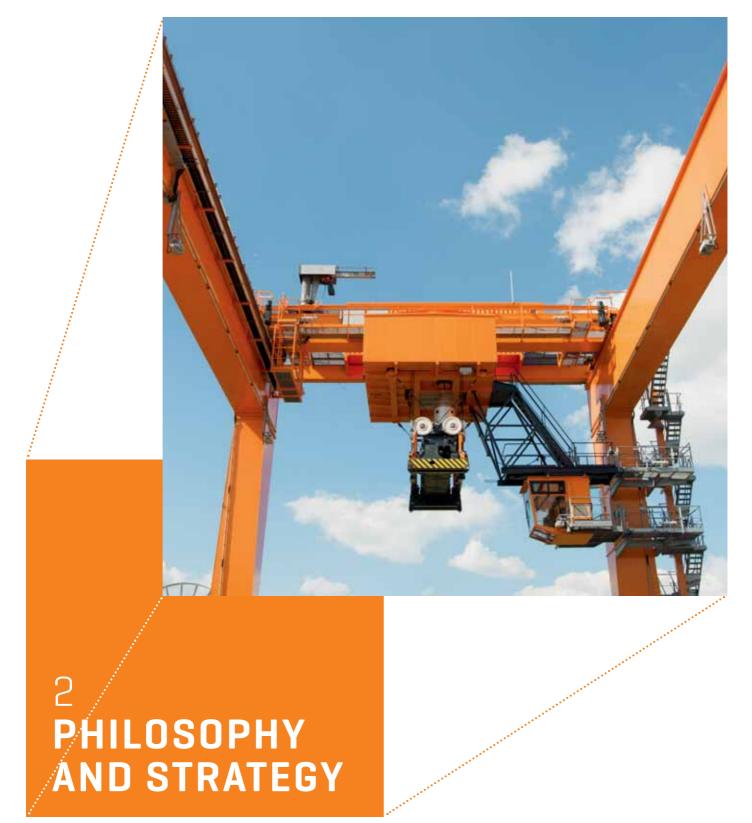
<sup>1</sup> Only the shares held by PCC SE as of the reporting date; converted to the closing rate as of the reporting date if in foreign currency.



In recent years, our biggest chemicals company, PCC Rokita SA, has increased its annual capacity for the manufacture of polyols to 100,000 metric tons. The photo shows polyol plant 3 (top) and the tanks for polyol storage (right).







The core objective of our Group strategy is to establish new corporate values and to constantly enhance those already in place, thereby strengthening our investors' confidence in us. Consistent with this, our corporate philosophy is founded on values such as dependability and continuity with respect to all of our stakeholders, and we rely in particular on the know-how and dedication of our employees.

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## THE CORPORATE PHILOSOPHY OF PCC

As an investor, PCC looks to the long term and our entire group of companies is aligned to sustainable growth. The common goal of management and the workforce is to continually increase the value of our investments through hard work, dynamism and innovative strength and to constantly generate new added value.

Our actions are defined at all times by both business acumen and awareness of our responsibilities. This is expressed in an array of basic values such as credibility and dependability, honesty and a cooperative approach, which as a whole constitute to a certain extent the DNA of our corporate philosophy and our Group strategy. We regard these values as the basis essential for the success and long-term positioning of PCC in global markets characterised by increasingly rapid change. This is because they serve as a point of reference as we strive to sustainably occupy lucrative niches in a rising number of sectors and industries, to generate higher profits by enhancing our effectiveness and to continually optimise our portfolio. The clear guidelines that result from our values are set out below.

Our values enable us to resolutely exploit new business and product areas as soon as they arise. In this context, we constantly assess the current market situation and adopt a conservative and risk-aware approach to analysing profit potential. When selecting our investments, we always align our decision-making processes to the likelihood of sustainable growth and stable cash flows. We are firmly focused on generating synergies and achieving economies of scale, pursuing opportunities for horizontal and vertical integration, and also the consolidation of our activities, whenever these become available.

We only enter new areas of activity once we have a thorough understanding of the business and its risks. We also hive off operations where opportunities for this appear lucrative or the long-term returns expected are no longer achievable – and also where the released resources can be utilised more efficiently elsewhere.

The inexorable globalisation of markets entails risks, but also – and especially – opportunities for further sustainable growth. The dedication and initiative of our employees, as well as their cultural diversity most importantly, are especially helpful in enabling us to seize these opportunities. On the one hand this is because our most important production and sales markets are traditionally in the still rapidly emerging economies of Central, Eastern and South-East Europe, and on the other hand, because we are committed to monitoring new geographic regions for possibilities of business development.

Against this background, we are steadily improving our business processes, our performance culture and our flexibility in order to be able to respond at all times quickly to market changes. At the same time, to pursue our strategic alignment, we have defined clear sustainability guidelines which we are constantly adapting and refining. These include, for example, further enhancing plant safety and complying with the latest environmental standards in our Group companies, improving our products – including their ecological credentials – through ongoing research and development, offering ever more efficient programmes for workforce training and qualification, and intensifying open and honest communica-

tion with stakeholder groups. These groups are given equal consideration and include our customers, employees, investors, suppliers and lenders as well as the communities and ecological environment in which we operate.

At all times, we link this holistic approach to sustainability to our quality and cost awareness so as to ensure an enduring balance between the interests of all stakeholders while effectively fulfilling our economic, ecological and social responsibilities. In this Annual Report, we have dedicated an entire section to our sustainability strategy and the initiatives pursued by our individual Group companies (see page 34). First, however, we would like to set out our guiding principles upon which we base our business activities, and also the content of our basic values and our Code of Ethics and Conduct.

### THE GUIDING PRINCIPLES OF PCC

### **CORPORATE MISSION**

PCC is a value-led, internationally operating management and investment company. Through the largely long-term, sustainable development and optimisation of our investment portfolio, our goal is to continually enhance our existing corporate values and to establish new values, thus ensuring that we are a trusted partner for all our stakeholders.

### **EMPLOYEE GUIDE**

Our employees are our most important assets and the primary factor for our success. As a growth-oriented, internationally structured corporation, PCC requires committed and competent people in order to be able to operate successfully on its various markets. We place great value on cultural and technical diversity, conscious of the benefits accruing from the interchange and knowledge transfer that this promotes. We regard our ability to harness this diversity anew and on a daily basis - and from it to create a corporate whole - as one of our greatest strengths. Our dealings with one another within the corporation are also characterised by appreciation, mutual understanding, openness and fairness - irrespective of the individual position of each employee within the organisation. In particular, we attach much importance to open and transparent communication, which makes our work even more effective and furthers the development of our corporate group.

We achieve our corporate targets through a shared dynamism and the personal commitment of each individual. The flexibility of our employees and their willingness to develop their skills enable us to successfully meet the challenges we encounter. We afford our people scope to pursue their own profit-aligned initiatives, and opportunities to assume task or project ownership under their own responsibility. We support them in their further personal development by properly preparing them for new duties and ensuring that they receive the appropriate training.

### **LEADERSHIP GUIDE**

For us, leadership means defining consistently profit-oriented targets and devising appropriate strategies and concepts to enable their achievement. At the same time, leadership also means providing our people with the motivation to work together with management so that we can realise our shared objectives. And even though it is management that ultimately bears the responsibility for the business results of PCC, individual initiative and creativity among our employees are specifically encouraged to the full extent possible. Our people are given decision-making competences on the basis of the principle of "as much managerial guidance as necessary, as much individual responsibility as possible".

In employee meetings, management systematically identifies the strengths of our high-performers and plans their individual careers within the corporation. In regular dialogues, we reappraise the development possibilities of managerial staff and co-workers, agreeing on this basis, and with the individuals concerned, appropriate development targets and actions.

PCC SE pays wages and salaries in conformity with market standards. Enshrined in our employment guidelines is the commitment that men and women shall receive the same compensation for the same work. Should variations nevertheless occur in individual cases, we will make every endeavour to guickly rebalance the situation.

## BASIC VALUES AND CODE OF ETHICS AND CONDUCT

We have summarised our general behavioural rules in the form of our basic values and a Code of Ethics and Conduct which each and every employee is expected to acknowledge and recognise with their signature.







Employees of the PCC Group in laboratory and production work: their dedication makes a critical contribution to the long-term profitable development of PCC.





### **BASIC VALUES**

### **PREAMBLE**

We aim to achieve the highest standards of behaviour in all that we do, ensuring that our actions are in full compliance with the following basic values which apply across the entire PCC Group:

### 1. CUSTOMER ENGAGEMENT

- ▶ We remain carefully focused on our customers and their needs, aware that the knowledge thus acquired enables us to identify and seize market opportunities and develop new business concepts.
- ▶ We maintain close and permanent contact with our customers, expanding and extending them as part of an ongoing process.
- We regard all customers as partners. Together, we establish a flexible set of ground rules to govern our collaboration.
- ▶ We support our customers in times of difficulty for them.

### 2. HONESTY AND CREDIBILITY

- ▶ We are committed to upholding honourable business principles.
- ▶ We are realistic in assessing our abilities and possibilities and ensure that information communicated to our stakeholders in this regard is transparent and accurate.
- ▶ We earn the trust of all our stakeholders through reliability and credibility in our actions.

### 3. INITIATIVE AND INVOLVEMENT

- We work with initiative and support one another at all levels of our organisation.
- ▶ We accept challenges with engaged enthusiasm and express our own opinions with unequivocal clarity.
- We realise defined objectives by combining a dynamic team approach with our own personal commitment.
- Together, we create the conditions for successful work capable of satisfying both ourselves and all our stakeholders.

### 4. MUTUAL RESPECT AND COOPERATION

- From our platform of cultural and technical diversity, we support and complement one another in our work, thus promoting our sense of community.
- ▶ We treat all colleagues with respect as honourable partners, without regard to their position in the Group.
- ▶ We build positive interpersonal relationships and treat others as we would like to be treated ourselves.
- ▶ We willingly share our knowledge, experience and information with all interested co-workers, in full awareness that this makes an important contribution to the development of our Group and to further increasing the efficiency of our work.
- ▶ Employees who share their knowledge with their colleagues are held in high esteem. Such attitudes strengthen their position within our Group and shall in no way be allowed to be detrimental to them.

### **CODE OF ETHICS AND CONDUCT**

PCC SE is an investment company and the parent and holding company of the PCC Group. It operates a stable and future-aligned port-folio in the chemicals, energy and logistics sectors. The majority of the Group's sites are located in Europe. The PCC Group is furthermore represented in the USA, Thailand and Ghana.

The PCC Group provides services on an international scale at a high technical and qualitative level and at the same time is a dependable and integral partner to all stakeholders.

PCC is convinced that long-term business success is closely connected to compliance with laws and regulations as well as with ethical standards.

For this reason, PCC has drawn up stringent and strict rules relating to all that we do as an enterprise that are set down in this Code of Ethics. The Code is supplemented by detailed internal guidelines.

PCC does not tolerate any infringement of this Code. Employees are required to comply with the principles described here at all times and to report any non-compliant behaviour to PCC's Compliance Department. PCC guarantees the utmost confidentiality in this regard.

#### **SCOPE**

- [1] The Code of Ethics and Conduct applies to all business units, the Administrative Board/Supervisory Board, the Managing Directors/ Management Board/members of the senior management and to all employees (hereinafter referred to as "employees") of PCC SE and its Group companies (hereinafter referred to as "PCC"), regardless of their function, position or location.
- [2] The Code of Ethics and Conduct furthermore also applies to the employees of joint venture partners where a PCC Group company is responsible for business management.
- [3] The term "employees" and similar terms naturally refer to both genders in all cases.
- [4] All employees are obliged to comply with the Code of Ethics and to base their actions on the principles below. Infringements of the Code shall be punished.

### **COMPLIANCE WITH THE LAW**

- [1] Employees must observe and comply with all laws, regulations and PCC internal guidelines applicable in their work environment.
- [2] This applies also to national and international laws that restrict or prohibit the import, export or domestic trading of goods, technologies or services and of capital and monetary transactions.
- [3] Employees must observe all relevant trade-control regulations whenever goods are purchased, manufactured or put onto the market or whenever technologies are transferred or received.
- [4] In the event that deviating requirements, laws or regulations exist on account of differing legal systems or national conventions in day-to-day business, then the most stringent regulations must be adhered to in all cases.
- [5] All employees are obliged to acquaint themselves with the legal obligations, directives, guidelines and framework conditions that are of importance to their area of work and area of responsibility. Should employees be unsure in individual cases about the current legal situation, they must consult with their line manager or the competent Compliance Officer.

### **CONFLICTS OF INTEREST**

- [1] Employees must act in the best interests of PCC at all times and avoid situations where personal interests come into or could come into conflict with the interests of PCC. Personal interests also include the interests of family members and comparable persons within the meaning of this Code.
- [2] Potential conflicts of interest involving PCC and employees are described in detail in a PCC guideline.
- [3] Conflicts of interest may also occur in business transactions if the conflicting interests of several parties have to be taken into account. In this case employees must consult with their line manager or the competent Compliance Officer.

### CORRUPTION

- [1] PCC does not tolerate any form of active or passive corruption.
- [2] Potential corruption situations are described in detail in a PCC guideline.
- [3] Business relationships with suppliers and business partners must be conducted in accordance with objective, commercial criteria exclusively. Personal interests may not play any role.
- [4] The ban on accepting and granting advantages relates not only to direct financial benefits, but also to other privileges that could cast doubt on commercial impartiality.
- [5] PCC's guidelines as well as tax regulations and the relevant approval obligations apply regarding the acceptance and giving of benefits, gifts and invitations. Adherence to these is mandatory.

### MONEY LAUNDERING

- [1] PCC strictly forbids all employees to become involved in processes in their work environment or to tolerate actions that infringe money-laundering regulations in Germany or in other countries.
- [2] Money laundering means in particular the smuggling for example through exchange or transfer of money or other assets originating directly or indirectly from criminal activity into the legitimate economy. Money laundering may also have taken place if the origin of the money or other assets is uncertain.
- [3] Infringements of money-laundering regulations may result in criminal penalties for the employee. Therefore, in the case of uncertainty regarding the legitimacy of a financial transaction, the advice of the Compliance Officer must be sought as soon as possible.

#### SOCIAL ENGAGEMENT

- [1] Business activities are closely connected with social responsibility. Within PCC, this responsibility is reflected in its engagement in the areas of social welfare, education and science, sport and culture.
- [2] Sponsorship monies are awarded only if a valid legal basis exists. Moreover, the approval of the Managing Directors of PCC SE or of the Management Board or the members of the senior management in the given Group companies is required for the awarding of sponsorship monies.
- [3] Monetary payments and other non-cash benefits granted to politicians, political parties, political associations or other political organisations are strictly prohibited.

### **INSIDER INFORMATION**

- [1] Employees who possess insider information about PCC or other companies with which PCC is considering a strategic alliance, acquisition, disposal or fusion may not purchase or sell securities or other derivatives in PCC or said companies while this information is not available to the general public.
- [2] Insider information includes all information that is not known to the public and that an investor would consider important with respect to the decision for or against the purchase or sale of securities or derivatives.
- [3] Insider information may not be passed on to third parties. Within PCC and elsewhere, insider information may only be passed on if the recipient of the information requires that information in order to carry out their role at PCC.
- [4] The use of insider information may have consequences under criminal law. In the event that employees are uncertain whether they possess insider information, they must consult with their line manager or the competent Compliance Officer.

### CONFIDENTIALITY

- [1] Both during their employment relationship with PCC and after its termination, employees of PCC are obliged to maintain absolute confidentiality with regard to all business secrets and all other confidential information about PCC of which they have become aware in connection with performance of their duties.
- [2] Confidential information includes information about PCC's business activities, technology, intellectual property, financial position and workforce as well as all information about PCC's customers, suppliers and business partners.
- [3] Confidential information may not be passed on to third parties. Within PCC and elsewhere, confidential information may only be passed on if the recipient of the information requires that information in order to carry out their role at PCC.
- [4] Confidential information and business documents must be appropriately protected against access by third parties and co-workers who are not party to said information and documents. In addition, e-mails sent internally by electronic means must, if necessary, be marked as "confidential" or "strictly confidential".
- [5] Moreover, confidential information may only be made public if the related information is known to the public, its publication has been approved by PCC or publication is required on account of a legal obligation.
- [6] Data and information relating to customers, business partners and market participants must be treated as strictly confidential. All employees are obliged to use data and information of which they become aware in the course of their work within the permitted limits only. If said information is passed within or outside the company, the employee must check whether the addressee is entitled to receipt of the information.
- [7] Data and information about the above-mentioned groups of persons and companies may only be collected, processed and used within the scope of its intended purpose, the principle of necessity and legal justification.
- [8] Employees' personal details are treated with the utmost care within the scope of workforce data-privacy legislation.

### INFORMATION SYSTEMS/SOFTWARE

- [1] The provision of e-mail and internet access is for business purposes. The use of e-mail as a means of business communication is subject to the same archiving rules as correspondence on paper. When e-mails are sent, the same duties of care and modes of conduct as for correspondence on paper must be adhered to.
- [2] PCC has purchased software compliant with the applicable licence terms for all workstations. Employees are not permitted to copy the software protected by licence agreements for private use, nor are they permitted to install private software at their workstation.
- [3] Employees may, to a limited extent, utilise PCC's internet connection and e-mail infrastructure for personal use, provided that this does not impair their work performance, pose or increase a security risk or make use of significant resources. In this case, all e-mails shall be considered business e-mails.
- [4] Employees must not under any circumstances misuse PCC's information and communications media for illegal or unethical purposes.

### REPORTING

- [1] PCC attaches the greatest importance to complete, accurate, timely, detailed and comprehensible financial statements and the corresponding financial reporting and communication. All employees in PCC's Finance Department are, within the context of their work tasks, responsible for ensuring that effective procedures and internal controls for financial reporting and the publication of information that is subject to the duty of disclosure are in place and adhered to.
- [2] The statutory regulations, in particular the accounting principles, and PCC's internal accounting procedure must be strictly adhered to. Dishonest reporting within the company or concerning other organisations or persons is prohibited.

#### INTELLECTUAL PROPERTY

- [1] Inventions, patents, trademarks, knowledge and other intellectual property belonging to PCC are of particular importance for ensuring the company's long-term success. PCC's intellectual property must therefore be protected as fully as possible.
- [2] Patents, trademarks, knowledge and other intellectual property belonging to third parties must be respected in all cases.
- [3] If employees are uncertain in individual cases whether intellectual property belonging to PCC or third parties could be affected, they must consult with their line manager or the competent Compliance Officer.

#### COMPANY PROPERTY

[1] PCC's company property must be used for business purposes only. Employees must treat PCC's company property with care and protect it appropriately against loss, damage, misuse, theft, embezzlement or destruction. Equipment, machinery and other technical installations and systems as well as vehicles must be operated in the correct manner.

### **FAIR COMPETITION**

- [1] PCC aligns its business policy to the criteria of fair and performance-orientated competition. Compliance with regulations relating to competition law forms part of PCC's corporate policy and is expected of all employees.
- [2] Employees must comply with all applicable regulations relating to competition law and must reject any measures that could lead to unfair competition.
- [3] Employees must comply with all applicable regulations relating to cartel law.
- [4] Owing to the complexity of cartel legislation, all agreements with competitors or other third parties that could have negative consequences in terms of competition must be submitted in advance to PCC's Legal Department. The Legal Department must also be contacted as soon as possible in the event of any uncertainty.

#### WORKFORCE INTERACTION

- [1] PCC recognises the four fundamental principles of the International Labour Organization (ILO). These are the freedom of association and the right to collective bargaining, the elimination of forced labour, the abolition of child labour and the elimination of discrimination
- [2] All employees have a right to fair, courteous and respectful treatment.
- [3] PCC does not tolerate any discrimination or harassment of employees, whether in direct interaction, in written correspondence, electronically, verbally or in any other form. Any discrimination or harassment, especially where based on race, religion, origin, gender, disability, age, marital status, sexual orientation or membership of trade unions or political parties, is prohibited.
- [4] Adherence to the regulations regarding the equality of men and women is mandatory. Equality encompasses in particular areas such as the allocation of responsibilities, remuneration, training and further training, and promotion.
- [5] Any form of sexual harassment at the workplace is prohibited. Any behaviour with a sexual connotation that is undesired by the employee concerned and compromises their dignity is considered sexual harassment.
- [6] Mobbing, in other words the deliberate exclusion and humiliation of an employee, is not tolerated. Mobbing is defined as systematic, sustained or repeated hostile behaviour with the aim of isolating a person in the workplace and within the workforce or even of isolating them from their workplace.
- [7] PCC implements all reasonable measures to prevent discriminatory or harassing behaviour. All employees are called upon to report discrimination or harassment that they have observed in their work environment to their line manager, the Human Resources Department or the Compliance Officer.

### **ENVIRONMENT, HEALTH AND SAFETY**

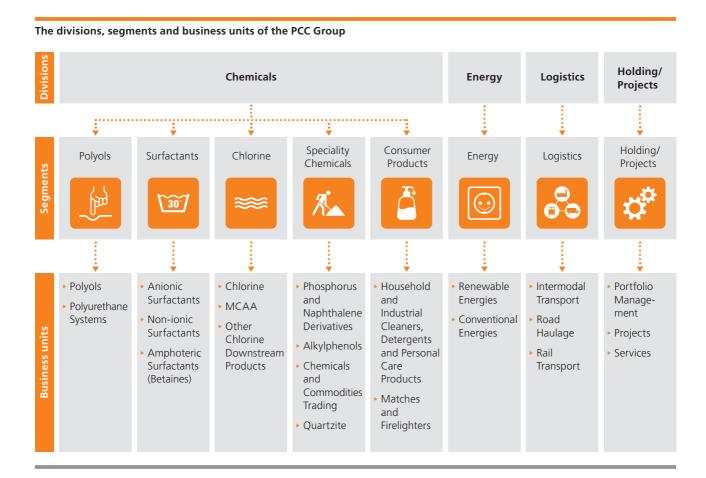
- [1] Alongside employee health and safety, protection of the environment has the highest priority at PCC. This awareness determines the choice of production processes and products and PCC's commitment to promoting sustainability and health and safety.
- [2] PCC endeavours to minimise the consumption of raw materials and energy in its production processes and is continually engaged with assessing and improving its work methods, production processes and products, thereby ensuring that they are safe for and acceptable to employees, customers, the public and other stakeholders.
- [3] In the event of accidents or operational malfunctions, PCC will implement the necessary measures for preventing hazards and repairing damage and inform the relevant authorities as quickly and efficiently as possible.
- [4] All employees share responsibility for safeguarding mankind and the environment in their area of work. The laws, regulations and internal guidelines relating to environmental protection, health, and plant and occupational safety must be strictly adhered to at all times. All line managers are obliged to instruct, oversee and support their employees with regard to fulfilling this responsibility.
- [5] As a rule, natural resources such as air, water and land may only be used commercially within the scope of a licence granted in advance. The same applies to the construction and operation of production facilities and their modification or extension. The unauthorised release of substances must be prevented.
- [6] Refuse disposal must be in accordance with statutory regulations. If third parties are engaged for this purpose, it must be ensured that they too adhere to the environmental regulations and the relevant PCC stipulations.

### THE GROUP STRATEGY OF PCC

As the parent and holding company of the PCC Group, PCC SE owns and manages a stable and future-aligned investment portfolio in the chemicals, energy and logistics sectors. We continuously optimise this portfolio while also extending it into new, competence-related market segments, as is currently the case with the construction of an ultra-modern production plant for silicon metal in Iceland.

As a growth-led investor, PCC SE concentrates on the long-term further development of its existing activities and projects with the objective of achieving a sustainable increase in its enterprise value. Among other things, we intend to generate further growth through targeted acquisitions, with the focus primarily on positioning ourselves in less competitive sub-markets and market niches. The majority of our sites are located in Europe and investments continue to be largely concentrated in the growing economies of Central, Eastern and South-East Europe. However, we are also increasingly directing our attention to the emerging markets of other continents, particularly Asia.

Conversely, PCC is also willing and able to divest operations where disposal offers attractive gains and the funds thus released can be invested in the expansion of other core activities. The holding company will also dispose of portfolio entities where these are unable to offer satisfactory returns or fail to exhibit attractive development potential.





Advanced sulphonation plant 2 of PCC Exol SA in Brzeg Dolny offers an annual production capacity of 30,000 metric tons of anionic surfactants.

## THE STRATEGY OF THE GROUP DIVISIONS AND SEGMENTS

## THE CHEMICALS DIVISION WITH ITS SEGMENTS POLYOLS, SURFACTANTS, CHLORINE, SPECIALITY CHEMICALS AND CONSUMER PRODUCTS

The strategic objective of our Chemicals division is to further consolidate our, in part, market-leading positions in Central Europe and to expand these wherever possible. With our strategic investments, we focus in this division, which is led by the chemicals concern PCC Rokita SA headquartered in Brzeg Dolny (Poland), on selected product categories in the segments Polyols, Surfactants, Chlorine and Speciality Chemicals, and in the latter case particularly on flame retardants. In the Polyols and Surfactants segments especially, we are increasingly switching to the development of higher-grade speciality products, applications and system solutions. In the Chlorine segment, we are extending our value chain through the construction of a production plant for the manufacture of ultra-pure monochloroacetic acid (MCAA) at our chemicals site in Brzeg Dolny. The chlorine we produce ourselves will be used as a feedstock for this facility. The priority within the segments responsible for chemicals production is specifically on investing in our existing sites and facilities. Upgrading our existing plants aligned to future environmental and cost-efficiency standards is given the same level of priority as expanding our capabilities with new production facilities. In keeping with this policy, we were able to complete the technology switch in our chlorine production facilities to the environmentally friendly membrane process in April 2015, with a significant reduction in energy consumption also ensuing.

The original core business of PCC, namely trading with petroleum- and carbon-based commodities, is assigned to the Speciality Chemicals segment. Beyond commodities trading, this operation is also responsible for supporting our production companies — on both the procurement and the sales and distribution sides — in those markets in which our trading companies have acquired expertise over the last two decades of activity.

Over the next few years, we plan to turn around the Consumer Products segment, also referred to as the "PCC Consumer Products" subgroup, with a view to returning it to success and driving its further expansion. The future growth of this subgroup is to be generated not just from the further

development of the existing product portfolio but also from entry into new sales markets outside Poland, particularly in Western Europe. The long-term goal is to float the subgroup on the Warsaw Stock Exchange (GPW).

### THE ENERGY DIVISION

Our focus in the Energy division is on the construction and operation of power generating facilities. The development, planning, implementation and also the selling-on of projects, particularly in the Renewable Energies field, are also integral to our strategic focus. The project company acting on our behalf in such endeavours is our subsidiary PCC DEG Renewables, a joint venture with KfW subsidiary DEG – Deutsche Investitions- und Entwicklungsgesellschaft mbH, Cologne (Germany). We have so far commissioned one small hydropower plant in Central Bosnia and four in the Republic of Macedonia. 2016 sees us start construction work on a fifth site there. This will take us a further step closer to our objective of operating a portfolio of power plants that may eventually be sold en bloc to a strategic investor.

### THE LOGISTICS DIVISION

Within the Logistics division, the focus of our growth and ambitions is on the expansion of the container terminals and the network of transport links operated by the Group subsidiary PCC Intermodal S.A. We successfully commissioned the first combined transport terminal in Central Poland at the end of September 2011. We now operate five wholly owned terminals, four of which were substantially expanded in recent years: the end of 2015 witnessed the on-schedule expansion and modernisation of the handling terminal in Gliwice (Poland). Shortly before that, in September, the expanded terminal in Brzeg Dolny was opened, preceded in June by the extended terminal in Kutno (Poland) and, in December 2014, the upgraded terminal in Frankfurt (Oder) (Germany). We are also planning to build a sixth terminal near Gdynia, the site of the headquarters of PCC Intermodal S.A. in the coming years. Already today, this Group entity offers container transport services within Poland and also between Poland and the major European ports of Rotterdam, Antwerp, Hamburg and Bremerhaven. At the beginning of this year, we also opened a direct link between the industrial Ruhr district in Germany and Central Poland, and in May, this was followed by intermodal services eastwards as far as China. In this market and with our base in Poland, we can look forward to enormous growth opportunities, the exploitation of which is a strategic core objective of PCC.

Through its road haulage arm PCC Autochem Sp. z o.o., Brzeg Dolny, PCC is also active on the international market for hazardous goods haulage, as it is on the Russian rail transport market through its portfolio company ZAO PCC Rail, Moscow.

### THE HOLDING/PROJECTS DIVISION

In addition to PCC SE, our parent and holding company, the Holding/Projects division also incorporates a number of entities including the IT unit, our research and development activities, and undertakings still at the start-up phase. One such is our project in Iceland where we are in the process of constructing one of the world's most modern and environmentally friendly production plants for silicon metal. Due for completion in 2018, a major objective of this project – which accounts for an investment volume of around US\$300 million - is to significantly extend our value chain, with the quartzite feedstock for the plant being taken from our Group-owned quarry in Zagórze (Poland). The construction of the plant began in June 2015 following the initial development in the spring of that year of the new Bakki industrial park near Húsavík in the north of Iceland. The official inauguration of the site took place in the presence of renowned representatives from the world of politics and business in September 2015.

In a further project under the management of the Holding segment, we are planning to construct – through a joint venture with a long-standing Russian partner – a plant for the production of dimethyl ether (DME), which is predominantly used as an odourless and environmentally compatible aerosol propellant.



The PCC hydropower plant Mujada in Bosnia-Herzegovina has been hooked up to the local grid since 2009 and by the end of 2015 had generated a total of around 42 million kWh of electricity, saving approximately 45,500 metric tons of CO<sub>2</sub> emissions.



The PCC container terminals have been upgraded and significantly expanded in recent years. Together, all five terminals account today for a handling capacity of 660,000 TEU.

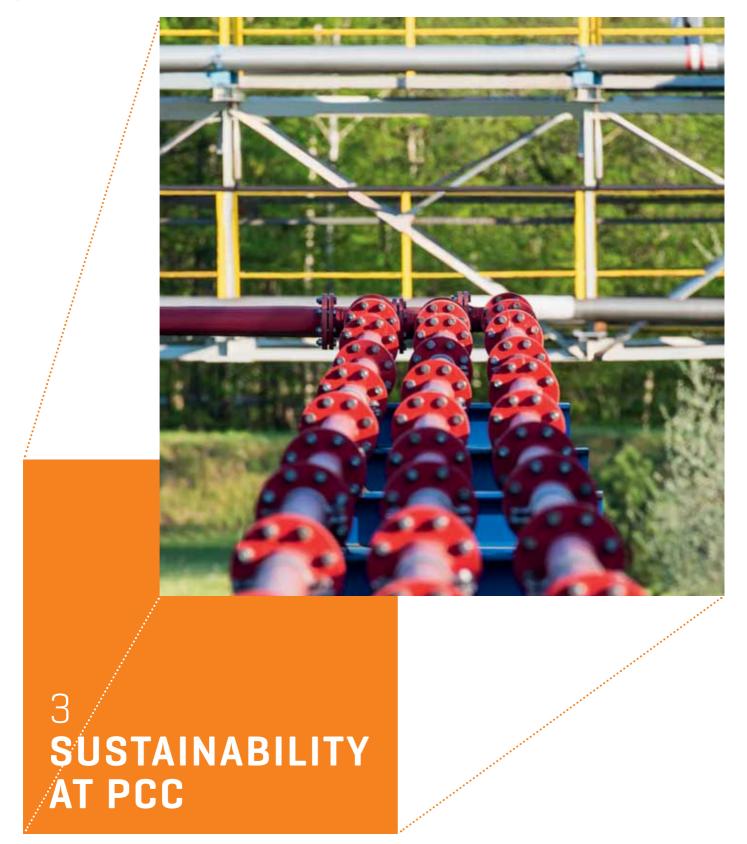


In Iceland, we are building one of the world's most advanced and environmentally friendly silicon metal production plants. Scheduled for commissioning in 2018, it will offer an annual capacity of 32,000 metric tons (shown in the picture: computer image).









Economic, social and ecological sustainability is firmly rooted in the corporate philosophy and Group strategy of PCC. We are committed to pursuing dynamic and value-adding growth in full compliance with the imperative of sustainable and ethically responsible development within the PCC Group.

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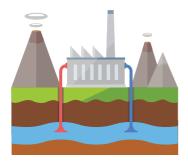
### THE SUSTAINABILITY STRATEGY OF PCC

The management of our international investment portfolio is rigorously aligned to the continuous creation of new and added enterprise value. This is at the core of our growth strategy and underpins our entire sustainability policy.

Far beyond being a marginal obligation to blindly follow "zeitgeist" trends, sustainability constitutes an essential core component of the long-term strategy of PCC SE and all its Group entities. We regard all aspects of sustainability in its economic, ecological, social and ethical sense as mutually beneficial components in value-adding growth. Numerous awards and high scores in sustainability rankings, achieved particularly by our subsidiaries PCC Exol SA and PCC Rokita SA, further strengthen our commitment to this strategic alignment.

Taking the example of ecological sustainability, we pursue all our investment projects through the use of advanced, en-

vironmentally friendly and thus energy-saving and cost-efficient technologies. For us, preserving and protecting the environment is assigned the same high priority as ensuring the safety of our employees. We therefore regard sustainability not as a growth inhibitor but rather the opposite – as a platform for earnings generation and long-term corporate success. Nor is it a static aspiration which, once achieved, can be ticked off and sidelined. Instead we regard it as a continuous, dynamic process, as vibrant and vital as the growth process pursued by the Group as a whole. Sustainability guidelines promote our creativity and inspire innovation, enabling us, for example, to utilise natural resources more efficiently and



The energy required to operate our silicon metal plant, currently under construction, will be taken 100 % from renewable sources such as those exploited by geothermal generating facilities.

-162,000

METRIC TONS CO<sub>2</sub> EMISSIONS PER YEAR

These are the total savings that have resulted from the technology switch implemented in respect of our chlor-alkali electrolysis facilities and operation of environmentally friendly small hydropower plants. to apply new technologies that reduce the energy consumption and emissions of our facilities. Thus, progress in sustainability both cuts costs and benefits the world around us.

One example of this approach is the complete switchover – culminating in the spring of the year under review – of our chlorine manufacturing technology to the environmentally friendly membrane electrolysis process. Among other things, this has reduced CO<sub>2</sub> emissions by 140,000 metric tons per year, with electricity costs also exhibiting a substantial decrease. And then there is our silicon metal production plant in Iceland, the site of which was officially opened in September 2015. This will be one of the most advanced facilities of its kind worldwide, both from an economic point of view and also in respect of its environmental protection credentials. The energy supplied to the plant will come entirely from renewable geothermal and hydropower sources, while the installation of ultra-modern filters will keep the plant virtually free from dust emissions. The main pillar of our Logistics segment is provided by our intermodal container transport operation in which road and rail transportation are efficiently combined to the benefit of the environment. And in the Energy segment, our new projects focus on power plant designed to harness regenerative energy sources, and particularly the construction and operation of small hydropower facilities which, because of their minimal intervention in nature, can be regarded as particularly environmentally compatible. So far, we have connected five of these hydroelectric power plants to their respective grids, with the ensuing CO<sub>2</sub> savings amounting to over 22,000 metric tons per year.

This commitment to sustainability is embedded in our strategy and our guidelines on corporate social responsibility (CSR). We are giving ever greater priority to socially responsible corporate management throughout the Group. But sustainability goes far beyond environmental protection. For us it also means nurturing a long-term relationship of trust based on partnership with all our stakeholders – from our employees, customers and investors through to residents that make up the social environment of our sites.

By extension, we of the PCC Group also promote the continuous personal development of our employees, encouraging their creativity and embracing their diversity, thus creating the right spirit for advancing innovation. Our relationship with our suppliers and business partners is characterised by a belief in fairness. Through transparency and reliability, we develop sustainable relationships with our investors and lenders. With this approach and in harness with our financing partner, the Frankfurt-based KfW IPEX-Bank, and a con-

sortium of Icelandic investors, we have – after several years of preparatory work – brought into being what is to date PCC's largest individual project, namely the construction of a silicon metal plant in Iceland. This too proves that CSR, interpreted as the responsible treatment of all stakeholders, is not a luxury but actually a prerequisite to the creation of enterprise value.

Our portfolio companies are also dedicated to improving the social environment of their sites. Our most important chemicals plants in Poland, those of PCC Rokita SA and PCC Exol SA, are an important factor of life for the inhabitants of the small town of Brzeg Dolny in Poland's Lower Silesia. PCC is one of the biggest employers in the region; and we supply Brzeg Dolny with water, clean the municipal sewage and provide distance heating. Through this, we are able to acquire what might be called a "social licence" for our economic activities. It is not just that these are pursued within all the relevant legal and regulatory frameworks, they are also regarded as desirable by the people populating the environs concerned. We also found this to be the case in Iceland recently where the construction of our silicon metal plant is providing growth momentum for an entire region.

Yet our social engagement extends even further. PCC SE and its subsidiaries are patrons of several children's homes and promote local and regional sport and cultural events. We are the name sponsor of the PCC Stadium in Duisburg-Homberg close to our Group headquarters, and in Tanzania, PCC SE supports the Amani AIDS orphans' Home in Mbigili (AOHM), sponsoring the construction of a house and also providing study scholarships.

Taken together, these initiatives aligned to sustainable development in our industries enable us to generate growth within our Group in line with the vaulted values that make up our corporate ethos.

On the following pages, we offer more detail of how our Group segments pursue and achieve sustainable development. After that, we familiarise you with our risk management system.



In 2015, we completed the switch of our chlor-alkali electrolysis process to environmentally friendly membrane technology (the photo shows a part of the electrolysis plant used to produce concentrated caustic soda).

# CHEMICALS: SUSTAINABILITY THROUGH INNOVATION

Our five Chemicals segments offer a unifying approach to dynamism and sustainability, with – in some cases – the portfolio companies concerned performing the role of pioneers in their markets and garnering numerous awards along the way. By continually increasing efficiency and introducing ever more environmentally friendly production processes, innovative products and compatible applications, the PCC Chemicals division is able to secure ongoing business success while at the same time making a meaningful contribution to the protection of the planet and its resources.

As a rapidly growing chemicals producer, PCC is an integral part of a key industry of the 21st century. For it too is responsible for providing solutions to a number of the fundamental challenges facing us today. Through modern technologies, products and applications, the quality of life of people, and the environmental compatibility of production processes, are being improved. We are conserving the limited resources available by consistently improving the efficiency with which they are used and consumed, at the same time protecting our climate through the ever more effective avoidance of emissions. Increasingly, the industry is meeting its energy requirements through the use of renewable resources. And very important: chemicals are contributing to securing food supplies for the burgeoning world population.

The companies that belong to our Chemicals segments – Polyols, Surfactants, Chlorine, Speciality Chemicals and Consumer Products – are tackling the associated challenges through responsible action and quality awareness paired with creativity and innovation and embedded in a comprehensive sustainability strategy. Our approach encompasses the entire value chain, starting from sustainable commodity sourcing and transport of raw materials and end products, through to manufacturing practices in keeping with modern environmental, quality and safety standards. We sharpen our awareness of these values within the Group through, for example, the participation of our chemicals companies in the global Responsible Care® initiative, which commits the chemicals industry to high sustainability standards beyond state regulation.

Various awards, particularly for our two major Polish production companies PCC Rokita SA and PCC Exol SA, strengthen our resolve in focusing on sustainability. Both companies, for example, submit to the renowned international sustainability audits carried out by EcoVadis. At the beginning of the year, our surfactants manufacturer PCC Exol received the EcoVadis Gold certificate for its performance in the field of corporate social responsibility (CSR), thus achieving the highest status available within the 2016 rankings. Overall, PCC Exol thus counts among the top 2 % of the globally highest scoring suppliers assessed by EcoVadis across all CSR categories. PCC Exol had already participated in the CSR audit in the previous year, immediately achieving Silver status. Since that time, it has significantly further increased its ratings in a number of key categories, such as employee working conditions, fair business practices and sustainability across its entire supply chain. PCC Rokita submitted to the challenge of an EcoVadis audit for the first time in 2015, and was likewise awarded a Silver certificate to match the achievement of its sister company in the previous year. This means that our largest Group company already counts among the top 30 % of the most sustainable companies audited by EcoVadis around the world.

In their home market of Poland, both chemicals companies are pioneers in submitting to audits of external rankings to assess the sustainability of their production systems and also their CSR performance. This is underlined by a number of awards in recognition of both their social importance and their sustainability credentials within the economic context. For example, PCC Rokita was among the award-winners of the competition entitled "2015's Employers of Tomorrow" organised by the Polish Agency for Enterprise Development. It garnered honours as a socially responsible company for its particular focus on the practical training of schoolchildren and students. In the previous year, the chemicals company was recognised as "Lower Silesia's Best Exporter in 2014" and was nominated for the title "Pearl of the Polish Economy", as was PCC Exol. At the beginning of the year under review, the latter received the award "Economic Driver of 2015", placing it among a select group of innovative Polish companies recognised for strengthening the industrial and economic competitiveness of their country.

Within our group of companies, PCC Exol developed a series of initiatives last year, enabling it to assume a kind of pioneering role in the field of sustainability:

- ▶ In 2014, for example, PCC Exol joined the Global Compact initiative of the United Nations, thus committing to compliance with ten universal principles of sustainable development. In the same year, it implemented the corresponding code of ethics for employees, a similar code for suppliers, an anti-corruption policy and a series of regulations governing respect for human rights, environmental protection and process safety.
- ▶ PCC Exol has also been a member of the international Carbon Disclosure Project (CDP) since 2012, making it an active proponent in combating climate change. In 2015, the associated audit report gave it a CDP score of 93 out of 100 (2014: 81 points), thus placing it well above the average score of 53 points for all companies assessed.
- ▶ In 2014, PCC Exol was also the very first Polish company to implement the system of Good Manufacturing Practice in compliance with the guidelines issued by the European Federation for Cosmetic Ingredients (EFfCI). Certification provides PCC Exol with a major competitive edge, as it confirms to cosmetics manufacturers around the world that it reliably satisfies the highest standards imposed at each phase of production.
- ▶ PCC Exol is also a certified member of the Roundtable on Sustainable Palm Oil (RSPO), which means that it is actively engaged in the sustainable production of palm kernel oil, an important raw material in the manufacture of surfactants. However, our Group commitment actually goes further: in Ghana, West Africa, PCC Organic Oils Ghana Ltd., Accra, has started the development of a sourcing position designed to secure over the long term renewable raw materials such as palm kernel oil extracted from palm kernels which we collect from smallholders for the surfactant production operations of PCC Exol. This is an example of sustainability on the procurement side.
- ▶ In the social domain of sustainability, PCC Exol has, for example, signed the Diversity Charter, an instrument designed to promote diversity among employees as a positive factor in companies and institutions and thus to combat workplace discrimination.

The following page offers a list of further initiatives implemented by these and also our other chemicals companies.

Initiative/Certification	Logo	Brief description
Responsible Care®		PCC Rokita SA, PCC Exol SA, PCC Synteza S.A. and PCC Consumer Products Kosmet Sp. z o.o. are members of the global Responsible Care® initiative, through which the chemicals industry commits to high standards in sustainability.
UN Global Compact	do <sup>NAL</sup> Co <sub>A</sub>	PCC Exol SA has joined the Global Compact of the United Nations and is thus committed to espousing universal principles underpinning sustainable development.
Roundtable on Sustainable Palm Oil	MIXED	PCC Exol SA is a certified member of the Roundtable on Sustainable Palm Oil (RSPO), meaning it actively supports sustainable palm kernel farming, collection and processing practices.
Carbon Disclosure Project	CDP	As a participant in the international Carbon Disclosure Project, PCC Exol SA has been actively combating climate change since 2012, during which time it has also seen its CDP rating significantly increase.
ISO	DEKNA DEKNA	The management systems of PCC Rokita SA and PCC Exol SA are certified to ISO 9001 and ISO 14001. They provide a documented, structural framework within which objectives, targets and programmes can be effectively developed, implemented and controlled.
EcoVadis	CSA having CSA having provided to	PCC Exol SA received a Gold certificate and PCC Rokita SA a Silver certificate for their CSR reporting on the EcoVadis international sustainability platform.
A.I.S.E.		PCC Consumer Products Kosmet Sp. z o.o. has signed up to the pan-European Charter for Sustainable Cleaning, which is a major initiative of the A.I.S.E. (International Association for Soaps, Detergents and Maintenance Products).
Diversity Charter	KARTA BÖZNORGONOŚCI	PCC Exol SA has signed the Diversity Charter as an undertaking to combat workplace discrimination and promote diversity within the company.
CEFIC & CESIO	sector gross	PCC Exol SA is a member of the European Chemical Industry Council (CEFIC) and also the European Committee of Organic Surfactants and their Intermediates (CESIO), ensuring that it contributes to the safe usage of surfactants as well as to sustainable development within the industry.
Good Manufacturing Practice	GMP	In 2014, PCC Exol SA was Poland's first company to implement the system of Good Manufacturing Practice in compliance with the guidelines issued by the European Federation for Cosmetic Ingredients (EFfCI).

Last year, PCC Exol became the first company of the PCC Group to undertake to document its progress in the sustainability domain with an annual sustainability report in compliance with the guidelines of the Global Reporting Initiative. This constitutes an important milestone for PCC Exol, underpinning the advent of sustainable chemistry as an integral component of its corporate culture. Part of this concept involves proactively informing all stakeholders – from investors and business partners to residents located close to our sites – as to the influence of our production, our products and applications on the world around us, on present generations and on the generations to come. CSR and the development of a sustainable chemicals production capability are today key aspects of our Group strategy.

One of the reasons for this is that many of our customers increasingly regard sustainability as an important facet of their own long-term development strategy. Consequently, sustainability brings competitive advantage, something that PCC Exol further leverages through its annual report.

Said report details, for example, the fact that PCC Exol has reduced its energy usage per ton of manufactured product in recent years. In 2014, the level fell by 3.1% versus the prior year, to 277 kWh/t. Direct and indirect emissions of greenhouse gases were likewise significantly reduced, while annual industrial wastewater output decreased by 27.5% to 26,988 cubic metres. Meanwhile, investments in environmental protection have more than tripled. PCC Exol also

uses its sustainability report to announce specific targets and undertakings as benchmarks for the future – such as a 15 % decrease in  $CO_2$  emissions versus the 2014 level by the year 2020.

PCC Rokita is also strengthening its ecological and social engagement activities. It is committed to implementing all its investment projects with advanced, environmentally friendly and thus energy-saving and economically efficient technologies. The already mentioned technology switch in its chlorine production facilities in the spring of 2015 is evidence of how serious we are in meeting our self-imposed goals. This measure not only enables PCC Rokita to cut emissions by 140,000 metric tons of  $CO_2$  per year, it has also satisfied new environmental regulations of the European Union almost three years before they come into force.

For the people living around its main site in Brzeg Dolny, Lower Silesia, PCC Rokita is an important employer. Pursuing social interaction, PCC Rokita also cooperates with the town's educational institutions in offering schoolchildren supplementary practical chemistry lessons. It is likewise committed to continuously developing new social and ecological initiatives. Last winter, for example, it joined forces with PCC Rokita subsidiary PCC Prodex, in raising funds for a clinic to treat injured wild animals.

Through PCC Consumer Products Kosmet Sp. z o.o., Brzeg Dolny, our Consumer Products segment – also managed as part of the Chemicals division – has signed up to the pan-European Charter for Sustainable Cleaning of the A.I.S.E. (International Association for Soaps, Detergents and Maintenance Products). In 2014, Consumer Products launched onto the market a new detergent range based on sustainable raw materials under the Roko Eco brand; it carries the recognised EU environmental mark "Ecolabel". And for the employees of PCC Consumer Products Kosmet, it has become a tradition to take part each year around Christmas time in the national Polish fundraising campaign "Precious Parcels", the purpose of which is to enable needy families to get some joy out of the festive season. This too constitutes a form of sustainability and is pursued with great enthusiasm and commitment.

# ENERGY: ENVIRONMENTALLY FRIENDLY POWER PLANTS

PCC small hydropower plants in South-East Europe contribute to climate protection thanks to the savings in CO<sub>2</sub> emissions that they represent. At the same time, they help conserve the local environment because their construction only requires a minimum intervention in nature. Meanwhile, our conventional power plant has also now been equipped with advanced filters for emission reduction.

Within the Renewable Energies business unit, we have so far commissioned five climate-protecting and environmentally friendly small hydropower plants, each having been preceded by several years of planning and construction effort. As our pilot project, the first small hydropower plant in Mujada, Central Bosnia, was connected to the grid in February 2009. Then, in the Republic of Macedonia, we were able to commission small hydropower plants at four sites at the end of 2014. After our subsidiary PCC HYDRO DOOEL Skopje, domiciled in the Macedonian capital of Skopje, hooked up the Gradečka power plant to the grid in autumn 2013, the sites of Galičnik, Brajčino and Patiška followed in 2014. Power plant construction in the Macedonian moun-

tains was particularly challenging due to the vertical heights that had to be overcome and the length of the penstocks, which in some cases extended to several kilometres, often in particularly inaccessible and occasionally erosion-prone locations. Today, these four small Macedonian hydropower plants together provide around 3,900 households and factories with environmentally friendly electricity. Back in 2013, the UN climate protection authority UNFCCC officially registered these facilities as climate-protection projects compliant with the requirements of the Kyoto Protocol.

Taken together, the five power plants commissioned to date enable a reduction in CO<sub>2</sub> emissions of over 22,000 met-



Our CHP plant in Brzeg Dolny not only supplies energy to our chemicals site but also to many households in the town.

Brajčino small hydropower plant in the Republic of Macedonia serves an average of around 1,200 households.





Waterfalls such as this one here in the Macedonian mountains can be harnessed for environmentally compatible electricity generation with only a minimum of intervention in nature.

ric tons per year while producing more than 22.5 million kWh (kilowatt-hours) of electricity as a long-term annual average. In addition, we are beginning this year, 2016, with the construction of a further power plant in Macedonia and have another three such facilities at the planning phase in Bosnia-Herzegovina. The overall management of these projects is the responsibility of PCC DEG Renewables GmbH, Duisburg (Germany), a joint venture that we operate together with the KfW subsidiary DEG — Deutsche Investitions- und Entwicklungsgesellschaft mbH.

But it is not only with respect to the avoidance of climatedamaging emissions that these power plants based on water pressure as a renewable source of energy offer an outstanding example of sustainable electricity generation. Their other advantage is that they only require a minimum intervention in nature. Once completed, they blend naturally into their environment. Moreover, we are able to meet our social responsibility in the implementation of these projects. For example, in Galičnik in Macedonia, we sponsored the paving of important access roads serving the village of Janche nearby, and we are also providing a plastic pipeline to enable the surrounding fields to be irrigated without loss of water. This and other social and environmental projects at the other locations were co-financed by our joint venture partner DEG from public funds provided by the Federal Ministry for Economic Cooperation and Development.

We have received external recognition for the high quality of our power plant projects: at the end of 2014, the financing bank EBRD (European Bank for Reconstruction and Development) recognised the successful commissioning of three power plants in Macedonia with a cash award that reduced the  $\le$ 6 million loan taken out with the EBRD by around  $\le$ 670,000. And for another power plant, we received an additional award of around  $\le$ 160,000 in May 2015.

We are also committed to sustainability with respect to our conventional energy generating plants. In 2008, we commissioned our co-generation plant EC-3, a modern CHP (combined heat and power) facility at our biggest production site, that of Brzeg Dolny, in Poland's Lower Silesia region.

This CHP plant not only supplies the production facilities of, in particular, the chemicals companies PCC Rokita SA and PCC Exol SA, it also serves many people in the small town of

Brzeg Dolny which has no power plant of its own. Indeed, this cogeneration unit supplies almost 80 % of the households with heat produced under environmentally compatible conditions. In many towns in Poland, homes are still heated predominantly with coal. The pollutants and greenhouse gas emissions produced as a result are avoided in Brzeg Dolny. In order to further improve the air quality in the locality, PCC Rokita began in 2015 to install state-of-the-art electrostatic precipitators in its CHP plant as a means to reducing dust emission. Although lower EU limits do not come into force until 2020 because of a national transition plan, PCC Rokita has, as a result, already cut its dust concentration from 50 to 20 milligrams per cubic metre, thus falling even further below the current limit of 100 mg/m³.

# LOGISTICS: ECOLOGICALLY EFFICIENT CONTAINER TRANSPORT

Our Logistics segment offers a smart combination of international container transport on road and rail. This intermodal form of haulage is exceptionally sustainable. Through the use of goods trains on long-distance railway routes,  $CO_2$  emissions are kept to about a third of what they would be. At the same time, the number of heavy trucks driving on the motorways is reduced, rendering our highways safer.

PCC Intermodal S.A., the largest Group company of our Logistics segment, is one of Poland's leading providers of intermodal container transport services, offering efficiency and environmental compatibility achieved through the combination of road and rail haulage. With a platform comprising its own, advanced container terminals in Kutno, Brzeg Dolny, Gliwice and Frankfurt (Oder), together with a further terminal in Dębica, PCC Intermodal operates a network of scheduled services of container block trains running through several international transport corridors that link Germany and the Benelux countries with Poland and other economic zones in Eastern Europe.

Transporting all sorts of cargo, these regular, daily block train services offer customers of PCC Intermodal the flexibility of being able to book a container place in the same way that passengers reserve their seats on the public railways. At our handling terminals, the containers are quickly

loaded from our wagons to trucks with the aid of heavyduty gantry cranes or the more flexible reach-stackers. Road transport is thus only performed for the so-called "last mile", the final short distance to the destination – precisely that part of the journey for which the ecologically more sustainable rail form of transport is unsuitable.

The advantages of both modes of conveyance are thus optimally combined. Customers profit from a tailored and flexible logistics service, while we are able to meet our responsibility with respect to climate protection and intelligent resource utilisation, as illustrated by the fact that, last year, PCC Intermodal provided 4,500 train services across all its routes. This resulted in emissions of around 55,000 metric tons of  $CO_2$ . If the same cargo had been carried in trucks instead, the  $CO_2$  emission levels would have been almost three times as high – or more than 155,000 metric tons. The total savings each year are therefore around 100,000 metric tons of  $CO_2$  emissions.



Today, the container terminal in Kutno has two gantry cranes and six reach-stackers.



The annual handling capacity of the Kutno terminal was increased in 2015 by 150 % to 250,000 TEU (twenty-foot standard containers).

These savings are not potential, they are real, because without the availability of flexible and reliable intermodal logistics services, customers would likely switch to other transport means. And the savings increase further because PCC Intermodal is currently undergoing dynamic growth which it is further accelerating through the modernisation and expansion of its container terminals. In December 2015, we completed the expansion and modernisation of our terminal in Gliwice, and thus the fourth terminal upgrade project within 13 months following Brzeg Dolny, Kutno and Frankfurt (Oder).

Sustainability in its various facets plays an important role not only for PCC Intermodal but also for other Group companies of the Logistics segment. An example for this is our road haulage company PCC Autochem Sp. z o.o. A specialist in the transport of liquid chemicals, PCC Autochem has its own tank interior cleaning facility especially designed for haz-

ardous substances. Within this business unit, sustainability means, above all, safety and quality. And indeed, PCC Autochem is the first Polish haulage company to be certified to ISO 9001 in the field of hazardous goods transport at the national and international level. Not only has its transport services been recognised in this way, its cleaning facility has also been certified to SQAS (Safety and Quality Assessment System). The company belongs to the Polish Association of Tanker Cleaning Facilities, the objective of which is to raise standards and introduce regulations that will increase the quality of the services provided, improve safety and protect nature. PCC Autochem confirms the correct cleaning of each road tanker by issuing a so-called European Cleaning Document (ECD).

# PROJECTS: SUSTAINABLE SILICON METAL PRODUCTION IN ICELAND

The construction of an ultra-modern production plant for silicon metal in Iceland is an excellent example of sustainable innovation: it is to be powered entirely from renewable energy sources, the emissions will be reduced to a minimum, the entire regional economy is being boosted through the creation of new jobs, and the long-term relationship with our financing partners also reflects an important aspect of sustainability.

Húsavík, a harbour town in the north of Iceland, and its environs are well known for their natural beauty – whales are often spotted in the waters offshore, the birdlife is characterised by an enormous variety of species, and geologically the area is famed for its many hot geysers and the almost magical air they impart to the landscape. So to choose such a location for the construction of a production plant for silicon metal with an annual capacity of 32,000 metric tons may, at first sight, not appear to be particularly environmentally friendly. And the fact that we are extracting the feedstock for our plant from the PCC-owned quartzite quarry in Poland may also appear to be economically risky, given that the two locations are 2,500 kilometres apart as the crow flies. However, the converse is true.

For there is hardly a land better suited to the environmentally compatible operation of a silicon metal production plant than Iceland. In terms of sustainability, the project is of model character. The facility, the construction site of which we inaugurated in September 2015 in a ceremony attended by members of the Icelandic government and high-ranking representatives of trade and industry, is to be one of the world's most advanced of its kind. On completion, which is envisaged by the beginning of 2018, it will be able to meet the highest sustainability standards in all the essential aspects – ecologically, socially and economically. This project is sustainable in relation to all its stakeholders: from investors, employees and residents to the customers purchasing the product.

The manufacture of silicon metal is energy-intensive. This is a critical cost factor, which means that the availability of inexpensive electricity, ideally produced in the most sustainable way possible, is essential. Iceland as a production site is unique in the world in this regard due to the wealth of regenerative energy sources that it offers. Power production can be achieved here entirely through renewable energy sources, ensuring that there are absolutely no emissions arising from the electricity generating process. The power produced is not only particularly clean but also inexpensive – an aspect that has been guaranteed over the long term. Added to this, only 20 to 50 kilometres from Húsavík is located a large geothermal area with potential for up to 400 MW in new power generating capacity. A further power plant with

a rated output of 90 MW, which is being built by others in Iceland, will provide the silicon plant with electricity beyond the usual grid source. This means that the power supplied will be cheap even by Icelandic standards. These conditions have been secured for 15 years and there is an extension option.

The logistical disadvantage of supplying the quartzite raw material from our quarry in Poland is outweighed by far by the low cost of the clean electricity produced in Iceland. In addition, the logistical chain involving the long land distances will be restricted to rail transport with block trains bringing the bulk cargo to the port of Szczecin. From the harbour in Húsavík, it will be transported on road by so-called trailer trains to the production plant nearby. And then the reverse journey involving the silicon metal end product will follow the same route to our customers.

Highly efficient core components, and in particular the 3 metre high smelting furnaces, each with a diameter of 7 metres, ensure the environmentally friendly operation of the production plant and avoidance of emissions. The discharge of fine dust will be minimised by an advanced system serving the entire plant designed to ensure that the vast majority of the fine dust is precipitated out and collected in a filter house. The complex is being built on a turnkey basis by plant constructor SMS group GmbH, Düsseldorf (Germany), the world market leader in this field. Our joint objective is to make our plant one of the most efficient and advanced in the world. As part of this remit, the commitment to environmental protection and sustainability in the plant design has gone as far as to ensure that the buildings are arranged so that they blend to optimum effect within the landscape and are invisible from, for example, Húsavík.

The region around Húsavík is particularly dependent on tourism, that is to say the attraction of its natural beauty and landscape. The high acceptance of the PCC project by the local population also derives from the fact that our plant will not jeopardise this source of income. Above all, however, the silicon metal plant is creating new economic opportunities for the people in the region whose traditional industries such as fishing and agriculture have lost ground compared to ear-

lier times, and in particular offer the younger generation less than promising prospects. The aim of government for the region was to harness the geothermal resources available in order to attract energy-intensive enterprises. Consequently, the PCC project offers as perfect a fit with Húsavík, as indeed the location does with our project. This is a core aspect of sustainability in the social and community sense.

Around 120 direct and permanent jobs will be created by the production operation, while construction is providing employment to 450 people. In addition, our plant and our project company PCC BakkiSilicon hf are to form the nucleus of the new Bakki industrial park, named after the small river flowing through the locality. A new industrial road including a tunnel is to be built to link our plant and the rest of the industrial area. The town's port is to be expanded and, 20 kilometres away, a geothermal power plant will be built with the

network link to the high-tension grid being upgraded. These projects also mean new jobs for the region. Our plant and the additional production firms attracted to the area will also create around 100 jobs in the service sector. Construction of the silicon metal facility is an important engine driving development in the region, which is why there is a mood of excited anticipation in and around Húsavík.

This project is also characterised by sustainability in terms of the relationship of trust which has grown up over the multi-year planning phase with our financial backers, namely KfW IPEX-Bank of Frankfurt am Main (Germany), and our Icelandic investors including banks and pension funds. The fact that Icelandic pension funds – which by their very nature are required to adopt a conservative investment policy – are involved in this project confirms its sustainability as does the support being provided by the German state.

A vision of six years ago is being transformed into reality: construction work on the silicon metal plant began at the end of June 2015.





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The silicon metal plant (the photo shows a computer image) is destined to become one of the most advanced of its kind in the world, including in terms of its ecological credentials.

The investment volume of around US\$300 million (approximately €265 million) means that the Iceland project is the largest single investment in the history of PCC SE. The undertaking only became possible after several years of amicable negotiations held with all the stakeholders involved. Its basis derives from the security of raw material supplies through excavation of the quartzite feedstock in the PCC-owned quarry, with the material having already been certified for both quality and quantity. Each year, the silicon metal plant requires 90,000 metric tons of this quartzite feedstock - a volume that has been contractually guaranteed for at least ten years. We have also been able to secure the economic relevance and sustainability of the plant through contracts with major customers in Germany signed long before the start of construction. As a result, we were able to obtain a cover note from the German government's Inter-Ministerial Committee in the form of a UFK export credit guarantee. This was a precondition for securing the financing package from KfW IPEX-Bank and was granted because the project was regarded as particularly beneficial: with its investment in Iceland, PCC is contributing to securing raw material supplies

to German industry. A guarantee of this kind is extremely rare. In the past 60 years, it has only been granted to a round dozen companies. This again underlines the sustainability and exceptional long-term significance of our silicon metal plant.

And there is another aspect: the end product, silicon metal, is used not only as an alloyant in the aluminium industry and for the manufacture of silicones but also for a truly sustainable purpose, namely for the manufacture of solar energy facilities. Silicon metal is a major input material for the manufacture of photovoltaic modules, which are among the key components required for energy production from regenerative sources.

Thus the cycle closes: this silicon metal project is sustainable from procurement through to the end customer, from the investor to the resident, from the employee to the breathtaking natural beauty of the north of Iceland, which we are helping to preserve.



Incorporated within a terraced landscape, the silicon metal plant will, once completed, blend into the background and be hardly visible from afar.



Silicon metal is used, among other things, in the aluminium industry and is also an input material for the manufacture of photovoltaic modules.





### **RISK MANAGEMENT**

The engine driving our sustainable growth is fuelled by our commitment to grasp market opportunities as they arise. However, this approach is not without its risks, which can have negative effects on our business development and also our stakeholders. Consequently, risk management is a central component of a robust sustainability strategy.

The Group risk management system adopted by PCC SE, encompassing the recognition, collation and control of risks, is of central importance to the sustainable development of the PCC Group. Taking no risks inevitably leads to standstill and stagnation. Consequently, for a group of companies such as the PCC organisation aligned to dynamic and sustainable growth, the complete elimination of all risks is not an option. Our focus therefore is on the management of entrepreneurial, ecological and social risks based on their earliest possible identification, categorisation according to threat and urgency, and the introduction of specific countermeasures in order to limit and mitigate them – that is to say to actively control them rather than being controlled by them. Thus, risk management contributes to the continuous optimisation of our corporate management capability while also creating an innovation-friendly environment.

Structured as a multi-stage procedure, our Group risk management system serves to establish exposure levels and optimisation potential, at the same time promoting entrepreneurship within the Group. As part of this process, the Risk Management team assesses the opportunities and threats, gauges these against the short- and medium-term targets defined by the Administrative Board, and checks the resultant analyses for relevance, consistency and accuracy. Decisions are made on this basis pertaining to possible optimisation measures. The risk assessment exercise is performed annually and supplemented as required by quarterly updates and interim reporting activities. It is also ensured that the Managing Directors and the Administrative Board remain informed of all major risks. Risk Management is, moreover, tasked with informing employees, motivating them and providing them with necessary further training in all aspects of relevance

While conscious of the constant need to monitor and analyse business risks, PCC SE applies the same watching brief to all areas and activities that may give rise to impairment of the environment and the inefficient utilisation of resources.

These areas include:

- Raw material consumption related to product manufactured
- ▶ Handling and transportation of hazardous substances
- ▶ Energy consumption and water usage
- ▶ Wastewater contamination
- ► Emission of air pollutants
- ► Waste for disposal
- Noise
- ▶ Hazardous sites and soil contamination
- ► Accidents and incidents
- Potential environmental aspects arising from planned activities

PCC also gives careful consideration to information or complaints from all stakeholders, particularly local residents. The local group companies are responsible for conducting this dialogue with their immediate stakeholders, while Groupwide risk management is the responsibility of the holding company PCC SE.





The sustainable diversification of our investment portfolio is reflected in the varied nature of our eight Group segments. In the Chemicals division our products range from polyols used in modern foam applications to surfactants and flame retardants. Our Energy segment is involved in the project planning and operation of environmentally compatible power stations. Our Intermodal Transport (container logistics) segment connects Germany and Poland with international destinations, and our Holding segment develops new projects.

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- **80** THE STRUCTURE OF THE PCC GROUP

### THE SEGMENTS OF THE PCC GROUP

The portfolio of our affiliate companies and their products and applications are spread across different segments. With this diversity, interlinked with internal synergies combining chemicals, energy and logistics, we are constantly creating new enterprise value.

Our product portfolio includes surfactants used, for instance, as feedstock in cleaning agents and laundry detergents, polyols for the manufacture of comfortable mattresses, environmentally friendly small hydropower plants, international container logistics and future projects in the Holding/Projects segment.

The eight segments as a whole achieved consolidated sales in fiscal 2015 of €571.1 million. As in previous years, the biggest share of this revenue, 86.9 %, was generated in our five Chemicals segments: Polyols (23.9 %), Surfactants (17.7 %), Chlorine (10.2 %), Speciality Chemicals (28.3 %) and Consumer Products (6.8 %). The Logistics segment contributed 9.9 %, the Energy segment 2.0 % and the Holding/Projects segment 1.2 % to Group sales.

Our EBITDA totalled  $\leq$  50.8 million with the biggest contribution coming from the Polyols segment, followed by the Surfactants and Chlorine segments.

The primary sales markets of the PCC Group remain Germany and Poland. Because of our strong position in the chemicals industry and the logistics sector, Poland continues to be our most important national market. PCC is a market leader there and also in parts of Central and Eastern Europe with sales covering a wide range of products from the Polyols, Chlorine, Surfactants and Speciality Chemicals segments. Our main production site is

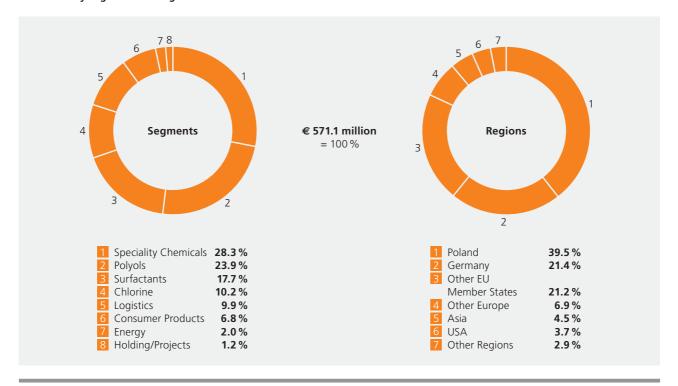
located in the Lower Silesia region in the south-west of Poland. The chemicals plant of PCC Rokita SA in Brzeg Dolny, about 40 kilometres north-west of Wrocław (Breslau), is one of the leading facilities of its kind in the country.

There we mainly produce polyether polyols, which are the feedstock for polyurethane foams used in the manufacture, for example, of mattresses, furniture upholstery, car seats, impact-cushioning shoe soles and even floor coverings for sports facilities. PCC Rokita is Poland's only manufacturer of these speciality polyols. Its portfolio also includes chlorine and downstream chlorine products.

We likewise hold a unique position in Poland with our Surfactants segment. These surface-active agents are indispensable components of, for example, shampoos, cleaning products and laundry detergents. They are produced by PCC Exol SA in Brzeg Dolny and Płock (Poland).

In Speciality Chemicals, the largest of our eight segments, we pursue our original core business, commodities trading. PCC Rokita's Phosphorus and Naphthalene Derivatives business unit is also part of this segment. In addition, PCC Synteza S.A. in Kędzierzyn-Koźle near Gliwice (Poland) manufactures nonylphenol and dodecylphenol. Our quartzite quarry in Zagórze (Poland) is also allocated to this segment.

### 2015 sales by segment and region in %



Within the Consumer Products segment, the company PCC Consumer Products Kosmet Sp. z o.o. operating out of Brzeg Dolny and Grodno (Belarus) manufactures household and industrial cleaners, laundry detergents and cosmetics. In the Polish town of Czechowice-Dziedzice, the matches factory PCC Consumer Products Czechowice S.A. manufactures standard matches, barbecue lighters and speciality products aligned to customer specifications.

The activities pursued in our Energy segment include the project planning and operation of power stations based on renewable energy sources. We have so far commissioned four environmentally compatible small hydropower plants in the Republic of Macedonia and one in Bosnia-Herzegovina. We also supply our chemical production sites with electricity from conventional power plants.

PCC Intermodal S.A., headquartered in Gdynia in the Bay of Gdańsk (in Polish: Zatoka Gdańska), is the largest company in our Logistics segment. As a provider of road and rail container services it maintains a dense network of regular transport links between Rotterdam (Netherlands), Hamburg, Duisburg (both Germany) and various locations in Poland.

Our eighth segment, Holding/Projects, not only provides corporate services to the operating units but also central planning services for future projects such as the construction of a state-of-the-art production plant for silicon metal in Iceland.

The following pages provide a more detailed overview of the wide and varied spectrum of our products and their many applications.





Expansion of production in the Polyols segment – pictured is the tank storage facility of the new polyester polyol plant operated by PCC Rokita SA in Brzeg Dolny.



PCC Exol SA is one of the most advanced producers of surfactants in Central and Eastern Europe – pictured is the interior of sulphonation unit 2, which produces anionic surfactants.



### **POLYOLS**

# FOR FOAM PRODUCTS SERVING A WIDE RANGE OF APPLICATIONS

Polyols are a feedstock used in the manufacture of polyurethane foams (PU foams) and have an extraordinary spectrum of applications. They are employed in a wide range of sectors, including iPoltec® foam technology developed in the laboratories of PCC Rokita SA and our PU foam systems produced by PCC Prodex Sp. z o.o. for effective thermal insulation of buildings. Our polyols are also the basis for flexible and rigid foams as well as for CASE (Coatings, Adhesives, Sealants and Elastomers) applications. PCC Rokita SA is Eastern Europe's biggest – and Poland's only – producer of polyether polyols and has four production lines with a total annual capacity of 100,000 metric tons. In fiscal 2015, this segment realised net external sales of €136.2 million (previous year: €147.0 million). The EBITDA generated by this segment in 2015 was €13.8 million (2014: €12.6 million).

Key financials and data	
of the Polyols segment	2015
Total sales of the segment	€ 148.1 m
Sales to other PCC segments	€11.8 m
Net external sales, consolidated	€ 136.2 m
EBITDA	€13.8 m
Capital expenditure on intangible assets and property, plant and equipment	€4.1 m
Number of employees (Dec. 31)	171

2014	Absolute change	Change in %
€158.6 m	€-10.6 m	-6.7 %
€11.6 m	€0.3 m	2.2 %
€ 147.0 m	€–10.8 m	-7.4 %
€12.6 m	€1.2 m	9.9 %
€2.4 m	€1.7 m	69.9 %
145	26	17.9 %



Comfortable cold-cured foam mattresses manufactured with our iPoltec® foam technology ensure a good night's sleep.

### WHAT ARE POLYOLS?

Polyols are chemical compounds containing multiple hydroxyl (–OH) groups. These can react e.g. with isocyanates to produce polyurethane, known also by the abbreviations PUR or PU. PU has many applications in a wide range of industries, with the properties of the polyurethane being determined by the actual polyols used.

PCC Rokita SA produces more than 30 different polyols and polyol formulations under the trademark Rokopol®. In addition, our Warsaw-based Group company PCC Prodex Sp. z o.o. and its subsidiary PCC Prodex GmbH in Essen develop, manufacture and sell PU systems.

The basis of our iPoltec® foam technology is provided by our Rokopol® polyols. Examples include "Rokopol iPol®" foams, which are used to produce HR foams with high rebound (HR) elasticity (left), and "Rokopol® vTec" foams, which are employed to create visco-elastic "memory" foams (right).

# APPLICATIONS AND MARKETS (SELECTION)

### Polyether polyols for flexible foam applications

Our polyether polyols are used in the manufacture of PU flexible foams, which form the basis for comfortable cold-cured foam mattresses and upholstered furniture with high rebound elasticity. PU flexible foams are also employed in the automotive industry for interior components, seats, partitions, roof linings and interior sound insulation. They can be found in the floor coverings of sports facilities and mats, as well as in protective packaging and household goods such as cleaning sponges.

### Polyether polyols for rigid foam applications

Rigid foams produced from our polyether polyols are used in the refrigeration industry where they serve to insulate refrigerators, industrial cold stores and refrigeration vehicles. They are also employed in the thermal insulation of piping. In the construction industry they are found in a wide range of applications, for instance in panels, as sprayed coatings and as single-component foam sealants e.g. for window installation.

### Polyether polyols for CASE applications

Our speciality polyols are found in coatings, adhesives, sealants and waterproofing products. PU elastomers are likewise developed from such speciality polyols. They are similar to rubber and are used, for instance, as textile fibres. Synthetic leather and the impact-cushioning soles of sports shoes are also made from polyol-based PU.







#### **Application in focus:**

#### iPoltec® - Foam technology made by PCC

Over three million mattress cores are produced each year with our innovative foam technology iPoltec®, the high-comfort upholstery component from the laboratories of PCC Rokita. Mattresses manufactured from iPoltec® foam offer outstanding comfort properties and are exceptionally hard-wearing. The basis for this foam technology is provided by a special "Rokopol iPol®" polymer polyol, which contains extremely low amounts of volatile organic compounds and offers improved fire protection and flame retardant properties. iPoltec® enables the production of an extremely wide range of foam densities and degrees of firmness.



### Polyurethane systems

The possible applications for our PU systems are equally varied. They range from thermal insulation to special PU adhesives for the mining industry used to reinforce layers of rock and prevent the ingress of water. For the construction industry we have developed a PU roof foam spray system in which the rigid foam is sprayed in liquid form to coat and thermally insulate the roofs of buildings. The reaction mixture foams and expands within a few seconds to create a seamless and jointless layer with outstanding insulation values. In the automotive industry our two-component foams are used e.g. for steering wheels, armrests and dashboards. Further applications include elastic two-layer floor coverings for sports facilities and children's playgrounds, as well as PU systems for robust, light, elastic and wear-resistant soles of shoes.







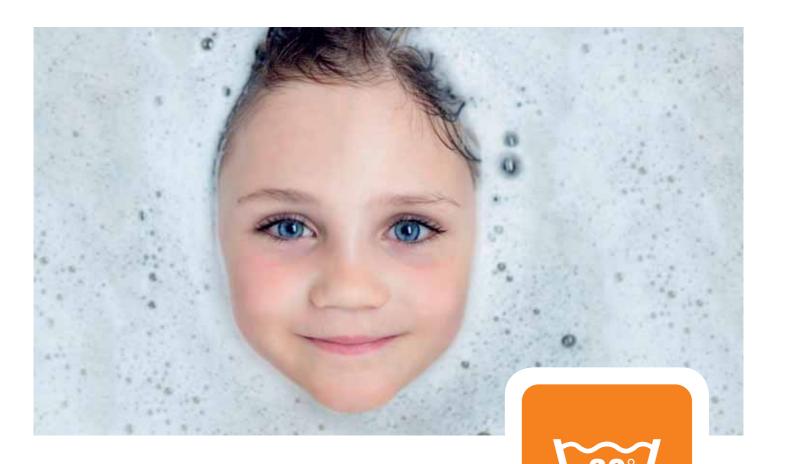






Polyols have many applications, e.g. in the automotive, furniture and mattress industries. They provide insulation in chiller cabinets and are used by shoe and textile manufacturers as well as in the construction industry.





### **SURFACTANTS**

ESSENTIAL ACTIVE INGREDIENTS FOR FOAMING, WETTING, EMULSIFYING AND CLEANING

PCC Exol SA is one of the most advanced producers of surface-active agents, known as surfactants, in Central and Eastern Europe, and is the only manufacturer of these products in Poland. The Group subsidiary with sites in Brzeg Dolny and Płock makes over 200 of these multifunctional substances, focusing increasingly on higher-quality surfactants. The total production capacity amounts to 60,000 metric tons of non-ionic surfactants (ethoxylates) and 40,000 metric tons of anionic surfactants (sulphonates) per year. In Piedmont, in the US state of South Carolina, PCC Chemax, Inc. also develops speciality surfactants for industrial applications. The PCC Surfactants segment is subdivided into the Anionic Surfactants, Non-ionic Surfactants and Amphoteric Surfactants (Betaines) business units. In all, this segment generated net external sales of €101.1 million in 2015 (2014: €98.8 million). The segment's EBITDA in 2015 came in at €9.5 million (2014: €6.6 million).

Key financials and data of the Surfactants segment	2015	2014	Absolute change	Change in %
Total sales of the segment	€123.7 m	€124.2 m	€-0.5 m	-0.4%
Sales to other PCC segments	€22.6 m		€-2.8 m	-11.1 %
Net external sales, consolidated	€101.1 m	€98.8 m	€2.3 m	2.3 %
EBITDA	€9.5 m	€6.6 m	€3.0 m	45.8 %
Capital expenditure on intangible assets and property, plant and equipment	€2.4 m	€2.8 m	€-0.4 m	-15.7 %
Number of employees (Dec. 31)	259	243	16	6.6%



Surfactants are responsible for the cleaning effect of e.g. soaps, shower gels and toothpastes. Anionic surfactants and betaines are particularly skin-friendly.

### WHAT ARE SURFACTANTS?

Surfactants reduce the surface tension of liquids or the interface tension e.g. between a solid surface and a liquid. In their molecular structure they consist of a hydrophobic ("water repelling") hydrocarbon radical and a hydrophilic ("water loving") molecule component. This is the basis for their outstanding range of actions, i.e. foaming, wetting, emulsifying and cleaning.

Foam is created, for instance, by the shaking of air into a surfactant solution. The surfactant molecules then accumulate at the interface between liquid and air and create the shells of the soap bubbles.

When used as wetting agents, surfactants reduce the interface tension between a solid surface and a liquid. The liquid, e.g. water, then flows evenly at the interface instead of forming droplets.

Surfactants can be used to mix incompatible liquids such as water and oil to create an emulsion. Because of the "amphiphilic" (simultaneously "hydrophilic" and "hydrophobic") character of surfactants, they penetrate into the oil with their fat-soluble molecule.

Surfactants assist in the detachment of small solid particles from solid surfaces, e.g. removing dirt from textiles. They can also accumulate around solid particles and so prevent their subsequent deposition on solid surfaces.

# APPLICATIONS AND MARKETS (SELECTION)

### Cleaning agents and personal care products

Anionic, non-ionic and amphoteric surfactants are basic components of cleaning agents, detergents and many personal care products such as shampoos and shower gels, the manufacture of which would be almost impossible without such surface-active substances. Their cleansing effect was known in ancient times and was used in soaps. These days, however, surfactants have a much wider spectrum of applications. For example, they ensure the skin tolerability of personal care products, create a pearlescent effect and are able to change the flowing properties of liquids. During cleaning processes the formation of foam by surfactants is also useful as it helps water to penetrate into the structure of the fabric. Other surfactants ensure that foaming does not get out of hand.

#### **Textile industry**

Foaming and wetting agents, emulsifiers, anti-foaming agents and dispersing agents are used in a broad range of processes, including the cleaning of fibres and textiles and in the spinning, bleaching, desizing, dyeing and softening of fibres.

#### Metallurgical industry

Surfactants are used as flux and as wetting agents in the soldering and welding of metallic materials.

### Other areas of application

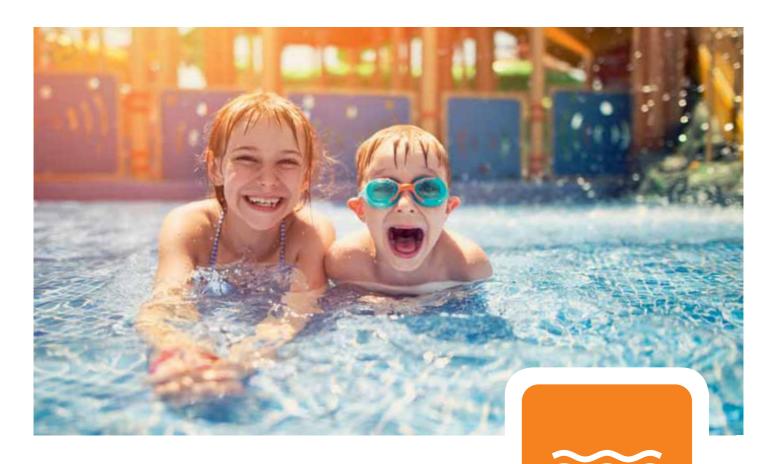
Agrochemicals, lubricants and functional liquids, mining and oil production, paints and varnishes, plastics, cellulose and paper.





Thanks to their wide range of actions – foaming, wetting, emulsifying and cleaning – surfactants are the main components of many household

products.



### **CHLORINE**

# MODERN PRODUCTION PROCESSES AND NEW VALUE-ADDED

Chlorine is one of the most important feedstocks for the chemicals industry, as well as being extensively used in water treatment facilities because of its disinfecting properties. We produce chlorine for a wide range of industrial customers who are active, for example, in the fields of petrochemicals, water resource management and food and beverage production, as well as for commercial users such as swimming pools and sports centres. PCC Rokita SA is a major supplier of chlorine as a chemical feedstock. Our product portfolio is also being expanded, for instance through the construction of a production plant for monochloroacetic acid (MCAA). Last year, we completely switched our production of chlorine to modern, environmentally friendly membrane technology. In 2015, the Chlorine segment generated net external sales of €58.3 million (2014: €67.8 million) and an EBITDA figure of €8.2 million (2014: €8.1 million).

Key financials and data of the Chlorine segment	201
Total sales of the segment	€ 113.0 n
Sales to other PCC segments	€54.6 n
Net external sales, consolidated	€58.3 n
EBITDA	€8.2 n
Capital expenditure on intangible assets and property, plant and equipment	€38.3 n
Number of employees (Dec. 31)	34

2014	Absolute change	Change in %
€129.0 m	€-16.1 m	-12.4 %
€61.2 m	€-6.6 m	-10.8 %
€67.8 m	€-9.5 m	-13.9 %
€8.1 m	€0.1 m	0.8%
€50.7 m	€–12.5 m	-24.6%
245	99	40.4%



Chlorine protects us from germs in the swimming pool thanks to its disinfecting properties.

### WHAT IS CHLORINE?

Chlorine (CI) is a chemical element with the atomic number 17. Chlorine does not really exist as a single independent element in nature. It is only found in combination with other elements, for instance in chlorides in which chlorine is present as an anion. The best-known chloride is sodium chloride (common salt). Chlorine is normally manufactured using chlor-alkali electrolysis from an aqueous sodium chloride solution. As from April 2015, chlorine production at PCC Rokita SA was switched completely to energy-efficient and environmentally friendly membrane electrolysis technology. In this process the end product, i.e. principally chlorine, has the same purity as achieved with the former amalgam process. However, significantly less energy input is required. As a result, PCC Rokita has been able to reduce its  $CO_2$  emissions by some 140,000 metric tons per year.

Chlorine is used in water treatment facilities. Caustic soda is employed, for instance, in rinsing and filling operations in bottling plants.

# APPLICATIONS AND MARKETS (SELECTION)

Chlorine is not just a widely used feedstock for the chemicals industry, it is also an almost indispensable part of our daily lives. With its disinfecting properties, its use is essential in swimming pools to protect bathers from the threat of germs. The Chlorine production unit at PCC Rokita also manufactures chlorobenzene, hydrochloric acid, sodium hydroxide (i.e. caustic soda, the aqueous solution of sodium hydroxide) and sodium hypochlorite.

Hydrochloric acid is used, for instance, in the food and beverage industry. Caustic soda serves as a degreasing agent and also a rinsing aid for bottles and apparatus. Sodium hypochlorite is an antiseptic used to boost the antibacterial properties of disinfectants. Chlorine is also employed within PCC Rokita, both for the manufacture of propylene oxide (PO) used in polyol production, and in the Phosphorus Derivatives business unit of our Speciality Chemicals segment. There, chlorine is processed in the production of phosphorus trichloride and phosphorus oxychloride.

2016 will see us taking into service a production facility for the manufacture of monochloroacetic acid (MCAA) at our chemicals plant in Brzeg Dolny. MCAA is employed in the food and beverage industry and in the manufacture of pharmaceuticals, personal care products, cosmetics, dyestuffs and pesticides.









### **SPECIALITY CHEMICALS**

# WIDE DIVERSIFICATION – FROM FLAME RETARDANTS TO SUPERPLASTICISERS

Speciality Chemicals is the segment within the PCC Group that generates the highest revenues. It also has an extremely wide product portfolio. PCC Rokita SA is the biggest manufacturer of phosphorus-based flame retardants for polyurethane foams in Eastern Europe and also supplies Central and Eastern Europe with naphthalene derivatives as admixtures for concrete. PCC Synteza S.A. produces additives for hydraulic oils and lubricant greases as well as other products. The main revenue earner of the entire segment is our traditional commodities trading business, managed by PCC Trade & Services GmbH, Duisburg (Germany). Another member of this strongly diversified segment is our Polish quartzite quarrying business. In 2015, the Speciality Chemicals segment generated net external sales of € 161.7 million (2014: € 222.1 million) and a segment EBITDA of € 5.2 million (2014: € 3.9 million).

Key financials and data of the Speciality Chemicals segment	2015
Total sales of the segment	€183.1 m
Sales to other PCC segments	€21.4 m
Net external sales, consolidated	€ 161.7 m
EBITDA	€5.2 m
Capital expenditure on intangible assets and property, plant and equipment	€1.4 m
Number of employees (Dec. 31)	363

2014	Absolute change	Change in %
€243.3 m	€-60.1 m	-24.7 %
€21.2 m	€0.2 m	0.8%
€222.1 m	€-60.3 m	-27.2 %
€3.9 m	€1.3 m	32.6%
€2.8 m	€–1.4 m	-50.6 %
380	-17	-4.5 %



We manufacture a wide range of products in the Speciality Chemicals segment, including additives and admixtures for the construction industry.

## WHAT ARE PHOSPHORUS AND NAPHTHALENE DERIVATES?

Our phosphorus derivatives include phosphorus trichloride and phosphorus oxychloride, a key raw material in the manufacture of phosphorus esters. These products serve as plasticisers and flame retardants in plastics and paints. In metal surface treatment processes they inhibit corrosion. They are also used as additives in hydraulic oils. Naphthalene derivatives improve the workability of fresh concrete in particular.

# APPLICATIONS AND MARKETS (SELECTION)

#### Phosphorus derivatives

Our product range of phosphorus derivatives is based on our own production of phosphorus trichloride and phosphorus oxychloride and comprises a portfolio of plastics additives such as plasticisers, as well as flame retardants and stabilisers. The conveyor belts used in mining, for example, contain phosphorus-based plasticisers and flame retardants, while flooring

products are given the flexibility they need by our plasticisers. Our phosphorus derivatives are used in the following sectors:

- ▶ Polyurethane industry (manufacture of rigid and flexible foams)
- ► Automotive industry
- ► Furniture industry
- ▶ Plastics and paints
- Mining industry
- ► Pharmaceutical industry
- ► Chemicals industry

#### Naphthalene derivatives

In the construction industry these derivatives are used as admixtures to improve the workability of fresh concrete and to manufacture plasterboard panels. They are particularly important as flow improvers ("superplasticisers") for fresh concrete. They help reduce the volume of water required, which in turn considerably reduces the transport costs of ready-mix concrete. They also increase the final strength of the concrete by improving its flow behaviour and workability. This would otherwise have to be achieved by adding excess water to the cement-aggregate-water mix, with impairment in strength the inevitable result. The use of such flow improvers in the production of plasterboard panels for interior use saves water and energy. In the plastics and textile industries, naphthalene derivatives are used as additives in the production of synthetic resins, as well as for dyeing processes.





Our naphthalene derivatives improve the workability of fresh concrete and increase its final strength.

#### WHAT ARE ALKYL PHENOLS?

Alkyl phenols are a family of organic chemical compounds manufactured by the alkylation of phenols. PCC Synteza S.A. produces nonylphenol and dodecylphenol at its production site in the Polish town of Kedzierzyn-Koźle.

## APPLICATIONS AND MARKETS (SELECTION)

Nonylphenol is employed in the production of surfactants for industrial cleaning solutions, filling inkjet cartridges, coating paper and as an additive to rubber. Dodecylphenol serves, for example, as an additive in hydraulic oils and lubricant greases. PCC Synteza S.A. also manufactures fuel additives.

#### **PCC COMMODITIES TRADING**

Also assigned to the Speciality Chemicals segment is the commodities trading business of Duisburg-based PCC Trade & Services (formerly Petro Carbo Chem) GmbH – the original founder company of the PCC Group – and PCC MORAVA-CHEM s.r.o. based in the Czech town of Český Těšín. Over the last two decades, PCC has successfully positioned itself on the market with these trading activities involving coal- and petroleumbased chemical commodities. Our trading operations also support our Group companies in the purchase and marketing of chemical products.

### **PCC QUARTZITE BUSINESS UNIT**

The quartzite quarry and associated processing plant operated by the company PCC Silicium S.A. in the Polish town of Zagórze is likewise managed under the Speciality Chemicals segment. The quartzite mined is primarily used as backfill material for the construction of roads and railway tracks. Some goes to the ferrosilicon industry and we are also planning to use a portion of the quartzite in Iceland, where we are erecting a state-of-the-art silicon metal production facility due for completion at the start of 2018.







The Speciality Chemicals segment is extremely diversified: here we see the quartzite quarry operated by PCC Silicium S.A. in Poland (top left), and the site of PCC Trade & Services GmbH in Essen (right). Additives used in the filling of inkjet cartridges are also produced in this segment (bottom left).





### **CONSUMER PRODUCTS**

"ROKO", "ROKO ECO" & CO. – THE BRANDED CONSUMER GOODS PRODUCED BY THE PCC GROUP

With PCC Consumer Products S.A., the Chemicals division of the PCC Group also boasts its own FMCG (fast-moving consumer goods) operation, which – following extensive upgrade and modernisation measures – we intend to get back on the road to success in the course of 2016. The segment specialises in the manufacture of household and industrial cleaners, laundry detergents and personal care products. We distribute these both under our own brand names such as "ROKO" and "Roko Eco" and also as a private label producer predominantly active to date in Poland and certain other countries of Central and Eastern Europe. Also assigned to this segment is the Polish matches manufacturer PCC Consumer Products Czechowice S.A. In fiscal 2015, the Consumer Products segment realised net external sales of  $\leqslant$  38.6 million (2014:  $\leqslant$  42.5 million) and an EBITDA figure of  $\leqslant$  –0.1 million (2014:  $\leqslant$  1.1 million).

Key financials and data of the Consumer Products segment	2015	2014	Absolute change	Change in %
Total sales of the segment	€38.7 m	€43.2 m	€-4.5 m	-10.4 %
Sales to other PCC segments	€0.1 m	€0.7 m	€-0.6 m	-84.5 %
Net external sales, consolidated	€38.6 m	€42.5 m	€-3.9 m	-9.3 %
EBITDA	€-0.1 m	€1.1 m	€-1.2 m	-106.2 %
Capital expenditure on intangible assets and property, plant and equipment	€3.1 m	€4.6 m	€-1.5 m	-32.4%
Number of employees (Dec. 31)	569	618	-49	-7.9 %



Our consumer products portfolio ranges from household and industrial cleaners to laundry detergents, liquid soaps and matches.

### THE CONSUMER PRODUCTS OF PCC

The largest portfolio company within the Consumer Products segment is PCC Consumer Products Kosmet Sp. z o.o. located at our chemicals production site in Brzeg Dolny. It is one of Poland's leading private label manufacturers in the field of household cleaners, laundry detergents and personal care products. Within its "ROKO" product line, PCC Consumer Products Kosmet also manufactures and markets a number of cleaning products for both industrial and household applications. And it offers a similar range of consumer goods based on renewable raw materials under its "Roko Eco" brand, which bears the renowned EU "Ecolabel" mark. While our core market is Poland, we are also expanding our Consumer Products segment into other countries of Eastern Europe; for example, we have our own production capability in Belarus.

Our consumer goods activities are pooled under the umbrella of the segment's holding company PCC Consumer Products S.A. domiciled in Warsaw. This manages not only PCC Consumer Products Kosmet but also our Silesian matches factory PCC Consumer Products Czechowice S.A. Aside from the classic safety match, the latter's range includes barbecue lighters and firelighters, with products being individual-



The mark of

ly tailored to customer requirements from the colour of the match heads and sticks to the design of the boxes, particularly where these are to serve as advertising giveaways. The matches are exclusively manufactured using timber from sustainably managed forests.

# APPLICATIONS AND MARKETS (SELECTION)

### Household and industrial cleaners, laundry detergents and personal care products

Our cleaning products, e.g. for floors, sanitary facilities, glass surfaces, hand hygiene and multi-purpose applications, are used in or by the following:

- ► Cleaning firms
- ► Hotels and restaurants
- ▶ Food and beverage industry
- Agriculture
- Public authorities

#### **Private labels**

As a leading private label manufacturer, we make products for adoption as own brands by leading discounters and retail chains, particularly in Poland. A recognised specialist for all kinds of liquid media used for industrial and household chemicals and cosmetics, we have for many years been one of the biggest suppliers of private label products in the region.

### **Matches and firelighters**

Matches and firelighters for private customers and also – e.g. as advertising giveaways – for commercial interests.

The product portfolio of PCC Consumer Products Kosmet addresses the needs of both consumers and professional trade and industry users.









### **ENERGY**

## EFFICIENT, CLEAN, MODERN: OUR POWER PLANTS

Our Energy segment is responsible for the project planning and operation of small hydropower plants, five of which have already been connected to the grid by the Renewable Energies business unit in South-East Europe, chiefly in the Republic of Macedonia. The construction of a sixth will commence this year. Owing to their minimal intervention in nature, these power plants are seen as especially environmentally compatible. The Conventional Energies business unit primarily supplies electricity to our own production facilities in Poland. We also provide efficiently generated heat, for example to the small town of Brzeg Dolny, which is the location of our largest chemicals site. In 2015, the segment as a whole realised net external sales of  $\in$  11.3 million (2014:  $\in$  10.9 million) and reported a divisional EBITDA of  $\in$  7.3 million (2014:  $\in$  5.2 million).

2015
€28.4 m
€ 17.1 m
€ 11.3 m
€7.3 m
€3.4 m
179

2014	Absolute change	Change in %
€26.0 m	€2.4 m	9.2 %
€15.1 m	€2.0 m	13.1 %
€10.9 m	€0.4 m	3.7 %
€5.2 m	€2.1 m	40.4%
€2.0 m	€1.4 m	68.0%
180	-1	-0.6 %



We are installing new electrostatic precipitators in our CHP plant, thereby significantly reducing dust emissions.

## RENEWABLE ENERGIES BUSINESS UNIT

We have commissioned the following five small hydropower plants to date. In total, they generate around 22.5 million kWh of electricity per year, thus reducing  $CO_2$  emissions by more than 22,000 metric tons.

#### Patiška small hydropower plant

The Patiška power plant supplies around 800 households. Construction work was significantly delayed by local political interests. However, we were able to overcome these challenges by, among other things, sponsoring a social project. This involved renewing some 2,000 metres of the main street in the village of Patiška.

Location	Patiška, Republic of Macedonia
Completion	December 2014
CO <sub>2</sub> reduction	Average annual emissions reduction of approx. 2,900 metric tons of CO <sub>2</sub>
Capacity	0.65 megawatts
Production (forecast)	Approx. 3.1 million kWh of electricity per year (multi-year average)

#### Galičnik small hydropower plant

The small hydropower plant in Galičnik in Macedonia was granted an operating licence on October 21, 2014, just under two years after construction began. Since the electricity supply agreement came into force, the plant has provided electricity to around 1,000 households. Slope angles of up to some 60° and jagged, avalanche-prone rock formations, together with difficulties in gaining access to the terrain for heavy-duty machinery, made the construction work exceptionally complex. However, thanks to our joint efforts with a local building company, we were still able to make satisfactory progress.

Location	Galičnik, Republic of Macedonia
Completion	October 2014
CO <sub>2</sub> reduction	Average annual emissions reduction of approx. 3,900 metric tons of CO <sub>2</sub>
Capacity	1.15 megawatts
Production (forecast)	Approx. 4.1 million kWh of electricity per year (multi-year average)













Our Energy segment operates five wholly owned small hydropower plants. Together they produce an annual average of around 22.5 million kWh of electricity, thus reducing CO<sub>2</sub> emissions by over 22,000 metric tons each year.

#### Brajčino small hydropower plant

Commissioned in May 2014, this plant supplies around 1,200 households. The height difference between the Brajčino turbine house and the water catchments located above it amounts to 115 metres. The pressure that builds up in the filled penstock is 11.3 bar. The Pelton impeller spoons are therefore impacted by water jets impinging at a rate of around 46 metres per second (approx. 166 km/h), generating turbine speeds of 500 rpm to drive the generator and produce electricity.

Location	Brajčino, Republic of Macedonia
Completion	October 2014
CO <sub>2</sub> reduction	Average annual emissions reduction of approx. 4,700 metric tons of CO <sub>2</sub>
Capacity	1.44 megawatts
Production (forecast)	Approx. 5.0 million kWh of electricity per year (multi-year average)

#### Gradečka small hydropower plant

This small hydropower plant, PCC's first in the Republic of Macedonia, started producing electricity commercially in August 2013. Construction began in July of the previous year. The excavation work was made more difficult by the sometimes harsh weather conditions and the rocky subsoil in particular. However, the construction phase was completed after just over one year.

Location	Gradečka, Republic of Macedonia
Completion	August 2013
CO <sub>2</sub> reduction	Average annual emissions reduction of approx. 3,500 metric tons of CO <sub>2</sub>
Capacity	0.87 megawatts
Production (forecast)	Approx. 3.8 million kWh of electricity per year (multi-year average)

#### Mujada small hydropower plant

Our first climate-protection project, a small hydropower plant in Mujada, Central Bosnia, was connected to the grid in February 2009. Since operating at full load, the plant has generated 6.6 million kWh of electricity per annum as a multi-year average. The project commenced in October 2007.

Location	Mujada, Bosnia-Herzegovina (Canton of Central Bosnia)
Completion	February 2009
CO <sub>2</sub> reduction	Average annual emissions reduction of approx. 7,200 metric tons of CO <sub>2</sub>
Capacity	1.15 megawatts
Production (forecast)	Approx. 6.6 million kWh of electricity per year (multi-year average)

## CONVENTIONAL ENERGIES BUSINESS UNIT

The main revenue generator of the Energy segment is PCC Energetyka Blachownia Sp. z o.o., Kędzierzyn-Koźle (Poland), which operates in the field of power generation and heat supply. The Conventional Energies business unit also encompasses the energy-related activities of PCC Rokita SA with its cogeneration plant. This advanced power plant supplies our Brzeg Dolny site – and also provides 80 % of households in the small town with efficiently generated heat.

#### EC-3 cogeneration plant

This modern combined heat and power (CHP) plant is located on the factory site of PCC Rokita SA in Brzeg Dolny and since 2008 has supplied electricity to our chemicals production facility situated there.

Completion	November 2008
Capacity	70 megawatts of thermal energy,
	15 megawatts of electrical energy





## LOGISTICS

#### SAFE, RELIABLE AND FLEXIBLE **ON ROAD AND RAIL**

The main revenue generator of our Logistics segment is PCC Intermodal S.A. This counts among Poland's leading providers of combined road and rail container transport services and operates five wholly owned container terminals. We have significantly expanded and upgraded four of these terminals in recent years; a sixth is at the planning stage. They allow us to offer regular scheduled freight services connecting Germany and the Benelux countries with Poland and the countries of Eastern Europe. The segment also encompasses the Polish company PCC Autochem Sp. z o.o., which specialises in the road transport of liquid chemicals, and hazardous substances in particular, and the Moscow rail transport company ZAO PCC Rail. In 2015, our Logistics segment generated net external sales of €56.8 million (2014: €50.8 million) and reported a divisional EBITDA of € 4.9 million (2014: € 3.9 million).

Key financials and data of the Logistics segment	2015
Total sales of the segment	€66.8 m
Sales to other PCC segments	€ 10.0 m
Net external sales, consolidated	€ 56.8 m
EBITDA	€4.9 m
Capital expenditure on intangible assets and property, plant and equipment	€31.2 m
Number of employees (Dec. 31)	367

2014	Absolute change	Change in %
€59.9 m	€6.9 m	11.5 %
€9.0 m	€1.0 m	10.9 %
€50.8 m	€5.9 m	11.6 %
€3.9 m	€0.9 m	24.0 %
€19.3 m	€11.9 m	61.8%
332	35	10.5 %



In 2015, the freight transport volume of PCC Intermodal was some 175,000 TEU (twenty-foot equivalent units) or around 110,000 containers.

## INTERMODAL TRANSPORT BUSINESS UNIT

#### **PCC terminal in Kutno**

The Kutno PCC terminal is today one of Poland's most modern combined transport terminals. It enables the rapid and efficient transfer of cargo along both an east-west axis from Western to Eastern Europe and vice versa, and a north-south axis from the Baltic ports of Gdańsk and Gdynia to the ports of Koper and Trieste on the Adriatic. In 2015, the annual handling capacity was increased considerably by 150% to 250,000 TEU (the unit of measurement for twenty-foot standard containers). The terminal was the first advanced logistics and handling facility in Central Poland and was commissioned by PCC Intermodal S.A. in 2011 as the company's first investment project of this scale. All expansion phases were completed by July 2015.

Location	Kutno, Central Poland
Site area	80,000 m <sup>2</sup>
Handling capacity per year	250,000 TEU
Storage capacity	4,000 TEU
Infrastructure/ facilities	<ul> <li>6 reach-stackers</li> <li>2 gantry cranes</li> <li>9,000 m² railway area</li> <li>4 block-train spur tracks, each 700 m long</li> <li>Entrance and exit gates with four lanes</li> <li>Office and staff building</li> <li>Workshop for container repairs</li> </ul>

#### **PCC** terminal in Gliwice

The Gliwice PCC terminal, approximately 35 kilometres away from Katowice, handles cargo from Upper Silesia. It benefits from an excellent location, close to the intersection of two trans-European traffic corridors: Berlin/Dresden-Wrocław-Lviv-Kiev and Gdańsk-Katowice-Žilina. The site area of the facility in Gliwice was significantly increased by an expansion project in the fourth quarter of 2015, rising from 30,000 m² to 50,000 m².

Location	Gliwice, Upper Silesia (Poland)
Site area	50,000 m <sup>2</sup>
Handling capacity per year	More than 150,000 TEU
Storage capacity	2,900 TEU
Infrastructure/ facilities	<ul> <li>2 gantry cranes</li> <li>4 reach-stackers</li> <li>4 spur tracks, each 650 m long</li> <li>50 parking spaces for trucks</li> </ul>

#### **PCC terminal in Brzeg Dolny**

This terminal is located on the factory site of PCC Rokita SA in Brzeg Dolny and promotes the flow of goods in the region of Lower Silesia. The expansion project, which was officially completed in September 2015, more than doubled the annual handling capacity from around 50,000 TEU to around 110,000 TEU. In addition, the storage capacity was increased and the fleet expanded.

Location	Brzeg Dolny, Lower Silesia (Poland)
Site area	28,000 m²
Handling capacity per year	110,000 TEU
Storage capacity	2,700 TEU
Infrastructure/ facilities	<ul> <li>4 reach-stackers</li> <li>4 block-train spur tracks, each 650 m long</li> <li>Goods wagon repair facility with an area of 335 m²</li> <li>20 parking spaces for trailers</li> </ul>

#### PCC terminal in Frankfurt (Oder)

This terminal is located on the German-Polish border and handles goods flows primarily from the Berlin/Brandenburg region. The Frankfurt (Oder) facility is further enabling us to develop our intermodal transport network westwards towards France and Spain. This combined transport terminal, which has undergone significant expansion in recent years, has been operated by PCC Intermodal S.A. since April 2012. Its current annual handling capacity is in excess of 100,000 TEU.

Location	Frankfurt (Oder)
Site area	30,000 m <sup>2</sup>
Handling capacity per year	More than 100,000 TEU
Storage capacity	1,000 TEU
Infrastructure/ facilities	<ul> <li>2 reach-stackers</li> <li>1 gantry crane (speed: 120 m/min, span: 70 m, load-lifting capacity: 41 t)</li> <li>4 block-train spur tracks, each 600 m long</li> </ul>

#### **PCC** terminal in Debica

The PCC terminal in Debica is a highly efficient facility that handles cargo transiting to and from South-East Poland. It is situated in the administrative district of Podkarpackie and has a site area of 15,000 m<sup>2</sup>. The Debica terminal currently has a storage capacity of 1,200 TEU. There are several cities, for example Rzeszów, Nowy Sącz, Tarnów and Stalowa Wola, within a radius of 100 to 150 kilometres of the terminal.

Location	Dębica (Poland)
Site area	15,000 m²
Handling capacity per year	50,000 TEU
Storage capacity	1,200 TEU
Infrastructure/ facilities	<ul><li>1 block-train spur track</li><li>2 reach-stackers</li><li>10 parking spaces for trailers</li></ul>

#### **ROAD HAULAGE BUSINESS UNIT**

The road haulage company PCC Autochem runs a fleet of around 110 road tankers which operate on behalf of customers throughout Europe from a hub on the factory site of PCC Rokita in Brzeg Dolny. Specialising in the transportation of liquid chemicals, PCC Autochem also has its own tank cleaning facility especially designed for hazardous substances.

#### **RAIL TRANSPORT BUSINESS UNIT**

Our Russian subsidiary ZAO PCC Rail operates a fleet of currently around 600 goods wagons designed to run on the wide gauge railways of Russia and the adjoining CIS states, carrying in particular construction materials, metals and coal.

PCC Autochem Sp. z o.o. specialises in the transport of liquid chemicals and also has its own tank cleaning facility.







Dębica



The Holding/Projects segment which, in addition to the Group holding company PCC SE, also encompasses other companies and units, develops future-aligned projects – such as the construction of a silicon metal production plant in Iceland, which started officially in September 2015 following a planning and project development phase lasting several years. This project management activity reduces the workload on the operating units. The Holding/Projects segment also provides core corporate services to the Group companies, for instance in the areas of finance and information technology. The segment is organised into three business units: Portfolio Management, Projects and Services. In 2015, the segment generated net external sales of € 7.0 million (2014: € 7.4 million) and reported a divisional EBITDA of € 1.9 million (2014: € − 1.8 million).

2015	2014	Absolute change	Change in %
€40.7 m	€36.3 m	€4.3 m	11.9 %
€33.6 m	€28.9 m	€4.7 m	16.2 %
€7.0 m	€7.4 m	€-0.4 m	-4.7 %
€1.9 m	€-1.8 m	€3.8 m	206.7 %
€76.3 m	€18.5 m	€ 57.8 m	312.0 %
740	753	– 13	-1.7 %
	€33.6 m €7.0 m €1.9 m €76.3 m	€40.7 m €36.3 m €33.6 m €28.9 m €7.0 m €7.4 m €1.9 m €-1.8 m €76.3 m €18.5 m 740 753	2015 2014 change  €40.7 m €36.3 m €4.3 m  €33.6 m €28.9 m €4.7 m  €7.0 m €7.4 m €-0.4 m  €1.9 m €-1.8 m €3.8 m  €76.3 m €18.5 m €57.8 m  740 753 -13



The Holding/Projects segment plans and develops future-aligned projects and also provides central Group services.

#### **PORTFOLIO MANAGEMENT BUSINESS UNIT**

The active portfolio management approach of PCC SE encompasses, firstly, the development of our operations and affiliates. Our focus in this regard is aligned in equal measure to the acquisition of new shareholdings and the leveraging of existing activities and projects. Conversely, PCC SE is also willing and able to divest operations and affiliates where disposal offers attractive gains and the funds thus released can be invested in the expansion of other core activities. The holding company will also dispose of portfolio entities that are outside the core business interests of the PCC Group. For instance, in the reporting year, we sold off our telecommunication and data centre activities. The closing for the divestment of the data centre operated by 3Services Factory S.A. and the associated minority interest in 3S S.A. took place as scheduled at the end of June 2015.

In recent years we have also listed a total of three Group companies on the Warsaw Stock Exchange: PCC Rokita SA in 2014, PCC Exol SA in 2012 and PCC Intermodal S.A. in 2009. PCC SE still retains its majority interests in these affiliates.

Computer images of our silicon metal plant (left), which we are currently building in Iceland, and our planned dimethyl ether production facility in Russia.



In this business unit we pool projects in the planning and construction phase before allocating them to our operating Group segments. This enables us to reduce the burden of project management on the segments concerned, while at the same time leveraging experience gained by Group management from two decades of planning and project stewardship in developing new fields of activity.

#### Silicon metal production plant in Iceland

The largest project – and also hitherto the largest single investment in the history of the PCC Group - relates to the construction of a silicon metal plant in Iceland. The production of silicon metal is scheduled to commence in early 2018, and the plant's annual capacity will be around 32,000 metric tons. For further details, please see page 44 onwards and page 93 onwards.

#### Dimethyl ether production plant in Russia

A further project that we are planning on the basis of a longterm joint venture with a Russian partner is the construction of a plant for the production of ultra-pure dimethyl ether (DME) in Russia. Commissioning of the plant, which will have an annual capacity of 20,000 metric tons, is scheduled for late 2017.

#### **SERVICES BUSINESS UNIT**

In addition to project development and management, the Holding segment also provides Group services in the fields of finance, corporate development, information technology, environmental protection, research and development and engineering/technology. Working from our chemicals site in Brzeg Dolny, for example, PCC IT S.A. provides IT services to internal and external customers.





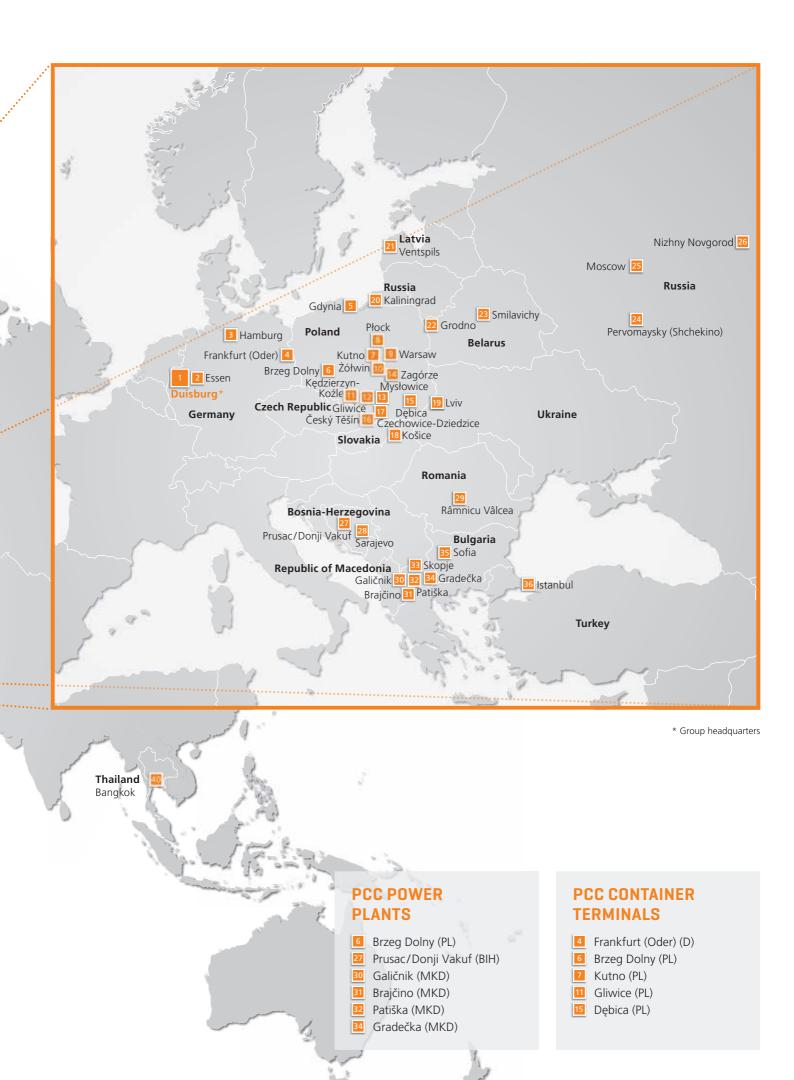


## **PCC GROUP SITES**

#### 3,000 employees - 40 sites - 17 countries

The PCC Group companies operate at 40 sites in 17 countries (status as of December 31, 2015). Most of our approximately 3,000 employees are active within Europe. However, the PCC Group is also represented in America, Asia and Africa.





## THE STRUCTURE OF THE PCC GROUP

The PCC Group comprises some 70 subsidiaries and affiliates in Germany and abroad. The main fully consolidated entities of the individual segments are shown on this double page (status as of December 31, 2015). A detailed list of the various shareholdings can be found under Note 41 to the consolidated financial statements at the back of this report.



#### **Surfactants segment**

#### **Chlorine segment**

#### **Speciality Chemicals segment**



Polyols business unit of PCC Rokita SA Brzeg Dolny (Poland) (84.16%)



PCC Prodex Sp. z o.o. Warsaw (Poland) (84.16%)



PCC Prodex GmbH Essen (Germany) (84.16%)



PCC PU Sp. z o.o. Brzeg Dolny (Poland) (84.16 %)



PCC Exol SA Brzeg Dolny (Poland) (80.04%)



PCC Chemax, Inc. Piedmont, SC (USA) (80.04%)



Tensis Sp. z o.o. Brzeg Dolny (Poland) (80.04%)



Chlorine business unit of PCC Rokita SA Brzeg Dolny (Poland) (84.16 %)



MCAA SE Brzeg Dolny (Poland) (100%)



PCC MCAA Sp. z o.o. Brzeg Dolny (Poland) (100 %)



Phosphorus and Naphthalene Derivatives business unit of PCC Rokita SA Brzeg Dolny (Poland) (84.16 %)



PCC Synteza S.A. Kędzierzyn-Koźle (Poland) (100%)



PCC Silicium S.A. Zagórze (Poland) (99.96 %)

#### **Trading companies**



PCC Trade & Services GmbH (formerly: Petro Carbo Chem GmbH) Duisburg (Germany) (100 %)

#### NOVOBALT terminal

ZAO Novobalt Terminal Kaliningrad (Russia) (100 %)



PCC MORAVA-CHEM s.r.o. Český Těšín (Czech Republic) (100 %)



PCC SE, holding company of the PCC Group, Duisburg (Germany)

#### **Consumer Products segment**

## Consumer Products

PCC Consumer Products S.A. Warsaw (Poland) (100 %)



PCC Consumer Products Kosmet Sp. z o.o. Brzeg Dolny (Poland) (100 %)

### **KOSMET**

Kosmet Sp. z o.o. Brzeg Dolny (Poland) (100 %)



OOO PCC Consumer Products Navigator (formerly: OOO NPK Navigator) Grodno (Belarus) (100 %)



OOO PCC Consumer Products Moscow (Russia) (100 %)



PCC Consumer Products Czechowice S.A. Czechowice-Dziedzice (Poland) (99.74%)

#### **Energy segment**

## **POCC**

Energy business unit of PCC Rokita SA Brzeg Dolny (Poland) (84.16 %)



PCC Energetyka Blachownia Sp. z o.o. Kędzierzyn-Koźle (Poland) (84.46 %)



PCC DEG Renewables GmbH Duisburg (Germany) (60 %)



GRID BH d.o.o. Sarajevo (Bosnia-Herzegovina) (51.37 %)



PCC HYDRO DOOEL Skopje Skopje (Republic of Macedonia) (60 %)

#### Logistics segment

## OCC Intermedal

PCC Intermodal S.A. Gdynia (Poland) (69.52 %)



PCC Intermodal GmbH Duisburg (Germany) (69.52 %)



PCC Autochem Sp. z o.o. Brzeg Dolny (Poland) (84.16 %)



ZAO PCC Rail Moscow (Russia) (100 %)

#### Holding/Projects segment



PCC BakkiSilicon hf Húsavík (Iceland) (86.50%)



PCC IT S.A. Brzeg Dolny (Poland) (100%)



PCC Apakor Sp. z o.o. Brzeg Dolny (Poland) (83.81 %)



Ekologistyka Sp. z o.o. Brzeg Dolny (Poland) (84.16 %)



LabMatic Sp. z o.o. Brzeg Dolny (Poland) (83.94%)



Our investments form the basis for the future growth of the PCC Group and sustainable value creation. Once again, therefore, we significantly increased our capital spend in the reporting year, raising it by over 55 % year on year to a total of  $\leq$  160.1 million, with the focus on expansion and modernisation of our chemical production capabilities and the container terminals of our Logistics segment.

83	PCC INVESTMENTS
<b>84</b> 84 86 88 88	INVESTMENTS IN THE CHEMICALS DIVISION  Switch of chlorine production to environmentally friendly membrane technology  Construction of a production plant for ultra-pure monochloroacetic acid  Increase in capacity of the propylene oxide plant  Establishment of a polyols joint venture in Thailand  Modernisation and expansion of consumer goods production
<b>90</b> 90	INVESTMENTS IN THE ENERGY DIVISION  Modernisation of the CHP plant in Brzeg Dolny
<b>90</b> 90	INVESTMENTS IN THE LOGISTICS DIVISION  Expansion of the PCC terminals in Kutno, Gliwice and Brzeg Dolny
<b>93</b> 93	INVESTMENTS IN THE HOLDING/PROJECTS DIVISION Construction of a silicon metal production plant in Iceland

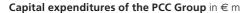
## **PCC INVESTMENTS**

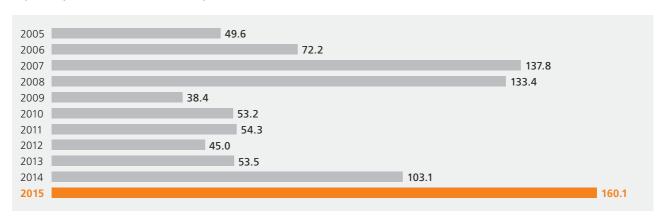
Within the PCC Group we once again stepped up our investment programme in 2015, substantially increasing the year-on-year capital expenditures for a third time in a row. Across the Group, we invested a total of € 160.1 million in 2015, a rise of 55 % versus 2014 (€ 103.1 million). 98.1 % of these investments went into property, plant and equipment, with the remainder on intangible assets.

This significant increase in investment enabled us to further strengthen our operational units and additionally consolidate our foundation for future value creation. Once again in 2015 we succeeded in successfully completing or significantly advancing a number of multi-year investment projects – particularly in the Chlorine segment, the Logistics segment and

the Projects business unit. And now we are looking forward to further investment successes in the course of fiscal 2016.

As in previous years, much of our capital spend in 2015 was in the Chemicals division where we continue to concentrate on the modernisation of our production facilities and the





development of new capacities. For example, we made major progress in 2015 with the construction of a production plant for MCAA (monochloroacetic acid) at our largest chemicals site in Brzeg Dolny, Lower Silesia (Poland). The final commissioning of this facility, with which we will significantly extend our value chain in the Chlorine segment, is scheduled for the middle of 2016. A further focus of investment activity in this segment in recent years has been the switch of our chlor-alkali electrolysis process to environmentally friendly and energy-efficient membrane technology. The second and therefore last phase of this modernisation project was completed in the first quarter of 2015, enabling us to commission the complete membrane electrolysis complex in April 2015.

Among the projects being undertaken in the Polyols segment is that of expanding the Polyurethane Systems business unit. The associated products, for example our roof-insulating spray foam system, are being marketed in the German-speaking countries of Europe and the Benelux union by PCC Prodex GmbH out of its offices in Essen (Germany). This subsidiary has also started to manufacture specialised flexible foam systems for these markets at its Essen site. Within the Consumer Products segment, PCC Consumer Products Kosmet Sp. z o.o. completed the modernisation and expansion work on its production facilities for laundry and home care detergent products in Brzeg Dolny.

Once again in the year under review, the Logistics segment undertook a number of strategic investments involving our container terminals. Following expansion of the handling facility in Frankfurt (Oder) in December 2014, last year we completed expansion and modernisation investments at another three terminals: in June we completed provisionally the last expansion phase at the terminal in Kutno, Poland; September saw completion of the expansion work on the terminal at our chemicals site in Brzeg Dolny, and in December 2015 we also finished upgrading the terminal in Gliwice, with Kutno and Gliwice also each benefiting from the installation of two new gantry cranes.

Within the Holding/Projects segment, we began in June 2015 with the construction of a production plant for silicon metal in Iceland. The building work has so far remained on schedule and within budget. Overall, the investment volume for this project amounts to around US\$ 300 million (approx. € 265 million). We expect the plant to be up and running in 2018.

For 2016, we also anticipate positive developments with respect to our project involving the construction of a plant for the manufacture of ultra-pure dimethyl ether (DME) in Russia which we are pursuing together with a long-standing Russian partner. Also in the Chemicals division, further production lines for the Polyols segment are likewise expected to be completed. For more details on these and other projects, please read on.

## **INVESTMENTS IN THE CHEMICALS DIVISION**

#### SWITCH OF CHLORINE PRODUCTION TO ENVIRONMENTALLY FRIENDLY MEMBRANE TECHNOLOGY

In April 2015, PCC Rokita SA was able to complete the technological switch of its chlorine production process to modern, environmentally friendly and energy-efficient membrane technology. This initially involved shutting down, at the beginning of March, the entire plant operating on the basis of the conventional amalgam process. Following this brief standstill, the new facilities were commissioned at the end of March, with all four electrolysers successively started up. First came the recommissioning of the two electrolysers serving membrane electrolysis plant 1 which had already been in productive service since 2010. Then, at the beginning of

April, the two recently installed and completed electrolysers of membrane electrolysis plant 2 also went into operation to conclude the switch-over.

Subsequently, as scheduled in mid-July 2015, PCC Rokita further increased the capacity of its chlorine production plant. Marking the final phase of installation of the new chloralkali electrolysis capability, this involved adding a fifth electrolyser to the new membrane electrolysis complex. In all, this new technology has enabled PCC Rokita to increase its annual capacity from 120,000 metric tons of chlorine to 135,000 metric tons, and from 135,000 metric tons of caustic soda to 152,000 metric tons, that is to say by more than 12 % in each case. Further process optimisations are planned for 2016, and these are expected to further increase capacity by more than 10 % in respect of each of the two products.



The first stage of the project, membrane electrolysis plant 1, had already resulted in an appreciable increase in capacity in 2010, at the same time substantially reducing energy consumption. As a result of the technology switch finalised in 2015, we significantly increased the scale of these improvements, while completely eliminating mercury from the production process. Electricity costs were once again substantially reduced and, since May 2015, we have been able to cut annual  $CO_2$  emissions by 140,000 metric tons.

Completion of the technology switch in the spring of 2015 meant this investment project had met the related EU requirements for the general closing-down of facilities using the amalgam process well ahead of the specified deadline of December 2017.

## CONSTRUCTION OF A PRODUCTION PLANT FOR ULTRA-PURE MONOCHLOROACETIC ACID

2015 also saw PCC Rokita make further progress with the construction of a production plant for the manufacture of ultrapure monochloroacetic acid (MCAA) at its site in Brzeg Dolny. MCAA is used in a wide number of industrial applications, with the food and beverage industries at the top of the list. It is also a feedstock in the manufacture of medicines, body care products, cosmetics, dyestuffs and crop protection products. Expected to significantly extend the chlorine value chain of PCC Rokita in the future, the plant is scheduled to go into service around the middle of 2016 – once a still missing component has finally been delivered and installed – thereafter contributing long-term to an increase in the profitability of the Chlorine segment. Its annual capacity will be in the region of 42,000 metric tons of MCAA.





>> THE NEW MCAA PLANT WILL ENABLE US TO SIGNIFICANTLY EXTEND THE CHLORINE VALUE CHAIN OF PCC ROKITA GOING FORWARD. LONG-TERM, THIS WILL CONTRIBUTE TO AN INCREASE IN EARNINGS WITHIN THE CHLORINE SEGMENT. <<

**Waldemar Preussner** 

Chairman of the Administrative Board of PCC SE



**4** A

We expect to commission the MCAA plant around the middle of 2016. Its annual capacity will lie in the region of 42,000 metric tons of MCAA, a feedstock used among other things in the food and beverage industries.

## INCREASE IN CAPACITY OF THE PROPYLENE OXIDE PLANT

In June 2015, PCC Rokita completed another investment project within the Chlorine segment. This involved expanding the annual capacity of the propylene oxide plant from 36,000 metric tons to 48,000 metric tons. Propylene oxide is used for the manufacture of polyols, one of the core business activities of PCC Rokita. The increase in capacity together with existing feedstock purchase agreements involving long-standing partners contributes appreciably to securing the raw material base both for the current polyol production of PCC Rokita and the growth targeted within the Polyols segment.

## ESTABLISHMENT OF A POLYOLS JOINT VENTURE IN THAILAND

Aligned to its policy of increasing internationalisation, in January 2015 PCC Rokita established a joint venture in Thailand. The object of the 50/50 undertaking, IRPC-PCC Company Ltd. domiciled in Bangkok, is to harness the rapidly growing markets of South-East Asia, China and India for, in particular, the products of the Polyols segment. There is currently

no other chemicals sector developing with such dynamism as the Asian market. The joint venture will be focusing on the distribution of products from the portfolio of the partner IRPC Polyol Company Ltd. (IRPCP). At the same time, the Thai company intends to expand its portfolio to include new products manufactured on the basis of a technology licence granted by PCC Rokita.

## MODERNISATION AND EXPANSION OF CONSUMER GOODS PRODUCTION

Over the last three years, PCC has been pursuing the modernisation and expansion of its production facilities within the Consumer Products segment. In the meantime, PCC Consumer Products Kosmet Sp. z o.o. – a leading Polish producer of household and industrial cleaners, laundry detergents and personal care products – has finished work on the manufacturing facilities at its primary domicile, our chemicals site in Brzeg Dolny in Poland's Lower Silesia. Not only has production been expanded, it has also been completely upgraded to new technologies. New facilities have also been created including a new wing that houses a modern laboratory. The investments made provide the basis for expanding our consumer goods business in the emerging markets of Eastern Europe.





Following expansion of the propylene oxide plant at our Brzeg Dolny site, we have seen annual production capacity increase from 36,000 metric tons to 48,000 metric tons.

Expansion of the consumer goods production capability of PCC Consumer Products Kosmet Sp. z o.o. in Brzeg Dolny also included the provision of new storage capacities.









The advanced CHP plant EC-3 is equipped with two steam generators.

## INVESTMENTS IN THE ENERGY DIVISION

## MODERNISATION OF THE CHP PLANT IN BRZEG DOLNY

The combined heat and power plant of PCC Rokita SA is an advanced example of cogeneration technology. Managed under the Conventional Energies business unit, it is located at our chemicals site in Brzeg Dolny. This unit not only supplies our own production facilities but also provides the majority of households in Brzeg Dolny with heat. At the beginning of this year, PCC Rokita continued its modernisation with the installation of a further advanced electrostatic precipitator

to filter dust emanating from the plant. One such filter had already been installed in 2015 with the first phase of construction. The dust emissions were significantly reduced as a result and are already below the new EU limits which will come into force in Poland as from 2020.

Within the Renewable Energies business unit, we expect to start construction in 2016 of a further environmentally friendly small hydropower plant in the Republic of Macedonia where four such facilities have already been commissioned in the course of 2013 and 2014.

## INVESTMENTS IN THE LOGISTICS DIVISION

## EXPANSION OF THE PCC TERMINALS IN KUTNO, GLIWICE AND BRZEG DOLNY

As in the previous year, PCC Intermodal S.A., headquartered in Gdynia (Poland) and the largest company of our Logistics division, was able to make significant progress in 2015 with the expansion of its container terminals. Following completion of the terminal upgrade project in Frankfurt (Oder) in December 2014, three further terminal expansion and mod-

ernisation projects have been successfully concluded at our Polish sites in Kutno, Brzeg Dolny and Gliwice. PCC Intermodal is one of the leading combined transport service-providers in Poland and is excellently positioned within this fast-growing logistics market. The four investment projects completed in just 13 months mean that we are now able to once again accelerate the already high growth rate of this affiliate, with our Polish terminals counting among the most advanced in the country.



The terminal expansion work in Kutno included installation of two gantry cranes and the purchase of further reachstackers.









Following the successful expansion of the PCC terminal in Brzeg Dolny, handling capacity there has now increased to 110,000 TEU per year.

The PCC terminal at the Gliwice site boasts a handling capacity of 150,000 TEU and, as a result of the expansion work completed at the end of 2015, rates as the most advanced logistics centre in Poland's Upper Silesia.

The PCC terminal in Kutno counts among Poland's most modern combined transport facilities. Its annual handling capacity has been extended to 250,000 TEU.

Last year in June, the container terminal in Kutno was the first to go "live" after having been extensively modernised and expanded. Two gantry cranes were installed which, with a speed of 160 metres per minute, a span of 40 metres and a maximum load capacity of 41 metric tons, ensure rapid train processing and container handling. There are also six reach-stackers in operation at the site for loading and unloading the container trains on the four 700 metre long spur tracks available. The handling capacity of the terminal has been more than doubled from 100,000 TEU (standard unit of measurement for a twenty-foot ISO container) to currently 250,000 TEU. The handling area is 80,000 square metres, and the terminal's storage capacity amounts to 4,000 TEU. The PCC terminal in Kutno today counts among Poland's most advanced combined transport handling facilities.

On September 24, 2015, following the start-up of the newly upgraded terminal in Kutno, PCC Intermodal officially commissioned the expanded and modernised container terminal in Brzeg Dolny at our most important chemicals site. The an-

nual handling capacity of this terminal, like that at Kutno, was more than doubled to 110,000 TEU. Now, the terminal in Brzeg Dolny features three flexibly deployable reach-stackers for container handling on four block train spur tracks, each measuring 650 metres in length. The handling area of the terminal measures 28,000 square metres and its storage capacity is 2,700 TEU.

As scheduled, the end of the year saw PCC Intermodal also take its new container terminal in Gliwice, Poland, into service. The expanded and modernised facility with a handling area of 50,000 square metres is equipped with two new gantry cranes. Today, its annual handling capacity is around 150,000 TEU. As a result of this terminal expansion project, Gliwice now boasts the most advanced logistics centre in Upper Silesia. Located about 35 kilometres from Katowice, the terminal is ideally placed at the intersection of the trans-European transport corridors of Berlin/Dresden-Wrocław-Lviv-Kiev and Gdańsk-Katowice-Žilina.

# INVESTMENTS IN THE HOLDING/PROJECTS DIVISION

## CONSTRUCTION OF A SILICON METAL PRODUCTION PLANT IN ICELAND

After several years of preparation, we were able to start in June 2015 with the erection of an advanced and environmentally friendly silicon metal production plant in Iceland. The construction site was officially inaugurated on September 17 in the presence of high-calibre representatives from the world of politics and business. This marked the point at which currently the biggest individual investment project in the history of the PCC Group transited from the planning and project engineering phase to the building phase.

Scheduled for completion in 2018, the production plant with an annual capacity of 32,000 metric tons is being constructed in the north of the island, near the town of Húsavík. The project entails using a portion of the quartzite that we extract from the quarry of our Group subsidiary PCC Silicium S.A. in Zagórze (Poland) as the feedstock for the smelting operation, thus significantly extending the value chain in this domain. The marketing

and sales of the end product, silicon metal, are already catered for to a large extent by long-term supply contracts involving German companies, thus reducing the dependency of the project on the volatile commodities spot markets. The primary purchaser is the aluminium industry which uses silicon metal as an alloyant. However, demand for higher-quality silicon metal products is also increasing in the chemicals and electrical industries. The production facility is being built on a turnkey basis by plant constructor SMS group GmbH, Düsseldorf (Germany).

The direct owner and promoter of the new plant is our Icelandic project company PCC BakkiSilicon hf, the head office of which is located in the immediately vicinity of the production site in Húsavík. The Icelandic state is promoting development of the Bakki industrial park; back in 2013, the Icelandic parliament passed with a large majority several laws permitting its construction. One of these laws is exclusively aligned to our silicon metal project and embodies in particular financial support for the initial investment in relation to the ground work, augmented by long-term tax benefits.

Work on the site of PCC BakkiSilicon hf also continued to schedule through the winter months.





Also back in 2013, we were able to sign a number of important contracts, including one covering low-cost power supplies from exclusively renewable energy sources. Indeed, the availability of inexpensive power guaranteed over the long term, particularly from geothermal sources, constitutes one of the most significant site advantages that Iceland offers. In the following year, we made significant progress in securing the necessary finance for the investment project. And on September 25, 2014, we received a provisional cover note from the German government's Inter-Ministerial Committee in the form of a UFK export credit guarantee. This was a precondition for securing the financing from KfW IPEX-Bank, Frankfurt am Main (Germany). It was granted because the project was deemed of particular interest to the German economy due to the fact that the material produced is to be sold to Germany-based companies. The global competition for commodities is becoming ever tougher. PCC's investment in Iceland will therefore contribute to securing raw material supplies to German industry going forward.

At the end of 2014, we were able to secure the financing package for the Iceland project. The investment volume totalling around US\$300 million (approx. €265 million) is largely covered by a loan from KfW IPEX-Bank in the amount of US\$ 194 million (approx. € 170 million). The external financing structure put in place over a term of 15 years is based on provision of Hermes cover (Germany's export credit insurance) in conjunction with the aforementioned grant of untied loan guarantees under Germany's UFK scheme. Around a quarter of the capital outlay will be provided by a consortium of 20 Icelandic pension funds and the Icelandic bank Islandsbanki. In February 2015, we engaged Viridis.iQ GmbH, a consultancy firm headquartered in Constance (Germany) that specialises in the silicon metal and photovoltaic industries. Their remit is to provide us with know-how and technical support during the start-up phase in order to quickly ramp up our process capabilities and thus elevate our silicon metal production project to world class status. Then, in the first quarter of 2015, we were able, among other things, to sign the final equity documents with our Icelandic co-investors. The financial closing of the project took place at the beginning of June 2015.

# >> OUR PRODUCTION PLANT FOR SILICON METAL IN ICELAND WILL BE ONE OF THE MOST ADVANCED IN THE WORLD, BOTH FROM AN ECONOMIC POINT OF VIEW AND ALSO IN TERMS OF ITS ENVIRONMENTAL CREDENTIALS. <<



Site of the silicon metal production plant in Iceland: in the foreground, the coal store under construction.

Concrete pump with a reach of up to 60 metres. With this equipment, it is possible to lay foundations and construct walls with relative ease, even at locations of poor accessibility. On the left in the picture: timber shuttering for a furnace foundation.



The construction work in the new Bakki industrial park also began in June. The official site opening took place on September 17, 2015, presided over by Waldemar Preussner, Chairman of the Administrative Board of PCC SE. The fact that the ceremony was – as mentioned above – attended by high-calibre representatives from the world of politics and business reflects in particular the creation of around 120 direct jobs at the PCC plant, opening up important prospects for families living in the north-east of Iceland.

#### CURRENT PROGRESS WITH THE CON-STRUCTION OF THE SILICON METAL PLANT

The project has since proceeded to schedule. The detailed planning of the plant and also the terracing of the site around it have been extensively completed, and the first foundations have been laid. Some buildings will also already be finished in the course of the summer of 2016. Among

other things, all the side walls of the first main facility have been erected. This coal storage building measuring over 120 metres long and 30 metres wide should therefore now be completed in July 2016, a little ahead of the planned date. We have likewise instigated recruitment activities in order to ensure that we have the necessary personnel available to operate the plant once it is commissioned in 2018. At the beginning of 2016 we took an important step in this regard with the hiring of a very experienced management team. On the Icelandic side, an additional geothermal power plant is being built concurrently near the silicon production facility together with a high-tension link to feed its power system. The port of Húsavík is also being expanded and linked to the plant by a new industrial road that passes through a tunnel measuring around a kilometre in length. All these investments are directly related to our project and have led to the development of an atmosphere of optimism in the region.



# GROUP MANAGEMENT REPORT

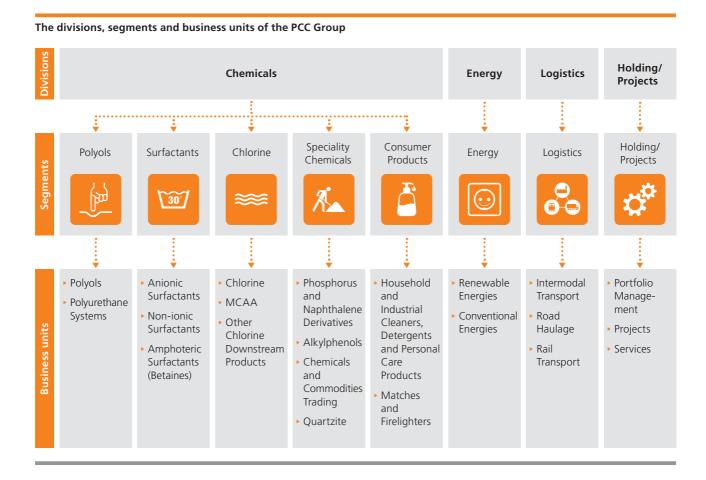
In fiscal 2015, the PCC Group disposed of marginal activities in the telecommunications sector. The resources released as a result and the proceeds from the divestment are now available for increasing investments in our core businesses, with the focus on developing new sales markets for existing products and transferring our know-how into new markets. Our aim is to consistently achieve further increases in gross profit and, supported by strict cost management, improvements in earnings.

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### ORGANISATION OF THE PCC GROUP

The PCC Group operates in 17 countries at 40 sites, employing around 3,000 people. Our investment portfolio is divided into eight segments. The seven segments Polyols, Surfactants, Chlorine, Speciality Chemicals, Consumer Products, Energy

and Logistics carry the operational responsibility. Our international companies and entities control 19 business units allocated to these segments. The eighth segment, Holding/Projects, to which not only our parent holding company PCC SE but



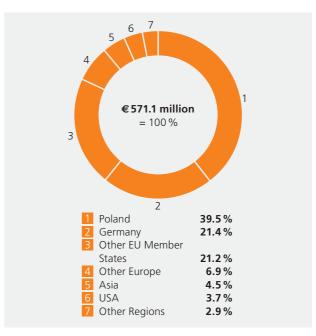
also other companies and entities belong, is primarily responsible for providing corporate services in the fields of finance, business development, information technology, environmental protection, site infrastructure management, research & development, and engineering & technology. Managed under this segment are the project companies PCC BakkiSilicon hf (silicon metal project in Iceland) and OOO DME Aerosol (dimethyl ether project in Russia).

The Group strategy of PCC is aligned to sustainable business investments and operational development with the aim, in particular, of generating further enterprise value. As a growth-led investor predominantly aligned to the long term, the holding company PCC SE supports its portfolio of businesses in their entrepreneurial development and in the expansion of their various specific strengths. The existing investment portfolio is subject to a regime of proactive management and ongoing optimisation. Group policy encompasses both the regular examination of further projects and acquisitions with the objective of competence-related diversification into new market segments, and engagement in other non-core activities that we develop only to a certain degree of market maturity and then divest. Overall, this approach is intended to create the basis for further sustainable growth going forward.

For the purpose of our financial communications, we pool our businesses within seven regions: Germany, Poland, Other EU Member States, Other Europe, USA, Asia and Other Regions. In fiscal 2015, we generated 21.4% (previous year: 25.9%) of

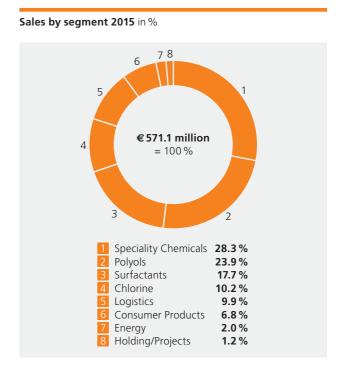
our sales with customers in Germany, and 39.5 % with customers in Poland (previous year: 35.2 %). Including PCC SE, the consolidated financial statements of the PCC Group for 2015 cover a scope of 44 fully consolidated entities. There is also one joint venture accounted for using the equity method.

#### Sales by region 2015 in %



## **CORE BUSINESS ACTIVITIES**

Consolidated sales in fiscal 2015 amounted to €571.1 million. Compared to the corresponding prior-year figure of € 647.3 million, this represents a decline of 11.8 %. The main reason for this development was the collapse in commodity prices as a consequence of the drastic decline in the price for crude oil. As a result, sales revenues in the Chemicals division were down 14.2 %, exceeding the decrease posted by the Group as a whole. Nevertheless, this division with its five segments Polyols, Surfactants, Chlorine, Speciality Chemicals and Consumer Products remained the principal revenue generator within the Group with a share of 86.9 % of consolidated sales (previous year: 89.3 %). Business development within the individual segments of this division was once again extremely mixed as the following detailed analysis shows. The Logistics division generated around 10 % of Group sales (previous year: 8%). This segment recorded an increase in revenues of 11.6 % to €56.8 million, primarily due to a further significant increase in year-on-year performance at PCC Intermodal S.A., Gdynia (Poland). Sales of the Energy segment increased by  $\leq 0.4$  million to  $\leq 11.3$  million. In the Holding/Projects segment, however, revenue decreased by €0.4 million to €7.0 million.



## **BUSINESS PERFORMANCE BY SEGMENT**

#### **POLYOLS**

The Polyols segment is divided into the business units Polyols and Polyurethane Systems with products for the mattress, furniture and automotive industries, and also for the construction sector. This segment includes the corresponding subsegment of PCC Rokita SA, Brzeg Dolny (Poland), i.e. its Polyols business unit, and the system providers PCC Prodex Sp. z o.o., Warsaw (Poland), and PCC Prodex GmbH, Essen (Germany). At the end of the fiscal year, the Polyols segment had 171 employees (previous year: 145).

Sales generated by this segment in fiscal 2015 amounted to €136.2 million (previous year: €147.0 million). Its share of total Group sales increased to 23.9 % (previous year: 22.7 %). The decrease in sales of 7.4 % compared to 2014 was largely due to declining commodity prices. On the purchasing side, however, the business also benefited from falling raw material prices. Consequently, 2015 saw the Polyols segment once again make an appreciable positive contribution to Group earnings. We intend to drive further diversification and expansion in the product portfolio of the Polyols business as we go forward. This will see a further increase

in the share of higher-grade speciality polyols in its range. In the Polyurethane Systems business unit, too, we intend to force forward further diversification and internationalisation. An important milestone was reached in this regard in January 2015 with the signing of a joint venture agreement between PCC Rokita SA and a Thai polyols manufacturer, advancing our internationalisation strategy and expansion of our production footprint outside Poland. From the base in Thailand, efforts will be made to gain entry in the still dynamically growing Asian market. Work also began in the course of 2015 with the production of speciality PU flexible foam products at the production facility in Essen acquired in the previous year. Since the beginning of 2015, rigid foams of Polish origin have been distributed to the Germany-Austria-Switzerland (DACH) region and also to the Benelux countries by the company located at this site, PCC Prodex GmbH (a 100 % subsidiary of PCC Prodex Sp. z o.o.). In Essen, too, both distribution and production are to be further expanded in the future, hence the decision was taken at the end of 2015 to inject further investment into the company and its facilities.

#### **SURFACTANTS**

The Surfactants segment generated sales of € 101.1 million in 2015. Compared to the prior-year figure of €98.8 million, this represents an increase of 2.3 %. As a result, the share of total sales revenues posted by the PCC Group rose year on year from 15.3 % to 17.7 %. The Surfactants segment comprises the business units Anionic Surfactants, Non-ionic Surfactants and Amphoteric Surfactants (Betaines). These products are used in the manufacture of laundry and homecare detergents, household cleaners, cosmetics and body care products, and also paints, inks and coatings. Organised under this segment are the companies PCC Exol SA, Brzeg Dolny (Poland), PCC Chemax, Inc., Piedmont (South Carolina, USA), and Tensis Sp. z o.o., likewise domiciled in Brzeg Dolny. The latter affiliate was merged at the end of the year with PCC Exol SA. As of the end of 2015, the number of people working in the Surfactants segment was 259 (previous year: 243).

Overall, the Surfactants product segment was able to significantly improve its performance compared to the previous year. Although sales here also fell below our expectations due to the low commodity price levels prevailing, on the purchasing side this price drop had, in some cases, an even stronger influence. The increased share of higher-grade products in the portfolio of PCC Exol SA also exerted a positive effect on margin development. As a consequence, PCC Exol SA closed fiscal 2015 with a substantially positive result that exceeded our expectations. The US American subsidiary of PCC Exol SA, PCC Chemax, Inc., also made a positive contribution to earnings, albeit below plan due primarily to the significant decline in sales of chemicals for the oil field industry – the previous main customer sector of PCC Chemax, Inc. In 2015, therefore, this portfolio company switched its endeavour to the development of products for a broader range of applications. In addition, cooperation with PCC Exol SA (including in the distribution of PCC Exol products in the American market) was further expanded in 2015. Similar to the Polyols segment, the PCC Group is engaged in a strategy of increasing internationalisation for the Surfactants segment. Thus, collaborations and production projects are being pursued both in Eastern Europe and in the Asian market.

#### **CHLORINE**

We generated sales in the Chlorine segment of €58.3 million, a decrease of 13.9 % year on year. This segment is divided into three business units: Chlorine, MCAA (monochloroacetic acid) and Other Downstream Chlorine Products, the latter serving primarily as a feedstock provider to other manufacturing business units within the Group. Allocated to the Chlorine segment is the corresponding Chlorine business unit of PCC Rokita SA, plus MCAA SE, likewise located in Brzeg Dolny, and PCC MCAA Sp. z o.o., again at the same site. At

the end of the year under review, there were 344 people working within this segment (previous year: 245).

The decline in sales in the Chlorine segment is essentially due to extended downtimes as a result of the switch of the second and thus last chlor-alkali electrolysis facility to environmentally friendly and significantly more energy-efficient membrane technology. The changeover process was successfully completed in the first half of 2015. In addition, a fifth electrolyser was incorporated into the plant in July 2015, increasing production capacity by more than 12 %. Further process optimisations are planned for 2016. The Chlorine segment nevertheless ended 2015 positively and above plan. However, as expected it was unable to reach the earnings figure of the previous year. Aside from the already mentioned downtimes, a further cause lay in temporary interruptions in the power supply: an extreme heat wave meant that, in summer 2015, the Polish power plants were in some cases forbidden from discharging their cooling water into the rivers. As a result, there were power interruptions across all of Poland's industry, with production outages ensuing.

The second major investment in this segment, namely the construction of a production plant for MCAA, was extensively completed in the course of 2015. However, final commissioning was delayed due to delivery of an incorrect component. With this plant, the value chain of the Chlorine segment will, in future, be significantly extended.

#### **SPECIALITY CHEMICALS**

The Speciality Chemicals segment realised sales of € 161.7 million in the year under review, representing a decrease of €60.3 million or 27.2 % versus the prior-year figure. Nevertheless, this segment remains the biggest revenue generator in the Group. It comprises the business units Phosphorus and Naphthalene Derivatives, Alkylphenols, and Chemicals and Commodities Trading. The Quartzite business unit also belongs to this segment as of the introduction of the new Group structure on January 1, 2013. Attributable to the Speciality Chemicals segment and business units is the corresponding business subsegment of PCC Rokita SA, that is to say its Phosphorus and Naphthalene Derivatives business unit, together with the following companies: PCC Synteza S.A., Kędzierzyn-Koźle (Poland), PCC Trade & Services GmbH, Duisburg (Germany), PCC Morava-Chem s.r.o., Český Těšín (Czech Republic), ZAO Novobalt Terminal, Kaliningrad (Russia), PCC Silicium S.A., Zagórze (Poland), and S.C. Euro-Urethane S.R.L., Râmnicu Vâlcea (Romania). The Speciality Chemicals segment had 363 employees as of the end of the reporting year (previous year: 380).

The two trading companies PCC Trade & Services GmbH and PCC Morava-Chem s.r.o. had to absorb significant decreases in sales in 2015, due primarily to the low commodity price levels prevailing. Increasing raw material imports from China

(particularly coke) and the continuing weakness of the steel industry due to existing overcapacities led to additional price pressure in the course of the year. Nevertheless, at least PCC Trade & Services GmbH was once again able to end fiscal 2015 with a positive result. PCC Morava-Chem s.r.o., on the other hand, closed the period under review with a loss, due among other things to one of its biggest customers declaring insolvency. The alkylphenols manufacturer PCC Synteza S.A. and the Phosphorus and Naphthalene Derivatives business unit of PCC Rokita SA were able to benefit from low prices for their raw materials in 2015 and - following losses in the previous period – succeeded in generating a positive earnings result for the year. In the case of PCC Synteza S.A., at least, this upward trend also continued through into the new fiscal year, with an additional boost coming from the expansion of alternative production facilities (including in cooperation with PCC Rokita SA) which is being progressed by PCC SE. In the Phosphorus and Naphthalene Derivatives business unit, on the other hand, competition became even stiffer at the beginning of the new fiscal year, with both Chinese and Russian suppliers having an impact.

As expected, PCC Silicium S.A. closed fiscal 2015 with another loss. The main cause of this has been the need to reserve a proportion of the quartzite quarry output of this affiliate so that higher-grade material is available for processing once the silicon metal project of PCC BakkiSilicon hf, Húsavík (Iceland), comes to fruition. Hence certain rock strata have been set aside for PCC Silicium S.A., leading to more lower-quality quartzite grades also having to be excavated. This, in turn, gives rise to more spoil for disposal in landfill sites, increasing the costs that the affiliate has to bear. The long-term objective remains to use certain, already defined quartzite grades for the manufacture of silicon metal in the production plant in Iceland that has been under construction since the middle of 2015. After a successful closing of this project, PCC SE therefore awarded a contract for the development of a corresponding mining concept for PCC Silicium S.A., and has also now issued a commitment to finance the investments necessary for this.

The Speciality Chemicals segment also includes the affiliate S.C. Euro-Urethane S.R.L. In 2015 and on the initiative of PCC SE, this portfolio company began liquidation of all the assets that it no longer requires. As a result, S.C. Euro-Urethane was at least able to generate a degree of cash flow in the course of the year. However, the future of this affiliate remains heavily dependent on the further development of our second Romanian investment, S.C. Oltchim S.A., Râmnicu Vâlcea (PCC SE shareholding: 32.34%), which is also a shareholder of S.C. Euro-Urethane. The assets of S.C. Oltchim S.A. were put into administered insolvency under Romanian law in January 2013. As a result, the book value of this shareholding amounting to around €20 million was completely written off from the balance sheet of PCC SE as of December 31, 2012. In the meantime, the administrator

has presented a restructuring plan which was approved by a meeting of creditors in March 2015, with confirmation from the Insolvency Court coming on April 22, 2015. The company has at least 36 months from that date to implement this plan. An extension of a further 12 months is possible and currently appears probable. The debt level of the company was also cut back in 2015, as a result of which S.C. Oltchim S.A. was able to end 2015 with a positive result. The company primarily produces caustic soda, polyols and oxo alcohols. The published plan for the company envisages further production increases for 2016 together with another positive earnings result. As of September 30, 2015, the shares of S.C. Oltchim S.A. are also again being traded on the Bucharest Stock Exchange (BVB). The price curve shows an upward trend which also continued into the new fiscal year. Against this background, the share package of this company was valued in our consolidated financial statements for 2015 at fair value in the amount of €9.6 million as a write-back of the amount written off as of December 31, 2012.

#### **CONSUMER PRODUCTS**

In the year under review, the Consumer Products segment generated sales of €38.6 million, representing a decrease of €3.9 million year on year. Its share of consolidated sales amounted to 6.8 % (previous year: 6.6 %). The Consumer Products segment is divided into two business units, one being the Household and Industrial Cleaners, Detergents and Personal Care Products, and the other being Matches and Firelighters. It is managed by the lead company PCC Consumer Products S.A., Warsaw (Poland). At the end of fiscal 2015, its workforce numbered 569 employees (previous year: 618).

Fiscal 2015 saw further expansion and modernisation of our production facilities in this segment, particularly at PCC Consumer Products Kosmet Sp. z o.o., Brzeg Dolny (Poland), which is active in the fields of household cleaners, laundry detergents and cosmetics. However, the upgrade work interfered with ongoing production at this portfolio company, impacting its results (and thus also the earnings performance of the entire segment). Business development was further negatively affected by the fact that the previously biggest customer of PCC Consumer Products Kosmet Sp. z o.o. had started up its own production operation, causing some employees of our company to switch to this new and direct competitor. PCC Consumer Products Kosmet Sp. z o.o. therefore closed fiscal 2015 with another loss. Business performance at the portfolio companies of the "PCC Consumer Products" subgroup in Belarus and Russia also culminated in negative earnings figures. Problems with adaptation of packaging to the requirements of the Russian market, payment difficulties of the customers there and the devaluation of the Belarusian ruble are among the causes of this development. The marginally positive performance of the matches factory PCC Consumer Products Czechowice S.A., Czechowice-Dziedzice (Poland), was only able to slightly offset the losses suffered by the other business units in the Consumer Products segment. The original intention of PCC SE to divest the matches factory due to a lack of sufficient growth prospects was reviewed once again in 2015. With the aid of a new local management, attempts are now to be made to intensify the direct sale of standard matches and, for example, barbecue lighters. Sales and distribution are also to be strengthened in the Household and Industrial Cleaners, Detergents and Personal Care Products business unit, with expansion plans focusing in particular on Western Europe. Following the positive conclusion of lengthy licensing procedures, initial successes are now being recorded in Scandinavia. The GMP approval essential for the sale of large product volumes in Western Europe is expected to be issued shortly; GMP stands for Good Manufacturing Practice and comprises guidelines on quality assurance in the processes and manufacturing environment applied in the production of pharmaceuticals, cosmetics, food, beverages and feedstuffs. With this as its extended basis, the Consumer Products segment should acquire sufficient growth potential in 2016 and the years that follow.

#### **ENERGY**

The Energy segment encompasses the two business units Renewable Energies and Conventional Energies. In the year under review, this segment generated sales of €11.3 million, an increase of 3.7 % above the prior-year figure of €10.9 million. Within this segment, we control the corresponding Energy business unit of PCC Rokita SA comprising PCC Energetyka Blachownia Sp. z o.o., Kędzierzyn-Koźle (Poland), and also PCC DEG Renewables GmbH, Duisburg (Germany), including its subsidiaries in Bosnia-Herzegovina, the Republic of Macedonia and Bulgaria. The company PCC Energy Trading GmbH, Duisburg, is likewise managed under the Energy segment, although this affiliate has not actively traded since 2012. At the end of the year, the number of employees within the Energy segment was 179 (previous year: 180).

The main sales and earnings generator of this segment remains the Conventional Energies business unit encompassing PCC Energetyka Blachownia Sp. z o.o., a combined heat and power generator, and the Energy business unit of PCC Rokita SA which operates its own power-generating plant to secure energy supplies to its local production site.

The aforementioned increase in sales is largely due to the Renewable Energies business unit. For the first time, five hydropower plants were in operation for a full year, one in Bosnia-Herzegovina and four others in the Republic of Macedonia. The construction of a fifth power plant in Macedonia, planned for 2015, was delayed through the turn of the year and is now scheduled for 2016. By contrast, certain approval processes are still outstanding with respect to the other three

sites in Bosnia-Herzegovina. There still appears to be no end in sight to this long, protracted process. The sale of the two portfolios in their respective countries, as pursued by PCC SE together with its joint venture partner, is proving to be difficult due to their fragmentation. Because the power plants in operation are now delivering relatively stable cash flows, an attempt is therefore to be made to supplement at least the portfolio in Macedonia through the addition of further sites. PCC DEG Renewables GmbH is also currently thinking about refinancing the existing external loans at more favourable conditions. These measures should help to make the portfolios in Bosnia and Macedonia more attractive to potential investors. PCC SE has further investments in hydroelectric and wind power projects in Bulgaria, all of which have now been placed on hold due to both the political and economic conditions rendering implementation unviable. The costs of the local portfolio companies were therefore reduced to an absolute minimum back in 2014, with still little sign of how the situation will develop going forward.

#### LOGISTICS

The Logistics segment was able to generate sales of €56.8 million in 2015, an increase of 11.6 % above the prior-year figure of €50.8 million. The segment is divided into three business units: Intermodal Transport, Road Haulage and Rail Transport. These comprise the Polish company PCC Intermodal S.A., Gdynia (Poland), and its German subsidiary PCC Intermodal GmbH, Duisburg (Germany), together with PCC Autochem Sp. z o.o., Brzeg Dolny (Poland), and ZAO PCC Rail, Moscow (Russia). The number of employees at this segment at year end was 367 (previous year: 332).

The Logistics division was again dominated in 2015 by PCC Intermodal S.A., the portfolio of which encompasses regular combined container transport services both within Poland and on international routes. This affiliate was again able to significantly improve its earnings situation year on year, ending fiscal 2015 well in profit. Increasing utilisation of the routes offered by PCC Intermodal S.A., and also, in particular, the associated increase in the number of containers handled at the company's terminals contributed to this positive development. Important milestones for future growth in the business unit were passed with the expansion of the handling terminal in Kutno (second phase) and also the terminals in Brzeg Dolny and Gliwice, all in Poland. In the past, the liquid funds for these investments were largely provided to PCC Intermodal S.A. by PCC SE in the form of loans. Following completion of the individual terminals, PCC Intermodal S.A. engaged in further negotiations with Polish banks with respect to the refinancing of these investments. The liquid funds now likely to be released from one of these external financing packages around mid-2016 are to be used both for further investments and also for the partial redemption of the loans received from PCC SE.

The road tanker haulage company PCC Autochem Sp. z o.o. again put in a positive business performance in 2015, continuing its upward trend. Growth was generated by, for example, increasing activity in the tanker cleaning business, which is to be further expanded going forward. PCC Autochem Sp. z o.o. was therefore once more able to make a positive contribution to Group earnings in the reporting year.

By contrast, the business operations of our Russian rail transport affiliate ZAO PCC Rail, which completes the Logistics division of the PCC Group, encountered further difficulties in fiscal 2015 due to the continuing crisis impacting the Russian economy. In addition, ZAO PCC Rail has continued to be financed by euro loans from PCC SE. The year-end valuations of these loans reflect the exchange rate fluctuations being suffered by the Russian currency which, after a phase of recovery in the first few months of 2015, came under further pressure as the year progressed – with negative effects on the overall results achieved by this portfolio company. ZAO PCC Rail therefore ended the fiscal year with another significant loss. In the meantime, however, the market environment in which ZAO PCC Rail operates has changed. Many small suppliers have been taken over by the major Russian wagon operators or have rented their wagons to these larger companies. In consultation with PCC SE, therefore, ZAO PCC Rail followed this market trend in 2015 and rented out 550 of its approximately 600 wagons to a subsidiary of the Russian state railway company. The other wagons have been kept in service on behalf of a long-term customer. As a consequence, personnel levels have been significantly decreased accompanied by a reduction in rented office space which will result in a significant cut in costs in 2016. With this as its basis, we anticipate that ZAO PCC Rail will be able to generate potentially stable cash flows in 2016 and beyond, enabling it to at least partially reduce its liabilities to PCC SE. Because of the change in the market environment, PCC SE is also now considering a long-term plan which would involve the sale of the complete wagon fleet of ZAO PCC Rail. A prerequisite for this is economic recovery in Russia, which in turn would lead to wagon tariffs and also the prices commanded by wagons rising again. Under such conditions, the disposal of these assets would represent a promising option, particularly as rail transport is destined to remain the most important form of carriage in Russia for the foreseeable future.

#### **HOLDING/PROJECTS**

Aside from the parent and Group holding company PCC SE, this segment also includes the following affiliates: PCC IT S.A., PCC Apakor Sp. z o.o., LabMatic Sp. z o.o. and Ekologistyka Sp. z o.o., each headquartered in Brzeg Dolny (Poland). The activities of all the portfolio companies indicated, supplemented by the Headquarters business unit of PCC Rokita SA, are essentially aligned to providing intercompany and Group-internal services, and have been managed

under the Holding segment since 2013. Since 2015, the project company PCC BakkiSilicon hf, Húsavík (Iceland), which is entrusted with the construction of a silicon metal production plant at this location, has also been consolidated within the Holding/Projects segment.

Earnings before interest, taxes, depreciation and amortisation (EBITDA) of this segment came in at € 1.9 million in the reporting year. Segment results are made up primarily of the gains generated on disposal of the telecommunications and data centre activities of PCC to a Polish investment fund. The number of employees within this segment at the close of 2015 was 740 (previous year: 753).

## BUSINESS DEVELOPMENT AND FINANCIAL PERFORMANCE

#### **DEVELOPMENT OF SELECTED GROUP INDICATORS**

<b>Key financials and data of the PCC Group</b> per IFRS		2015	2014	Absolute change	Relative change
Sales	€m	571.1	647.3	-76.3	-11.8%
Polyols segment	€m	136.2	147.0	-10.8	-7.4 %
Surfactants segment	€m	101.1	98.8	2.3	2.3 %
Chlorine segment	€m	58.3	67.8	-9.5	-13.9%
Speciality Chemicals segment	€m	161.7	222.1	-60.3	-27.2 %
Consumer Products segment	€m	38.6	42.5	-3.9	-9.3 %
Energy segment	€m	11.3	10.9	0.4	3.7 %
Logistics segment	€m	56.8	50.8	5.9	11.6 %
Holding/Projects segment	€m	7.0	7.4	-0.4	-4.7 %
Gross profit	€m	157.2	149.6	7.6	5.1 %
EBITDA <sup>1</sup>	€m	50.8	39.6	11.2	28.3 %
EBIT <sup>2</sup>	€m	26.9	17.6	9.2	52.2 %
EBT <sup>3</sup>	€m	1.2	-7.3	8.5	116.6%
Net result	€m	-2.0	-8.9	6.9	77.6 %
Gross cash flow <sup>4</sup>	€m	39.4	41.1	-1.7	-4.2%
ROCE <sup>5</sup>	%	4.6	3.5	1.0°	29.9%
Net debt <sup>6</sup>	€m	439.0	346.5	92.5	26.7 %
Net debt/EBITDA		8.6	8.8	0.1	1.2 %
Group equity	€m	135.0	133.5	1.6	1.2 %
Equity ratio <sup>7</sup>	%	16.4	19.6	-3.2°	-16.2 %
Return on equity <sup>8</sup>	%	-1.5	-6.9	5.4°	78.3 %
Capital expenditures	<u>€</u> m	160.1	103.1	57.0	55.3 %
Employees (Dec. 31)		2,992	2,896	96	3.3 %
Germany		127	133	-6	-4.5%
International		2,865	2,763	102	3.7 %

Rounding differences possible.

- 1 EBITDA (Earnings before Interest, Taxes, Depreciation and Amortisation)
- 2 EBIT (Earnings before Interest and Taxes) = EBITDA Depreciation and amortisation
- 3 EBT (Earnings before Taxes) = EBIT Interest and other financial items
- 4 Gross cash flow = Net result adjusted for non-cash income and expenses
- 5 ROCE (Return on Capital Employed = EBIT  $\div$  [Average equity + Average interest-bearing borrowings])
- 6 Net debt = Interest-bearing borrowings Liquid funds Other current securities
- 7 Equity ratio = Equity capital ÷ Total assets
- 8 Return on equity = Net result for the year  $\div$  Average equity
- 9 Change in percentage points

#### **EARNINGS POSITION**

Overall, the PCC Group finished fiscal 2015 with an operating profit – expressed as earnings before interest, taxes, depreciation and amortisation (EBITDA) – of €50.8 million, an increase of €11.2 million or 28.3 % over the prior-year figure of €39.6 million. PCC Group sales in 2015 amounted to €571.1 million, representing a decrease of €76.3 million or 11.8 % year on year. This is due in the first instance to the significant decline in raw material prices. However, compared to the previous year, most of the Chemicals segments were able to either hold sales constant or post an increase. At 0.1 % of consolidated sales, the impact on revenue resulting from changes in the scope of consolidation was negligible.

Given that the euro is not the functional currency of most PCC companies, the foreign exchange rates at which sales and earnings are translated exert an influence on the consolidated statement of income. If parities had remained unchanged versus the previous year, sales of the PCC Group would have amounted to €568.5 million, representing a decrease of €2.6 million or 0.5%. Essentially, it is the foreign exchange rates against the US dollar that most impact sales revenue. Developments with respect to the Russian ruble, on the other hand, served to boost sales performance.

Gross profit generated by the PCC Group increased by €7.6 million or 5.1 % to €157.2 million (previous year: €149.6 million). The average gross margin was therefore 27.5 % (previous year: 23.1 %). The strategy of concentrating more on high-margin products and speciality grades in selected business units within the Chemicals segment supported this development. Added to this, the purchase price for raw materials paid by the segments of the Chemicals division decreased more than the selling prices they charged. The significant increase in the container handling volumes at the terminals operated by the Intermodal Transport business unit of the Logistics segment likewise exerted a positive effect.

Personnel expenses rose year on year by 8.5% from €52.9 million to €57.3 million. The number of employees grew by 3.3% from 2,896 to 2,992 – due in particular to increased headcount in the segments Polyols, Chlorine and Logistics. In regional terms, 119 of the new jobs were created in Poland, while the number of permanent positions in the Other Europe region decreased by 20.

Redundancies were implemented in the Consumer Products segment and in the Rail Transport business unit. Following completion of the upgrade measures in the production facilities of the Consumer Products segment and in view of the need to adapt to the current market situation, its workforce was reduced by 49. The economic situation affecting our rail transport activities in Russia also meant that cost optimising measures had to be instituted, with the number of employees reduced by 12. As a result of the sale of 3Services Factory S.A.

and its deconsolidation, the number of employees in the Holding/Projects segment fell by 13 versus the prior-year level.

At  $\in$  12.8 million, other operating income remained virtually unchanged versus the prior-year figure of  $\in$  12.9 million. This includes gains from the disposal of the two entities divested in 2015, namely 3S S.A. and 3Services Factory S.A. Offering telecommunication and data centre services, these two companies did not count among the core businesses of the PCC Group and were sold to a Polish offshoot of an international investment fund. The liquid funds generated in the amount of  $\in$  14.1 million were used in part for other investment projects and also for the purpose of debt repayment.

With a total of € 160.1 million, capital expenditures in 2015 reached a new high. In addition to ongoing renewal investments and a number of relatively small projects, mention should also be made in particular of the following major projects: construction of a silicon metal smelting plant; switchover of the chlor-alkali electrolysis process to environmentally friendly membrane technology; construction of a production plant for monochloroacetic acid (MCAA); and the construction and expansion of container terminals within the Intermodal Transport business unit.

The investments completed should, as from 2016, make significant full-year contributions to the sales, gross profit and the earnings of the PCC Group. At the same time, they also mean an increase in both depreciation/amortisation and net interest paid in the consolidated statement of income. The effect on the balance sheet was already largely reflected in the 2015 consolidated financial statements in the form of an increase in both non-current assets and non-current financial liabilities (borrowings). In the year under review, depreciation of property, plant and equipment and amortisation of intangible assets increased from €21.9 million to €23.9 million (a rise of 9.0%).

Interest and similar expenses arising from both bond and bank liabilities increased in the reporting year from € 19.8 million to € 22.0 million, representing a rise of 10.8 %. PCC SE and also other Group companies were able to finance their activities at better interest rates and conditions than in the previous year. However, financial liabilities continued to rise with our investment and capital expenditure activities. Interest attributable to qualifying assets of investment projects is now capitalised during the construction period.

Income and expenditures arising from foreign exchange differences are recognised as gains/losses on currency translation under financial result. In fiscal 2015, these exerted a negative net effect of  $\in$  -3.6 million (previous year:  $\in$  -6.1 million).

Compared to fiscal 2014, earnings before taxes (EBT) increased by  $\leqslant$  8.5 million from  $\leqslant$  -7.3 million to  $\leqslant$  1.2 million.

The consolidated net result of the PCC Group improved from €-14.8 million to €10.1 million. With approval of the restructuring plan of S.C. Oltchim S.A., the shares in this company are again being traded on the Romanian stock exchange as of the fourth quarter of 2015. Following the insolvency application in 2013, the shares were temporarily withdrawn from the market. The resumption of trading and the market price since commanded by the shares held by PCC SE resulted in a positive valuation at fair value of €9.6 million as of the reporting date.

#### **NET ASSETS**

At the end of the year under review, total assets amounted to €824.4 million, thus exceeding the prior-year figure by € 141.8 million or 20.8 %. At €25.3 million, intangible assets remained virtually constant year on year. In particular, the ongoing investment programme of the PCC Group in the segments Chlorine, Logistics and Holding/Projects resulted in a substantial increase in property, plant and equipment of €128.3 million to €542.7 million, representing a plus of 31.0 %. Major capital expenditures were allocated to the switch in the chlor-alkali electrolysis process to environmentally friendly membrane technology, the continuation of the construction work on the MCAA plant located at the production site of PCC Rokita SA in Brzeg Dolny, start of construction of a silicon metal smelting facility in Iceland and expansion of the container handling terminal network in Poland. Following the fair value assessment of the shares held by PCC SE in S.C. Oltchim S.A., financial assets rose by €9.9 million to €12.1 million.

The decline of €7.0 million to zero in the value of investments measured using the equity method is the result of the sale of the 46 % share in 3S S.A. in June 2015. The joint venture OOO DME Aerosol, Pervomaysky (Russia), which is responsible for the development and construction of a dimethyl ether plant, has a recognised balance of zero due to the usual losses incurred by companies at such a stage being invariably higher than the book values of the business. Together with a joint venture partner, PCC SE is providing 30 % of the investment volume, with the remaining 70 % being financed by a Russian bank.

Current assets rose slightly by €4.8 million to €232.0 million. Inventories decreased by €7.6 million to €45.7 million. Other receivables and other assets fell by €17.1 million to €40.4 million, primarily due to the payment of a purchase price claim arising from the sale of shares in PCC BakkiSilicon hf in 2014.

The balance of cash and cash equivalents was €80.4 million, an increase of €34.3 million above the level reported on December 31, 2014.

#### **FINANCIAL POSITION**

PCC Group equity grew slightly versus year end 2014, by  $\in$  1.6 million to  $\in$  135.0 million. Revenue reserves/other reserves decreased by  $\in$  9.6 million to  $\in$  98.6 million. At  $\in$  41.0 million, minority interests remained virtually constant year on year. Other comprehensive income increased by  $\in$  11.6 million from  $\in$  -21.2 million to  $\in$  -9.6 million. The main factors here were a reduction in foreign currency translation differences recognised in other comprehensive income in the amount of  $\in$  +4.9 million, and also positive effects arising from the fair value measurement of financial assets in the amount of  $\in$  +6.7 million. Remeasurement of defined benefit pension obligations resulted in no material change compared to the previous year. Because of the balance sheet extension, the equity ratio decreased from 19.6 % to 16.4 %.

Non-current investments are financed with non-current borrowings. Non-current provisions and liabilities rose in 2015 by  $\in$  145.3 million to  $\in$  477.0 million. Within this figure, deferred tax liabilities increased by  $\in$  3.5 million to  $\in$  10.9 million. Non-current financial liabilities rose by  $\in$  128.5 million to  $\in$  419.9 million, due in the first instance to the debt financing of capital expenditure projects. Other liabilities include deferred income, which increased by  $\in$  10.3 million to  $\in$  35.6 million, primarily as a result of subsidies for the individual investment projects indicated above.

Of the bonds previously in existence, PCC SE redeemed in full on maturity a total of four in the course of 2015 as follows: bond ISIN DE000A1RE798 in the amount of €15.0 million on April 1; bond ISIN DE000A1H3MS7 in the amount of €26.7 million on July 1; bond ISIN DE000A1YCSX6 in the amount of €10.0 million on October 1; and bond ISIN DE000A1K0U02 in the amount of €21.9 million on December 1. Together with the quarterly repayments in respect of the two bonds ISIN DE000A1EWB67 and ISIN DE000A1EWRT6 in the aggregate amount of €1.6 million, total repayments in 2015 amounted to €75.2 million. At the same time, six new bonds were issued, three as of May 1 and three as of October 1, with different tenors and maturities and with coupons ranging between 3.5% and 6.5%. The nominal issue volume placed by the end of the year totalled around €118 million. These funds were used for further investments in existing operations and ongoing projects and also, in part, for the refinancing of the liabilities due in 2015. Aside from PCC SE, whose bonds are denominated in euro, other Group companies also issued bonds. Those of PCC Rokita SA, PCC Consumer Products Kosmet Sp. z o.o. and PCC Autochem Sp. z o.o. in Poland, denominated in zloty, had a value of PLN 126.2 million (€29.6 million) as of year end 2015.

Current provisions and liabilities decreased by  $\leq$  5.0 million to  $\leq$  212.4 million, due primarily to changes in trade accounts payable and current financial liabilities. Other liabilities also fell by  $\leq$  2.7 million to  $\leq$  38.2 million.

Provisions for pensions and similar obligations and also other provisions increased slightly by  $\leqslant$  0.3 million to  $\leqslant$  17.2 million (previous year:  $\leqslant$  16.9 million).

The net debt of the PCC Group rose in fiscal 2015 from €346.5 million to €439.0 million. In particular, non-current financial liabilities increased due to the high level of capital expenditures implemented. This was countervailed by a rise in cash and cash equivalents. Compared to 2014, the ratio between net debt and earnings before interest, taxes, depreciation and amortisation (EBITDA) improved from 8.8 to 8.6 in 2015, with both EBITDA and net debt rising. Because of the ongoing high investments for 2016 and 2017, we currently anticipate that we will only achieve our medium-term objective of improving this value to below 5.0 after fiscal 2018.

#### Net debt

Figures in€k	Dec. 31, 2015	Dec. 31, 2014
Cash and cash equivalents	80,398	46,107
Financial liabilities	519,374	392,594
Net debt	438,976	346,487

Overall, the company management regards developments in our net assets, financial position and results of operations in fiscal 2015 as satisfactory. Although the expectations documented in the prior-year report were not met in all aspects, significant milestones were reached for the long-term improvement in our earnings position and further increasing our enterprise value.

## PCC SE - CONDENSED REPORT PER HGB (GERMAN COMMERCIAL CODE)

By way of supplement to the report relating to the PCC Group, we hereby submit in the following an appraisal of the performance and development of PCC SE. PCC SE is the parent company of the PCC Group and is domiciled in Duisburg (Germany). At the core of the business activities undertaken by PCC SE is a commitment to the long-term engagement in and development of its portfolio business investments. One of our primary objectives in this regard is to create and continuously increase enterprise value. As a growth-led investor with a predominantly long-term view, PCC SE supports its affiliates and portfolio companies in their development and in the expansion of their respective strengths. Aside from the active management of our investment portfolio, our main tasks include the strategic management and control of our affiliated companies at home and abroad. A further focus lies on cross-group financing activities and market observation and advisory services with the purpose of further extending our group of companies aligned to competence-related diversification. We focus in particular on positioning ourselves in less competitive submarkets and market niches. We concentrate our investments primarily in the higher-growth regions of Eastern and South-East Europe, and also more recently in Asia.

The annual financial statements of PCC SE are prepared in accordance with the German Commercial Code (HGB, the German GAAP). The consolidated financial statements are prepared in accordance with International Financial Reporting Standards (IFRS) as adopted and endorsed within the European Union (EU). This results in differences in the measurement and recognition principles applied, relating primarily to intangible assets, provisions, financial instruments, leasing transactions and deferred taxes.

As in previous years, the costs incurred by PCC SE in performing its holding company function are – with the exception of financing costs and the legal and consultancy costs arising in relation to planned new projects, acquisitions or divestments – allocated within the framework of a licence fee agreement by means of a revenue-based formula to the companies included in the consolidation scope. Exempted from this rule for 2015 are affiliates which, in 2015, did not generate any appreciable external sales or which have not yet adopted the PCC logo in their company style. Also exempted are affiliates of which the business operations were discontinued and which are now merely being wound down.

## BUSINESS DEVELOPMENT AND FINANCIAL PERFORMANCE OF PCC SE

Generated primarily by allocated costs/licence fees, sales in fiscal 2015 came in at €2.9 million, a decline of €0.3 million compared to the figure of €3.2 million realised in 2014. The reasons for this lie in reduced sales achieved by the majority of the portfolio companies as a result of the lower commodity prices prevailing. There was also a decline in other operating income of €9.4 million, causing the total to decrease from €31.1 million to €21.7 million. The main constituents were income from write-ups of financial assets (S.C. Oltchim S.A. and PCC Synteza S.A.) in a total amount of € 12.3 million. Income was also generated from the sale of shares in affiliated companies (sale of the telecommunications and data centre activities of PCC SE) in the total amount of €5.5 million. Sundry other operating income included rental income in the amount of €0.4 million (previous year: €0.4 million) and income from costs recharged of €0.7 million (previous year: € 1.0 million). This income from costs recharged was, however, countervailed on the expenses side by, among other things, personnel, consultancy and travel costs. Income from foreign exchange rate differences accrued to €2.0 million (previous year: €0.3 million), with losses arising from foreign exchange rate differences amounting to €2.9 million (previous year: €2.0 million).

On the costs side, personnel expenses remained flat year on year at €4.9 million. However, other operating expenses increased by €0.3 million from €14.8 million to € 15.1 million. The cause here was a mixture of an increase in losses arising from foreign exchange rate differences in the amount of €0.9 million and allowances for individual value adjustments amounting to €2.8 million (previous year: €0). This latter allocation relates to the loans receivable from PCC Energy Trading GmbH and SSH Sp. z o.o. Due to clawbacks demanded by an insolvency administrator relating to a case that affected our former company PCC Capital GmbH, provision had to be allocated for, among other things, expenses arising from guarantees and warranties in the amount of €0.3 million (previous year: €0). The expenses relating to bearer bonds increased slightly from €2.3 million to €2.4 million. These increases incurred in respect of individual expense items were more than offset by a significant decline in legal and consultancy costs. These decreased by around €2.0 million from €5.2 million to €3.2 million due primarily to the absence of exceptional items from the previous year such as the flotation of PCC Rokita SA and an analysis of possible bond issuances by PCC SE on the Polish

#### Condensed statement of income of PCC SE according to the German Commercial Code (HGB)

Figures in €k	Dec. 31, 2015	Dec. 31, 2014
Sales	2,917	3,157
Other operating income	21,736	31,140
Personnel expenses	4,942	4,869
Depreciation of property, plant and equipment and amortisation of intangible assets	603	566
Other operating expenses	15,128	14,769
Income from investments	16,605	18,579
Other interest and similar income	6,645	5,892
Write-downs of financial assets	418	7,579
Interest and similar expenses	18,332	16,605
Income from ordinary activities	8,481	14,382
Other taxes	32	17
Taxes on income	61	-88
Net income	8,388	14,452

market. Losses from the disposal of financial assets and from bad debts among affiliated companies were absent in 2015 (previous year: €2.1 million).

Overall, the total of sales revenue and other income exceeded expenses in the 2015 fiscal year, giving rise to a positive figure for earnings before interest, taxes, depreciation and amortisation (EBITDA) in the amount of  $\[ \in \] +4.6$  million (previous year:  $\[ \in \] +14.7$  million). Depreciation of property, plant and equipment and amortisation of intangible assets in 2015 remained flat year on year at around  $\[ \in \] 0.6$  million.

Income from investments decreased versus the prior year by  $\leqslant$  2.0 million from  $\leqslant$  18.6 million to  $\leqslant$  16.6 million, with the major share again attributable to PCC Rokita SA. Other companies contributing to income from investments were PCC Exol SA, PCC Energetyka Blachownia Sp. z o.o. and PCC IT S.A.

Interest income, which was generated primarily from our affiliated companies, amounted to  $\in$  6.6 million, an increase of  $\in$  0.7 million compared to the prior-year figure of  $\in$  5.9 million. Nevertheless, loans to affiliated companies as of December 31, 2015 decreased from  $\in$  68.8 million to  $\in$  58.8 million. This is primarily due to the reclassification to equity of the loan granted to PCC BakkiSilicon hf in the amount of around  $\in$  13.0 million. The figure for shares held in affiliated companies increased accordingly.

Write-downs of financial assets in 2015 amounted to  $\in$  0.4 million (previous year:  $\in$  7.6 million). These relate to the loan in this amount granted to the Bulgarian affiliate PCC Izvorsko EOOD.

Because of the increase in bond liabilities, interest expense rose by  $\leq$  1.7 million from  $\leq$  16.6 million to  $\leq$  18.3 million.

Given these developments, income from ordinary activities in fiscal 2015 amounted to €+8.5 million (previous year: €+14.4 million). Taking into account other taxes of €32 k, earnings before taxes (EBT) came in at €+8.4 million (previous year: €+14.4 million). After deducting taxes on income in the amount of €61 k, net income for the year was €8.4 million (previous year: €14.5 million).

Taking into account this income figure and the distribution made to the shareholder in 2015 from the 2014 net income, equity disclosed in our balance sheet increased from  $\[ \in \]$  62.9 million to  $\[ \in \]$  70.0 million. At the same time, total assets increased from  $\[ \in \]$  305 million to  $\[ \in \]$  357 million. As a result, the equity ratio eased somewhat from 20.6% to 19.6%.

#### Condensed balance sheet of PCC SE according to the German Commercial Code (HGB)

Figures in €k	Dec. 31, 2015	Dec. 31, 2014
Intangible assets	251	106
Property, plant and equipment	10,927	10,043
Financial assets	258,770	231,564
Receivables and other assets	48,188	56,494
Securities	0	0
Cash on hand and credit balances at banks	38,818	5,970
Prepaid expenses	130	130
Deferred tax assets	136	196
Assets	357,220	304,504
Equity	69,976	62,938
Provisions	721	571
Bond liabilities	276,592	233,127
Bank liabilities	2,169	2,280
Trade accounts payable	388	1,116
Liabilities to affiliated companies	262	148
Other liabilities	7,111	4,323
Equity and liabilities	357,220	304,504

The reason for the rise in total assets/liabilities lay in the increase in equity and also an increase in liabilities from a total of €241.0 million to €286.5 million. This latter arose primarily from the increase in bond liabilities from €233.1 million to €276.6 million. A total of four bonds representing an aggregate volume of €73.6 million were fully redeemed on maturity in the course of 2015. In addition, quarterly repayments were made in the amount of €1.6 million in respect of the two redeemable bonds. The total repayment volume thus amounted to €75.2 million.

At the same time, six new bonds with coupons varying between 3.5% and 6.5% p.a. and different tenors and maturities ranging from July 1, 2017 to October 1, 2022 were issued, three on May 1 and three on October 1, 2015. The funds received as a result of these new issuances were used for further investments in existing portfolio companies and ongoing projects, and also for the partial refinancing of liabilities due in 2015.

On the assets side of the balance sheet, non-current assets increased from €241.7 million to €269.9 million, due primarily to the increase in shares held in affiliated compa-

nies from € 155.8 million to € 189.2 million. Investments rose from € 6.3 million to € 9.9 million. At the same time, loans to affiliated companies decreased from € 68.8 million to € 58.8 million, as already mentioned. Current assets increased from € 62.5 million to € 87.0 million. Within this, other assets decreased from € 29.9 million to € 15.3 million, mainly due to the loan receivable from PCC BakkiSilicon hf of € 14.8 million likewise being reclassified to equity. This contributed to the aforementioned rise in shares held in affiliated companies in a corresponding amount. The decline in other assets was, however, significantly overcompensated by the substantial increase in credit balances at banks which, as of the balance sheet date, amounted to € 38.8 million (previous year: € 6.0 million).

The decrease in other assets is also a major cause for the improvement in cash flow from operating activities at PCC SE, which metric rose from  $\leftarrow$  16.3 million in the previous year to  $\leftarrow$  +1.0 million this time.

## OPPORTUNITIES FOR AND RISKS TO FUTURE DEVELOPMENT

Our increasing focus on higher-grade products and our planned diversification with respect to our sales markets will, in the view of the management, be the primary source of opportunity for the future growth of the PCC Group. Added to this are further modernisation and expansion investments through which our market position in the individual segments is to be further extended.

Aside from the general economic risks that prevail, there also exist political risks, such as the Russia-Ukraine conflict, which lie outside our control. Ignoring the special situation in which ZAO PCC Rail finds itself, the impact on the operating business of our portfolio of companies from this conflict remains negligible. The situation could change, however, if the EU were to extend its economic sanctions against Russia, or Russia were to impose corresponding export restrictions or other sanctions that specifically affect the business of a PCC company. At the time of preparation of this management report, however, such eventualities appear to be unlikely. With the exemption of the DME project in Russia, which is being undertaken together with a long-standing Russian partner, no further projects are currently being promoted that might be affected by the conflict or the current economic weakness in Russia.

Other indirect factors that can affect the performance of our portfolio companies and thus their dividend payouts to our company include price change and default risks. The latter should be eliminated as far as possible through the conclusion of commercial credit insurance policies by our portfolio companies. Price change risks are minimised through the conclusion of back-to-back transactions, through price formulae and/or through the use of price-hedging instruments.

In addition, both PCC SE and the operationally active companies are exposed to the risk of changes in interest rates and foreign exchange parities. However, these can be at least partially eliminated by hedging transactions. Overall, the foreign exchange rate and foreign currency risk encountered in the PCC Group should be significantly minimised once the euro has been introduced into Poland as its official currency.

Our affiliates in the Chemicals division are, in particular, also exposed to the risk of rising environmental protection costs in the wake of increasingly stringent waste, effluent and other pan-European environmental regulations. Investment requirements possibly resulting from these could, in the future, have a negative effect on the earnings position of this division and thus also on the dividend flows from the affiliates concerned to PCC SE. The same applies to possible additional charges arising in connection with the EU regulation REACH (European legislation on the registration, evaluation, authorisation and restriction of chemicals) which came into force on June 1, 2007. The utilisation of further potential for savings may, however, compensate to some extent for any additional costs incurred.

In our financial planning, we anticipate further regular liquidity inflows arising in the future from the issuance of corporate bonds. However, increasing obstacles within the SME bonds market could possibly lead to at least temporary liquidity bottlenecks. This risk is to be countered through the acquisition of alternative financing sources, including at the institutional level. We are also working continuously on partially replacing the liquidity loans granted to subsidiaries by bank loans.

# INTERNAL CONTROL SYSTEM AND RISK MANAGEMENT RELATED TO THE GROUP ACCOUNTING PROCESS

The consolidated financial statements of PCC SE as of December 31, 2015 have been prepared in accordance with the provisions of the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB) and the interpretations of the International Financial Reporting Standards Interpretations Committee (IFRS IC) as applicable on the closing date and as adopted in the European Union (EU), and in supplementary compliance with the statutory disclosure requirements specified in Section 315a (1) HGB (German Commercial Code).

The consolidated financial statements are prepared within the PCC Group in a multi-stage process using standardised IDL consolidation software. The pre-consolidated financial statements of individual subsidiaries, duly audited by their own auditors, are incorporated by PCC SE within the consolidated financial statements. Responsibility for advice and support with respect to the consolidation system, for the consolidation chart of accounts standardised across the Group, and for implementation of the consolidation adjustments, lies with PCC SE. The companies incorporated within the consolidated financial statements are required to abide

by standard accounting and financial reporting guidelines. These also specify the recognition and valuation principles to be applied in compliance with the provisions of IFRS.

All the companies included in the consolidated financial statements are provided with a binding, uniform calendar of due dates for the preparation of their financial statements and completion of the associated audits. Automated and manual checks and controls are integrated at every stage of the process. Procedural rules ensure that all business transactions and the preparation of the annual financial statements are recorded, processed and documented in full, promptly, accurately and with correct period allocation. Before the final submission to PCC SE, a quality-assuring review process is performed within the subsidiaries of the PCC Group by their own governing bodies or with direct involvement of their management. This internal procedure concludes with a formal written confirmation of the system's effectiveness together with a signed release of the financial statements of the individual companies and related information for incorporation in the consolidated financial statements.

## **EVENTS AFTER THE BALANCE SHEET DATE**

In February 2016, PCC SE sold its shares in SSH Sp. z o.o., Katowice (Poland), our last remaining portfolio company in the telecommunications sector. Provision was made in the 2015 annual financial statements covering the loss of around €0.5 million that was incurred on disposal of this entity.

Having received a bank financing package, in March 2016 PCC Exol SA redeemed the loan of € 14.5 million granted to it by PCC SE. The liquid funds received by PCC SE as a result were used in part for debt repayment purposes.

Likewise in March 2016, PCC SE bought back 14,125,000 shares in PCC Exol SA. from an investment fund. This cor-

responds to around 8.2% of the capital stock and around 4.7% of the voting rights in the annual general meeting of the company.

Bond ISIN DE000A11P9V6 with a placed volume of  $\in$  7.3 million was redeemed in full on maturity as of April 1, 2016. It was issued on April 1, 2014, offering a coupon of 4.75 % p.a.

In order to partially refinance the bonds falling due in the future and for further investments in existing portfolio companies and new projects, a new bond was issued on May 1, 2016: ISIN DE000A2AAVL7 with a volume of  $\[ \in \]$  15 million, a coupon of 3.5 % p.a. and a tenor through to July 1, 2018.

### **OUTLOOK FOR 2016**

The focus of the PCC Group in fiscal 2016 will once again be on its predominantly long-term strategy of portfolio company investment and development. The core activities and competitiveness of the Group will also continue to be enhanced through capital expenditures going forward. Green-field projects such as the silicon metal production plant in Iceland are expected to contribute to the growth of the Group. The strategy of proactive investment portfolio management accompanied by ongoing optimisation measures is likewise to be continued. The long-term objective remains to steadily increase our enterprise value.

In view of the positive business performance of, in particular, PCC Rokita SA and also the majority of the other affiliated companies in the reporting year, dividend payments to PCC SE in the low double-digit million euro range are again expected in 2016. The lion's share will once more be provided by PCC Rokita SA. Gains from the disposal of portfolio companies or other "one-offs" are not currently expected for fiscal 2016.

The current budget for 2016, prepared for the operating businesses of the Group companies and affiliates in the fourth quarter of 2015, provides for an increase in sales revenue of 18%. At the Group level, it is anticipated that total operating result (EBITDA) will be around 25% above the 2015 level. A major share of this increase in earnings will be attributable to the Chlorine segment due to the first-time all-year operation of the new chlor-alkali electrolysis facilities. Significant earnings improvements are also expected for the Surfactants segment and the Intermodal Transport business unit (due inter alia to the first full year of operation of the terminals completed in 2015). The Consumer Products segment should experience a significant recovery following conclusion of the upgrade measures in Brzeg Dolny (Poland) and receipt of the GMP approval. Further increasing burdens arising from depreciation, amortisation and interest will, however, mean that Group earnings before taxes (EBT) for 2016 will only slightly exceed the positive result of 2015. Seen from the current standpoint, significant increases in earnings will – subject to positive or at least stable economic developments in the coming years – only start flowing from 2017. By that time, both the new MCAA plant and also the new production lines in the Polyols segment currently under construction will, for the first time, be producing over a full year. Increasing earnings should

also be forthcoming in the Intermodal Transport business unit as a result of the planned expansion in the network services of PCC Intermodal S.A. and a further increase in the number of terminal handling operations. Then, from 2018, the first revenues will also begin flowing from the silicon metal project of PCC BakkiSilicon hf. Positive effects on the earnings development of PCC SE are anticipated in the following years in the form of increasing dividend payments. At the same time, however, the net debt of both PCC SE and the PCC Group will increase, at least temporarily, due particularly to the Iceland project. That said, the medium-term objective of the PCC Group remains to improve its net-debt-to-EBITDA ratio to less than 5.0.

The main revenue and earnings generator in fiscal 2016 will again be the Chemicals division, followed at some significant distance by the Logistics division. We anticipate that the operating rate within the Chemicals division will largely be comparable with that maintained in 2015. A year-on-year increase in both sales and earnings is expected in almost all our segments. Increasing prices and the migration towards higher-grade speciality products – particularly in the Polyols and Surfactants segments – are among the reasons for these anticipated improvements. Our trading business with chemical commodities should experience an improvement in sales due to the recovery in commodity prices, accompanied by a steady earnings contribution. As already mentioned, 2016 should also see a turnaround in the Consumer Products segment.

The Logistics segment is expected to register an increase in sales in fiscal 2016 of over 20%, emanating largely from the Intermodal Transport business. Based on the existing order situation and expectations for a continuation in robust economic growth in Europe, business should once again exceed the level of the previous year. The outlook for the tanker haulage business is similar. Although the transport business of ZAO PCC Rail will see its results improve versus 2015 in the wake of the restructuring measures implemented, it is still expected to trade at a loss in 2016 due to the persistent weakness of Russia's economy.

The Energy segment will continue to be essentially characterised by project development in the course of 2016, which means it will again be of only minor importance in terms of Group revenues and consolidated earnings.

As already mentioned, significant earnings increases – subject to positive or at least stable economic developments in the coming years – are from the present standpoint unlikely to be generated before 2017. Consequently, for current fiscal 2016 and beyond, the focus of Group policy will remain predominantly on our long-term activities aligned to portfolio business

investment and development. Beyond that, we will continue to pursue our strategy of proactive investment portfolio management with sustainable growth and a steady increase in the enterprise value of the PCC Group providing our key metrics and corporate objectives.

Duisburg, May 27, 2016 PCC SE

Ulrike Warnecke Managing Director Dr. rer. oec. (BY) Alfred Pelzer Managing Director



## CONSOLIDATED FINANCIAL STATEMENTS

In fiscal 2015, the total assets of the PCC Group rose 20.8 % from €682.6 million to €824.4 million, primarily as a result of the high volume of capital expenditures in the amount of €160.1 million. Created for sustainability and financed over the long term, investments such as these can be expected to generate increases in earnings over the next few years. The PCC Group is planning capital expenditures for 2016 of at least equivalent volume, causing the balance sheet to be further extended.

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### **AUDITOR'S OPINION**

We have audited the consolidated financial statements prepared by PCC SE, Duisburg, Germany – comprising the consolidated balance sheet, consolidated statement of comprehensive income, consolidated statement of cash flows, consolidated statement of changes in equity and the notes to the consolidated financial statements – and the group management report of PCC SE for the financial year from January 01 to December 31, 2015. The preparation of the consolidated financial statements and the group management report in accordance with IFRS, as adopted by the EU, and with the additional requirements of the German commercial law pursuant to section 315a paragraph 1 HGB, are the responsibility of the parent company's management. Our responsibility is to express an opinion on the consolidated financial statements and on the group management report based on our audit.

We conducted our audit of the consolidated financial statements in accordance with section 317 HGB and German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Those standards require that we plan and perform the audit such that misstatements materially affecting the presentation of the net assets, financial position and results of operations in the consolidated financial statements in accordance with the applicable financial reporting framework and in the group management report, are detected with reasonable assurance. Knowledge of the business activities and the economic and legal environment of the Group and expectations as to possible misstatements, are taken into account in the determination of audit procedures. The effectiveness of the accounting-related internal control system and the evidence supporting the disclosures in the consolidated financial statements and the group management report are examined primarily on a test basis within the framework of the audit. The audit includes assessing the annual financial statements of those entities included in consolidation, the determination of the entities to be included in consolidation, the accounting and consolidation principles used, and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements and the group management report. We believe that our audit provides a reasonable basis for our opinion.

Our audit has not led to any reservations.

In our opinion, based on the findings of our audit, the consolidated financial statements of PCC SE, Duisburg, Germany, for the financial year from January 01 to December 31, 2015, comply with IFRS, as adopted by the EU, and the additional requirements of the German commercial law pursuant to section 315a paragraph 1 HGB, and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The group management report is consistent with the consolidated financial statements and as a whole provides a suitable view of the Group's position and suitably presents the opportunities and risks of future development.

Düsseldorf, June 21, 2016

Warth & Klein Grant Thornton AG Wirtschaftsprüfungsgesellschaft

Ulrich Diersch Achim Krichel
Wirtschaftsprüfer Wirtschaftsprüfer
(German Public Auditor) (German Public Auditor)

### **CONSOLIDATED STATEMENT OF INCOME**

ures in € k	(Note)	2015	2014
es revenue	(6)	571,063	647,315
ange in inventory of finished products and work in progress		695	2,857
ner internal costs capitalised	(7)	4,808	2,474
chased goods and services	(8)	419,317	503,035
sonnel expenses	(9)	57,345	52,874
ner operating income	(10)	12,766	12,903
ner operating expenses	(11)	61,883	70,631
ome from investments accounted for using the equity method	(12)	-	582
nings before interest, tax, depreciation and amortisation (EBITDA)	(17)	50,787	39,591
oreciation and amortisation	(13)	23,920	21,941
erating profit from continuing operations (EBIT)	(17)	26,867	17,650
ner interest and similar income	(14)	746	1,123
erest and similar expenses	(14)	21,984	19,840
rency translation differences	(15)	-3,647	-6,086
ner financial expenses		766	181
rnings before taxes from continuing operations (EBT)		1,216	-7,334
es on income	(16)	3,214	1,574
t result for the year		-1,998	-8,908
result attributable to Group		-6,076	-12,258
result attributable to minority interests		4,078	3,351
result attributable to minority interests		4,078	3

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

Figures in € k	2015	2014
Net result for the year	-1,998	-8,908
Net result for the year	- 1,330	-0,500
Income and expenses recognised in equity for future recycling through profit or loss	11,616	-4,867
Exchange differences on translation of foreign operations	4,918	-5,739
Fair value measurement of financial assets	9,595	20
Fair value measurement of cash flow hedges	-3	950
Deferred taxes on items for future recycling through profit or loss	-2,893	-98
Income and expenses recognised in equity not for future recycling through profit or loss  Remeasurement of defined benefit pension plans  Other changes not for future recycling through profit or loss	-5 -3 -14	-121 -121 -15
Deferred taxes on items not for future recycling through profit or loss	12	15
Attributable to minority interests	523	-929
Total income and expenses recognised in equity	12,135	-5,917
Total comprehensive income	10,137	-14,824
Share of comprehensive income attributable to Group	5,536	- 17,246
Share of comprehensive income attributable to minority interests	4,601	2,422

## **CONSOLIDATED BALANCE SHEET**

<b>Assets</b> in € k	(Note)	Dec. 31, 2015	Dec. 31, 2014	Jan. 01, 2014 <sup>1</sup>
Non-current assets	592,224	455,446	392,378	
Intangible assets	(19)	25,258	25,406	22,646
Property, plant and equipment	(20)	542,657	414,360	331,293
Investment property	(21)	3,670	2,649	2,551
Investments accounted for using the equity method	(12)	- "	7,047	13,530
Non-current financial investments	(22)	12,119	2,210	4,738
Other non-current financial assets		4,771	657	15,075
Income tax receivables		26	40	58
Deferred tax assets		3,723	3,077	2,487
Current assets		231,985	227,154	211,193
Inventories	(23)	45,720	53,304	46,511
Trade accounts receivable	(24)	64,972	69,598	75,369
Other receivables and other assets	(25)	40,442	57,544	46,982
Income tax receivables		453	602	1,148
Cash and cash equivalents		80,398	46,107	41,184
Assets held for sale		197	_	_
Assets held for sale	(20)	197		-
Total assets		824,406	682,600	603,571

<sup>1</sup> Carrying values of previous financial year restated. Please refer to Note (3).

Equity and liabilities in $\in k$	(Note)	Dec. 31, 2015	Dec. 31, 2014	Jan. 01, 2014 <sup>1</sup>
Equity		135,047	133,486	124,504
Subscribed capital	(26)	5,000	5,000	5,000
Capital reserve		56	56	56
Revenue reserves/Other reserves		98,586	108,197	114,497
Other equity items/OCI		-9,631	-21,243	-16,255
Minority interests	(27)	41,036	41,476	21,207
Non-current provisions and liabilities		476,992	331,750	298,104
Provisions for pensions and similar obligations	(28)	423	434	302
Other provisions	(29)	7,043	7,022	9,119
Deferred tax liabilities	(32)	10,949	7,437	8,163
Financial liabilities	(30)	419,872	291,323	269,052
Other liabilities	(31)	38,705	25,533	11,468
Current provisions and liabilities		212,367	217,364	180,962
Provisions for pensions and similar obligations	(28)	63	68	39
Other provisions	(29)	9,657	9,394	7,319
Current tax liabilities		1,873	1,407	500
Trade accounts payable		63,596	64,864	57,248
Financial liabilities	(30)	99,017	100,769	85,632
Other liabilities	(31)	38,162	40,861	30,225
Total equity and liabilities		824,406	682,600	603,571

<sup>1</sup> Carrying values of previous financial year restated. Please refer to Note (3).

## **CONSOLIDATED STATEMENT OF** CASH FLOWS

Figures in € k	2015	2014
Net result for the year	-1,998	-8,908
Depreciation and amortisation	23,920	21,941
Write-downs of financial investments	126	181
Income (–), expense (+) from income tax	3,214	1,574
Income (–), expense (+) from interest	21,238	18,716
Change in provisions for pensions and other provisions	267	140
Interest received	196	520
Income taxes paid	-2,919	-1,922
Increase (+), decrease (–) in value adjustments for receivables and other assets	1,380	233
Gains (–), losses (+) from disposal of property, plant and equipment	- 178	-513
Write-ups of intangible assets and property, plant and equipment	-31	-55
Other non-cash gains (–), expenses (+)	-5,819	9,215
Gross cash flow	39,396	41,122
Increase (–), decrease (+) in inventories	7,584	-6,793
Increase (–), decrease (+) in trade accounts receivable	4,626	5,771
Increase (–), decrease (+) in accounts receivable from affiliated companies	344	
Increase (–), decrease (+) in other assets	16,077	-9,697
Increase (+), decrease (–) in trade accounts payable	-1,269	7,616
Increase (+), decrease (–) in accounts payable to affiliated companies	228	<b>–74</b>
Increase (+), decrease (–) in other liabilities	14,223	24,957
Cash flow from operating activities	81,209	62,111
Proceeds from disposal of intangible assets	120	121
Proceeds from disposal of property, plant and equipment	3,367	1,119
Proceeds from disposal of investment property	155	1,119
Proceeds from disposal of investments accounted for using the equity method	11,180	8,464
Proceeds from disposal of non-current financial investments		449
Proceeds from disposal of other non-current financial assets		349
Proceeds from the sale of consolidated subsidiaries and other business units	2,925	648
Capital expenditures on intangible assets	-2,921	-1.703
Capital expenditures on property, plant and equipment	-158,899	-101,030
Capital expenditures on investment property	-	-148
Capital expenditures on investments accounted for using the equity method	-671	-424
Capital expenditures on non-current financial investments		
Capital expenditures on other non-current financial assets		-131
Capital expenditures on the acquisition of consolidated subsidiaries and other business units	-117	– 1,950
Cash flow from investing activities	-144,915	-94,236

#### CONTINUED

Figures in € k (Note)	2015	2014
Inflows from capital increases	-	-
Outflows from capital reductions	-	-
Dividends paid to shareholder and owner	<b>–1,350</b>	-1,200
Dividends paid to minority interests	-2,908	-333
Inflows from issuance of mezzanine capital notes	-	-
Outflows from redemption of mezzanine capital notes	-300	-
Inflows from issuance of profit participation certificates	-	-
Outflows from redemption of profit participation certificates	-	_
Inflows from issuance of bonds	180,464	79,638
Outflows from redemption of bonds	-80,103	-68,894
Inflows from banks	43,701	60,414
Outflows to banks	-16,650	-34,027
Inflows in respect of finance lease liabilities	5,280	1,877
Outflows in respect of finance lease liabilities	-3,681	-2,436
Inflows in respect of financial liabilities to affiliated companies	9,701	3,051
Outflows in respect of financial liabilities to affiliated companies	-9,911	-3,488
Inflow from partial disposal of shares in an affiliated company, with no loss of control	-	23,723
Interest paid	-25,141	-22,760
Cash flow from financing activities	99,102	35,565
Changes in cash and cash equivalents due to cash transactions	35,396	3,440
Changes in cash and cash equivalents due to foreign exchange rates	-1,192	1,301
Changes in cash and cash equivalents due to changes in consolidation scope	87	182
Cash and cash equivalents at the beginning of the period	46,107	41,184
Cash and cash equivalents at the end of the period (36)	80,398	46,107

## **CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**

Figures in € k	Subscribed capital	Capital reserve	Revenue reserves/ Other reserves	Other equity items/ OCI	Equity at- tributable to Group	Minority interests	Equity
Jan. 1, 2014	5,000	56	116,228	-16,255	105,029	21,447	126,476
Changes in consolidation scope	-	-	-1,731	_	-1,731	-240	-1,971
Jan. 1, 2014, restated due to changes in consolidation scope	5,000	56	114,497	-16,255	103,298	21,207	124,504
Dividends paid	-	_	-1,200	_	-1,200	-333	-1,533
Changes in consolidation scope and other consolidation effects	_	_	-3,940	_	-3,940	18,115	14,175
Net result for the year		_	2,772	_	2,772	3,417	6,189
IAS 8 adjustments		_	-3,932	_	-3,932	_	-3,932
Other comprehensive income	-	-	-	-4,988	-4,988	-929	-5,917
<ul> <li>Currency translation differences</li> </ul>	-	_	_	-5,739	-5,739	-835	-6,547
<ul> <li>Remeasurement of defined benefit pension plans</li> </ul>	-	-	-	<b>–</b> 121	-121	-14	-134
<ul> <li>Fair value measurement of financial assets</li> </ul>	-	-	-	20	20	_	20
<ul> <li>Fair value measurement of cash flow hedges</li> </ul>	_	_	_	950	950	-80	870
<ul> <li>Other changes not for future recycling through profit or loss</li> </ul>	-	_	_	-15	-15	-	-15
► Deferred taxes recognised in OCI	_	-	_	-83	-83	_	-83
Dec. 31, 2014	5,000	56	108,197	-21,243	92,010	41,476	133,486

Figures in € k	Subscribed capital	Capital reserve	Revenue reserves/ Other reserves	Other equity items/ OCI	Equity at- tributable to Group	Minority interests	Equity
Jan. 1, 2015	5,000	56	108,197	-21,243	92,010	41,476	133,486
Dividends paid	_	-	-1,350	-	-1,350	-2,908	-4,258
Changes in consolidation scope and other consolidation effects	_	_	-2,185	_	-2,185	-2,133	-4,318
Net result for the year	_	_	-6,076	_	-6,076	4,078	-1,998
Other comprehensive income	_	-	-	11,612	11,612	523	12,135
<ul> <li>Currency translation differences</li> </ul>	-	-	_	4,918	4,918	527	5,445
<ul> <li>Remeasurement of defined benefit pension plans</li> </ul>	-	-	_	-3	-3	-4	-7
<ul> <li>Fair value measurement of financial assets</li> </ul>	_	-	_	9,595	9,595	_	9,595
<ul> <li>Fair value measurement of cash flow hedges</li> </ul>	_	_	_	-3	-3	-	-3
<ul> <li>Other changes not for future recycling through profit or loss</li> </ul>	_	-	_	-14	-14	-	- 14
► Deferred taxes recognised in OCI	_	_	_	-2,882	-2,882	_	-2,882
Dec. 31, 2015	5,000	56	98,586	-9,632	94,010	41,036	135,047

## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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## SUMMARY OF THE MAIN ACCOUNTING AND VALUATION PRINCIPLES

#### (1) GENERAL DISCLOSURES

PCC Societas Europaea (PCC SE) is a non-listed corporation under European law headquartered in Duisburg and the parent company of the PCC Group. Its address is Moerser Str. 149, 47198 Duisburg, Germany.

The consolidated financial statements of PCC SE as of December 31, 2015 have been prepared in accordance with the provisions of the International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB) and the interpretations of the International Financial Reporting Standards Interpretations Committee (IFRS IC) as applicable on the closing date and as adopted in the European Union (EU), and in supplementary compliance with the statutory disclosure requirements specified in Section 315a (1) HGB (German Commercial Code).

Assets, liabilities and all other balance sheet items are recognised and measured in accordance with those IFRS applicable and mandatory as of December 31, 2015.

The closing date for the consolidated financial statements is December 31, 2015, which is also the closing date for the annual financial statements of PCC SE. The Group's financial year corresponds to the calendar year.

The annual and subgroup financial statements of the subsidiaries incorporated in the consolidated financial statements are also prepared to this closing date.

The financial statements of PCC SE and the consolidated subsidiaries are prepared in accordance with uniform accounting and valuation principles.

The consolidated financial statements have been stated in euro. The reporting currency is the euro. Unless otherwise indicated, all amounts are disclosed in thousand euros ( $\in$ k), with the consequence that rounding differences are possible.

Individual items on the balance sheet and the statement of income of the PCC Group have been combined to improve representation clarity. These items are explained in the notes. The consolidated statement of income is structured in accordance with the nature of expense method.

The PCC Group presents current and non-current assets and also current and non-current liabilities as separate classification groups in the balance sheet in accordance with IAS 1.60, with further subdivision according to their respective useful lives/maturities/tenors being additionally provided where appropriate in these notes to the consolidated financial statements as of December 31, 2015.

The Managing Directors of PCC SE finalised these financial statements in their meeting of June 13, 2016, whereupon they were presented to the Administrative Board for examination and approval, and then released for publication.

## (2) CHANGES IN ACCOUNTING POLICY; STANDARDS AND INTERPRETATIONS FOR WHICH APPLICATION IS NOT YET MANDATORY

#### Mandatory standards and interpretations applied for the first time

Application of the following standards and interpretations

or changes thereto became mandatory for the first time in respect of the consolidated financial statements as of December 31, 2015.

Standard/Interpretation	Mandatory according to IASB for fiscal year beginning on or after	Mandatory for application in the EU as of
IFRIC 21 "Disclosures"	January 1, 2014	June 17, 2014
Annual improvements to IFRS: Cycle 2011–2013	July 1, 2014	January 1, 2015

The above did not have any material impact on the consolidated financial statements of PCC SE.

### Standards and interpretations for which application is not yet mandatory

The IASB has published the standards and interpretations and/or amendments thereto listed in the following which are

not yet mandatory as of fiscal 2015. Some of these standards and interpretations have not yet been endorsed by the EU and have not yet been applied by the PCC Group.

Standard/Interpretation	Mandatory first-time applica- tion according to IASB as of	Mandatory first-time application in the EU
Amendments to IAS 7 "Statement of Cash Flows"	January 1, 2017	Not yet known
IFRS 9 "Financial Instruments"	January 1, 2018	Not yet known
IFRS 14 "Regulatory Deferral Accounts"	January 1, 2016	No EU endorsement
IFRS 15 "Revenue from Contracts with Customers"	January 1, 2018	Not yet known
IFRS 15 "Clarifications to 'Revenue from Contracts with Customers'"	January 1, 2018	Not yet known
IFRS 16 "Leases"	January 1, 2019	Not yet known
Amendments to IAS 1 "Disclosure Initiative"	January 1, 2016	January 1, 2016
Amendments to IAS 12 "Income Taxes"	January 1, 2017	Not yet known
Amendments to IAS 16 and IAS 38 "Clarification of Acceptable Methods of Depreciation and Amortisation"	January 1, 2016	January 1, 2016
Amendments to IAS 16 and IAS 41 "Agriculture: Bearer Plants"	January 1, 2016	January 1, 2016
Amendments to IAS 19 "Defined Benefit Plans: Employee Contributions"	July 1, 2014	February 1, 2015
Amendments to IAS 27 "Equity Method in Separate Financial Statements"	January 1, 2016	January 1, 2016
Amendments to IFRS 10 and IAS 28 "Sale or Contribution of Assets between an Investor and its Associate or Joint Venture"	Yet to be determined	Not yet known
Amendments to IFRS 11 "Accounting for Acquisitions of Interests in Joint Operations"	January 1, 2016	January 1, 2016
Annual improvements to IFRS: Cycle 2010–2012	July 1, 2014	February 1, 2015
Annual improvements to IFRS: Cycle 2012–2014	January 1, 2016	January 1, 2016
Amendments to IFRS 10, IFRS 12 and IAS 28 "Investment Entities: Applying the Consolidation Exception"	January 1, 2016	Not yet known

The PCC Group is currently determining the extent to which new, not yet mandatory standards and interpretations will influence the consolidated financial statements. Unless otherwise indicated below, the current expectation is that the standards and interpretations listed above that are not yet mandatory will not have a material impact on the consolidated financial statements.

#### IFRS 15 "Revenue from Contracts with Customers"

In May 2014, the IASB published the new standard IFRS 15 "Revenue from Contracts with Customers". The purpose of this new standard relating to revenue realisation is to bring together the many regulations contained in the various standards and interpretations that have existed to date. At the same time, uniform basic principles are defined which are applicable to all industries and for all kinds of sales transaction. The questions as to how much and at what date or across what period revenue is to be recognised as realised are answered with the aid of a five-step model. The standard also contains a number of other regulations covering questions of detail and also an extension to the notes that

is required. The new standard is mandatory as of fiscal years beginning on or after January 1, 2018. First-time application must be retrospective. However, various simplification options are granted; earlier application is permissible. The EU has yet to adopt the changes. The PCC Group expects that the notes to the consolidated financial statements will be expanded once the standard has been applied. Further effects are currently under investigation.

#### IFRS 16 "Leases"

In January 2016, the IASB published the new standard IFRS 16 "Leases". IFRS 16 establishes principles for the recognition and measurement, disclosure and notes required in respect of leases. The objective is to ensure that lessees and lessors are provided with relevant information with respect to the effects of leasing transactions. At the same time, the previous accounting model according to IAS 17, in which leases were classified as operating or financial, was discarded in favour of a lease accounting concept in keeping with the concept of control. For the lessee, the standard provides for a single accounting model. In the case of the lessee, it means

that all assets and liabilities arising from a lease agreement must be disclosed in the balance sheet where the term exceeds 12 months, or where the asset concerned is not classed as minor (option). For accounting purposes, the lessor continues to distinguish between finance or rental lease agreements (finance or operating leases). Application of IFRS 16 "Leases" becomes mandatory as of fiscal years starting on or after January 1, 2019. Application in advance of this date is allowed provided that IFRS 15 "Revenue from Contracts with Customers" is already being applied in full in advance of its mandatory date. The lessor must apply IFRS 16 either in full and retrospectively, taking into account earlier reporting periods, or must recognise the cumulative adjustment effect as of the date of first-time application as an equity entry at the start of the fiscal year in which the standard is first applied. The EU has yet to adopt the standard. The PCC Group is currently examining the impact of the first-time application of IFRS 16 on the consolidated financial statements and will determine the date of first-time application and also the transition method to be applied once it has been adopted in this form by the EU.

### IFRS 9 "Financial Instruments": Classification and measurement

IFRS 9 "Financial Instruments" contains regulations for the disclosure, recognition, derecognition and also the accounting of hedge relationships. The IASB published the final version of the standard on July 24, 2014 in the course of finalising the various phases of its comprehensive project in relation to financial instruments. As a result, the previous accounting methods applied to financial instruments as specified under IAS 39 "Financial Instruments: Recognition and Measurement" can be entirely replaced by the accounting methods described in IFRS 9. The now published version of IFRS 9 supersedes all previous versions. The central requirements of the final IFRS 9 standard can be summarised as follows:

- ▶ The requirements of IFRS 9 relating to scope of application, recognition and derecognition remain largely unchanged compared to the preceding standard IAS 39.
- ▶ However, the provisions of IFRS 9 introduce a new classification model for financial assets that is absent from IAS 39.
- ▶ The subsequent measurement of financial assets is to be aligned in future to three categories with different value criteria and a different method of value change recognition. Categorisation is performed as a function both of the con-

tractual cash flows emanating from the instrument and of the business model in which the instrument is held. Essentially, these are therefore mandatory categories. In addition, however, the company or entity also a number of options available to it.

- ▶ By contrast, the existing requirements in respect of financial liabilities were extensively adopted in IFRS 9. The only significant change relates to financial liabilities in the fair value option. Fair value fluctuations in these liabilities due to changes of a company's own risk of default are to be recognised under other comprehensive income.
- ▶ IFRS 9 provides for three stages which, in future, will determine both the level of loss to be recognised and the treatment of interest income. Accordingly, losses already expected on receipt are to be recognised on the basis of the cash value of a 12-month expected credit loss (Stage 1). If there is a significant deterioration in credit quality, the risk provision needs to be increased to the level of the expected losses over the entire remaining life of the financial instrument (Stage 2). On receipt of an objective indication of impairment, interest revenue is calculated on the net carrying amount i.e. it is reduced for expected credit losses (Stage 3).
- ▶ In addition to extensive transitional provisions, IFRS 9 also specifies comprehensive disclosure regulations in respect of both the transition and current application. Changes compared to IFRS 7 "Financial Instruments: Disclosures" relate particularly to the impairment requirements.

The final IFRS 9 will be mandatorily effective for periods beginning on or after January 1, 2018; earlier application is permitted. The EU has not yet adopted the changes. The PCC Group anticipates that the future application of IFRS 9 may affect the presentation of financial assets and financial liabilities of the Group. However, it will only be possible to provide a reliable assessment of the effects of applying IFRS 9 after a detailed analysis has been carried out.

#### Changes in accounting policy

The reduction in participating interest recognised through profit or loss in the previous year with respect to PCC Rokita SA, Brzeg Dolny (Poland), has been retrospectively restated in accordance with IFRS 10 B.96. This results in a reduction in the prior-year earnings and a corresponding increase in revenue reserves of €3.9 million. For more details, please see the statement of changes in equity.

#### (3) SCOPE OF CONSOLIDATION

The basis for consolidation of the entities incorporated in the consolidated financial statements was provided by the annual financial statements (or commercial balance sheets II according to IFRS) of the companies as of December 31, 2015. The consolidated financial statements as of this closing date were prepared on the basis of uniform accounting and valuation principles (IFRS). Included in the consolidated financial statements as of December 31, 2015 are the financial statements of the parent company PCC SE and those of subsidiaries over which the parent company exerts control.

Subsidiaries not responsible for material business operations and regarded individually and in aggregate as being immaterial in terms of portraying a true and fair view of the net assets, financial position, results of operations and cash flows of the Group, have been omitted from the consolidation process and are therefore not reflected in the consolidated annual financial statements.

Following an updated materiality assessment, certain subsidiaries previously not fully consolidated have now been included in the consolidated financial statements on application of IAS 8.22, which means that incorporation is retrospective. The entities involved are as follows:

- ▶ PCC BakkiSilicon hf, Húsavík (Iceland)
- ▶ PCC NEW HYDRO DOOEL, Skopje (Republic of Macedonia) PCC Energia EOOD, Sofia (Bulgaria)
- ► PCC EXOL Kimya Sanayi ve Ticaret Limited Şirketi, Istanbul (Turkey)
- ▶ PCC Packaging, Brzeg Dolny (Poland)
- ▶ Novi Energii OOD, Sofia (Bulgaria)
- ▶ PCC Izvorsko, Sofia (Bulgaria)

These adjustments mean that comparison with the previous year is only possible to a limited degree.

The entity PCC BakkiSilicon hf, Húsavík (Iceland), became material on successful conclusion of the financing agreements and with the advent of the turnkey contract with a plant constructor, and was therefore included in the consolidation scope. The final closing with the financing partners was achieved with respect to this project in June 2015. The project company also received a capital increase. The stake held by PCC SE therefore rose to a current figure of 86.5 %. The minority shareholders take the form of a consortium of Icelandic pension funds and an Icelandic bank. The project company is responsible for the construction and operation of a silicon metal smelting plant in Iceland.

The consolidation scope was also expanded by a further entity accounted for using the equity method. Here also, the prioryear figures have had to be restated:

▶ OOO DME Aerosol, Pervomaysky (Russia)

This company is a joint venture with a Russian partner company. Located on the production site of JSC Shchekinoazot, the joint venture is undertaking the construction of a plant for the manufacture of dimethyl ether (DME). PCC SE holds a direct share of 50.0 % in the voting and capital rights of this joint venture.

For a detailed schedule of shareholdings in accordance with Section 313 (2) HGB (German Commercial Code), please refer to Note (41).

Fully consolidated subsidiaries	Germany	Abroad
Jan. 1, 2014	4	37
→ Additions	1	2
▶ Disposals/Mergers	-	2
Jan. 1, 2015	5	37
▶ Additions	-	2
▶ Disposals/Mergers	-	1
Consolidated subsidiaries as of Dec. 31, 2015	5	38

There was an addition to the scope of consolidation in fiscal 2015 within the Polyols segment in the form of PCC Therm Sp. z o.o., Brzeg Dolny (Poland). The company was re-established as a new entity in the year under review and is responsible for the production and marketing of PU-based thermal insulation products.

A further company was newly established in 2015 in the form of distripark.com Sp. z o.o., Brzeg Dolny (Poland). Operating on a group-wide and cross-segment basis, this entity is developing the direct sale of PCC products in standard household and small commercial quantities via an internet portal.

None of the additions named fall under the scope of IFRS 3.

The company 3S S.A., previously accounted for using the equity method, and 3Services Factory S.A., both domiciled in Katowice (Poland), were sold and eliminated from the consolidation.

In addition, PCC Utilities Sp. z o.o., Brzeg Dolny (Poland), was liquidated as an inactive entity and removed from the commercial register.

In the case of S.C. Oltchim S.A., Râmnicu Vâlcea (Romania), which is listed in the schedule of shareholdings under Note (41), PCC SE has no codetermination rights whatsoever that would enable it to exert a significant influence over the company.

#### (4) CONSOLIDATION METHODS

The consolidated financial statements of the PCC Group contain all the material German and international subsidiaries over which PCC SE is able to exercise control.

Subsidiaries are fully consolidated from the time of acquisition. The time of acquisition is defined as the time at which the parent company acquires control over these Group entities. Subsidiaries remain included in the consolidated financial statements until they are no longer under the control of the parent company.

All intercompany receivables and payables and intra-Group income and expenses are eliminated on consolidation. Intercompany results are, where material, also eliminated.

The acquisition of subsidiaries is accounted for using the purchase method. The consideration transferred in the course of a business combination is measured at fair value. This is determined from the total of the fair values of the assets transferred at the time of acquisition less the liabilities assumed from the previous owners of the acquired entity and the equity instruments issued by the Group in exchange for control of the acquired entity. Transaction costs associated with business combinations are expensed against income on incurrence.

The purchase price is distributed between the acquired assets and liabilities on first-time consolidation. Any positive difference between the purchase price and the amount allocated is recorded as goodwill. Goodwill thus arises as the surplus represented by the total of the consideration transferred plus the amount of all non-controlling shares in the acquired company and the fair value of the equity share previously held by the acquirer in the acquired entity (where applicable) above the balance of the fair values of the acquired identifiable assets and liabilities assumed on the date of acquisition. In the event that a negative difference is identified, and remains confirmed after a second assessment, this is immediately recognised as income. Any goodwill recognised is subjected to an impairment test at least once a year. For further details, please see Note (19).

Participating interests in associated companies and joint arrangements, i.e. those entities accounted for using the equity method, are recognised at cost in the consolidated balance sheet. In the following periods, the annual net profit or loss realised is proportionally allocated in accordance with the equity value approach. The dividends received in the reporting year are then deducted from the equity value. The differences that may arise on first-time consolidation are taken into account in the equity approach. At each balance sheet date, the Group investigates whether there are indications that an impairment loss needs to be recognised with respect to an associated company or a joint venture. In this case, the difference between the carrying amount and the expected net realisable value is recognised as an impairment loss under income from investments accounted for using the equity method in the consolidated statement of income.

#### (5) EXPLANATORY NOTES TO THE ACCOUNTING AND VALUATION PRINCIPLES

#### Property, plant and equipment

Property, plant and equipment are recognised at cost less accumulated scheduled depreciation and accumulated impairment charges, in accordance with IAS 16. The revaluation method is not applied. Costs for repairs and maintenance of property, plant and equipment are immediately expensed. Regular maintenance of major plant or the replacement of major components is capitalised where additional future benefits are anticipated. The scheduled straight-line depreciation amounts are based on the following useful lives:

in years	2015	2014
Buildings and structures	5-80	5-80
Plant and machinery	3-30	3–30
Factory and office equipment	1-29	1–29
Investment property	28-33	28-33

An item of property, plant and equipment is derecognised either on disposal or when the further use or disposal of the asset is no longer expected to generate any economic benefit. The gains or losses arising from the derecognition of the asset are determined as the difference between the net proceeds and the book value/carrying amount of the asset, and recognised through profit or loss in the period in which the asset is derecognised. Value write-ups arising from impairment reversals are recognised in other operating income.

The residual values, useful lives and depreciation methods are regularly reviewed and, where required, adapted at the end of each fiscal year.

#### **Investment property**

Investment property, i.e. real estate held for the purpose of generating rental income or value increase, is capitalised at cost. Value write-ups are recognised under other operating income, write-downs/impairments are recognised under depreciation.

Assets in this category are accounted for using the acquisition cost model and subjected to scheduled depreciation over a useful life ranging between 28 and 33 years.

#### Intangible assets

Acquired intangible assets are recognised at cost less accumulated amortisation and accumulated impairment charges. Only those intangible assets acquired from third parties are capitalised, as the prerequisites for capitalisation of internally generated intangible assets are not fulfilled. Intangible assets are capitalised and generally amortised using the straight-line method over their estimated useful lives ranging between

2 and 20 years, and relate essentially to concessions for the operation of technical facilities. The intangible assets capitalised within the Group – other than goodwill – have limited useful lives

Research and development expenses are accounted for in accordance with IAS 38 "Intangible Assets". Research costs are expensed on incurrence. Development expenses may be capitalised under certain circumstances (see IAS 38.57), depending on the possible outcome of the associated development activities. Development expenses of a project qualify for capitalisation where the Group can prove that the project is both technically feasible, resulting in the generating of internal benefits, or allowing the sale of an asset, and that both the intention and the funds exist to complete said asset and to utilise or sell it. Assessment of this possible outcome necessitates material assumptions by the management involved. Moreover, the Group must verify that the expenditures to be allocated to the intangible asset during its development can be reliably calculated.

#### **Inventories**

Raw materials and supplies and also finished products and work in progress are recognised at cost. Capitalisation of the cost of borrowings in accordance with IAS 23 does not take place in the case of inventories as the prerequisites for this are not met. The acquisition or manufacturing cost of raw materials and supplies is essentially determined using the first in, first out method (FIFO). In isolated, negligible cases, however, the weighted average method may be used instead. Inventories are subjected to a valuation adjustment as of the closing date where the net realisable value is less than the carrying value.

#### **Borrowing costs**

Directly attributable borrowing costs incurred as part of the acquisition, construction or manufacture of a qualifying asset are capitalised as part of the cost of acquisition, construction or manufacture. They remain capitalised until the asset is ready for its envisaged use, with the relevant interest rate being duly applied. All other borrowing costs are expensed in the period in which they are incurred.

#### Financial instruments (IAS 39)

Financial instruments take the form of financial assets and financial liabilities. They are disclosed in the consolidated balance sheet where PCC SE or a subsidiary is a contractual party to the associated transaction. Financial assets are derecognised once the contractual rights to payments from the financial assets expire or the financial assets are transferred to another party together with all material risks and opportunities. Financial liabilities are derecognised once the contractual obligations are settled, cancelled or have expired. Regular-way purchases and sales

of financial assets are recognised as of the settlement date, that is to say the date on which the Group commits to the purchase or sale of the asset.

Within the PCC Group, financial assets are classified in accordance with the following categories: (a) "At fair value through profit or loss"; (b) "Loans and receivables"; or (c) "Available for sale". Classification depends on the nature of the assets and their purpose. The management determines the classification of financial assets on first-time recognition.

Financial assets that do not belong to the category "At fair value through profit or loss" are initially recognised at their fair value plus transaction costs. Financial assets which belong to the category "At fair value through profit or loss" are initially recognised at their fair value, while the associated transaction costs are immediately expensed.

#### a) Financial assets recognised at fair value through profit or loss

Financial assets recognised at fair value through profit or loss are those held for trading or which have been designated as belonging to this category on first-time recognition. A financial asset is assigned to this category if it has essentially been acquired with a view to short-term resale. Derivatives likewise belong to this category where they are not qualified as hedges. Financial assets measured at fair value through profit or loss are recognised at their fair value. Any gain or loss arising from (re-)measurement is added or deducted from income.

#### b) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable cash flows that are not quoted on an active market. Financial assets assigned to this category are recognised in the balance sheet under "Trade accounts receivable", "Other receivables and other assets" and "Cash and cash equivalents". Loans and receivables are subsequently stated at amortised cost using the effective interest method. If there are objective indications of impairment, they are subjected to individual value allowances. The assessment of the value allowance requirement is based on experience with respect to the solvency of the customer, the age structure of the asset, days overdue, any existing insurance policies, and customer-specific risks.

#### c) Financial assets available for sale

Financial assets available for sale are non-derivative financial assets which do not fall into any of the other categories described. They are measured at fair value. The fair values are essentially determined on the basis of market prices or quotations. Participating interests of which the fair value cannot be reliably determined are measured at cost and written down on impairment. In the case of such participating interests, the cost of ac-

quisition represents the best estimate of the fair value. Assets that fall under this heading include shares in subsidiaries, associates and joint ventures which, for reasons of materiality, are not fully consolidated or are included in the consolidated financial statements using the equity method. There are generally no plans to sell these participating interests to any significant degree.

Changes in the book values/carrying amounts of monetary financial instruments denominated in a foreign currency within the category of financial assets available for sale are recognised through profit or loss where such changes result from fluctuations in foreign exchange rates. Other changes in the book value/carrying amount of financial assets available for sale are recognised under other comprehensive income. Interest gains arising from application of the effective interest method in respect of securities in the category "Available for sale" are recognised through profit or loss. Dividends payable on equity instruments available for sale are taken to income once the Group becomes legally entitled to payment.

If financial assets classified as available for sale are sold or become impaired, the cumulative changes in fair value recognised in equity are recycled through profit and loss.

Financial liabilities are categorised either at fair value through profit or loss or as other financial liabilities. The rules governing initial recognition and measurement and the treatment of transaction costs are similar to those applicable to financial assets. With financial liabilities recognised at fair value through profit or loss, gains and losses arising from subsequent measurement in the following periods are taken to income. Other financial liabilities are measured in subsequent periods at amortised cost in accordance with the effective interest method.

Financial assets and liabilities are only offset and disclosed as a net amount in the balance sheet where there is a legal entitlement to do so and the intention is to settle on a net basis or to discharge the associated liability simultaneously with realisation of the associated asset.

Derivative financial instruments are initially recognised at fair value as of conclusion of the associated contract. Subsequent measurement is likewise at fair value as of the respective reporting date. The method for recognising gains and losses depends on whether the derivative financial instrument is designated as a hedge and, if so, on the nature of the hedged item. The PCC Group designates certain derivative financial instruments either as a) a fair value hedge of a recognised asset, a liability or an unrecognised firm commitment (fair value hedge), b) a hedge against the risks of fluctuating cash flows (cash flow hedge) associated with a recognised asset or a recognised liability or an expected future transaction with a high probability of occurrence, or c) as a hedge of a net investment in a foreign business operation (net investment hedge). In the

reporting year and also in the previous year, the PCC Group only had cash flow hedges to account for.

On conclusion of a transaction, the Group documents the hedge relationship between the hedging instrument and the main transaction, the purpose of the associated risk management and also the underlying strategy with respect to hedging transactions. Estimates are also documented both at the beginning of the hedging relationship and thereafter as to whether the derivatives used in the hedging relationship extensively compensate for changes in the fair value or the cash flows of the underlying transactions.

The effective portion of changes in the fair value of derivatives designated as cash flow hedges is recognised under other comprehensive income, with the ineffective portion being recognised directly through profit and loss. Amounts accrued under equity are recycled to profit or loss in the period in which the hedged underlying affects income.

In the event that a hedging transaction expires, is sold or no longer fulfils the criteria for recognition as a hedge, the gain or loss accumulated in equity remains in equity and is only recycled to profit or loss once the originally hedged, future transaction takes place. If the future transaction is no longer expected to occur, the cumulative gains or losses in equity are immediately recycled to profit or loss.

#### Trade accounts receivable

Trade accounts receivable are recognised at amortised cost. In the event of value adjustments, these are recognised directly in the receivable concerned. Value adjustments are allocated to receivables from insolvent debtors and also receivables that are more than 365 days overdue. Receivables denominated in foreign currency are converted as of the closing date at the applicable euro exchange rate, with any translation differences being recognised through profit or loss.

#### Cash and cash equivalents

Cash and cash equivalents encompass cash balances and cheques, credit balances at banks with a term of up to three months from the date of acquisition, and also highly liquid financial assets available at short notice. These items are recognised at amortised cost.

#### Trade accounts payable; overdrafts

Trade accounts payable, overdraft liabilities and other liabilities are recognised at their repayable or settlement amount.

#### **Provisions**

Provisions are created where a past event has given rise to an obligation towards third parties that is likely to lead in the future to an outflow of funds, and where the amount involved can be reliably estimated.

#### Taxes on income

The PCC Group accounts for deferred taxes in accordance with IAS 12 where differences exist between the carrying amount and the tax base of an asset. Deferred tax liabilities are essentially recognised on all taxable temporary differences, while deferred tax assets are only recognised where it is probable that taxable profits will be available to enable their realisation. The carrying value of deferred income tax assets is examined on each closing date and reduced to the extent that it is no longer probable that sufficient income will be available against which the deferred tax asset can be at least partially realised. Deferred income tax assets not recognised in an earlier period are reassessed at each closing date and recognised to the extent that it currently appears probable that future taxable profits will allow realisation of the deferred tax asset.

Deferred tax liabilities and deferred tax assets are netted where there is a right to do so and where they involve the same tax authority.

Current taxes are calculated on the basis of the taxable income of the company for the reporting period. The tax rates applied for each company are those applicable as of the closing date.

#### Leases (IAS 17)

Concluded lease contracts are treated as either finance leases or operating leases. Where material opportunities and risks are transferred to the Group as the lessee, the Group is also assigned economic ownership. In the case of contracts that qualify as operating leases, the current lease instalments are immediately expensed. Assets held as finance leases are either capitalised at the present value of the minimum lease payments or the fair value of the leased item at the inception of the lease, whichever is the lower. In the event that change of ownership to the lessee at the end of the contractual period is not sufficiently ensured, these assets are either written down over the term of the lease or over their useful life, whichever period is shorter. A lease liability is also recognised in the corresponding amount. The periodic lease payments have to be divided into repayment and interest components. The repayment component reduces the liability, while the interest component is recognised as an interest expense.

#### Revenue recognition (IAS 18)

The company recognises revenue in compliance with IAS 18 where the selling process has been completed and the risks and opportunities associated with ownership have been transferred to the purchaser. The Group essentially recognises its sales revenue with the sale of its products and services.

#### Government grants and assistance (IAS 20)

Government grants and assistance are recognised in the consolidated financial statements of the PCC Group as deferred income on the liabilities side, provided that there

is reasonable assurance that the entity will comply with any conditions attached to the grant or assistance, and that the grant or assistance will be received. The release of this deferred income is effected through profit and loss under other operating income over the full period of depreciation assigned to the asset created.

### Exploration for and evaluation of mineral resources (IFRS 6)

Expenditures on viable exploration drilling operations and also for non-productive drilling operations are capitalised. The expenditures are recognised through to exploitation as assets in course of construction. Once production begins on a positive find, the asset is reclassified to plant and machinery. The capitalised expenses are amortised over the maximum period of production as determined by expert appraisal. If annual investigation of the resources should result in a change in this lifetime estimate, the depreciation period is adjusted accordingly. In the event of the find being determined as unviable in subsequent periods, the asset is written off by way of an unscheduled impairment.

#### Foreign currency translation

The consolidated financial statements have been prepared in euro, the functional currency of the parent company.

Each company within the Group determines its own functional currency. The items contained in the financial statements of the company concerned are measured using this functional currency. Foreign currency transactions are initially translated into the functional currency at the spot rate applicable on the transaction date.

Monetary assets and liabilities in a foreign currency are translated into the functional currency on each closing date using the spot rate applicable as of that date. All foreign exchange

differences are recognised through profit or loss with the exception of translation differences arising from foreign currency loans where these are recognised as hedges of a net investment in a foreign operation. These are recognised directly in equity until the net investment is sold, and only on derecognition are they recycled through profit or loss. Deferred taxes arising from the translation differences of these foreign currency loans are likewise recognised directly in equity.

For entities for which the euro is not the functional currency, non-monetary items that are measured at historical cost in a foreign currency are translated at the rate prevailing on the date of the transaction. Non-monetary items measured at their fair value in a foreign currency are translated at the rate applicable at the time of ascertaining the fair value.

All assets and liabilities resulting from the acquisition of a foreign operation are recognised as assets and liabilities of that foreign operation and translated at the spot rate prevailing on the closing date.

For entities for which the euro is not the functional currency, the assets and liabilities of foreign operations are translated into euro as of the closing date. Income and expenses are translated at the weighted average rate for the fiscal year. The translation differences arising from this are recognised as a separate item in equity.

The accumulated amount recognised for a foreign operation in equity is recycled through profit or loss on disposal of that foreign operation.

The exchange rates of the currencies of importance to the consolidated financial statements are indicated in the following table:

		Closing rate		Average rate	
Currency exchange rate for 1 €	Dec. 31, 2015	Dec. 31, 2014	2015	2014	
Bosnian convertible mark (BAM)	1.9558	1.9558	1.9558	1.9558	
Bulgarian lev (BGN)	1.9558	1.9558	1.9558	1.9558	
Belarusian ruble (BYR)	20,304.29	13,395.61	17,505.36	13,592.89	
Czech koruna (CZK)	27.0230	27.7350	27.2790	27.5359	
Macedonian denar (MKD)	61.5947	61.4814	61.6098	61.6228	
Polish zloty (PLN)	4.2639	4.2732	4.1841	4.1843	
Romanian leu (RON)	4.5240	4.4823	4.4454	4.4437	
Russian ruble (RUB)	80.6736	72.3370	68.0720	50.9518	
Turkish lira (TRY)	3.1765	2.8320	3.0255	2.9065	
US dollar (USD)	1.0887	1.2141	1.1095	1.3285	

#### Use of assumptions and estimates

Preparation of the consolidated financial statements as of December 31, 2015 in compliance with IFRS requires certain estimates and assumptions to be made by the management that influence the amount recognised as assets, liabilities, contingent receivables and contingent liabilities as of the reporting date, and also the income and expenses generated during the fiscal year. The main areas of application for assumptions, estimates and the exercise of discretionary scope are encountered in determining the useful lives of non-current assets, the recognition and measurement of other reserves and pension reserves, and also income tax. It is also necessary when determining goodwill impairment to

assess the value-in-use of the cash-generating unit to which the goodwill is assigned. Calculation of the value-in-use requires an estimate of future cash flows from the cash-generating unit and also a suitable discount rate for determining the present value of those future cash flows. Estimates are based on empirical values and other assumptions considered appropriate under the given circumstances. They are continuously reviewed and may deviate from the actual values and figures that come to light. The book values/carrying amounts of items affected by estimates can be found in the following Notes and also in the balance sheet. Discretionary decisions which are not based on estimates occur, for example, in relation to the categorisation of lease contracts.

## NOTES TO THE INDIVIDUAL ITEMS OF THE CONSOLIDATED STATEMENT OF INCOME

#### (6) SALES REVENUE

Sales in fiscal 2015 amounted to €571.1 million (previous year: €647.3 million). Of this, €514.3 million (previous year: €596.5 million) was generated from the sale of goods and

products, while €56.8 million (previous year: €50.8 million) came from the sale of services, and in particular transport services.

#### [7] OTHER INTERNAL COSTS CAPITALISED

The total of other internal costs capitalised essentially derives from manufacturing costs in respect of work or assets capitalised, with material intercompany profits eliminated. The total for this item increased in the year under review from €2.5 million to €4.8 million.

#### (8) PURCHASED GOODS AND SERVICES

Figures in €k	2015	2014
Cost of raw materials, supplies and merchandise	351,907	438,986
Cost of external services	50,135	44,423
Transport and warehouse costs	17,275	19,626
Total purchased goods and services	419,317	503,035

The cost of purchased goods and services decreased compared to the previous year by €83.7 million or 16.6 % to €419.3 million. The main reason for this was the reduction in purchase prices for raw materials across the whole of 2015. The persistently low crude oil price was instrumental

in sustaining this trend. The rise in expenses for purchased services occurred within the Intermodal Transport business unit and was due in particular to a substantial increase in the number of containers transported.

#### (9) PERSONNEL EXPENSES

Figures in €k	2015	2014
Wages and salaries	48,217	44,284
Social security contributions	9,073	8,484
Pension costs	55	106
Total personnel expenses	57,345	52,874

Compared to the previous year, personnel expenses increased by  $\in$  4.5 million to  $\in$  57.3 million. This rise is due in the first instance to the increase in personnel accompanying plant and business expansions, particularly in the Chlorine and Surfactants segments and in the Intermodal Transport business unit.

At the end of 2015, the number of people employed at the Group was 2,992, an increase of 96 or 3.3 % compared to the headcount of 2,896 as of year end 2014.

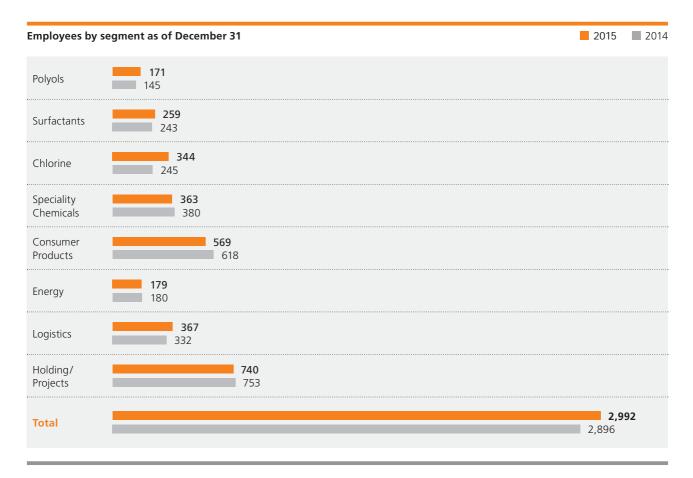
The increases were offset by personnel reductions in the Consumer Products segment and in the Rail Transport business unit. Following completion of the upgrade work in the production facilities of the Consumer Products segment and adjustments implemented to reflect the current market situation, the number of employees was reduced there by 49. The economic situation and the market environment underlying wagon leasing activities in Russia meant that cost optimisation measures were also required there, leading to the headcount being reduced by 12. The sale of 3Services Factory S.A. meant that the number of employees was reduced by 29 versus the previous year.

	2015	2014
Salaried employees	1,273	1,226
Waged employees	1,655	1,648
Total employees (average for the year)	2,928	2,874

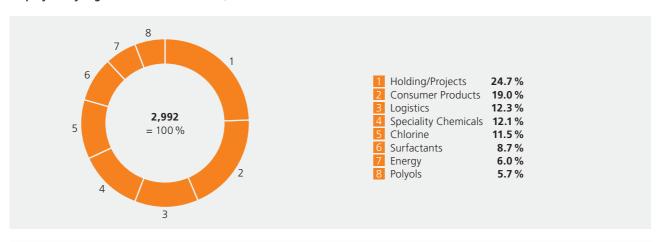
The average total headcount in 2015 at the companies of the PCC Group was 2,928 employees, which is 54 or 1.9 % more than in the previous year.

The following table indicates the distribution of employees between the Group segments as of the closing date. The corporate service functions are allocated to the Holding/

Projects segment, as is the investment project of PCC Bakki-Silicon hf in Iceland.

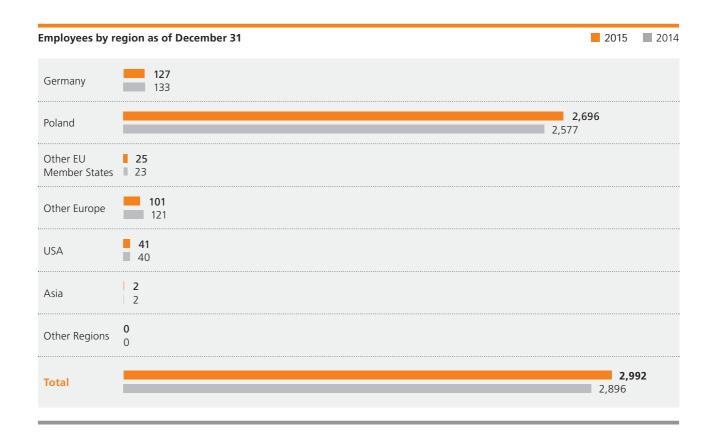


#### Employees by segment as of December 31, 2015 in %



The geographic distribution of employees as of the closing date was as follows:

Employees by region as of December 31, 2015 in %







#### (10) OTHER OPERATING INCOME

Figures in €k	2015	2014
Income on disposal of financial assets	4,372	4,832
Income from reversal of value adjustments on accounts receivable	1,545	1,790
Income on disposal of property, plant and equipment	988	332
Insurance reimbursements	563	653
Rental and similar income	538	811
Income from costs recharged	173	128
Income from release of other provisions	117	715
Sundry other operating income	4,469	3,642
Total other operating income	12,766	12,903

At  $\leq$  12.8 million, other operating income for the year under review remained virtually flat versus the prior year ( $\leq$  12.9 million).

Gains from disposal of financial assets, which also include gains from the derecognition of consolidated companies and other business units, decreased from €4.8 million to €4.4 million. Two companies which did not form part of the core business of the PCC Group, namely 3S S.A. and 3Services Factory S.A., left the consolidation scope in fiscal 2015. The derecognition gain from the departure of 3Services Factory amounted to €1.4 million. This disposal triggered the reclassification of currency translation effects in the amount of €0.9 million from equity to consolidated income.

Gains from the reversal of other provisions decreased in fiscal 2015 by  $\leq$  598 k to  $\leq$  117 k.

Gains from the disposal of property, plant and equipment increased versus the prior year from  $\leq$  332 k to  $\leq$  988 k.

The increase in sundry other operating income is essentially due to the gain arising from a claim for compensation in the amount of  $\leq 1.5$  million.

## (11) OTHER OPERATING EXPENSES

Figures in €k	2015	2014
Freight expenses	10,736	13,449
Maintenance and repair expenses	7,694	7,751
Legal, consultancy and audit expenses	5,539	7,668
Other taxes	5,158	5,606
Marketing, selling and distribution expenses	3,517	3,410
Travel and hospitality expenses	3,308	3,594
Insurance premiums	3,110	3,295
Rent and similar expenses	3,009	3,191
General office costs	2,856	4,007
Increase of value adjustment on receivables	2,577	2,039
Non-wage personnel expenses	2,330	1,992
Losses on disposal of property, plant and equipment	810	135
Sundry other operating expenses	11,237	14,493
Total other operating expenses	61,883	70,631

In fiscal 2015, other operating expenses decreased from  $\in$  70.6 million to  $\in$  61.9 million, a reduction of 12.4%. At  $\in$  10.7 million (20.1% less than in the previous year), freight

expenses represented the largest individual item. Despite increased sales volumes, the business units of the Chemicals segment were able to benefit from the reduction in freight

rates arising from increased competition in the transport industry. Because of greater focus on Group-internal logistics service-providers (Intermodal Transport and Road Haulage), there was a reduction in purchase levels with respect to services supplied from outside the Group.

Other taxes include all tax expenses other than income tax. The domestic and foreign taxes on income and also deferred taxes are separately disclosed in the tax result and explained under Note (16). At  $\leqslant$  5.2 million, the figure for the year under review is 7.8 % below the prior-year amount of  $\leqslant$  5.6 million.

Maintenance and repair expenses remained virtually flat at €7.7 million in the reporting year (previous year: €7.8 mil-

lion). Essentially, these expenses are incurred by the asset-intensive businesses of the Chemicals segments, and in particular the companies at our Brzeg Dolny site in Poland.

Expenses for accounting, auditing and consultancy services decreased compared to the previous year from  $\[ \in \]$  7.7 million to  $\[ \in \]$  5.5 million. This represents a fall of 28.6%, attributable to the recognition of exceptional expenses in the preceding fiscal year due to the flotation of our subsidiary PCC Rokita SA in fiscal 2014.

Research and development expenses of  $\leq 2.3$  million were recognised for the year under review (previous year:  $\leq 2.1$  million).

## (12) INCOME FROM INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

Figures in €k	2015	2014
Equity value as of Jan. 1	7,047	13,530
Changes in consolidation scope	-5,917	-6,908
Dividends received	-1,130	– 157
Proportionate net profit/loss	-102	406
Adjustment for negative value	102	176
Equity value as of Dec. 31	_	7,047

Our associate 3S S.A., Katowice (Poland), was divested in fiscal 2015 and therefore left the consolidation scope.

	OOO DME Aerosol			
Figures in €k	2015	2014		
Income statement				
Revenues	-	-		
EBITDA	-12	-14		
EBT	-227	-465		
Net result	-204	-425		
Balance sheet				
Non-current assets	758	671		
Current assets	166	186		
Non-current liabilities	1,343	1,132		
Current liabilities	-	-		

Because of the assignment of a loss that exceeds the equity value of OOO DME Aerosol, Pervomaysky (Russia), the equity method has been discontinued in the case of this entity. The losses are to be carried in a subledger account and will be initially offset against future income before any positive share of earnings is recognised in the consolidated statement of income. As of December 31, 2015, the accumulated losses amounted to  $\leq 0.3$  million (previous year:  $\leq 0.2$  million). Unrecognised losses in the year under review amounted to  $\leq 0.1$  million.

Aside from the aforementioned company, there is a further joint venture within the PCC Group in the form of IRPC-PCC Co. Ltd., Bangkok (Thailand). However, this has not been included in the consolidated financial statements due to lack of materiality.

#### (13) DEPRECIATION AND AMORTISATION

The depreciation of property, plant and equipment increased due to the continuation of the extensive capital expenditure programme of the PCC Group that has been put in train in recent years. In the reporting year, amortisation of intangible assets and depreciation of property, plant and equipment amounted to €23.9 million, 9.0 % more than in the previous year. A significant portion of the increase is attributable to the now commissioned new container terminals in the Logistics segment, and also to the switch of the chlor-alkali

electrolysis process in the Chlorine segment to environmentally friendly membrane technology. The commissioning of a further small hydropower plant in Macedonia and the first-time full-year effect of the hydroelectric power plants completed in the previous year led to an increase of €260.9 k.

Countervailing decreases arose as a result of the disposal of the data centre activities ( $\in -384.9 \, k$ ) and depreciation of the Russian ruble ( $\in -267.0 \, k$ ).

Figures in €k	2015	2014
Amortisation of intangible assets	1,070	985
Depreciation of property, plant and equipment	22,849	20,956
Total depreciation and amortisation	23,920	21,941

Amortisation of non-current intangible assets relates to industrial property rights and similar rights. There were no impairments or write-ups of goodwill either in fiscal 2015 or in the previous year. For further information in relation to goodwill, please refer to Note (19).

In fiscal 2015, total impairment charges with respect to property, plant and equipment amounted to €821.7 k, caused primarily by assets in the Chlorine segment being written off as a result of replacement by technologically more advanced plant and equipment.

## (14) INTEREST RESULT

The balance of interest income and interest expenses moved from  $\in$  -18.7 million in the previous year to  $\in$  -21.2 million

in the year under review, representing a change of -13.4 %. The breakdown for 2015 reads as follows:

Figures in €k	2015	2014
Interest and similar income	746	1,123
Interest income from deposits	108	198
Interest income on bank balances	531	477
Interest income from discounting of non-current provisions	-	24
Interest income from discounting of non-current receivables	-	_
Interest income on intercompany loans	107	424
Interest and similar expenses	21,984	19,838
Interest payable on bearer bonds	15,023	12,726
Interest payable on profit participation certificates	962	962
Interest payable on loans	4,422	5,765
Interest expense from discounting of non-current provisions	325	9
Interest expense from discounting of non-current receivables	916	_
Interest expense component of finance lease payments	306	360
Derivatives	-	_
Interest expenses on intercompany loans received	30	17
Interest result	-21,238	-18,716

The largest individual item was, as in the previous year, interest payable on bonds. Overall, the interest expense arising from bonds increased by  $\leqslant$  2.3 million or 18.0 % to  $\leqslant$  15.0 million. This was the result of an increase in bond liabilities of  $\leqslant$  100.1 million to  $\leqslant$  363.1 million. Nevertheless, both the parent company of the PCC Group and also the Polish subsidiaries were able to obtain finance at improved interest rates. Several companies of the PCC Group issued bonds to finance investments and also for the refinancing of liabilities falling due. Note (30) provides a detailed breakdown of the bond liabilities and their tenors.

Interest attributable to investment projects that represent qualifying assets is capitalised during the construction phase in accordance with IAS 23. In the year under review, total interest expenses amounting to  $\leqslant$  8.6 million (previous year:  $\leqslant$  4.8 million) were recognised on the assets side. The capitalisation rate was 7.0 % (previous year: 8.0 %).

The weighted interest rate across all interest-bearing liabilities in fiscal 2015 was 5.6%, a decrease of 0.2 percentage points compared to the rate prevailing in the previous year.

#### (15) CURRENCY TRANSLATION RESULT

2015	2014
16,024	7,903
19,671	13,989
-3,647	-6,086
	16,024 19,671

Gains and losses from currency translation are recognised under financial result. In particular, gains arising from currency translation increased considerably compared to the previous year, with the rise in the US dollar primarily responsible.

## (16) TAXES ON INCOME / TAX EXPENSE

Figures in €k	2015	2014
Current taxes on income, Germany	756	1,159
Current taxes on income, abroad	2,884	1,935
Current income tax expenses	3,640	3,094
Deferred tax income (–) / expense (+)	-427	<b>–</b> 1,521
Total taxes on income	3,214	1,574
Other taxes incl. VAT and other excise duties	5,158	5,606
Total tax expenses	8,371	7,179

Taxes on income include the income taxes paid or owed in the individual countries, and also deferred taxes recognised through profit or loss. Taxes on income are comprised of municipal trade and corporate income tax, the solidarity surcharge payable in Germany and the corresponding foreign taxes on income. Other taxes include property taxes, wealth taxes and other comparable tax classes and amounted to  $\leq$  5.2 million (previous year:  $\leq$  5.6 million). These are allocated to other operating expenses.

The effective tax rate of the PCC Group has moved from -21.5% to 264.3%. The differences between the income tax rate of 30% applicable in Germany for 2015 and the

effective tax rate are indicated in the following reconciliation statement:

Figures in €k	2015	2014
Earnings before taxes (EBT)	1,216	-7,334
Anticipated income tax burden at parent company	365	-2,200
Effects of changes on income tax rates	-	
Foreign tax rate differentials	1,935	725
Results from investments accounted for using the equity method	_	-582
Non-taxable income	-20,838	-18,693
Non-deductible expenses	24,321	22,437
Deduction of losses for which deferred taxes have been provided	-2,962	-3,008
Deduction of losses for which deferred taxes have not been provided	-310	-1,645
Non-period-related taxes	-	-74
Result in special economic zones	-14,657	-13,409
Permanent differences	23,847	15,912
Other effects	-8,486	2,111
Effective income tax	3,214	1,574

Individual Group companies have tax losses that can be carried forward. The following indicates the timeframes in which these tax loss carry-forwards can be used and from which deferred tax assets are formed. Compared to the pre-

vious year, the amount has decreased by  $\le$  1.6 million or 10.4%. Tax loss carry-forwards from which no deferred tax assets have been formed amount to  $\le$  94.4 million (previous year:  $\le$  83.2 million).

Figures in €k	2015	2014
Usable within:		
1 year	66	673
2 years	2,645	193
3 years	834	4,480
4 years	806	1,297
5 years and thereafter	9,024	8,732
Carried forward without restriction	407	-
Total usable tax losses carried forward	13,781	15,373

## **SEGMENT REPORT**

#### (17) BUSINESS SEGMENT REPORT

The PCC Group is currently active with around 3,000 employees at 40 sites in 17 countries. The investment portfolio of PCC SE is divided into eight segments. The seven segments Polyols, Surfactants, Chlorine, Speciality Chemicals, Consumer Products, Energy and Logistics are assigned full operational responsibility. Allocated to these segments are 19 business units that are managed by the international com-

panies and entities of PCC. The eighth segment, Holding/ Projects, includes not only the holding company PCC SE but also other companies and entities and is primarily responsible for providing corporate services in the fields of finance, business development, information technology, environmental protection, site infrastructure management, research & development and engineering & technology.

#### The divisions, segments and business units of the PCC Group Holding/ Chemicals Energy Logistics **Projects** Speciality Holding/ Consumer **Polyols** Surfactants Chlorine Energy Logistics Chemicals **Products** Projects 30° Polyols Anionic Chlorine Phosphorus Household Renewable Intermodal Portfolio and Surfactants and **Energies** Transport Manage-Polvurethane MCAA Naphthalene Industrial ment Non-ionic Road Systems Conventional Other Derivatives Cleaners, Surfactants **Energies** Haulage Projects Chlorine Detergents Alkylphenols and Personal Rail Amphoteric Downstream Services Chemicals Surfactants Products Care **Transport** (Betaines) and **Products** Commodities Matches **Trading** and Quartzite **Firelighters**

The assignment of the Group's businesses to the seven operational segments assists in the leverage of synergy effects and sharpens the profile of the individual operations. The adoption of this structure underscores the PCC Group's commitment to its strategy of active investment portfolio management and ongoing portfolio optimisation. The management of the portfolio assets and affiliates together with examination of further acquisitions for the purpose of competence-related diversification into new market segments remains at the heart of Group policy. The underlying objective over the long term is to build a basis for sustainable growth and to continuously increase enterprise value.

The Polyols segment is divided into the business units Polyols and Polyurethane Systems. These manufacture products that provide the basis for PU foam materials serving a wide range

of applications in numerous industries – from the PCC foam technology iPoltec® for high-comfort mattresses to PU foam systems for the effective thermal insulation of buildings.

Pooled under the Surfactants segment are the business units Anionic Surfactants, Non-ionic Surfactants and Amphoteric Surfactants (Betaines). Because of their multiple effects in foaming, wetting, emulsifying and cleaning, surfactants are a primary ingredient in many products. In toothpastes, they generate the cleaning effect and foaming action, while in dishwashing products they ensure that dirt and grease are effectively dislodged from hard surfaces.

Chlorine marks the starting point in the value chain of many other products in the Chemicals division. For many people, it is also essential for everyday living: in swimming baths, for example, it serves as a disinfectant protecting bathers from germs. Produced nowadays by an environmentally friendly process, chlorine and downstream chlorine products manufactured by PCC are also used in water treatment and the petrochemical industry.

The Speciality Chemicals segment is PCC's biggest in terms of revenue. Its products extend from phosphorus-based flame retardants, plasticisers and stabilisers, to additives for hydraulic fluids and superplasticisers that facilitate the laying of fresh concrete. The commodities trading operation of the PCC Group is also currently allocated to this segment.

The Consumer Products segment encompasses the business unit Household & Industrial Cleaners, Detergents and Personal Care Products – with its own Polish brands such as "ROKO" and "Roko Eco" – together with the business unit Matches and Firelighters.

Aside from a power plant for the on-site power generation activities of the manufacturing facilities in Poland, the Energy segment also pursues the development, construction and operation of power plants based on renewable energies. So far, four environmentally friendly small hydropower plants have been commissioned in the Republic of Macedonia, with one also in service in Bosnia-Herzegovina. A polish cogenerator (CHP power plant) providing heat, electricity and steam as a regional utility is also managed under this segment.

The Logistics segment comprises the three business units Intermodal Transport, Road Haulage and Rail Transport. PCC is one of the leading providers of container transport services in Poland. The logistics network extends from Eastern Europe to the Benelux countries, and the Group entities also operate several wholly owned terminals. Operating throughout Europe, the tanker fleet of PCC specialises in the road transport of liquid chemicals.

The Holding/Projects segment provides corporate and interdivisional services to the Group companies in fields such as finance, information technology, research, and maintenance & servicing. The Holding/Projects segment also manages projects in the development phase such as the advanced silicon metal production plant under construction in Iceland or the planned production plant for dimethyl ether in Russia.

The valuation principles for the Group's segment report are based on the valuation principles used in preparation of the consolidated financial statements per IFRS. Group-internal transactions are essentially performed in accordance with the same arm-length principles as those involving third parties. According to IFRS 8, operating segments are defined on the basis of the internal reporting regime as components of an entity whose operating results are reviewed regularly by the entity's chief operating officer. This review process entails making decisions about resources to be allocated to the segment and assessing its performance on the basis of discrete financial information. In-

formation reported to the main decision makers for the purpose of the allocation of resources to the operating segments of the Group, and also assessment of their financial performance, relates to the types of products manufactured or services provided.

At €571.1 million, sales for fiscal 2015 were 11.8% below the figure of €647.3 million realised in the previous year. The principle reasons for this lay in the global decline in prices for almost all the world's commodities. Despite robust to growing volume sales, all the Chemicals segments saw revenues decline due to the general price collapse. The traditional trading operations of the PCC Group, managed under the Speciality Chemicals segment, experienced the biggest decline in revenues. Sales in the Logistics and Energy divisions increased due to the commissioning of further container terminals and hydroelectric power plants. Sales of the Polyols segment decreased by 7.4% to € 136.2 million. The Surfactants segment was able to slightly increase its revenue by €2.3 million to € 101.1 million. A decrease in sales of € 9.5 million or 13.9 % was registered by the Chlorine segment. In the Speciality Chemicals segment, sales fell year on year by €60.3 million to €161.7 million. Aside from price effects, the Consumer Products segment was also impacted by tougher competition compared to the previous year, with the two factors resulting in a decline in sales of €3.9 million to €38.6 million. The Energy segment was able to increase its sales by 3.7 % from € 10.9 million to € 11.3 million. The Logistics segment also posted a rise in revenues from €50.8 million in 2014 to € 56.8 million this time, representing an increase of 11.6%.

In terms of the total output of the Group in fiscal 2015, the Chemicals division accounted for sales in the amount of €496.0 million generated by its five segments Polyols, Surfactants, Chlorine, Speciality Chemicals and Consumer Products. This figure still represents a high, although slightly reduced, proportion of consolidated sales amounting to 86.9% (previous year: 89.3%). Sales of the Logistics segment now correspond to a slightly greater share of 9.9% of total revenue (previous year: 7.9%). The share accounted for by the Energy segment in the reporting year amounted to 2.0% of total sales (previous year: 1.7%). The segment of the holding company with revenues amounting to €7.0 million (previous year: €7.4 million) saw its share of total output generated remain virtually unchanged at 1.2%.

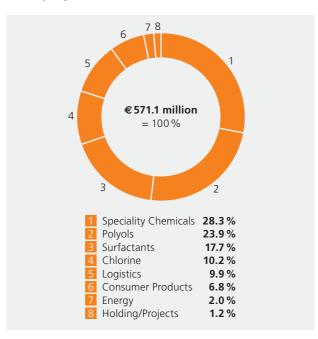
#### Reconciliation to earnings before taxes (EBT)

Figures in €k	2015	2014
EBITDA	50,787	39,591
Amortisation and depreciation	23,920	21,941
Financial result	-25,651	-24,983
Earnings before taxes (EBT)	1,216	-7,334

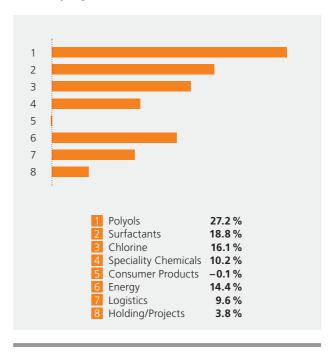
#### **Business segment report**

	Poly	yols	Surfac	tants	Chlo	rine		iality nicals
Figures in €k	2015	2014	2015	2014	2015	2014	2015	2014
Sales per segment (total)	148,056	158,619	123,694	124,212	112,970	129,029	183,128	243,273
Sales with other PCC segments	11,826	11,573	22,591	25,421	54,620	61,227	21,391	21,219
Sales revenue (external, consolidated)	136,229	147,046	101,102	98,792	58,350	67,802	161,737	222,055
Contribution to total revenue	23.9 %	22.7 %	17.7 %	15.3 %	10.2 %	10.5 %	28.3 %	34.3 %
EBITDA	13,806	12,567	9,549	6,551	8,159	8,094	5,198	3,921
EBITDA margin	10.1 %	8.5 %	9.4 %	6.6%	14.0 %	11.9 %	3.2 %	1.8 %
EBIT	12,460	11,345	7,294	4,375	3,018	3,669	1,584	-136
EBIT margin	9.1 %	7.7 %	7.2 %	4.4%	5.2 %	5.4%	1.0 %	-0.1 %
Intangible assets	291	208	1,808	1,698	9,802	9,075	1,888	2,145
Property, plant and equipment	28,472	26,067	42,496	41,854	161,685	127,939	27,259	30,335
Financial liabilities	7,968	6,707	43,768	48,542	84,211	52,452	20,030	30,163
Capital expenditures on intangible assets and property, plant and equipment	4,063	2,391	2,379	2,821	38,267	50,741	1,360	2,751
Depreciation and amortisation	1,343	1,223	2,256	2,176	5,046	4,425	3,595	4,056
Capital employed (average)	25,824	27,692	67,072	67,909	182,919	125,944	53,029	60,615
ROCE	48.3 %	41.0 %	10.9 %	6.4%	1.6 %	2.9 %	3.0 %	-0.2 %
Income from investments accounted for using the equity method	_	-		_		-		_
Employees at Dec. 31	171	145	259	243	344	245	363	380
Employees (annual average)	165	142	255	239	306	241	371	376

#### Sales by segment 2015 in %

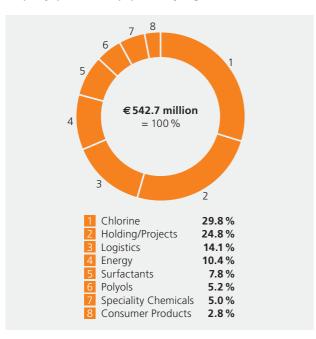


#### EBITDA by segment 2015 in %

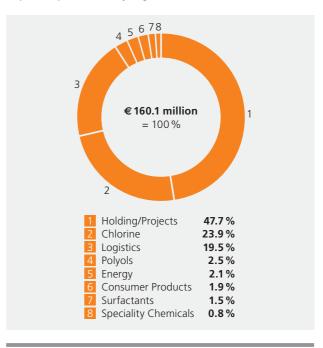


	Consu Prod		Ene	rgy	Logis	stics		ling / ects	Consol	idation	PCC G	roup
	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
_	38,676	43,173	28,363	25,976	66,755	59,859	40,666	36,340		-	742,309	820,483
	102	661	17,094	15,108	9,994	9,012	33,626	28,949		_	171,246	173,168
	38,574	42,513	11,270	10,868	56,761	50,848	7,040	7,391		_	571,063	647,315
	6.8 %	6.6%	2.0 %	1.7 %	9.9 %	7.9 %	1.2 %	1.1 %		_	100.0 %	100.0%
_	-70	1,139	7,326	5,220	4,868	3,926	2,680	18,966	-731	-20,793	50,787	39,591
_	-0.2 %	2.7 %	65.0 %	48.0 %	8.6 %	7.7 %	38.1 %	256.6%			8.9 %	6.1 %
_	-877	284	4,298	2,769	1,714	1,197	1,779	14,917	-845	-20,769	26,867	17,650
_	-2.3 %	0.7 %	38.1 %	25.5 %	3.0 %	2.4 %	-25.3 %	201.8 %			4.7 %	2.7 %
_	34	36	2,837	3,396	182	163	1,472	4,998	6,943	3,689	25,258	25,406
_	15,112	13,505	56,422	55,855	76,442	50,956	144,464	74,521	-9,695	-6,673	542,657	414,360
_	13,947	14,121	35,829	35,485	50,593	32,913	374,510	280,159	-111,968	-108,450	518,889	392,092
_	3,091	4,576	3,404	2,027	31,231	19,298	75,366	20,416	949	-1,893	160,111	103,127
	807	856	2,998	2,450	3,142	2,730	4,401	4,049	333	-24	23,920	21,941
	14,231	15,991	75,740	74,994	66,153	49,983	883,876	715,325	-777	-612,373	1,368,067	526,080
	-6.2 %	1.8 %	5.7 %	3.7 %	2.6 %	2.4%	-0.2 %	2.1 %	108.7 %	3.4 %	2.0 %	3.4%
-	_	_		_		-	-102	406	102	176	_	582
	569	618	179	180	367	332	740	753	_	_	2,992	2,896
_	576	636	179	183	352	326	724	731		-	2,928	2,874
_												

#### Property, plant and equipment by segment 2015 in %



#### Capital expenditures by segment 2015 in %



#### [18] REGIONAL SEGMENT REPORT

	Gern	nany	Pol	and	Other EU Member States	
Figures in €k	2015	2014	2015	2014	2015	2014
Customer location						
Sales revenue (external, consolidated)	121,998	167,660	225,311	227,779	121,285	131,892
Contribution to total revenue	21.4 %	25.9 %	39.5 %	35.2 %	21.2 %	20.4%
Company location						
Sales revenue (external, consolidated)	90,708	148,738	432,077	444,744	23,842	30,341
Contribution to total revenue	15.9 %	23.0 %	75.7 %	68.7 %	4.2 %	4.7 %
EBITDA	-1,486	17,147	52,026	41,676	-747	45
EBITDA margin	-1.6 %	11.5 %	12.0 %	9.4%	-3.1 %	0.1 %
EBIT	-2,572	16,105	31,506	22,921	-910	21
EBIT margin	-2.8 %	10.8 %	7.3 %	5.2 %	-3.8 %	0.1 %
Intangible assets	968	1,072	13,972	17,236	130	124
Property, plant and equipment	9,894	9,011	432,336	369,689	3,518	4,146
Investment property	2,572	2,507	1,098	-	_	_
Financial liabilities	298,725	261,528	232,826	186,293	6,747	8,840
Capital expenditures on intangible assets and property, plant and equipment	2,141	2,143	87,819	97,138	35	78
Depreciation and amortisation	1,086	1,041	20,301	18,754	163	24
Income from investments accounted for using the equity method		_		582		_
Employees at Dec. 31	127	133	2,696	2,577	25	23
Employees (annual average)	126	127	2,626	2,560	25	23

For the purpose of regular internal and external reporting, the business of the PCC Group is divided into seven regions (Germany, Poland, Other EU Member States, Other Europe, USA, Asia and Other Regions). In fiscal 2015, the Group generated 21.4% of its sales with customers in Germany (previous year: 25.9%), with 39.5% accounted for by customers in Poland (previous year: 35.2%).

The PCC Group generates a total of 82.1 % of its sales with customers in the member states of the European Union (previous year: 81.5 %), with Poland and Germany taking the lion's share

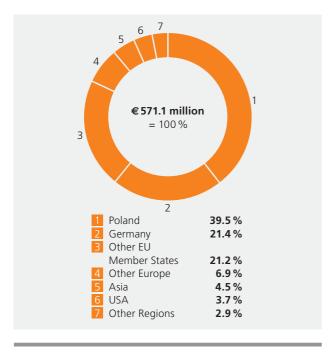
Based on company location, Poland accounted for net external sales of €432.1 million, corresponding to 75.7 % of the Group total (previous year: 68.7 %). Based on customer location, the figure for Poland was €225.3 million or around

39.5% (previous year: 35.2%). Due to the significant decrease in sales from our trading business, Germany registered a decline from  $\in$  167.7 million to  $\in$  122.0 million based on customer location. Based on company location, sales likewise decreased, from  $\in$  148.7 million to  $\in$  90.7 million.

Capital expenditures in Poland amounted to €87.8 million (previous year: €97.1 million), with major investment projects being undertaken in the Chlorine and Logistics segments, primarily in the form of the switch of the chlor-alkali electrolysis process to membrane technology, construction of an MCAA plant and expansion of the container terminal network. The Holding/Projects segment registered capital expenditures as a result of its investment in the new silicon metal smelting plant in Iceland, with the figure rising from €20.4 million last time to €75.4 million in the year under review

Other E	urope	US	A	Asi	ia	Other R	egions	Consoli	dation	PCC G	roup
2015	2014	2015	2014	2015	2014	2015	2014	2015	2014	2015	2014
39,225	69,610	20,952	18,867	25,615	26,934	16,678	4,572		_	571,063	647,315
6.9 %	10.8 %	3.7 %	2.9 %	4.5 %	4.2 %	2.9 %	0.7 %		_	100.0 %	100.0 %
4,237	5,148	20,199	18,344		_		_		_	571,063	647,315
0.7 %	0.8%	3.5 %	2.8 %		_		-		_	100.0 %	100.0 %
			70.5		4.5						
1,045	809	656	720	24	–13		_	-731	-20,793	50,787	39,591
24.7 %	15.7 %	3.2 %	3.9 %		_		_			8.9%	6.1 %
-716	-1,110	382	496	22	-14		-	-845	-20,769	26,867	17,650
<b>-16.9 %</b>	-21.6%	1.9 %	2.7 %		_		-		-	4.7 %	2.7 %
2,218	2,339	1,026	947	_	_	_	_	6,943	3,689	25,258	25,406
102,663	34,449	3,938	3,734	4	4		_	-9,695	-6,673	542,657	414,360
			142		_		_		_	3,670	2,649
90,746	42,155	1,811	1,726		_		-	-111,968	_108 <b>,</b> 450	518,889	392,092
69,134	5,557	31	100	2	4	_	_	949	-1,893	160,111	103,127
1,761	1,919	274	224		1		_	333	-24	23,920	21,941
1,701	1,515									23,320	21,511
-102	- 176		_		_		-	102	176		582
101	121	41	40	2	2	_	_	_	_	2,992	2,896
109	121	41	40		2		_		_	2,928	2,874
										, , , , ,	

#### Sales by region 2015 in %



# NOTES TO THE INDIVIDUAL ITEMS OF THE CONSOLIDATED BALANCE SHEET

## (19) INTANGIBLE ASSETS

Net book value on Dec. 31, 2015	16,113	8,049	_	1,095	25,258
Dec. 31, 2015	4,449	853	_	152	5,454
Currency translation differences	10	88		0	97
Reclassifications	_	-		_	-
Reversal of write-downs	_				_
Write-downs	_			_	_
Disposals	1,344			_	1,344
Additions	1,039	-	_	31	1,070
Changes in consolidation scope	-38		_	_	-38
Jan. 1, 2015	4,783	765		121	5,669
Amortisation					
Dec. 31, 2015	20,562	8,902	-	1,248	30,712
Currency translation differences	48	191		4	243
Reclassifications	252			-236	16
Disposals	3,485				3,485
Additions	2,988			-67	2,921
Changes in consolidation scope	-57		_	_	-57
Jan. 1, 2015	20,817	8,711	-	1,547	31,075
Historical cost					
Figures in €k	Industrial property rights and similar rights	Goodwill	Internally generated intangible assets	Advance payments	Tota

Intangible assets comprise industrial proprietary rights, licences and similar rights, goodwill, internally generated intangible assets and advance payments for such assets.

As of the balance sheet date, there were restricted rights of disposal on intangible assets in the amount of  $\leq$  2.9 million (previous year:  $\leq$  3.0 million). Exploration and production activities are carried out by one subsidiary. The associated

net book value contained in the total for intangible assets amounted to  $\leqslant$  0.4 million as of the balance sheet date (previous year:  $\leqslant$  0.4 million). No exploration activities occurred in the year under review. This activity is immaterial for the PCC Group, hence there is no separate reconciliation statement in this regard.

A debit differential that cannot be allocated to other assets on the first-time consolidation of subsidiaries is recognised in the consolidated balance sheet as goodwill. This goodwill does not undergo scheduled amortisation; instead, it is subjected at least once a year to an impairment test in accordance with IFRS 3.

Figures in €k	Industrial property rights and similar rights	Goodwill	Internally generated intangible assets	Advance payments	Total
Historical cost					
Jan. 1, 2014	18,248	8,502	_	1,333	28,083
Changes in consolidation scope	2,401	-	-	-	2,401
Additions	1,323	9	-	371	1,703
Disposals	886	-1	-	-	885
Reclassifications	120	_	_	-120	-
Currency translation differences	-389	198	_	-37	-227
Dec. 31, 2014	20,817	8,711		1,547	31,075
Amortisation					
Jan. 1, 2014	4,670	673	_	93	5,437
Changes in consolidation scope	8	-	_	-	8
Additions	954	-	_	31	985
Disposals	779	-	_	-	779
Write-downs	_	-	_	-	_
Reversal of write-downs	-1	_	_	-	-1
Reclassifications	_	_	_	_	_
Currency translation differences	-69	92	-	-3	19
Dec. 31, 2014	4,783	765	_	121	5,669
Net book value on Dec. 31, 2014	16,034	7,946	_	1,426	25,406

Figures in €k	Dec. 31, 2015	Dec. 31, 2014
PCC Silicium S.A.	2,615	2,615
PCC Intermodal S.A.	2,593	2,593
PCC Rokita subgroup	1,330	1,330
PCC Chemax, Inc.	997	894
PCC Exol SA	515	515
Goodwill	8,049	7,946

The above chart shows all the goodwill recognised within the Group as of December 31, 2015. It also includes the goodwill assumed from the individual financial statements of the US company PCC Chemax, Inc., Piedmont (South Carolina). There were no additions/write-ups nor write-downs either in the year under review or in the previous year. The change in goodwill at PCC Chemax, Inc. results from a foreign exchange effect, as it is listed in the cash-generating currency of the company, that is to say US dollars.

The annual impairment tests were carried out in each case in the fourth quarter of the fiscal year and were based on management-approved budgets for the three subsequent years. Using a perpetuity growth model, a terminal value was determined on the basis of the last budget year. The achievable amount was determined on the basis of value-in-use. As in the previous year, the growth rate assumed was 1.0 %. The planning assumptions are based on empirical values and estimates of the various business managements taking into account centrally defined global positions such as exchange rates, estimates of economic development, market growth or commodity prices, for which purpose external sources were also consulted. The local tax rates assumed were, once again, 19.0 % in the case of the Polish cash-generating units, and 35.0% in the case of the US cash-generating unit. The tax rates remained unchanged versus the previous year. The discount rate assumed was again 6.0%, as in the previous year. Even taking into account a change in the discount rate of 10%, there is no impairments requirement.

As in fiscal 2014, no impairments resulted from the impairment tests performed in fiscal 2015.

## (20) PROPERTY, PLANT AND EQUIPMENT

Net book value on bec. 31, 2013	100,070	104,340	03,232	180,190	342,037
Net book value on Dec. 31, 2015	108,876	164,340	83,252	186,190	542,657
Dec. 31, 2015	22,912	115,993	48,543	661	188,109
Currency translation differences	-50	-538	-41	1	-631
Reclassifications	-433	122	-389	_	-701
Reversal of write-downs	-31	_	_	_	-31
Write-downs	22	383	273	144	822
Disposals	222	7,021	439	79	7,761
Additions	2,781	13,604	5,338	_	21,724
Changes in consolidation scope	-229	-551	-54	_	-835
Jan. 1, 2015	21,075	109,997	43,855	595	175,521
Amortisation					
Dec. 31, 2015	131,788	280,333	131,795	186,851	730,766
Currency translation differences	-88	-813	141	1,476	716
Reclassifications	31,132	54,350	14,245	– 101,745	-2,018
Disposals	343	9,320	516	 771	10,950
Additions		2,795	566	155,617	158,899
Changes in consolidation scope	-2,533	-3,045	– 119	_65	-5,762
Jan. 1, 2015	103,700	236,365	117,478	132.339	589,882
Figures in €k <b>Historical cost</b>	Land and buildings	Plant and machinery	office equipment	construction in progress	Total
			Factory and	Advance payments and	

The value of our property, plant and equipment increased year on year from €414.4 million to €542.7 million. This is attributable to the major investment programmes implemented by the PCC Group. The construction of our silicon metal smelting plant in Iceland, the switch of the chlor-alkali electrolysis process to modern membrane technology, the establishment of a production capability for the manufacture of ultra-pure monochloroacetic acid (MCAA) and expansion of our container terminal network are among the major projects worth mentioning in this regard.

Additions to property, plant and equipment in fiscal 2015 amounted to € 158.9 million (previous year: € 101.0 million).

These investments were largely implemented in the Chlorine and Logistics segments which accounted for €38.3 million (previous year: €50.8 million) and €31.2 million (previous year: €19.3 million) respectively. Through PCC BakkiSilicon hf, the Holding/Projects segment accounted for a share of the additions in the amount of €76.3 million (previous year: €18.5 million).

Depreciation of property, plant and equipment in the year under review amounted to €21.7 million (previous year: €20.9 million). The increase versus the 2014 figure is primarily due to the completion of current investment projects.

Net book value on Dec. 31, 2014	82,625	126,369	73,623	131,744	414,360
Dec. 31, 2014	21,075	109,997	43,855	595	175,521
Currency translation differences	-824	-4,973	-1,323	-15 FOE	-7,135
Reclassifications	-47	4,059	-4,013	-	7.405
Reversal of write-downs	51	-36 4.050	-2	-63	-50
Write-downs	-	-	-	-	-
Disposals	105	3,665	1,219		4,989
Additions	2,518	13,108	4,924	358	20,908
Changes in consolidation scope	219	30	54	_	303
Jan. 1, 2014	19,263	101,472	45,434	315	166,484
Amortisation					
Dec. 31, 2014	103,700	236,365	117,478	132,339	589,88
Currency translation differences	-2,758	-12,667	-3,343	-1,333	-20,10
Reclassifications	11,422	22,550	-6,441	-27,530	-
Disposals	299	3,894	1,402		5,59
Additions	2,527	2,523	687	95,293	101,030
Changes in consolidation scope	2,597	559	76	13,539	16,77
Jan. 1, 2014	90,212	227,295	127,900	52,370	497,77
Historical cost					
Figures in €k	Land and buildings	Plant and machinery	Factory and office equipment	Advance payments and construction in progress	Tota

Major investments in the previous year included the construction – started in 2014 – of the MCAA plant and expansion investments at the chemicals production site in Brzeg Dolny, the procurement of further wagons in the Rail Transport business unit in Russia and the creation of additional production capacities in the Consumer Products segment in Belarus.

As of year end 2015, there were restrictions on rights of disposal of individual tangible fixed assets in the amount of €287.8 million (previous year: €101.8 million). In addition, these assets serve as collateral security for liabilities. Investment obligations in the form of already contractually agreed but not yet completed capital expenditures as of Decem-

ber 31, 2015 amounted to  $\leq$  151.7 million (previous year:  $\leq$  57.2 million). A major item in this regard was the turnkey contract with a German plant constructor for the erection of a silicon metal smelting plant in Iceland. This became effective in June 2015. Also in the year under review, income from insurance claims in the amount of  $\leq$  0.2 million was received (previous year:  $\leq$  0.5 million) which was attributable to property, plant and equipment.

A Polish subsidiary took the decision to dispose of an office building it had been using. The carrying amount of  $\leqslant$  0.2 million has been reclassified to "Assets held for sale". There are no liabilities directly attributable to this asset.

## (21) INVESTMENT PROPERTY

In fiscal 2015, the net book value of investment property was  $\in$  3.7 million (previous year:  $\in$  2.6 million). In 2015, assets meeting the criteria of investment property were reclassified from property, plant and equipment. The net book value of the reclassifications amounts to  $\in$  1.3 million and relates to buildings let to external parties located at our chemicals site in Brzeg Dolny. There were no unscheduled write-downs of these assets. There were also no addi-

tions in fiscal 2015 (previous year:  $\leqslant$  148 k). Assets brought back into in-company usage are classified as disposals and amounted in fiscal 2015 to  $\leqslant$  176 k (previous year:  $\leqslant$  0). In total, income of  $\leqslant$  437 k was generated with rental properties in the year under review (previous year:  $\leqslant$  643 k). The expenses under the same heading amounted to  $\leqslant$  357 k (previous year:  $\leqslant$  373 k).

	Investment	
Figures in €k	property	Total
Historical cost		
Jan. 1, 2015	2,843	2,843
Changes in consolidation scope	-	_
Additions	-	_
Disposals	176	176
Reclassifications	2,002	2,002
Currency translation differences	18	18
Dec. 31, 2015	4,687	4,687
Amortisation		
Jan. 1, 2015	194	194
Changes in consolidation scope	_	_
Additions	143	143
Disposals	21	21
Write-downs	_	_
Reversal of write-downs	-	_
Reclassifications	701	701
Currency translation differences	1	1
Dec. 31, 2015	1,017	1,017
Net book value on Dec. 31, 2015	3,670	3,670
	5,670	2,0,0

	Investment	
Figures in €k	property	Total
Historical cost		
Jan. 1, 2014	2,676	2,676
Changes in consolidation scope	-	_
Additions	148	148
Disposals	-	_
Reclassifications	-	_
Currency translation differences	19	19
Dec. 31, 2014	2,843	2,843
Amortisation		
Jan. 1, 2014	125	125
Changes in consolidation scope	_	_
Additions	67	67
Disposals	-	_
Write-downs	-	_
Reversal of write-downs	-	_
Reclassifications	-	_
Currency translation differences	2	2
Dec. 31, 2014	194	194
Net book value on Dec. 31, 2014	2,649	2,649

## (22) NON-CURRENT FINANCIAL INVESTMENTS

Classified under non-current financial investments are shares in affiliated companies, participating interests in other entities and also financial investment securities. The carrying amount increased by  $\leqslant 9.9$  million from  $\leqslant 2.2$  million to

€12.1 million. This rise is essentially due to the change in value in the amount of €9.6 million in the fair value of shares held in S.C. Oltchim S.A., Râmnicu Vâlcea (Romania), said amount being recognised in other comprehensive income.

## (23) INVENTORIES

Figures in €k	Dec. 31, 2015	Dec. 31, 2014
Raw materials and supplies	15,109	16,399
Work in progress	9,761	10,205
Finished products	7,273	6,622
Merchandise	8,818	10,806
Goods in transit	2,700	5,984
Advance payments	2,060	3,289
Total inventories	45,720	53,304

Compared to the previous year, inventories decreased by €7.6 million or 14.2 % to €45.7 million, reflecting the decrease in purchase prices.

Due to increased marketability, write-ups on previously impaired inventories amounted to €25 k in 2015, while in 2014 the figure was € 1.3 million. Write-downs of inventories amounted to €850.6k (previous year: €53.5k).

#### (24) TRADE ACCOUNTS RECEIVABLE

Figures in €k	Dec. 31, 2015	Dec. 31, 2014
Trade accounts receivable	70,589	73,836
Individual value adjustments	-5,618	-4,238
	64.070	50 500
Total trade accounts receivable	64,972	69,598

Trade accounts receivable as of December 31, 2015 all have a remaining term of up to one year in their full amount. They decreased by 6.6 % or €4.6 million compared to the previous year.

Write-ups on value allowances increased year on year from €2.3 million to €3.1 million. In all, value allowances on trade accounts receivable within the Group amounted to €5.6 million, representing a rise of €1.4 million compared to the previous year.

Figures in €k	2015	2014
Value adjustments per Jan. 1	-4,238	-4,006
Changes in consolidation scope	-	0
Additions of write-downs	-3,078	-2,324
Reversals of write-downs	1,531	1,346
Disposals	210	527
Currency translation differences	-42	219
Other effects	-	-
Value adjustments per Dec. 31	-5,618	-4,238

The maturity structure of non-impaired trade accounts receivable is indicated in the following table. Around 88% of

receivables within the Group were neither impaired nor overdue as of December 31, 2015 (previous year: 83 %).

Figures in €k	Dec. 31, 2015	Dec. 31, 2014
Not value-adjusted and not overdue	57,256	58,422
Not value-adjusted and overdue	7,716	11,176
up to 30 days	6,176	4,019
30 to 60 days	634	734
60 to 90 days	209	1,066
90 to 120 days	239	3,063
more than 120 days	457	2,293
Trade accounts receivable	64,972	69,598

Individual companies within the PCC Group use factoring as a receivables financing instrument. The volume of all receivables sold as of the balance sheet date amounted to  $\leqslant$  14.2 million (previous year:  $\leqslant$  16.3 million).

#### (25) OTHER RECEIVABLES AND OTHER ASSETS

Figures in €k	Dec. 31	, 2015	Dec. 31,	2014
	Non-current	Current	Non-current	Current
Accounts receivable from affiliated companies	-	1,406	-	1,750
Accounts receivable from enterprises in which participating interests are held	-	9,657	_	9,561
Security deposits paid	-	122	_	163
Reimbursement claims for VAT and other duties	-	7,030	_	11,112
Receivables from employees	-	28	_	113
Insurance claims	-	-	-	_
Positive fair values on derivatives	-	-	_	2
Prepaid expenses and deferred charges	-	4,466	-	3,396
Loans to affiliated companies	-	517	-	393
Other securities	-	487	_	_
Sundry other current assets	-	16,728		31,054
Other receivables and other assets		40,442	-	57,544

Accounts receivable from affiliated companies as of December 31, 2015 all have a remaining term of up to one year in their full amount. They comprise accounts receivable from affiliated, non-consolidated companies. Further information is also provided in the section on related parties, see Note (37). These are largely loan receivables from project companies. Receivables from enterprises in which participating interests are held relate to the loan receivables from a Polish company in which the PCC Group holds one share and no co-determination rights. The decrease in some of the other current assets relates primarily to the purchase price payment in respect of shares held by the minority shareholder of PCC BakkiSilicon hf. The remainder of the sundry other

current assets largely consists of a residual purchase price claim against an international investment fund arising from the sale of shares in PCC Exol SA, Brzeg Dolny (Poland), in the amount of € 14.2 million. The shares in PCC Exol SA sold serve as security collateral for these claims.

As of the balance sheet date, an impairment was charged in the amount of €0.5 million on the carrying value of the shares in SSH Sp. z o.o., Gliwice (Poland). The shares in this company were sold in February 2016. Other than the aforementioned, there were no further impairments charged on other assets or on receivables from affiliated companies. There were no impairments charged in the previous year.

## (26) EQUITY

The subscribed capital of PCC SE remained unchanged year on year. It amounts to €5.0 million and it is fully paid up. It is divided into five million individual share certificates with

a par value of  $\leqslant$  1 per share. The items included under revenue reserves/other reserves as of December 31, 2015 are as follows:

Figures in €k	Dec. 31, 2015	Dec. 31, 2014
Revenue reserves, valuation reserves and debit differentials set off against revenue reserves	83,026	98,820
IFRS transition reserve	21,635	21,635
Share of net result attributable to Group	-6,076	-12,258
Total revenue reserves / other reserves	98,586	108,197

The changes in equity are indicated in the statement of changes in equity included in the consolidated financial statements.

Revenue reserves/other reserves comprise the earnings results achieved in the reporting period by the subsidiaries included in the consolidated financial statements where these have not been appropriated. The share of the net result from the previous year attributable to the Group in the amount €–12.3 million is disclosed in the revenue reserves as a loss carried forward. In fiscal 2015, a distribution was made out

of retained earnings to the shareholder of PCC SE in the amount of  $\in$  1.35 million (previous year:  $\in$  1.20 million). This corresponds to a dividend per share of  $\in$  0.27 (previous year:  $\in$  0.24).

Recognised under other comprehensive income are differences arising from currency translation. In the year under review, these increased retained earnings by  $\leqslant$  4.9 million with a total of  $\leqslant$  –17.0 million (previous year:  $\leqslant$  –21.9 million). Gains and losses recognised directly in equity without affecting income are shown in the following:

Dec. 31, 2014	-21,892	-123	170	631	-29	-21,243
Deferred taxes		15		-98		-83
Reclassifications	_		_	-		
Changes	-5,739	-121	20	950	-15	-4,905
Jan. 1, 2014	-16,153	-16	150	-221	-15	-16,255
Figures in €k	Currency translation differences	Remeasure- ment of de- fined benefit pension plans	Fair value of financial assets	Fair value of cash flow hedges	Other changes	Total
Dec. 31, 2015	-16,974	-114	6,872	627	-43	-9,631
Deferred taxes		12	-2,893	_1		-2,882
Reclassifications	989	_	-		_	989
Changes	3,929	-3	9,595	-3	-14	13,504
Jan. 1, 2015	-21,892	-123	170	631	-29	-21,243
Figures in €k	Currency translation differences	Remeasure- ment of de- fined benefit pension plans	Fair value of financial assets	Fair value of cash flow hedges	Other changes	Total

#### [27] MINORITY INTERESTS

German and international minority shareholders hold non-controlling interests in various entities of the PCC Group. The share of minority interests in consolidated retained earnings as of December 31, 2015 was  $\leqslant$  41.0 million, which is a decrease of around  $\leqslant$  0.4 million versus year end 2014.

Subsidiaries with material minority interests are active in various segments of the PCC Group. For details of company names, location of company head offices and share of capital in respect of subsidiaries with material minority interests, please consult the schedule of shareholdings provided under Note (41) drawn up in accordance with Section 313 (2) HGB.

	PCC Rokit	a subgroup	PCC Intermodal S.A.		PCC DEG Renewables GmbH		
Figures in € k	Dec. 31, 2015	Dec. 31, 2014	Dec. 31, 2014 Dec. 31, 2015		Dec. 31, 2015	Dec. 31, 2014	
Balance sheet							
Minority interests	22,434	19,253	6,443	6,871	7,940	7,575	
Minority interests in %	15.84	15.84	30.48	37.59	40.00	40.00	
Dividends paid to minority interests	2,738	_	-	_	-	_	
Non-current assets	235,475	213,399	64,461	40,025	19,315	18,048	
Current assets	66,262	76,885	10,939	10,639	697	1,412	
Non-current liabilities	88,018	86,331	44,587	23,542			
Current liabilities	71,718	65,465	10,329	7,527	162	108	
Statement of income							
Net result attributable to minority interests	3,275	2,694	262	495	199	166	
Sales	250,749	259,334	51,580	44,290	-	_	
Net result	20,661	16,997	861	1,317	498	415	
Comprehensive income	20,642	16,950	861	1,314	498	415	

There are no material restrictions imposed that go beyond the usual regulations under company law and contractual regulations.

#### (28) PROVISIONS FOR PENSIONS AND SIMILAR OBLIGATIONS

Most of the employees of the Polish subsidiaries of the PCC Group are covered by defined benefit pension plans in addition to the statutory pension scheme. Defined benefit pension plans are, as a rule, aligned to service time and remuneration. Payments made from defined benefit pension plans are generally granted on attainment of pensionable age or on invalidity or death. Defined contribution plans exist primarily in the form of the statutory pension insurance scheme in Germany and those schemes also applicable to foreign subsidiaries. In the case of employees of the German subsidiaries and the holding company, contributions can also be made to other defined contribution pension schemes in

addition to the statutory pension scheme. Typical risk factors for defined benefit obligations are increasing life expectancies, changes in nominal interest rates and increases in inflation and salaries. The present value of the defined benefit obligation arising from a pension plan is determined on the basis of the best-possible estimate of the mortality of the recipient employees both during the employment relationship and after its termination. An increase in the life expectancy of the recipient employees leads to an increase in the plan liability. A decrease in loan interest likewise leads to an increase in the plan liability. In addition, the present value of the defined benefit obligation arising from a pension plan is

determined on the basis of the future salaries of the recipient employees. Increases in salary paid to the recipient employees again lead to an increase in the plan liability.

Defined contribution plans are internally financed.

At December 31, 2015, provisions for pensions and similar obligations amounted to  $\leqslant$  485.2 k, representing a decrease of  $\leqslant$  17.3 k below the prior-year figure of  $\leqslant$  502.5 k. Of this amount,  $\leqslant$  422.6 k was classified as non-current provisions with a term of more than one year.

Figures in €k	2015	2014
Opening balance of pension obligations as of Jan. 1	503	341
Current service cost	33	29
Past service cost	_	_
Payments made	-53	-11
Interest expense	10	13
Actuarial gains/losses from changes in demographic assumptions	9	28
Actuarial gains/losses from changes in financial assumptions	-17	61
Actuarial gains/losses from experience adjustments	-	59
Changes in consolidation scope	-1	_
Currency translation differences	1	-10
Other effects	_	-7
Closing balance of pension obligations as of Dec. 31	486	503

In total, 2,569 employees of PCC Group companies have defined benefit pension plans (previous year: 2,407). Of this figure, around 72 % are male and 28 % are female. The average age at year end 2015 was 40.7 years (previous year: 41.1 years).

As in the previous year, a uniform discount rate of 2.3 % has been applied in calculating pension liabilities. The range

adopted for the income trend was 1.5 % to 4.5 % (previous year: 1.5 % to 3.5 %). The Polish mortality table for 2014 published by the Central Office for Statistics, which serves as the basis for pension calculations, anticipates a life expectancy of 76.1 years (previous year: 75.8 years). Changes in the key actuarial parameters would have the following effects on the amounts shown in respect of pension liabilities:

	Increase by 0.25 %-points		Decrease by 0.25 %-points	
Figures in €k	2015	2014	2015	2014
Change in underlying discount rate	-4	-13	23	14
Change in salary trend	23	14	-4	– 13
Change in turnover rate	-5	<b>– 14</b>	20	11

The above sensitivity analysis may not be representative for the actual change in the defined benefit obligation, as it can be regarded as improbable that deviations from the assumptions made would occur in isolation.

Included in the expense for fiscal 2015 is  $\leq$  4.4 million representing employer contributions to the statutory pension scheme (previous year:  $\leq$  4.1 million). In addition to the contributions to the statutory pension scheme, expenses for de-

fined contribution pension plans in the amount of  $\le$  86.7 k are also included in the result for the current period (previous year:  $\le$  65.3 k).

Figures in € k	2015	2014
Expenses for defined benefit pension plans	33	29
Expenses for defined contribution pension plans	87	65
Total pension expenses recognised in result	120	94

## (29) OTHER PROVISIONS

Figures in €k	Dec. 31, 2015		Dec. 31, 2014	
	Non-current	Current	Non-current	Current
Accruals for personnel expenses	-	4,836	_	3,613
Provisions for year-end accounting and audit expenses	_	387	_	535
Provisions for obligations to customers	_	1,893	_	2,340
Provisions for litigation risks	_	267	1	_
Sundry other provisions	7,043	2,274	7,022	2,906
Total other provisions	7,043	9,657	7,022	9,394

Compared to the previous year, other provisions increased by  $\[ \in \]$  0.3 million to  $\[ \in \]$  16.7 million. Accruals for personnel expenses rose by  $\[ \in \]$  1.2 million, while provisions for obligations to customers decreased by  $\[ \in \]$  0.4 million. These essentially comprise rebates and compensation claims. Accruals for personnel expenses essentially relate to claims for bonus and holiday payments.

Sundry other non-current and current provisions include a re-cultivation obligation of a subsidiary of the "PCC Rokita"

subgroup in the amount of  $\in$  7.3 million as of December 31, 2015 (previous year:  $\in$  6.6 million). This is a multiyear obligation arising from local regulations which will remain in place until 2026.

The following table shows the development in other provisions for fiscal 2015. Other changes include foreign exchange effects and changes in the consolidation scope.

Figures in €k	Jan. 1, 2015	Additions	Usages	Released	Discounted	Other changes	Dec. 31, 2015
Accruals for personnel expenses	3,613	4,486	1,954	1,261	-	-49	4,836
Provisions for year-end accounting and audit expenses	535	441	573	27	-	12	387
Provisions for obligations to customers	2,340	1,893	2,345	_	_	5	1,893
Provisions for litigation risks	0	267	_	1	-	-	266
Sundry other provisions	9,928	1,812	2,705	44	309	18	9,317
Total other provisions	16,417	8,899	7,577	1,333	309	-13	16,700

## (30) FINANCIAL LIABILITIES

The financial liabilities of the PCC Group are comprised of non-current and current liabilities arising from bonds, amounts owed to banks, finance leases, amounts owed to affiliated companies and amounts payable on profit participation certificates.

The maturity structure of the financial liabilities of the PCC Group as of December 31 of the reporting year and the previous year are shown in the table below. This reveals a shift towards non-current financing.

Total financial liabilities	100,769	270,199	21,124	392,092
Financial liabilities with respect to affiliated companies	766			766
Finance lease liabilities	2,380	5,403	98	7,880
Bank liabilities	19,092	68,962	21,026	109,080
Bond liabilities	78,232	184,758	-	262,991
Profit participation certificates	299	11,076		11,375
Figures in €k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31, 2014
Total financial liabilities	99,017	263,735	156,137	518,889
Financial liabilities with respect to affiliated companies	487			487
Finance lease liabilities	2,794	6,417	5	9,217
Bank liabilities	27,914	56,950	50,109	134,973
Bond liabilities	67,822	189,291	106,023	363,135
Profit participation certificates	-	11,076	-	11,076
Figures in €k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31 2015

The profit participation certificate as of December 31, 2015 was exclusively issued by PCC SE and remains unchanged year on year with a total capital amount of €11.1 million. It contains – in the amount of the repayment obligation – capital increases arising from the issuance of a subordinate profit participation certificate of PCC SE. The profit participation certificate was issued in October 2007 with a volume of up to €20 million in certificate denominations of €1,000 subject to a minimum investment of €5,000. It offers a basic coupon of 8.75 % p.a. on the profit participation certificate denomination certificate or participation certificate denomination certificate denomination of €1,000 subject to a minimum investment of €5,000.

icate value plus an additional share of profits amounting to between 0.5 % and 2.0 % p.a., depending on consolidated profit for the year. Where losses have been incurred during the term of the profit participation certificate, participation in such losses occurs as of the date of redemption. The term of the profit participation certificate is indeterminate. Premiums received ("agio") amounting to  $\leqslant 80\,\mathrm{k}$  (previous year:  $\leqslant 80\,\mathrm{k}$ ) in excess of the nominal value of the participatory rights arising from the issuance of the profit participation certificate are likewise disclosed under this heading.

Liabilities to banks increased year on year from €109.1 million to €135.0 million. This is the result of the externally financed investment programme of the PCC Group, particularly the switch of the chlor-alkali electrolysis process to the energy-efficient and environmentally friendly membrane process

and expansion of the container terminal network. The expansion investments in the Surfactants segment are also worthy of mention in this regard. The spread of the financial liabilities between the individual segments is indicated in the segment report.

Figures in €k	Dec. 31	Dec. 31, 2015		Dec. 31, 2014	
	Non-current	Current	Non-current	Current	
Profit participation certificates	11,076	-	11,076	299	
Bond liabilities	295,314	67,822	184,758	78,232	
Bank liabilities	107,059	27,914	89,988	19,092	
Finance lease liabilities	6,423	2,794	5,500	2,380	
Financial liabilities owed to affiliated companies		487	_	766	
Total financial liabilities	419,872	99,017	291,323	100,769	

Secured credit lines within the PCC Group not utilised as of December 31, 2015 amounted to €6.8 million (previous year: €8.1 million).

Figures in €k	Dec. 31, 2015	Dec. 31, 2014
Mortgages and similar liens	75,627	64,902
Assignment of claims on assets	56,269	39,704
Assignment of claims of inventories	_	-
Chattel mortgages	2,179	4,993
Other assignments	2,748	1,290
Liabilities secured	136,823	110,889

The bank loans disclosed under financial liabilities were secured in 2015 in their entirety by mortgages or similar liens, by the assignment of claims, or by chattel mortgages on property, plant and equipment and other assignments. Over-

all, collateral securities granted increased from  $\leq$  110.9 million to  $\leq$  136.8 million as of the end of fiscal 2015, thus following a trend similar to that of financial liabilities in general.

Bond liabilities result from the issuance of bonds by PCC SE and its international subsidiaries PCC Rokita SA, PCC Exol SA, PCC Consumer Products Kosmet Sp. z o.o., OOO PCC Consumer Products Navigator and PCC Autochem Sp. z o.o. The bond issued by PCC BakkiSilicon hf represents a share of the funding provided by the co-owner relating to the silicon metal smelting plant construction project.

Bonds from the PCC Group are issued in the currencies euro, Polish zloty and US dollar. The public bonds in euro (EUR) carry coupons between 3.5 % and 7.25 % p.a., while those in zloty (PLN) carry coupons ranging from 5.0 % to 6.8 % p.a. For details, see the table opposite.

The bonds issued in zloty with a total volume of PLN 126.2 million (previous year: PLN 128.1 million) had a value as of the 2015 closing date of €29.6 million (previous year: €30.0 million).

currency	Coupon	volume	Dec. 31, 2015	Dec. 31, 2014
EUR	7.250 %	30,000	29,995	29,995
EUR	7.250 %	30,000	29,768	29,768
EUR	6.250%	20,000	20,000	3,253
EUR	6.750 %	20,000	20,000	2,832
EUR	7.000%	20,000	19,996	19,996
EUR	6.000%	40,000	19,278	-
EUR	6.500%	35,000	16,261	-
EUR	7.000 %	20,000	15,654	15,654
EUR	6.500%	20,000	13,949	13,639
EUR	7.250 %	20,000	12,968	13,078
EUR	6.000%	25,000	12,813	-
EUR	4.000%	20,000	12,005	_
EUR	4.000%	10,000	10,000	2,862
EUR	4.250 %	10,000	9,177	8,913
EUR	6.750 %	20,000	8,909	8,909
EUR	3.500%	15,000	8,886	_
EUR	5.000%	25,000	8,002	_
EUR	4.750%	10,000	7,311	7,311
EUR	6.500%	10,000	1,351	2,702
EUR	6.500%	3,000	269	538
EUR	6.875%	30,000		26,665
EUR	7.250%	25,000		21,903
EUR	5.000%	15,000		14,999
EUR	4.750 %	10,000		10,000
USD	8.500%	62,000	56,949	-
PLN	7.500 %	25,000	5,852	5,850
PLN	6.800%	25,000	5,824	5,850
PLN	5.500%	25,000	5,781	5,850
PLN	5.500 %	22,000	5,095	5,148
PLN	5.000%	20,000	4,625	-
PLN	8.300%	20,000	-	4,680
PLN	6.800%	4,164	848	975
PLN	6.000%	3,000	704	574
EUR	10.400%	468	322	502
PLN	6.800%	2,319	544	543
			363,135	262,991
	EUR	EUR 7.250 % EUR 7.250 % EUR 6.250 % EUR 6.750 % EUR 7.000 % EUR 6.000 % EUR 6.500 % EUR 7.250 % EUR 7.000 % EUR 7.250 % EUR 7.250 % EUR 7.250 % EUR 6.500 % EUR 4.000 % EUR 4.000 % EUR 4.750 % EUR 6.750 % EUR 6.750 % EUR 6.750 % EUR 7.250 % EUR 1.750 % EUR 5.000 % EUR 1.750 % EUR 5.000 % EUR 3.500 % EUR 5.000 %	EUR 7.250 % 30,000 EUR 7.250 % 20,000 EUR 6.250 % 20,000 EUR 6.750 % 20,000 EUR 7.000 % 20,000 EUR 6.500 % 35,000 EUR 7.000 % 20,000 EUR 7.000 % 20,000 EUR 7.250 % 20,000 EUR 7.250 % 20,000 EUR 6.500 % 25,000 EUR 4.000 % 25,000 EUR 4.000 % 10,000 EUR 6.750 % 20,000 EUR 7.250 % 10,000 EUR 6.750 % 20,000 EUR 6.750 % 20,000 EUR 7.250 % 10,000 EUR 6.750 % 20,000 EUR 7.250 % 15,000 EUR 7.250 % 15,000 EUR 10,000 EUR 10,0	EUR 7.250% 30,000 29,995 EUR 7.250% 30,000 29,768 EUR 6.250% 20,000 20,000 EUR 6.750% 20,000 19,996 EUR 6.000% 40,000 19,278 EUR 6.500% 35,000 16,261 EUR 7.000% 20,000 13,949 EUR 7.250% 20,000 12,968 EUR 6.000% 25,000 12,813 EUR 4.000% 20,000 12,005 EUR 4.000% 10,000 10,000 EUR 4.250% 10,000 9,177 EUR 6.750% 20,000 8,909 EUR 3.500% 15,000 8,886 EUR 5.000% 25,000 8,002 EUR 4.750% 10,000 7,311 EUR 6.500% 30,000 1,351 EUR 6.500% 30,000 69 EUR 7.250% 25,000 1,351 EUR 6.500% 10,000 7,311 EUR 6.500% 10,000 1,351 EUR 6.500% 3,000 69 EUR 7.250% 25,000 5,824 PLN 5.500% 25,000 5,852 PLN 6.800% 25,000 5,884 PLN 5.500% 20,000 4,625 PLN 6.800% 20,000 1,000 EUR 4.750 10,000 1,000 EUR 4.750% 10,000 1,000 1,000 EUR 4.750% 10,000 1,000 1,000 EUR 4.750% 10,000 1,000 1,000 1,000 EUR 4.750% 10,000 1,000 1,000 1,000 EUR 4.750% 10,000 1,0

## (31) OTHER LIABILITIES

Figures in €k	Dec. 31, 2015		Dec. 31, 2014		
	Non-current	Current	Non-current	Current	
Deferred income	35,637	1,060	25,372	519	
Income tax and similar taxes payable	-	831	_	755	
Advance payments received	-	202	_	111	
Social security contributions payable	-	2,065	_	1,758	
Interest payment obligations	-	5,315	_	4,252	
VAT, customs, excise and other duties payable	-	1,224	_	443	
Accounts payable to employees	-	2,177	_	1,985	
Accounts payable to affiliated companies	-	1,030	_	802	
Liabilities arising from investments	46	7,028	_	14,496	
Accounts payable to enterprises in which participations are held	-	_	_	38	
Sundry other liabilities	3,022	17,231	160	15,701	
Total other liabilities	38,705	38,162	25,533	40,861	

Other liabilities rose by  $\leq$  10.5 million from  $\leq$  66.4 million to  $\leq$  76.9 million. In particular, there was an increase in non-current deferred income compared to the previous year of  $\leq$  25.4 million to  $\leq$  35.6 million. Essentially, this was the result of grants received for completed investment projects, primarily the switch in the chlor-alkali electrolysis process and expansion and development of the container terminal network. In the 2015 reporting year, a total of  $\leq$  0.6 million

was released through profit or loss from deferred income arising from subsidies (previous year: €0.5 million).

Current sundry other liabilities increased versus the previous year by  $\leq$  1.5 million from  $\leq$  15.7 million to  $\leq$  17.2 million. Liabilities arising from interest payment obligations relate primarily to interest on bonds falling due at the start of the following quarter.

#### (32) DEFERRED TAXES

Deferred taxes are recognised on temporary differences between the carrying amounts of assets, liabilities and accruals in the balance sheet and their tax base. For German affiliates, the tax rate applied is 30 %, as was the case in the previous year. For international companies, the relevant national tax rates continued to be applied unchanged.

The distribution of deferred taxes among the various items on the balance sheet is shown in the following table. Within the PCC Group, deferred tax assets and liabilities are offset and disclosed as netted balances where they relate to the same tax jurisdiction and where there is an enforceable right to the offsetting of tax liabilities and tax receivables. For fiscal 2015, deferred tax assets amounted to  $\in$  3.7 million (previous year:  $\in$  3.1 million) and deferred tax liabilities amounted to  $\in$  10.9 million (previous year:  $\in$  7.4 million).

	%
Bosnia & Herzegovina	10.0
Bulgaria	10.0
Germany	30.0
Iceland	20.0
Poland	19.0
Republic of Macedonia	10.0
Romania	16.0
Russia	20.0
Czech Republic	19.0
Turkey	20.0
USA	34.0
Belarus	18.0

	Deferred	tax assets	Deferred t	ax liabilities
Figures in € k	2015	2014	2015	2014
Intangible assets	8	24	149	97
Property, plant and equipment	543	340	10,826	11,144
Financial assets	140	_	-	_
Inventories	100	105	-	_
Receivables	205	279	93	68
Securities	-	-		_
Other assets	-	-	193	202
Pension provisions	81	96	-	0
Other provisions and accruals	772	747	3	_
Liabilities	531	548	101	87
Other liabilities	187	63	24	64
Losses carried forward	2,689	3,035	40	_
Sundry deferred taxes	2,454	2,854	-244	12
Total deferred taxes	7,711	8,092	11,185	11,673

The table above shows the un-netted deferred taxes. Deferred taxes arising from consolidation adjustments amounted to around €–25.8k (previous year: €55.5k) in 2015, and relate primarily to eliminated intercompany profits. Sundry deferred taxes include future tax benefits arising from activities in a special economic zone.

Despite the losses incurred in the year under review, the Russian subsidiary ZAO PCC Rail, Moscow, disclosed deferred tax assets on unused tax losses of €0.4 million (total: €1.6 million). In Russia, unused tax losses can be carried forward for up to 10 years. The management of the local company anticipates that sufficient profits will be generated in the coming years to allow utilisation of these tax loss carry-forwards.

## (33) ADDITIONAL DISCLOSURES RELATING TO FINANCIAL INSTRUMENTS

As an internationally active corporation, the PCC Group is exposed to financial risks in the course of its ordinary business operations. A major objective of the corporate policy is to generally restrict market, default and liquidity risks, both in order to secure enterprise value over the long term and also maintain the Group's earning power and thus extensively cushion the impact of fluctuations in cash flow and earnings.

The Group holding company and the individual subsidiaries cooperate in the management of interest rate and currency risks, and also default risks. Each individual operating unit is responsible for managing its own commodity price risks, while liquidity control is the responsibility of the holding company.

#### Market risks

Currency risks: Changes in exchange rates can lead to losses in the value of financial instruments and also to disadvantageous changes in future income streams from planned transactions. Currency risks in respect of financial instruments result from the translation of financial receivables, loans, securities, cash sums and financial liabilities into the functional currency of the various companies as of the reporting date. Specifically, currency risks arise both on the purchase side through the procurement of commodities and raw materials, and on the selling side as a result of the sale of end products. A potential change in the Polish zloty of 10 % would affect the assets and liabilities of the Group to the tune of €2.4 million (previous year: €2.3 million). A change in the exchange rate of the US dollar of 10 % would have an impact of €1.8 million (previous year: €0.5 k).

Interest rate risks: These risks arise as a result of potential changes in the market interest rate, causing fluctuations in the fair value of financial instruments bearing a fixed interest rate, and fluctuations in interest payments in the case of financial instruments bearing floating interest rates. A potential change in interest rates of 100 basis points would affect the assets and liabilities of the Group to the tune of €3.8 million (previous year: €3.0 million).

Commodity price risks: These risks result from market price changes in relation to commodity purchases and sales, and also the purchase of electricity and gas. The general risk situation of the PCC Group is greatly affected by the availability and also the price-dependency of relevant raw materials, input products and intermediate products. Within this context, the dependency of important commodity prices on foreign exchange rates and, in particular, the oil price, is especially relevant. Price volatilities are hedged, for example, through the agreement of price escalator clauses with suppliers and customers. Moreover, commodity price risks are restricted by internationally aligned sourcing activities. Backward integration along the value chain or along the various production stages encountered in the Chemicals division provides for an additional, high degree of independence in the procurement of raw materials and commodities, thus reducing risk to an acceptable level. The commodities trading business in the Speciality Chemicals segment is exposed to major price fluctuations that can occur from time to time.

#### Default or credit risks

Default or credit risks arise when contractual partners are unable to meet their contractual obligations. Credit limits are granted based on the continuous monitoring of the creditworthiness of major debtors. Because of the international activity and the diversified customer structure of the PCC Group, there are no major regional or segment-specific clusters of default risks. In selecting short-term capital investments, various safeguarding criteria are taken into account (e.g. ratings, capital guarantee or protection afforded by deposit protection funds). Given the selection criteria applied

and our regime of constantly monitoring our capital investments, the PCC Group does not envisage any unidentified default risk occurring in this domain. The financial asset amounts shown in the balance sheet essentially represent the maximum default risk.

Such risks are regularly monitored and analysed within the framework of a receivables and credit management regime and also by a Working Capital Management unit with responsibility at both the operational and Group levels. In all, receivables from customers are insured for an amount of €44.8 million (previous year: €41.3 million). Financial assets that are neither overdue nor impaired are categorised as collectable in line with the creditworthiness of the debtor.

#### Liquidity risks

Liquidity risks result from income stream fluctuations and are identified at an early stage by a liquidity planning and control system based on an IT-supported solution (Treasury Information Platform) implemented across the Group.

Liquidity is monitored and controlled on the basis of both short- and long-term corporate planning. Liquidity risks are identified at an early stage through simulation of different scenarios. Current liquidity is measured and monitored with IT-supported systems on a weekly basis.

The possibility of increasing obstacles within the SME bonds market could possibly – at least temporarily – lead to liquidity bottlenecks. This risk is to be countered through the acquisition of alternative financing sources, including at the institutional level. Work is also being carried out on the partial replacement of the liquidity loans granted to the affiliated companies by bank loans.

One subsidiary uses forward contracts to hedge transactions in foreign currencies. The nominal value as of the balance sheet date was  $\leqslant$  46.7 k. The fair value is recognised as a liability in the amount of  $\leqslant$  97.8 k.

#### Financial instruments by class and category

In the case of trade accounts receivable, receivables from affiliated companies and from enterprises in which participations are held, other financial assets, cash and cash equivalents, and trade accounts payable and other financial liabilities, the carrying amount approximates to the fair value, provided these instruments are short-term/current in nature. Assets that are not quoted on an active market and for which the fair value cannot therefore be reliably determined, are measured at cost.

	ing ints 31,			Categories			Fair Value
Figures in €k	Carrying amounts Dec. 31,	FAHfT	AfS	LaR	FLaC	FLHfT	
Financial assets	1 1						
Non-current financial assets	12,119	-	12,119	-	-	_	9,643
Other non-current financial assets	4,771	-	_	4,771	-	-	4,771
Trade accounts receivable	64,972	-	-	64,972	-	-	64,972
Receivables from affiliated companies	1,406	-	-	1,406	-	-	1,406
Receivables from enterprises in which participations are held	9,657	_	_	9,657	_	_	9,657
Other financial assets	1,127	122	-	1,005	-	-	1,127
Cash and cash equivalents	80,398		_	80,398	_	_	80,398
Financial liabilities							
Bond liabilities	363,135	_	_	_	363,135	_	362,870
Profit participation certificate liabilities	11,076	-	-	-	11,076	-	11,076
Bank liabilities	134,973	-	-	-	134,973	-	134,973
Finance lease liabilities	9,217	-	-	-	-	-	9,217
Other financial liabilities	1,232	-	_	-	1,232	-	1,232
Trade accounts payable	63,596	_	_	_	63,596	_	63,596

FAHfT = Financial assets held for trading; AfS = Available for sale; LaR = Loans and receivables; FLaC = Financial liabilities measured at amortised cost; FLHfT = Financial liabilities held for trading

	ing ints 31,			Categories			Fair Value
Figures in €k	Carrying amounts Dec. 31,	FAHfT	AfS	LaR	FLaC	FLHfT	
Financial assets							
Non-current financial assets	2,210	-	2,210	-	-	_	2,210
Other non-current financial assets	657	-	-	657	_	_	657
Trade accounts receivable	69,598	-	-	69,598	-	_	69,598
Receivables from affiliated companies	1,750	-	-	1,750	-	-	1,750
Receivables from enterprises in which participations are held	9,561	-	_	9,561	-	-	9,561
Other financial assets	558	163	-	395	-	-	558
Cash and cash equivalents	46,107			46,107		_	46,107
Financial liabilities							
Bond liabilities	262,991	-	-	-	262,991	_	263,407
Profit participation certificate liabilities	11,076	-	_	_	11,076	_	11,076
Bank liabilities	109,080	-	-	-	109,080	-	106,770
Finance lease liabilities	7,880	-	-	-	-	-	7,880
Other financial liabilities	954	-	-	-	954	-	954
Trade accounts payable	64,864	_	_	_	64,864	_	64,864

FAHfT = Financial assets held for trading; AfS = Available for sale; LaR = Loans and receivables; FLaC = Financial liabilities measured at amortised cost; FLHfT = Financial liabilities held for trading

The net gains and net losses from financial instruments comprise valuation results, the carrying amounts of premiums and discounts, the recognition and reversal of expenses arising from impairments, currency translation results, and interest, dividends and all other effects on income arising from financial instruments. Under the heading "Financial instruments valued at fair value through profit and loss", only those results appear pertaining to such instruments that have not been designated as hedging instruments in a hedging arrangement to IAS 39. Net gains and net losses on financial assets held for sale contain results arising from depreciation and amortisation, write-ups, interest, dividends and reclassifications of valuation effects from equity through profit and loss on the sale of securities or investments.

Figures in €k	2015	2014
Loans and receivables (LaR)	-1,426	-832
Available for sale (AfS)	-94	-999
Financial instruments held for trading (FAHfT, FLHfT)	-9	-82
Financial liabilities carried at amortised cost (FLaC)	-25,667	-23,999

Financial assets and liabilities measured at fair value are indicated below. These relate to shares that are valued on the basis of stock market quotations.

Figures in € k	Level 1	Level 2	Level 3	Dec. 31, 2015
Financial assets				
Available for sale (AfS)	9,748	-	_	9,748
Financial instruments held for trading (HfT)	_	_	_	-
Derivative financial assets		_	_	-
Financial liabilities				
Financial liabilities held for trading (HfT)	-	-	_	-
Derivative financial liabilities	_	0		0
Figures in €k	Level 1	Level 2	Level 3	Dec. 31, 2014
Financial assets				
Available for sales (AfS)	2	-	_	2
Financial instruments held for trading (HfT)	_	-	_	_
	_	2	_	2
Derivative financial assets			•••••••••••••••••••••••••••••••••••••••	
Financial liabilities				
		_		-

A Polish subsidiary has taken out a loan in euro in order to hedge against future revenues in a foreign currency. The valuation adjustments as of the respective reporting date during the term of this loan are recognised in other comprehensive income. Cash flows from this cash flow hedge are due in

2021. The fair value amounts to €0.6 million (previous year: €0.6 million). In the period under review, €2.2 k (previous year: €-401.3 k) has been recognised as a change in value in other comprehensive income.

## (34) LEASES

Included under property, plant and equipment are assets which are regarded as economic goods owned on the basis of finance leases. Some finance lease agreements contain purchase options.

Figures in €k	Finance leases	Total
Historical cost		
Jan. 1, 2015	15,472	15,472
Changes in consolidation scope	-266	-266
Additions	3,560	3,560
Disposals	1,776	1,776
Reclassifications	-	-
Currency translation differences	20	20
Dec. 31, 2015	17,011	17,011
Amortisation		
Jan. 1, 2015	3,790	3,790
Changes in consolidation scope	-43	-43
Additions	1,125	1,125
Disposals	1,051	1,051
Write-downs	-	-
Reversal of write-downs	-	-
Reclassifications	-	-
Currency translation differences	-32	-32
Dec. 31, 2015	3,789	3,789
Net book value on Dec. 31, 2015	13,222	13,222

Figures in €k	Finance leases	Total
Historical cost		
Jan. 1, 2014	15,377	15,377
Changes in consolidation scope	-	-
Additions	947	947
Disposals	392	392
Reclassifications	-	_
Currency translation differences	-461	-461
Dec. 31, 2014	15,472	15,472
Amortisation		
Jan. 1, 2014	3,282	3,282
Changes in consolidation scope	-	_
Additions	925	925
Disposals	273	273
Write-downs	-	_
Reversal of write-downs	_	_
Reclassifications	_	
Currency translation differences	<b>– 145</b>	-145
Dec. 31, 2014	3,790	3,790
Net book value on Dec. 31, 2014	11,682	11,682

In 2015, as in the previous year, there were no material future minimum lease payments arising from subleasing agreements to offset lease liabilities.

227 2,794	7,268 851 6,417	5 0 5	10,295 1,078 9,217
227	851	0	
2,794	6,417	5	9,217
up to	emaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31, 2014
2.568	6.911	99	9,578
279	1,613	1	1,893
2,289	5,298	98	7,685
	2,568	1 yr 1 to 5 yrs 2,568 6,911 279 1,613	1 yr     1 to 5 yrs     than 5 yrs       2,568     6,911     99       279     1,613     1

In addition to the finance lease commitments, the PCC Group is also a lessee with respect to operating lease agreements. The associated commitment arising from minimum lease payments amounts to € 17.8 million (previous year: € 10.4 million).

# (35) CONTINGENT LIABILITIES AND OTHER FINANCIAL COMMITMENTS

Figures in €k	Dec. 31, 2015	Dec. 31, 2014
Contingent liabilities arising from warranty agreements	-	-
Contingent liabilities arising from sureties and debt guarantees	302	28
Other contingent liabilities	-	108
Total contingent liabilities	302	136

The liabilities arising from guarantee and warranty agreements and other contingent liabilities are attributable to Polish subsidiaries. These are guarantees issued either to non-consolidated companies or third parties. They relate to leases and obligations to government bodies. The PCC Group's current estimates indicate that no claims will be made against any such guarantees or warranties.

As of December 31, 2015, there were certain commitments arising from operating leases and other financial obligations. In particular, commitments arising from investment agreements increased significantly. This rise is due, among other things, to the turnkey agreement with a German plant constructor for the erection of the silicon metal smelting facility in Iceland. This agreement came into effect in June 2015.

Investment commitments for intangible assets	- 01 021	- 60.710		151 740
Investment commitments for property, plant and equipment	91,021	60,719		151,740
Other commitments (incl. pending transactions)	345			345
Total financial commitments	95,134	63,595	11,224	169,953
	Remaining term up to	Remaining term	Remaining term more	Dec 31
Figures in €k	Remaining term up to 1 yr	Remaining term 1 to 5 yrs	Remaining term more than 5 yrs	Dec. 31, 2014
	term up to	term	term more	
Figures in €k  Operating lease commitments  Investment commitments for intangible assets	term up to 1 yr	term 1 to 5 yrs	term more than 5 yrs	2014
Operating lease commitments	term up to 1 yr	term 1 to 5 yrs	term more than 5 yrs	2014
Operating lease commitments Investment commitments for intangible assets	term up to 1 yr 3,748	term 1 to 5 yrs	term more than 5 yrs	2014 10,378

There were no other major financial commitments in 2015 to entities not included in the consolidated financial statements.

# (36) STATEMENT OF CASH FLOWS AND CAPITAL STRUCTURE MANAGEMENT

#### Statement of cash flows

The statement of cash flows shows the changes in cash and cash equivalents that took place in the year under review and is drawn up in accordance with IAS 7.

The cash flows are broken down according to the headings "Cash flow from operating activities", "Cash flow from investing activities" and "Cash flow from financing activities".

Interest received and taxes on income paid are recognised as cash flow from operating activities. Interest paid is disclosed under cash flow from financing activities.

Dividends paid are a component of the financing activities category. Dividends paid within the Group from income attributable to the previous year are eliminated. Dividend payments to the shareholder of PCC SE and also dividend payments to co-shareholders at subsidiaries are reflected in the cash flow from financing activities and are shown separately.

The financial funds equate to the total of cash and cash equivalents (cash in hand, credit balances at banks, and cheques)

shown in the balance sheet. In the event of changes in the scope of consolidation arising from the purchase or sale of entities (loss of control), the purchase price paid or received, less the financial funds acquired or sold, is recognised under cash flow from investing activities. In the event that the acquisition or disposal of shares in a subsidiary takes place without a change in status, such transactions are disclosed as financing activities.

For fiscal 2015, the sale of our stake in 3S S.A. is included under proceeds from disposal of investments accounted for using the equity method. The cash inflow from the sale of 3Services Factory S.A. is included under proceeds from the sale of consolidated subsidiaries and other business units. The divestment of 3Services Factory S.A. resulted in the disposal of cash assets in the amount of  $\[ \in \]$ 7.2 k. The sale resulted in the Group receiving a payment of  $\[ \in \]$ 2.9 million in cash and cash equivalents.

Because of the loss of control, the following assets and liabilities have been eliminated from the balance sheet:

Figures in €k	3Services Factory S.A.
Balance sheet	
Non-current assets	5,156
Current assets excluding cash & cash equivalents	279
Assets	5,436
Non-current liabilities	1,638
Current liabilities	1,058
Liabilities	2,697

Cash and cash equivalents as disclosed in the balance sheet include an amount of  $\leqslant$  32.5 million (previous year:  $\leqslant$  0.2 million) in funds not freely available. These are almost entirely attributable to funds provided for the investment project in Iceland.

### Capital structure management

The purpose of capital structure management is to remain financially flexible so that the business portfolio can be effectively further developed and strategic options can be seized. The purpose of the financial policy of the Group is to secure its liquidity and solvency, limit financial risks and optimise capital costs. The control metric adopted in this regard is the Net debt/EBITDA ratio. In reflecting the relationship between net financial liabilities including current and non-current pension provisions, current and non-current financial liabilities, cash and cash equivalents and also current marketable

securities, as well as the EBITDA figure, this constitutes a dynamic indicator of indebtedness. With a net debt in the amount of €439.0 million (previous year: €346.5 million) and a disclosed EBITDA figure of €50.8 million (previous year: €39.6 million), the Net debt/EBITDA ratio for the year under review comes in at 8.6 (previous year: 8.8). Because of financing agreements, individual subsidiaries are subject to external minimum capital requirements reflected in standard financial covenants. These include requirements relating to minimum equity ratios and also maximum levels of indebtedness. The need to comply with these financial covenants is also taken into account in preparing the annual budget for the following year. According to the information supplied for the purpose of preparing the consolidated financial statements, the existing minimum capital requirements have been adhered to

# OTHER DISCLOSURES

# (37) RELATED PARTY DISCLOSURES

Balances and business transactions between PCC SE and incorporated subsidiaries regarded as related parties are eliminated as part of the consolidation process and have not been included in these notes and disclosures. Details regarding the business transactions between the PCC Group and other related parties are indicated in the following.

Other receivables and other assets include a claim against the sole shareholder PCC SE in the amount of  $\le 474.8 \,\mathrm{k}$  (previous year:  $\le 316 \,\mathrm{k}$ ). This receivable is short-term and, as in the previous year, carries an interest rate of 6.0 % p.a.

As of the balance sheet date, December 31, 2015, the PCC Group has claims against affiliated entities not included in the consolidated financial statements in an amount totalling  $\leqslant$  1.5 million (previous year:  $\leqslant$  1.8 million). These relate to loans, trade accounts receivable and current loan receivables. The Group-internal financing arrangements carry interest rates ranging between 4.0 % p.a. and 8.0 % p.a.

For compensation to Board members, please refer to the notes under the section Corporate Bodies (38).

For compensation of the Administrative Board, again please refer to the notes under Corporate Bodies (38).

Essentially, sales made to related parties, or purchases from related parties, are transacted at prevailing market prices. Open positions as of the end of the fiscal year are not secured, are non-interest-bearing and will be settled in cash. There are no guarantees covering receivables from related parties or payables to related parties. As in the previous year, no value adjustment on receivables from related parties was necessary in fiscal 2015.

Claims against the affiliated company OOO DME Aerosol amounted to €649 k as of the balance sheet date (previous year: €595 k) and relate to loan receivables. As in the previous year, these receivables bear an interest rate of 10.0 % p.a. The loans were granted for the development and construction of a dimethyl ether plant on the production site of the joint venture partner. In all, the joint venture company has been granted loans by PCC SE in the amount of €3.5 million which can be drawn down as the project proceeds through various defined milestones.

Figures in €k	2015	2014
Sales with related parties		
Non-consolidated entities	2,466	4,145
Joint ventures	-	_
Associated companies	-	-
Receivables from related parties		
Non-consolidated entities	1,468	1,812
Joint ventures	649	_
Associated companies	_	29
Liabilities to related parties		
Non-consolidated entities	487	766
Joint ventures	-	-
Associated companies	-	_

# (38) CORPORATE BODIES

The corporate bodies of PCC SE are as follows:

#### Managing Directors:

- Ulrike Warnecke, Finance and Human Resources, Organisation and Public Relations, Trading and Consumer Products
- Dr. rer. oec. (BY) Alfred Pelzer, Chemicals Production, Logistics and Sales

The Managing Directors received remunerations totalling €464k in fiscal 2015 (previous year: €494k), recorded in full as short-term employee benefits.

#### Administrative Board:

- Dipl. Volkswirt Waldemar Preussner, Chairman of the Administrative Board
- ▶ Dr. rer. oec. (BY) Alfred Pelzer, Vice Chairman of the Administrative Board, Managing Director of PCC SE
- Reinhard Quint, Member of the Administrative Board, Member of the Corporate Development Council of Duisburger Hafen AG, Duisburg, Germany

The Administrative Board received emoluments amounting to € 132 k in fiscal 2015 (previous year: € 132 k), recorded in full as short-term employee benefits.

### **Annual General Meeting:**

The Annual General Meeting of PCC SE took place on August 3, 2015. The consolidated financial statements and the Group management report for 2014 were both approved, as were the actions of the Managing Directors and the Administrative Board of PCC SE. Further, Warth & Klein Grant Thornton AG, Düsseldorf, was reappointed as auditor for fiscal 2015.

# (39) EVENTS AFTER THE BALANCE SHEET DATE

In February 2016, PCC SE sold its shares in SSH Sp. z o.o., Katowice (Poland), our last remaining portfolio company in the telecommunications sector. Provision was made in the 2015 annual financial statements covering the loss of around € 0.5 million that was incurred on disposal of this entity.

Having received a bank financing package, in March 2016 PCC Exol SA redeemed the loan of €14.5 million granted to it by PCC SE. The liquid funds received by PCC SE as a result were used in part for debt repayment purposes.

Likewise in March 2016, PCC SE bought back 14,125,000 shares in PCC Exol SA from an investment fund. This corresponds to around 8.2 % of the capital stock and around

4.7 % of the voting rights in the annual general meeting of the company.

Bond ISIN DE000A11P9V6 with a placed volume of  $\leqslant$  7.3 million was redeemed in full on maturity as of April 1, 2016. It was issued on April 1, 2014, offering a coupon of 4.75 % p.a.

In order to partially refinance the bonds falling due in the future and for further investments in existing portfolio companies and new projects, a new bond was issued on May 1, 2016: ISIN DE000A2AAVL7 with a volume of €15.0 million, a coupon of 3.5 % p.a. and a tenor through to July 1, 2018.

# (40) MISCELLANEOUS

The PCC Group and the individual German companies were audited by Warth & Klein Grant Thornton AG, Düsseldorf, and their respective financial statements were given an unqualified opinion. The fee for audit services in respect of these companies and the Group amounted to € 133.0k (previous

year: €80.8k). The fee for other services performed in the course of fiscal 2015 was €140.0k (previous year: €80.0k). Tax consultancy services were also provided for which the total fee charged was €20.0k (previous year: €0).

# (41) SCHEDULE OF SHAREHOLDINGS IN ACCORDANCE WITH SECTION $\S$ 313 (2) HGB

	on			e rate 2015	PCC SE participating interest in %				Jcy	ا کار
Name and head office of company	Consolidation method	Segment	Currency	Exchange rate as of Dec. 31, 2015 1 euro =	direct	indirect	total	2014	Equity in local currency ('000)	Net result in local currency ('000)
Parent company										
PCC SE, Duisburg	Full	Holding/Projects	EUR	1.0000					69,976.4	8,388.0
	•••••••••••••••••••••••••••••••••••••••		•••••••	<u></u>						
Subsidiaries										
PCC Energia EOOD, Sofia	Full	Polyols	BGN	1.9558	100.00		100.00	100.00	-544.3	-75.7
PCC Prodex GmbH, Essen	Full	Polyols	EUR	1.0000		84.16	84.16	84.16	-477.3	-412.5
PCC Prodex Sp. z o.o., Warsaw	Full	Polyols	PLN	4.2639		84.16	84.16	84.16	2,320.0	-2,705.0
PCC PU Sp. z o.o., Brzeg Dolny	Full	Polyols Polyols, Chlorine, Speciality Chem-	PLN	4.2639		84.16	84.16		4,891.0	-108.5
		icals, Energy,								
PCC Rokita SA, Brzeg Dolny	Full	Holding	PLN	4.2639	84.16		84.16	84.16	610,608.8	89,116.0
PCC Therm Sp. z o.o., Brzeg Dolny	Full	Polyols	PLN	4.2639		84.16	84.16	-	646.5	-103.5
PCC Chemax, Inc., Piedmont, SC PCC EXOL Kýmya Sanayý Ve	Full	Surfactants	USD	1.0887		80.04	80.04	80.05	8,514.3	124.5
Týcaret Lýmýted Týrketý, Istanbul	Full	Surfactants	TRY	3.1765		80.04	80.04	80.05	118.0	67.9
PCC Exol SA, Brzeg Dolny	Full	Surfactants	PLN	4.2639	80.04		80.04	80.05	224,519.4	14,223.7
Tensis Sp. z o.o., Brzeg Dolny	Full	Surfactants	PLN	4.2639		80.04	80.04	84.16	3,892.4	214.4
MCAA SE, Brzeg Dolny	Full	Chlorine	PLN	4.2639	100.00		100.00	100.00	86,440.2	-15.2
PCC MCAA Sp. z o.o., Brzeg Dolny	Full	Chlorine	PLN	4.2639		100.00	100.00	100.00	72,531.4	-5,503.3
PCC MORAVA-CHEM s.r.o., Český Těšín	Full	Speciality Chemicals	CZK	27.0230	98.00	2.00	100.00	100.00	88,121.4	-23,067.9
PCC Silicium S.A., Zagórze	Full	Speciality Chemicals	PLN	4.2639	99.96		99.96	99.95	6,133.0	-2,906.2
PCC Synteza S.A., Kędzierzyn-Koźle	Full	Speciality Chemicals	PLN	4.2639	100.00		100.00	100.00	8,520.2	4,752.9
PCC Trade & Services GmbH, Duisburg	Full	Speciality Chemicals	EUR	1.0000	100.00	<del>.</del>	100.00	100.00	9,720.1	800.0
S.C. Euro-Urethane S.R.L., Râmnicu Vâlcea	Full	Speciality Chemicals	RON	4.5240	58.72		58.72	58.72	5,611.0	-53,183.3
ZAO NOVOBALT Terminal, Kaliningrad	Full	Speciality Chemicals	RUB	80.6736		100.00	100.00	100.00	43,325.0	-6,073.0
Kosmet Sp. z o.o., Brzeg Dolny	Full	Consumer Products	PLN	4.2639		100.00	100.00	100.00	-1.3	-6.6
OOO PCC Consumer Products Navigator, Grodno	Full	Consumer Products	BYR	20.304.29		100.00	100.00	100.00	11,937,854.9	-7,013,617.4
OOO PCC Consumer Products, Moscow	Full	Consumer Products	RUB	80.6736	••••••••	100.00	100.00	100.00	-59,833.9	-12,389.0
PCC Consumer Products Czechowice S.A., Czechowice-Dziedzice	Full	Consumer Products	PLN	4.2639		99.74	99.74	99.15	13,543.8	-636.1
PCC Consumer Products Kosmet Sp. z o.o., Brzeg Dolny	Full	Consumer Products	PLN	4.2639		100.00	100.00	100.00	16,109.1	-4,688.7
PCC Consumer Products S.A., Warsaw	Full	Consumer Products	PLN	4.2639	100.00	<u></u>	100.00	100.00	5,657.7	-5,495.1
PCC Packaging Sp. z o.o., Brzeg Dolny	Full	Consumer Products	PLN	4.2639		84.16	84.16	84.16	892.1	-133.8
GRID BH d.o.o., Sarajevo	Full	Energy	BAM	1.9558		51.37	51.37	51.37	-663.4	-93.9
Novi Energii OOD, Sofia	Full	Energy	BGN	1.9558		36.00	36.00	36.00	-1,450.4	–148.5
PCC Engraphica Plachownia	Full	Energy	EUR	1.0000	60.00		60.00	60.00	16,266.2	-3,085.2
PCC Energy Trading CmbH	Full	Energy	PLN	4.2639	84.46		84.46	84.46	17,308.2	2,024.6
PCC Energy Trading GmbH, Duisburg	Full	Energy	EUR	1.0000	100.00		100.00	100.00	-2,320.7	-83.9
PCC HYDRO DOOEL Skopje, Skopje	Full	Energy	MKD	61.5947		60.00	60.00	60.00	-155,756.9	-34,873.3
PCC Izvorsko EOOD, Sofia	Full	Energy	BGN	1.9558		60.00	60.00	60.00	-1,362.9	-38.2
PCC NEW HYDRO DOOEL Skopje, Skopje	Full	Energy	MKD	61.5947		60.00	60.00	100.00	-15,984.8	-5,787.8

	Consolidation method			Exchange rate as of Dec. 31, 2015 1 euro =	PCC SI	E participa	ting intere	st in %	Equity in local currency ('000)	Net result in local currency ('000)
	pilo	Segment	Currency	ng 31, 0 =	#:	ect			ty in curl O)	resul curl O)
Name and head office of company	Consolio	Segr	Curr	Exchan as of Dec. 31	direct	indirect	2015	2014	Equi local ('00)	Net local
PCC Autochem Sp. z o.o., Brzeg Dolny	Full	Logistics	PLN	4.2639		84.16	84.16	92.29	5,753.5	1,866.2
PCC Intermodal GmbH, Duisburg	Full	Logistics	EUR	1.0000	•••••••••••••••••••••••••••••••••••••••	69.52	69.52	62.41	37.2	5.7
PCC Intermodal S.A., Gdynia	Full	Logistics	PLN	4.2639	69.52		69.52	62.41	86,478.3	4,981.1
ZAO PCC Rail, Moscow	Full	Logistics	RUB	80.6736	100.00		100.00	100.00	-534,149.0	-236,064.0
distripark.com Sp. z o.o., Brzeg Dolny	Full	Holding/Projects	PLN	4.2639		84.16	84.16	_	-129.4	- 179.4
Ekologistyka Sp. z o.o., Brzeg Dolny	Full	Holding/Projects	PLN	4.2639	······································	84.16	84.16	100.00	-3,633.3	-1,876.2
LabMatic Sp. z o.o., Brzeg Dolny	Full	Holding/Projects	PLN	4.2639	•••••••••••••••••••••••••••••••••••••••	83.94	83.94	83.94	980.5	37.0
PCC Apakor Sp. z o.o., Brzeg Dolny	Full	Holding/Projects	PLN	4.2639		83.81	83.81	83.81	9,389.4	2,009.7
PCC BakkiSilicon hf, Húsavík	Full	Holding/Projects	USD	1.0887	86.50	05.01	86.50	83.13	31,815.3	484.8
PCC IT S.A., Brzeg Dolny	Full	Holding/Projects	PLN	4.2639	100.00		100.00	100.00	7,244.7	735.6
OOO DME Aerosol, Pervomaysky	Equity	Holding/Projects	RUB	80.6736	50.00		50.00	50.00	-33,837.2	-13,913.1
IRPC-PCC Co. Ltd, Bangkok	None	Polyols	THB	39.2480	50.00	42.08	42.08	-	-416.7	1,081.0
PCC ABC (formerly PCC Rokita Polyurethanes) Sp. z o.o.,	NONE									
Brzeg Dolny	None	Polyols	PLN	4.2639		84.16	84.16	84.16	18.0	-8.1
SOO PCC Prodex Bel, Smilavichy	None	Polyols	BYR	20,304.29		42.92	42.92	42.92	-4,036,837.8	-1,140,091.2
PCC Exol Philippines Inc., Batangas	None	Surfactants	PHP	50.9990		80.04	80.04	_	347.8	-501.8
ZAO Exol, Nizhny Novgorod	None	Surfactants	RUB	80.6736	100.00		100.00	100.00	499.0	-2,435.0
New Better Industry (formerly PCC Chlor-Alkali) Sp. z o.o., Brzeg Dolny	None	Chlorine	PLN	4.2639		84.16	84.16	84.16	6.9	-8.1
bizeg boiliy	ivone	•	FLIN	4.2033	······································	04.10	04.10	04.10	0.9	-0.1
PCC Organic Oils Ghana Ltd., Accra	None	Speciality Chemicals	GHS	4.1306	100.00		100.00	89.00		
PCC Slovakia s.r.o., Košice	None	Speciality Chemicals	EUR	1.0000		100.00	100.00	100.00	33.2	-104.9
TzOW Petro Carbo Chem, Lviv	None	Speciality Chemicals	UAH	26.2231	92.32		92.32	92.32	6,699.9	68.3
PCC Envolt Sp. z o.o., Brzeg Dolny	None	Energy	PLN	4.2639	100.00		100.00	100.00	213.6	-10.0
PCC Power Sp. z o.o., Brzeg Dolny BiznesPark Rokita Sp. z o.o. i.L.,	None	Energy	PLN	4.2639	100.00		100.00	100.00	-109.5	-27.0
Brzeg Dolny	None	Holding/Projects	PLN	4.2639		84.16	84.16	84.16	1,378.1	-95.8
Chemia-Profex Sp. z o.o., Brzeg Dolny	None	Holding/Projects	PLN	4.2639		84.16	84.16	84.16	22.9	21.1
Chemia-Serwis Sp. z o.o., Brzeg Dolny	None	Holding/Projects	PLN	4.2639		84.16	84.16	84.16	31.8	2.1
ChemiPark Technologiczny	••••••••••		• • • • • • • • • • • • • • • • • • • •						•••••••••••••••••••••••••••••••••••••••	
Sp. z o.o., Brzeg Dolny	None	Holding/Projects	PLN	4.2639		84.16	84.16	84.16	4,728.0	94.2
Chemi-Plan S.A., Brzeg Dolny CWB Partner Sp. z o.o.,	None	Holding/Projects	PLN	4.2639		84.16	84.16	84.16	52.4	-5.8
Brzeg Dolny	None	Holding/Projects	PLN	4.2639		84.16	84.16	84.16	75.1	9.8
GEKON S.A. i.L., Brzeg Dolny LabAnalityka Sp. z o.o.,	None	Holding/Projects	PLN	4.2639		84.16	84.16	84.16	-	_
Brzeg Dolny	None	Holding/Projects	PLN	4.2639		84.16	84.16	84.16	-367.2	439.0
LocoChem Sp. z o.o., Brzeg Dolny	None	Holding/Projects	PLN	4.2639		84.16	84.16	-	50.0	0.0
S.C. Oltchim S.A., Râmnicu Vâlcea	None	Holding/Projects	RON	4.5240	32.34	-	32.34	32.34	-538,668.2*	2,294,129.2*
SSH Sp. z o.o., Gliwice	None	Holding/Projects	PLN	4.2639	36.16		36.16	30.62	-	-
TEC artec valves GmbH & Co. KG i.L., Oranienburg	None	Holding/Projects	EUR	1.0000	68.85		68.85	68.85	-	-
Technochem Sp. z o.o., Brzeg Dolny	None	Holding/Projects	PLN	4.2639		72.21	72.21	72.21	2.0	-1.6
TRANSGAZ S.A., Rybnik	None	Holding/Projects	PLN	4.2639	9.64	, , , , , ,	9.64	9.64		1.0
III III III	INOTIE	- Iolanig/Trojects		7.2033	J.∪ <del>+</del>		5.04	5.04		

 $<sup>\</sup>ensuremath{^{\star}}$  according to published information

Duisburg, May 28, 2016

PCC SE

Ulrike Warnecke Managing Director Dr. rer. oec. (BY) Alfred Pelzer Managing Director

# **GLOSSARY**

#### **Additives**

Additives are substances which, incorporated in formulations in very small quantities, optimise the properties and performance profile of products such as concrete, paints and plastics and/or facilitate their manufacture and processing.

#### **Betaines**

Amphoteric surfactants used in cosmetic products such as hair shampoos to optimise the skin compatibility of the anionic surfactants responsible for the cleaning effect of such products.

#### Chlor-alkali electrolysis

Electrochemical process in which the base chemicals chlorine, caustic soda (sodium hydroxide) and hydrogen are generated.

#### CHP

Combined Heat and Power – used in reference to power plants designed to supply both electrical and thermal energy in a process known as "cogeneration". More fuel-efficient due to utilisation of otherwise wasted heat. Produces less CO<sub>2</sub> (greenhouse gas) per unit energy output, therefore regarded as more climate-friendly.

## Climate-protection project

In keeping with the provisions of the Kyoto Protocol, a climate-protection project contributes to the reduction of greenhouse gases. Through adoption of a "clean development mechanism", participating developing countries are also to be assisted not only in reducing their emissions but also generally in their pursuit of a sustainable mode of development. The small hydropower plant projects being implemented by PCC in the Balkans constitute an example of this kind of assistance.

#### **CSR**

Abbreviation for Corporate Social Responsibility, referring to the self-regulatory, responsible attitude of businesses towards all stakeholders and the social and ecological environment.

# **EBIT**

Abbreviation for Earnings Before Interest and Taxes; †EBITDA less depreciation and amortisation.

#### **EBITDA**

Abbreviation for Earnings Before Interest, Taxes, Depreciation and Amortisation.

#### **EBT**

Abbreviation for Earnings Before Taxes; †EBIT less interest and other financial items.

### **Ethoxylation**

Process for the manufacture of non-ionic †surfactants (ethoxy-lates; surface-active substances), which are major constituents of, in particular, detergents and cleaning products.

#### **FSC®**

Abbreviation for Forest Stewardship Council; an independent, non-profit, non-governmental organisation which is represented in 80 countries. The mission of the FSC® is to promote the environmentally sound, socially responsible and economically viable management of forests.

#### **Global Compact of the United Nations**

The UN Global Compact is the world's largest initiative in the field of Corporate Social Responsibility (†CSR). It is a principle-based framework for businesses, stating ten principles in the areas of human rights, labour, the environment and anti-corruption.

### **Hydroxyl groups**

Functional groups of alcohols and phenols.

# Intermodal transport

Combined transport (CT) involving the conveyance of goods, primarily in containers, which are transferred one or more times between different modes of carriage such as train, truck and ship.

#### **IPO**

Abbreviation for Initial Public Offering, which relates to the first-time placement of a company's shares on an organised capital market.

## Isocyanates

Highly reactive chemical esters of isocyanic acid. Compounds that contain two isocyanate groups are termed diisocyanates, and these react with polyols to create polyurethanes (†PU foams).

#### **MCAA**

Abbreviation for monochloroacetic acid, a product used primarily in the food and beverage industry, with further applications in the manufacture of medicines, personal care products, cosmetics, dyestuffs, and plant protection products.

### Membrane process

Modern process in †chlor-alkali electrolysis used in the manufacture of chlorine. The membrane process is more energy-efficient than, for example, the amalgam process, and functions without the use of mercury.

#### Mezzanine capital

General term covering forms of finance which, due to their legal and economic make-up, represent a mix of equity and debt capital.

### **MW** (megawatt)

Unit of measurement for electric power:

- 1 megawatt =  $10^3$  kilowatts
- 1 gigawatt =  $10^6$  kilowatts
- 1 terawatt = 10<sup>9</sup> kilowatts

## **Phosphorus derivatives**

Substances manufactured from phosphorus, such as flame retardants and plasticisers.

#### **PU foams**

PU is the abbreviation for polyurethane (also abbreviated PUR), of which polyols are a major constituent.

#### RFACH

European regulation governing the registration, evaluation, authorisation and restriction of chemicals.

#### Renewable energy

Also known as regenerative energy; term given to energy from sustainable sources such as solar energy, biomass, hydroelectric power and wind power.

# Responsible Care®

Global initiative of the chemicals industry aimed at continuously improving sustainability in terms of environmental protection, health and safety.

#### **ROCE**

Return On Capital Employed; †EBIT ÷ [Average equity + Average interest-bearing borrowings incl. pension provisions].

#### SE

Latin abbreviation: Societas Europaea; English: European Company.

#### Segment

Introduced on January 1, 2013 as a basic management unit of PCC (conversion to segment structure as a refinement of the former divisional structure). The Group is divided into eight segments: Polyols, Surfactants, Chlorine, Speciality Chemicals, Consumer Products, Energy, Logistics, and Holding/Projects.

#### Sulphonation

Process for the manufacture of anionic †surfactants (sulphonates; surface-active substances) which, because of their dermatological compatibility, are widely used in cosmetics and laundry/home care detergents.

## Surfactants

Surface-active substances; ingredients in cosmetics, detergents, cleaning and cleansing products (†Ethoxylation, †Sulphonation).

#### TEU

Abbreviation for Twenty-foot Equivalent Unit – unit of measurement for ISO standard containers; 1 TEU corresponds to a 20 foot ISO container.

## Value chain

The sequential set of primary and support activities in a production process that an enterprise performs to turn inputs, e.g. raw materials, into value-added outputs, e.g. finished products, for its external customers.

# **CREDITS**

# **Published by**

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#### **Image rights**

PCC SE

PCC SE

Duisburg, June 2016

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Both versions can be downloaded from www.pcc.eu.

This report is printed on FSC®-certified natural paper.



# FORWARD-LOOKING STATEMENTS

This Annual Report contains forward-looking statements which are based on the current estimates and assumptions made by the management with respect to future developments. The accuracy of such statements is subject to risks and uncertainties that lie outside the control and forecasting capability of PCC SE. Examples include changes in the market environment and underlying economic conditions, the behaviour of other market participants, the success with which new acquisitions can be integrated, the realisation of anticipated synergy effects, and the actions of governmental agencies. Should such factors of uncertainty or imponderables come into play, or if the assumptions upon which these statements are based prove to be incorrect, the ensuing events could differ materially from those explicitly indicated, implied in or inferred from these statements. PCC SE neither plans nor undertakes to update any forward-looking statements in respect of developments or events occurring in the future.

# **TECHNICAL DISCREPANCIES**

For technical reasons (e.g. arising from the conversion of electronic formats), differences may occur between the information provided in this Annual Report and that contained in the accounting documents submitted for publication in the Federal gazette (Bundesanzeiger). In such cases, the version appearing in the Federal gazette is authoritative.

# **PCC ON THE INTERNET**

# www.pcc.eu www.pcc-financialdata.eu

#### PCC. Direktinvest

www.pcc-direktinvest.eu

# Chemicals

www.products.pcc.eu www.crossin.pcc.eu www.distripark.com www.chemproducts.com

www.cnemproducts.

www.pcc.rokita.pl

www.pcc-exol.eu

www.ipoltec.eu

www.pcc-prodex.eu

www.pcc-chemax.com

www.tensis.pl

www.mcaase.eu

www.pccsynteza.pl

www.pccmorava-chem.cz

www.kosmet.com.pl

www.pcc-cp.eu

www.navisan.by

www.matches.com.pl

www.pcc-silicium.pl

# **Energy**

www.pcc-hydro-mk.com www.zeblach.pl

# Logistics

www.pcc-intermodal.pl www.pcc-autochem.eu www.pcc.ru

#### Holding

www.pccit.pl www.cwbpartner.pl www.pcc.is www.apakor.eu www.labmatic.com.pl

