

**Be equipped for tomorrow's materials.**

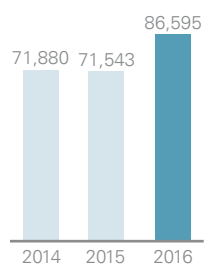
## IMPORTANT CONSOLIDATED FIGURES AT A GLANCE

EUR'000	2015	2014	2013
<b>Sales revenues</b>	<b>86,595</b>	<b>71,543</b>	<b>71,880</b>
Industrial Systems	35,674	30,789	35,572
Semiconductor Systems	50,921	40,754	36,308
<b>Gross profit</b>	<b>20,413</b>	<b>16,699</b>	<b>13,824</b>
in % sales revenues	23.6	23.3	19.2
R&D expenses	2,970	3,236	2,026
<b>Operating result (EBIT)</b>	<b>3,890</b>	<b>95</b>	<b>-6,305</b>
in % sales revenues	4.5	0.1	-8.8
<b>Consolidated net result</b>	<b>2,931</b>	<b>-1,449</b>	<b>-9,974</b>
in % sales revenues	3.4	-2.0	-13.9
<b>Earnings per Share (EPS) in EUR<sup>1)</sup></b>	<b>0.13</b>	<b>-0.07</b>	<b>-0.46</b>
Capital expenditure	755	2,076	918
<b>Total assets</b>	<b>94,736</b>	<b>88,279</b>	<b>89,037</b>
<b>Shareholders' equity</b>	<b>40,305</b>	<b>37,941</b>	<b>38,815</b>
Equity ratio in %	42.5	43.0	43.6
<b>Employees as of 31.12.</b>	<b>377</b>	<b>361</b>	<b>391</b>
<b>Incoming orders</b>	<b>70,493</b>	<b>101,472</b>	<b>67,235</b>
<b>Order backlog</b>	<b>50,623</b>	<b>67,833</b>	<b>37,905</b>
Book-to-bill-ratio	0.81	1.42	0.94
<b>Cash Flow from operating activities</b>	<b>-4,441</b>	<b>5,448</b>	<b>-4,489</b>

<sup>1)</sup> Circulating shares on average 21,749,988

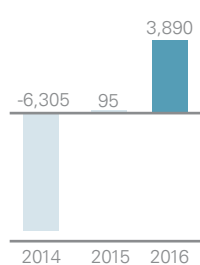
### Sales revenues

EUR'000



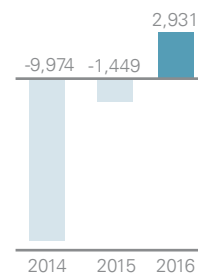
### Operating result (EBIT)

EUR'000



### Consolidated net result

EUR'000



# PVA TePla AG

AS A VACUUM SPECIALIST FOR HIGH-TEMPERATURE AND PLASMA TREATMENT PROCESSES, PVA TEPLA AG IS ONE OF THE WORLD'S LEADING SYSTEM ENGINEERING COMPANIES IN THE FIELDS OF HARD METAL SINTERING, CRYSTAL GROWING, THE USE OF PLASMA SYSTEMS FOR SURFACE ACTIVATION AND ULTRA-FINE CLEANING AS WELL AS SYSTEMS FOR QUALITY INSPECTION.

## INNOVATIVE DEVELOPMENTS

With its systems and services, PVA TePla enables and supports the innovative manufacturing processes and developments of its customers, primarily in the semiconductor, hard metal, electrical/electronic and optical industries – as well as in the energy, photovoltaic and environmental technologies.

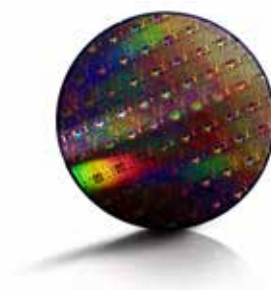
## INDIVIDUAL SOLUTIONS

The company provides its customers with customized solutions from a single source. These range from technology development through tailor-made design and construction of production facilities right up to an after-sales service that covers all four corners of the globe.

## JOINTLY WITH OUR CUSTOMERS

The company will use its systems to enter the latest fields of application jointly with its customers – be they next-generation wafers for use in the semiconductor or photovoltaic industries, powdered-metal technology, new crystals for the optoelectronic industry, fiber-optics for data transmission or the development of high-tech materials and surfaces.

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# Foreword by the Management Board

## DEAR SHAREHOLDERS AND BUSINESS PARTNERS,

In 2016, we once more reached the goals that we had set for ourselves.

With EUR 86.6 million, we achieved significantly higher sales revenues than in the previous year. The company is on the right track to stable profitability and better planning security. After breaking even in the 2015 fiscal year, we were able to generate a positive EBIT of EUR 3.9 million for 2016 as a whole – in spite of the expenses of just under EUR 0.7 million incurred for relocating our Munich-based subsidiary. The restructuring of PVA TePla Holding carried out in the last few years – with the operating activities in our subsidiaries –, the optimization of our cost structure in our limited liability companies under German law (GmbHs) and improved capacity utilization have had a significant effect. The operating break-even point currently lies at around EUR 70 million. Pooling resources and utilizing synergies continue to be the focal points our work.

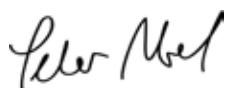
Along with improving our cost structure, we will also continue to develop our operating activities. In addition to our subsidiary in Beijing, which has been running successfully for years, we have set up a new company in Xi'an dedica-

ted to developing and expanding supply chains for our systems, particularly those in the semiconductor market, in order to expand our business activities in what has for years been our largest market. Chinese demand for production systems for microelectronics in particular is growing rapidly. Chinese customers are also making increasing efforts toward domestic production in this field. We also want to intensify sales activities and build up additional assembly capacities in the USA, especially against the backdrop of current political developments.

The development of incoming orders in the two divisions varied in 2016. They were below expectations in the Industrial Systems division due to the weakness of the hard metal market. Although incoming orders were in excess of planned targets in all other product divisions, they were unable to fully compensate for missing incoming orders. We assume that there will be a delay in the implementation of corresponding projects in the Industrial Systems division and that these projects will significantly increase in the first six months of 2017. Incoming orders considerably exceeded the planned budget in the Semiconductor System division. This was the case for meteorology systems in particular.

We anticipate consolidate sales revenues on the scale of EUR 85 million and an EBITDA-margin on the scale of 6%.

On behalf of our managing directors and all employees, we would like to thank you, our shareholders and business partners, for your trust in and commitment to our Company.



Peter Abel  
Chief Executive Officer



Oliver Höfer  
Chief Operating Officer

# Report from the Supervisory Board

In fiscal year 2016, the Supervisory Board performed all duties required of it according to the law and the Articles of Association, and continuously monitored the work of the Management Board of PVA TePla AG in addition to advising the Management Board on a regular basis. We examined critically the proposed resolutions of the Management Board and put forward suggestions at Supervisory Board meetings on the basis of the detailed written and verbal reports of the Management Board. The Management Board regularly, promptly and comprehensively informed the Supervisory Board with regard to key economic figures of the Group and business areas, other fundamental aspects of corporate management and planning, strategy, risk management, and compliance. The Management Board informed the Supervisory Board of a variety of business transactions not requiring approval and discussed them with it. The Supervisory Board was involved in decisions of fundamental importance. The Management Board also regularly reported to the Supervisory Board on the economic development of the Company with monthly reports and risk reports. The Supervisory Board adopted the resolutions required according to the law or the Articles of Association. This was also done by circulation when necessary. In addition to the meetings and reports, my colleagues on the Supervisory Board and I as Chairman of the Supervisory Board also regularly obtained information on the current situation in discussions with the Management Board.

## COOPERATION BETWEEN THE SUPERVISORY BOARD AND THE MANAGEMENT BOARD

The meetings of the Supervisory Board were characterized by open and intensive dialog with the Management Board. The Supervisory Board members were able to comprehensively prepare for meetings and resolutions on the basis of the documents made available by the Management Board.

In 2016, the Supervisory Board convened for four ordinary and one extraordinary, telephone Supervisory Board meeting(s). All members of the Supervisory Board attended these meetings. No committees were formed due to the size of the Supervisory Board (three members). All matters that would have been addressed by committees were addressed by the full Supervisory Board.

## CONFLICTS OF INTEREST

There were no potential conflicts of interest of Management Board and Supervisory Board members requiring immediate disclosure to the Supervisory Board and notification to the Annual General Meeting.

## MAIN AREAS OF CONSULTATION

The Supervisory Board dealt in depth with the ordering, sales revenues and earnings situation of each of the subsidiaries at all Supervisory Board meetings. The market situation and competitive situation, as well as the opportunities and risks in the product areas, were discussed in detail with the Management Board and managing directors. Another topic discussed was the development of personnel at the group's subsidiaries, especially at a management level.

At its first ordinary meeting of 2016 on March 18, the Supervisory Board spoke at length about the 2015 consolidated financial statement, the subsidiaries' market and business situation and PVA Metrology & Plasma Solutions' relocation from Munich to Wetztenberg.

Besides the business situation, during its meeting on June 13/14 2016, the Supervisory Board also discussed the progress of PVA Metrology & Plasma Solutions' relocation. The Supervisory Board acknowledged and approved the Management Board's explanation for founding a new limited liability company under German Law (GmbH) in Xi'an, China. The Management Board's rules of procedure were adjusted in light of the introduction of an age limit – as reported upon at the Annual General Meeting of PVA TePla in 2016.

During its meeting on October 7, 2016, the Supervisory Board spoke at length about business development, in particular about developments in sales revenue, incoming orders and the earnings situation of each of the subsidiaries. This was followed by an in-depth discussion of corporate strategy and break-even analyses for the largest companies in the PVA TePla Group. It discussed management questions for individual subsidiaries.

The focus of the Supervisory Board meeting on November 29, 2016 was corporate planning for 2017 to 2019 for the holding and for the individual subsidiaries. The Management Board presented the Supervisory Board with comprehensive budget plans for all subsidiaries for the coming years, among other items. The individual budgets were adopted. The Management Board explained the development of and suggested adjustments to the risk management system, which the Supervisory Board approved. A declaration of compliance with the German Corporate Governance Codex was adopted and there was in-depth discussion of the status of the invitation for tenders for the audit of the annual and consolidated financial statements.

During the extraordinary telephone-conference meeting on December 23, 2016, which was attended by all members, the Supervisory Board approved the termination contract with Chief Financial Officer Henning Döring.



## CORPORATE GOVERNANCE AND DECLARATION OF COMPLIANCE

At the meeting on October 7, 2016, the Management Board and Supervisory Board discussed items including the update of the declaration of compliance with the German Corporate Governance Code pursuant to Section 161 of the German Stock Corporation Act (AktG). The updated joint declaration of compliance was made permanently available to the public on the website [www.pvatepla.com](http://www.pvatepla.com) in the "Investor Relations – Corporate Governance" section in December 2016. Deviations from this Code were discussed intensively between the Management Board and Supervisory Board and justified. The Management Board reports on corporate governance, including for the Supervisory Board, in accordance with Item 3.10 of the Code on the Company's website at: <http://www.pvatepla.com/pva-tepla-service/investor-relations/corporate-governance>.

The election of the auditors Ebner Stolz GmbH & Co. KG, Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft to audit the financial statements and consolidated financial statements for fiscal year 2016 was proposed to the Annual General Meeting. The Supervisory Board satisfied itself of the independence of the auditor in accordance with Section 107(3) Sentence 2 AktG, and obtained and assessed a corresponding declaration of independence. In line with a resolution by the Supervisory Board, the auditor performs no consultancy services for the Group. Following approval by the Annual General Meeting, the Supervisory Board issued the mandate to the auditor and set the audit fee. The main focal points of the audits of the annual and consolidated financial statements for 2016 were also coordinated between the Supervisory Board and the auditor.

The self-evaluation was performed on the basis of a detailed questionnaire and interviews, and the review of the efficiency of the Supervisory Board provided for in the German Corporate Governance Code was thus carried out.

## DEPENDENCY REPORT

The Management Board prepared a dependent company report for the reporting year in accordance with Section 312(3) AktG. This report was audited by Ebner Stolz GmbH & Co. KG, Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft" and issued with an unqualified audit opinion with the following wording: "In accordance with our duly performed audit and assessment, we confirm that 1) the factual statements in the report are correct and that 2) the amounts paid by the Companies with respect to the legal transactions listed in the report were not unduly high." The dependent company report was submitted to the Supervisory Board, which subjected it and the legal transactions and measures listed therein to an independent review pursuant to Section 314(2) AktG. This did not give rise to any objections. At the meeting on March 24, 2017, the auditor reported on the main findings of the audit.

## ANNUAL FINANCIAL STATEMENTS

Ebner Stolz GmbH & Co. KG, Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft audited the annual financial statements and consolidated financial statements to December 31, 2016 as well as the management report and Group management report for the fiscal year 2016 of PVA TePla AG. The auditor found that the present annual and



consolidated financial statements were prepared in compliance with the German Commercial Code (HGB) and the International Financial Reporting Standards (IFRS) and gave an accurate reflection of the actual net assets, financial position, and income situation. The annual and consolidated financial statements along with the combined management report and Group management report received an unqualified audit opinion. The financial statements together with the management reports and the respective audit reports by the auditor were sent to each member of the Supervisory Board. The Supervisory Board assessed them and discussed them in detail at the meeting on March 24, 2017. At this meeting, the auditor reported on the main findings of the audit. We examined the annual financial statements, the management report and the auditor's statement on the situation assessment by the Management Board as well as the recommendation for use of retained earnings, the consolidated financial statements and the Group management report. There were no objections. We therefore approve the results of the audit of the financial statements. We approve the annual financial statements and consolidated financial statements prepared by the Management Board. The annual financial statements are thus adopted in accordance with Section 172 Sentence 1 AktG. We are in agreement with the management reports and in particular the assessment of the future development of the Company. The Supervisory Board endorses the Management Board's proposal to carry over the reported unappropriated surplus to new account.

## COMPOSITION OF THE SUPERVISORY BOARD AND MANAGEMENT BOARD

There were no changes to the makeup of the Supervisory Board and the Management Board in the reporting period.

## THANKS

The Supervisory Board wishes to thank the management and all employees for their dedicated work in the past fiscal year.

Wettenberg, March 2017

On behalf of the Supervisory Board



Alexander von Witzleben  
Chairman of the Supervisory Board of PVA TePla AG

# PVA TePla on Capital Markets

## EQUITY MARKET – STOCK EXCHANGE

The year 2016 was an extremely turbulent one for stock markets and offered plenty of surprises. The global economy, commodity prices, political risks and central banks' monetary policy caused a considerable amount of uncertainty and volatility. Two major events dominated the political landscape in 2016 – the British referendum on Brexit and the election of Donald Trump as President of the USA. Although the outcome of these political decisions came as a surprise, they only triggered short-term fluctuation in share prices. The historically weak start to the year on stock markets was also unexpected. Concerns about the Chinese economy unsettled investors at the beginning of 2016, with the DAX recording its weakest start to the year since 1988. Despite recovering temporarily during the

course of the year, the DAX still lagged by 1% up to the end of November compared to the year as whole. However, thanks to the European Central Bank's decision at the beginning of December to continue its ultra-expansionary monetary policy, the DAX was able to make up for its losses and even post gains, which continued into 2017. Hopes for an extensive economic program by the US President-elect Donald Trump also fueled the positive stock market trend. In December 2016, the anticipated rally in stock market prices materialized, with the DAX closing the year 6.87% higher. The MDAX gained 6.81% while the TecDAX shed 1.04% in 2016. The USA registered sharper share price gains, with the Dow Jones Index in the lead, closing the year 13.42% higher, followed by the S&P 500 Index, which was up 9.54%.

PVA TePla shares key figures		2016	2015
Earnings per share (EPS)	EUR	0.13	-0.07
Annual high	EUR	3.13	2.81
Annual low	EUR	2.28	1.46
Closing rate as of Dec. 31	EUR	2.28	2.48
Performance of PVA TePla shares	%	-8	+53
Performance of Technology All Share	%	0	+8
Performance of DAXSubs. Advanced Industrial Equipment	%	+16	+9
Number of shares at year-end	Mio.	21.75	21.75
Market capitalization at year-end	Mio. EUR	49.6	53.9

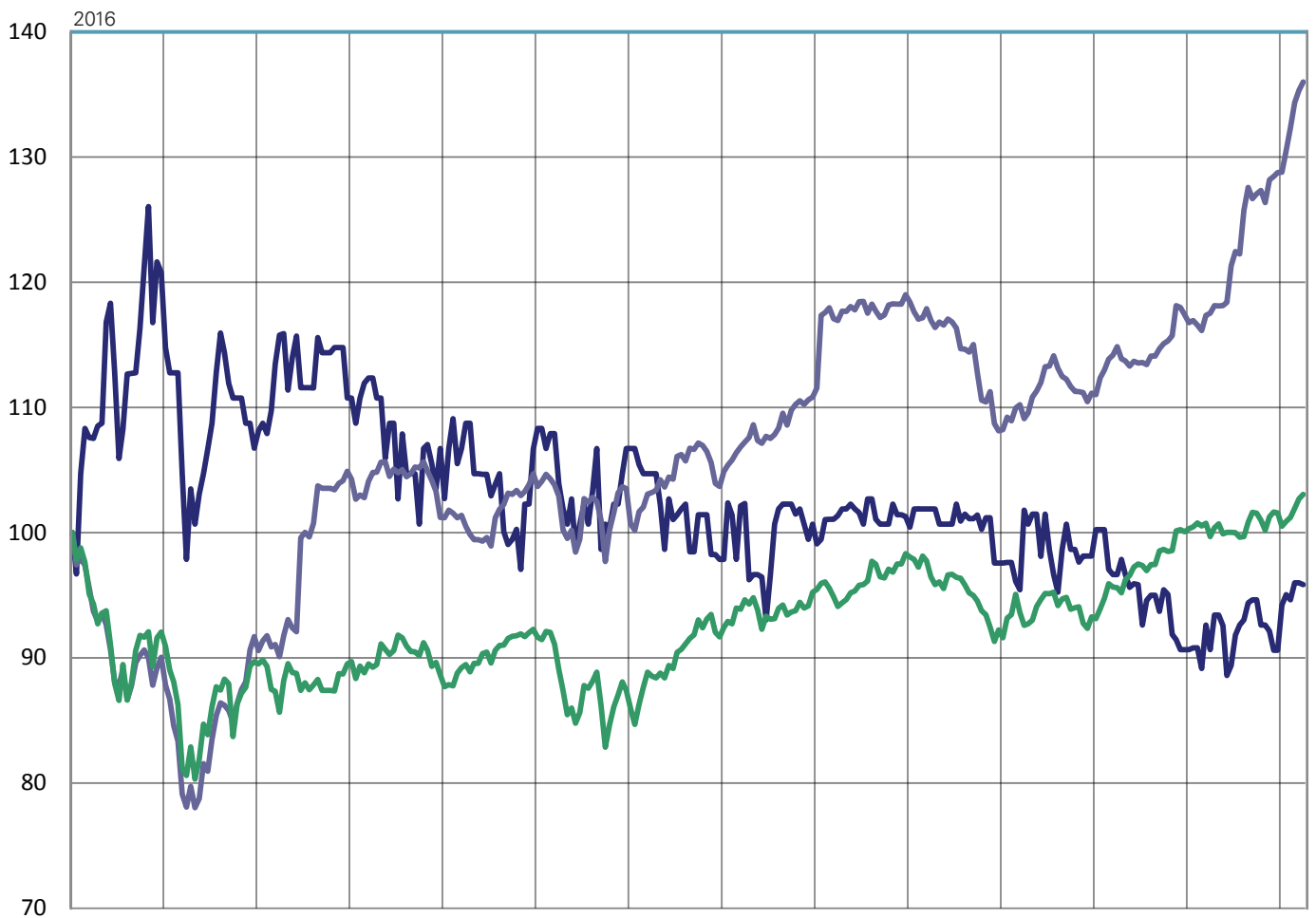
## DEVELOPMENT OF PVA TEPLA SHARES

PVA TePla AG's shares fell 8% in 2016. They closed the year at EUR 2.28 (prior year: EUR 2.48), with the share price almost recovering its losses to EUR 2.41 by mid-February 2017. The majority shareholder of PVA TePla, Peter Abel, increased his shareholding to 29% of the voting rights last year through PA Beteiligungsgesellschaft.

## COMMUNICATION WITH THE CAPITAL MARKET

Key topics of discussions with private and institutional investors were the long-term prospects in the markets serviced by the PVA TePla subsidiaries, the improvement in the cost structure and hence the results of operations and the technological development of products and services.

Performance of PVA TePla shares January 2016 – February 2017  
in % 1-day-interval



PVA TePla AG  
DAXSubs. Advanced Industrial Equipment  
Tec All Share

## ANNUAL GENERAL MEETING

The Annual General Meeting of PVA TePla AG was held at the Giessen Congress Center on June 14, 2016. The items on the agenda were passed with a large majority, and around 40% of shareholders were in attendance. Chief Executive Officer Peter Abel presented the key figures for the fiscal year 2015 as well as incoming orders which developed extremely well with a volume of EUR 101.5 million in 2015. For the first time since 2011, orders exceeded EUR 100 million once again. This was not expected at the beginning of 2015. "At the beginning of the year we anticipated a 25% increase, and at the end of the year it was more than 50%," commented Peter Abel.

Both the Industrial Systems and Semiconductor Systems divisions contributed to this strong increase. Two large-volume orders with terms of more than two years each had a particularly positive effect on this development.

Peter Abel then presented some examples of PVA TePla's new developments in mechanical engineering. He explained the components of a high-vacuum hot press using charts. It is Europe's largest high-vacuum heat treatment furnace with an integrated pressing unit to date. With its extremely high pressing force and equal power distribution and temperatures above 1,000 degrees, this system is suitable for components used for the liquefaction of natural gas, for example.

Management Board member Oliver Höfer, who is responsible for production and technology, gave an overview of the completed restructuring of the Group. As of January 1, 2015, PlaTeG GmbH and Munich Metrology GmbH were merged with the operating units PVA IVS and PVA MPS.

As a result of the reorganization, the number of subsidiaries and accounts has fallen considerably and the corporate structure has been streamlined to one appropriate for a medium-sized company. In addition, various process optimizations have been initiated in operational and administrative areas to reduce administrative costs.

Oliver Höfer explained the organizational models to pool resources and personnel that are being used in human resources. The internal and project-related exchange of employees creates positive synergies and assists in the sharing of ideas between various Group divisions.

CFO Henning Döring gave an outline of the ongoing cost-saving measures. For example, the production facility in Denmark was closed on account of profitability-related concerns. At the end of 2015, the PVA TePla Group had a total of 361 employees.

Thanks to the streamlining of the Group structure, operating profit was positive again in 2015, and administrative savings of EUR 2.4 million were achieved. The current objective is to reduce the PVA TePla Group's break-even sales revenues to less than EUR 70 million through various restructuring measures.

Chief Executive Officer Peter Abel then gave an outlook for the full year 2016.

### Shareholding structure

Free float	71.0 %
PA Beteiligungsgesellschaft	29.0 %





## GROUP MANAGEMENT REPORT

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This financial report comprises the combined Management Report, the consolidated financial statements and the Group Notes. Moreover, the Company Management Declaration and the remuneration report available at <http://www.pvatepla.com/en/pva-tepla-service/investor-relations/corporate-governance> form an integral part of this combined Management Report.



# Group Management Report

## 1. BASIC PRINCIPLES OF THE GROUP

### Business Activities

The PVA TePla Group, headquartered in Wettenberg, Germany, offers its customers systems for the production and refinement of high-quality materials, which are processed under high temperature, vacuum and under high pressure conditions and in plasma, for example.

The market for these systems is closely tied to the latest developments in materials and surface treatment technologies, such as silicon wafer technology for microelectronics, silicon carbide wafer technology for high performance electronics and wafer technology for mono or multicrystalline solar cells in the Crystal Growing Systems business unit.

In the Industrial Systems business unit, this involves technologies for structural materials for aviation and aerospace, energy technology for hard metal tools and in the Plasma Systems business unit production technologies for microsensors (MEMS, Micro Electromechanical Systems) and luminous light sources made from semiconductor diodes (HB LED, High Brightness Light Emitting Diodes) and ultrathin wafer production technology.

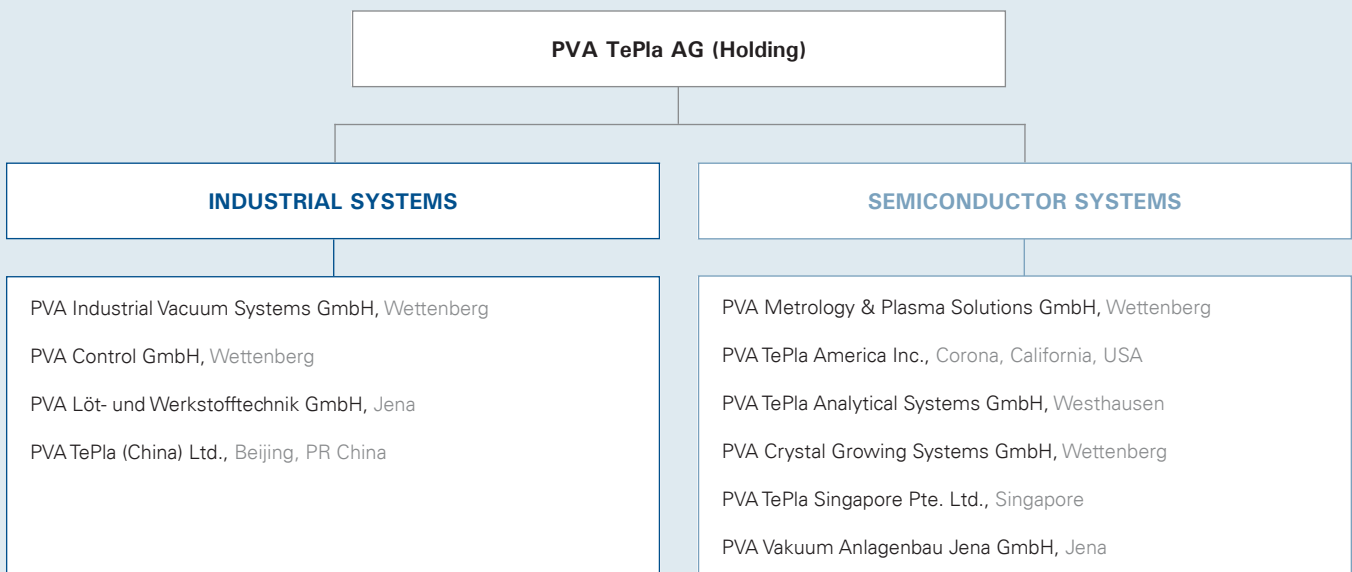
In the Coating Systems business unit, technology for hydrophobic layers on electronic components and for plastics in medical technology is used

and the Analysis Systems business unit includes technology for nondestructive inspection of wafers using lasers and complex semiconductor components with ultrasound microscopy.

High-tech materials and their surfaces will undoubtedly depend on production processes under vacuum and high temperature conditions and in plasma in future, which means the product range and technologies of the PVA TePla Group.

### Reporting Segments

The PVA TePla Group is divided into two divisions: Industrial Systems and Semiconductor Systems. The chart provides an overview of the organizational units and how subsidiaries are allocated to the divisions:



## CHANGES TO THE REPORTING SEGMENTS

There were no changes to the reporting structure in 2016, compared to the consolidated financial statements as of December 31, 2015.

### Corporate Management

Controlling in the PVA TePla Group is based on operational performance indicators related to the income statement (consolidated sales revenues, gross result (gross margin), operating result (EBIT (EBIT margin)), net profit/loss for the period and segment profit/loss), balance sheet figures such as the equity ratio and liquidity performance indicators such as liquidity position, the net financial position and liquidity reserves.

Most significant financial performance indicators for managing results of operations are consolidated sales revenues, gross result and the operating result (EBIT) and the resulting EBIT margin. These figures are calculated on a monthly basis at segment level and represent an essential internal management tool.

The order situation is determined on a monthly basis using the relevant incoming orders and order backlog figures at segment level. The resulting book-to-bill ratio shows the ratio of incoming orders to sales revenues in a given period. A book-to-bill ratio above 1 indicates that incoming orders are higher than sales revenues, meaning a future increase in sales revenues can be expected. If the book-to-bill ratio is below 1, it means a decline in sales revenues is to be expected.

In addition to the monitoring of customers' and suppliers' payment targets, liquidity and liquidity reserves in the form of credit and guarantee lines are ongoing monitored and a rolling cash flow forecast is calculated on a monthly basis in order to manage the liquidity situation. The net financial position, the balance of current and non-current financial liabilities and cash and cash equivalents, is reported on a quarterly basis. The Group-wide and segment-related weighted average cost of capital (WACC) and average cost of debt are reviewed on an annual basis.

### PVA TePla – Performance Figures

Profitability	Orders	Liquidity
Sales revenues	Incoming orders	Net liquidity and liquidity reserves
Gross result (=sales revenue less cost of sales)	Book-to-bill ratio (ratio of incoming orders to sales revenues in a given period)	Net financial position (balance of current and noncurrent financial liabilities and cash)
Operating profit/loss (EBIT)	Order backlog	

### Research and Development

The cost of research and development (R&D) totaled EUR 3.0 million for the Group in the reporting period (prior year: EUR 3.2 million). It should be noted here that the PVA TePla Group almost exclusively carries out the further development of products and processes as part of customer orders, so that the related expenditures are not included in the cost of research and development. A selection of R&D activities in the individual divisions is described in the section below:

One focus of the R&D activities in the [Industrial Systems division](#) was the further optimization of hot-press vacuum process systems. The primary area of focus was the optimization of hydraulic control and regulation. The established hydraulics allow the pressing force and path of the hydraulic cylinder to be regulated with the highest level of precision. That makes completely new applications possible and creates opportunities for PVA TePla's customers. Precise path measurement in the micrometer range can precisely resolve material deformities, which further significantly increases process security with regard to the diffusion bonding of metallic components.

The primary focus of process development in the Industrial Systems division was the further development of the diffusion bonding process. The main aim was the qualification of the process for various materials. Diffusion bonding of a number of steel materials was developed, along with diffusion bonding of copper and molybdenum materials, and diffusion bonding of high-alloy aluminum materials.

With regard to applications, process parameters for diffusion bonding of large high-pressure stainless steel plate heat exchangers and hot runners for injection molding technology were developed. The joined components have the highest possible strength, approaching the strength of the base material. Diffusion bonding therefore represents a significant improvement over conventional joining processes, such as brazing, and, in particular, allows for new applications with components that are subject to extreme mechanical pressure and corrosion.

As well as diffusion bonding, initial promising trials of power-assisted high-temperature brazing were conducted using the hot press. This process variant primarily offers advantages when working with large format, multi-layered sheet materials. The pressurization of the brazing configuration using machine-induced pressing force allows the material deformities that often result from conventional brazing to be eliminated as a result of residual stress relaxation (relaxation of the stresses present in a material), thereby ensuring reliable brazing. In the context of an industrial application, a tempered injection mold was realized in a hot press using power-assisted vacuum brazing.

In the Plasma Nitriding Systems business unit (PlaTeG), the development of rapid cooling for large process systems was developed further. That development serves the purpose of reduced process times for plasma nitriding of high batch masses in the 5,000 kg range. This rapid cooling process allowed the cooling period to be reduced by 50% in the scope of a customer contract. That further significantly increased the efficiency of the machine.

In the [Semiconductor Systems division](#), in the Ultra-sound Analytical Systems business unit, a six-axis robot used in the further automation of quality control processes for electronic components was developed and delivered to customers worldwide. The system is able to analyze imagery automatically and is linked to the factory's material tracking system. Equipped with a four-channel system for rapid data acquisition, the devices only use a small amount of space in expensive clean room environments thanks to their optimal compact layout using six-axis robots. The control software's new WINSAM 8 user interface has been further developed, with many new error analysis and quality control functions added.

In the VPD Analysis business unit (**v**apor **p**hase **d**ecomposition is a sample preparation method in which metallic contamination can be detected on silicon samples) an important task is guaranteeing the stability and reliability of its systems in the production process. The systems are installed as part of production lines that qualify highly complex products. The systems work around the clock, meaning that failures can lead to delays. As part of a development project, the feasibility study for a special system to monitor dosing equipment was all but completed in the first half of 2016. Etching is integrated into the processes to obtain contamination information from deeper layers, in other words down to several thousand atomic layers. An ozone module developed for this purpose was certified as SEMI S2 and delivered to customers in fall 2016 (the SEMI S2 standard defines the minimum safety requirements for products used in semiconductor production). Thanks to excellent etching rate distribution, ozone etching enables better quantification in many processes, compared to acid-based processes.

In the Plasma Systems business unit, the automation of the flagship product, the 80 Plus HighSpeed plasma cleaning system, was further developed in order to achieve additional increases in production stability and machine availability, and to guarantee a low cost of ownership. The 80 Plus HighSpeed is a volume production tool and has been set up for maximum productivity. This type of system is used to treat substrate streaks in the back-end (chip packaging) before wire bonding and molding using plasma. The system is SEMI S2 certified.

## Disclosures Relevant to the Right to Take Over

The required disclosures related to the right to take over pursuant to Section 315 (4) of the German Commercial Code (HGB) are provided below.

## COMPOSITION OF SHARE CAPITAL

As of 31 December 2016, the issued share capital of PVA TePla AG consisted of 21,749,988 individual no-par bearer shares with a nominal value of EUR 1.00 each.

#### RESTRICTIONS WHICH AFFECT VOTING RIGHTS OR THE SALE /TRANSFERABILITY OF SHARES

There are no restrictions of voting rights or the sale/transferability of shares.

#### SHAREHOLDINGS THAT EXCEED 10% OF VOTING RIGHT

According to disclosures filed with the Company, PA Beteiligungsgesellschaft mbH, Wettenberg held a share of voting rights as of 31 December 2016, above the 10% threshold.

#### SHARES WITH SPECIAL RIGHTS THAT IMPART THE RIGHT OF CONTROL

There were and are no shares with special rights that impart the right of control.

#### CONTROL OF VOTING RIGHTS BY EMPLOYEES HOLDING SHARES IN THE COMPANY

There is no control of voting rights by employees holding shares in the Company.

#### APPOINTMENT AND REVOCATION OF MANAGEMENT BOARD MEMBERS

The appointment of PVA TePla AG Management Board members is done in accordance with Section 84 of the German Stock Corporation Act (AktG), and Section 6, Article 2 of the PVA TePla AG Articles of Incorporation. The following is established therein:

- » Article 2: The appointment of members of the Management Board, the revocation of their appointment as well as the concluding, the amendment and the termination of contracts of employment with members of the Management Board are affected by the Supervisory Board. The same applies to the appointment of a member of the Management Board as chairman or as spokesman of the Management Board.

#### AUTHORITY OF THE MANAGEMENT BOARD TO ISSUE OR REPURCHASE SHARES

As of December 31, 2016, the Management Board is authorized per Annual General Meeting resolution to issue new shares from authorized capital in the amount of EUR 10,874,994.00 through June 30, 2017. The Management Board is authorized per Annual General Meeting resolution to buy back shares amounting to 10% of authorized capital by June 18, 2018.

#### COMPANY AGREEMENTS CONTINGENT UPON A CHANGE OF CONTROL AS THE RESULT OF A TAKEOVER OFFER

The current master agreements with the banks are based on a largely unchanged shareholder structure and, in case of a change in control, calls for renegotiation or, in one case, specifies that the bank has a right to cancellation. The provisions for a publicly funded research and development project also include a special right to cancellation in case of a change in control. There are no other agreements that are contingent upon a change of control as the result of a takeover offer.

#### CHANGE OF CONTROL PROVISION

In the event of a change of control, Executive Board members receive benefits that should not exceed 150% of the severance payment cap (value of two years' compensation including benefits).

#### Company Management Declaration (Section 289a German Commercial Code)

The Company Management Declaration pursuant to Section 289a of the German Commercial Code (HGB) and the remuneration report are permanently available as part of the Corporate Governance Report on the Website of PVA TePla AG in the section "Investor Relations – Corporate Governance" or directly under the following link: [www.pva-tepla.com/pva-tepla-service/investor-relations/corporate-governance](http://www.pva-tepla.com/pva-tepla-service/investor-relations/corporate-governance). The remuneration report describes the basics of the remuneration system pursuant to Section 289 no. 5 HGB and also forms an integral part of the 2016 consolidated financial statements of PVA TePla AG.

## Dependency Report

In 2016, PA Beteiligungsgesellschaft mbH held the majority of votes at the Annual General Meeting of PVA TePla AG. The Management Board of PVA TePla AG therefore prepared a dependency report for fiscal year 2016 pursuant to Section 312 of the AktG.

The 2016 report includes the following final statement by the Management Board: "We declare that according to the information known to us at this time, our Company engaged in legal transactions with dependent companies pursuant to Section 312 of the AktG and received appropriate compensation in all cases. The Company did not take or fail to take any reportable measures."

## 2. ECONOMIC REPORT

### Macroeconomic and Sector Environment

#### MACROECONOMIC ENVIRONMENT

The growth of the global economy was modest again in 2016. In many countries, overall economic growth continued to be driven by consumption. Global trade and investment were weak. The structural transformation of China, regional wars and conflicts, terrorist attacks, the structural problems of individual EU member states, over-indebted companies in emerging markets, the United Kingdom's vote to leave the EU and the U.S. election all had a negative effect on the outlook for growth and reduced the willingness of economic actors to invest. In 2016, the inflation-adjusted rate of global growth was 3.1%, compared to 3.2% in 2015. In the industrialized countries, growth slowed significantly from 2.1% in 2015 to 1.6% in 2016. Meanwhile, in the emerging and developing countries, the rate of growth is expected to remain at its level from the prior year, 4.1%. Below is a brief outline of the economic development in the PVA TePla Group's key regions:

- » In 2016 the **German economy** achieved solid growth. The overall average growth of its gross domestic product for the year was 1.9%, continuing the positive trend from the prior year. That growth was, in particular, driven by domestic consumption: Private consumption increased by 2.0%, while rise in public spending was even greater, at 4.2%. The growth of the German economy was also supported by investment. Investment in equipment was 1.7% higher than in the prior year. The growth in investment in buildings was even greater (3.1%). That reflects the positive situation in the labor market. The working population was 43.5 million, the highest figure since 1991. That represented a 1.0% increase, compared to the prior year.
- » The economy in the **Eurozone** recovered moderately during the course of 2016. It continued to be characterized by the significant heterogeneity of individual member states. The rate of real GDP growth is expected to increase to 1.7%. In particular, the economy benefited from the increase in private consumption, which was driven by the continued loose monetary policy of the ECB and a further decline in unemployment. There was also a slight upturn in investment in equipment. However, the rate of growth was low. Exports continued to have some tailwind thanks to the comparatively weak EUR exchange rate.
- » In **Japan**, growth slowed slightly in 2016. A GDP growth rate of 0.9% is expected, following growth of 1.2% in the prior year. There was an upturn in private consumption in 2016. Meanwhile, weak economic development in PR China had a negative effect on the export economy.
- » **Asia** excluding Japan almost matched the prior year (6.1%) with GDP growth of 6.0%.
- » The economy in **PR China** was less dynamic in 2016, but growth remained at the self-imposed level of 6.7%. Following a disappointing start to the year, declining growth in gross investment in plant and equipment was offset by government investment.
- » The **US economy** displayed weaker development in 2016. In the presidential election year, the growth rate of 1.6% was a whole percentage point lower than in the

prior year. Weak investment by companies, in particular, had a dampening effect – not only in the oil and gas industry, but also in large parts of the industrial sector. The overall economic situation brightened somewhat at the end of the year.

- » In 2016, **Brazil and Russia**, which depend on exports of raw materials, were in recession.
- » In **India**, the real rate of growth is expected to remain high at 6.6% (fiscal year 2016/2017), which represents a decrease of one percentage point compared to the prior year. In November 2016, the Indian government declared 500 and 1,000 rupee notes invalid in order to combat corruption and the black market. That had a negative effect on consumption throughout the country.

## SECTOR DEVELOPMENTS

The PVA TePla Group faced difficult development in the markets of particular relevance to the Group in the past fiscal year. There were no significant increases to capacities in the hard metal market in Europe and Asia. Investment in the global semiconductor market decreased slightly.

- » German machine production stagnated in 2016. According to provisional figures published by the Federal Statistical Office (Statistisches Bundesamt), the inflation-adjusted rate of production growth was 0%. That confirmed the forecast issued by the German Engineering Federation (Verband Deutscher Maschinen- und Anlagenbau – VDMA). According to an estimate by VDMA economists, last year non-adjusted sales revenue amounted to EUR 221 billion. Exports of machines and plant amounted to an estimated EUR 156 billion. That was approximately on a par with the prior year. Deliveries to the member countries of the European Union increased. That increase, and the growth in exports to a number of smaller countries, compensated for the decline in exports to numerous developing and emerging countries. The greatest decrease was in

exports to China. It is still not clear whether exports to the USA were above or below the prior year's level. In 2016, there was a real-terms decrease of 2% in incoming orders, compared to the prior year. Domestic incoming orders decreased by 1%, while foreign incoming orders fell by 3% compared to the prior year. That figure is the result of significant divergence. While incoming orders from euro countries were 8% lower than in the prior year, incoming orders from non-euro countries decreased by 1%.

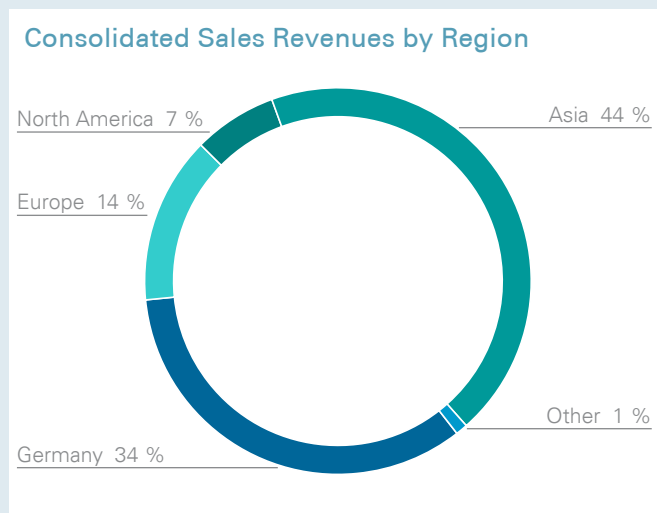
- » Worldwide, revenue in the microelectronics sector stagnated, totaling almost USD 335 billion at the end of 2016. According to the German Electrical and Electronic Manufacturers' Association (Zentralverband Elektrotechnik- und Elektronikindustrie – ZVEI), the semiconductor sector has developed into a mature market. Growth rates in that market primarily depend on new applications and economic development. The average annual rate of growth since 2010 has been just less than 2%. However, the backend market, which is important to PVA TePla's plasma systems for the processing of electronic components into modules, grew by 3.9%. The sensor/actuator semiconductor product segment achieved the greatest global growth in 2016, at a rate of more than 20%. This sector will continue to see the strongest growth in coming years. Almost half of the sensors/actuators currently sold are supplied by companies based in Europe. However, in 2016 it was still the smallest segment in the global semiconductor market, accounting for revenue of just less than USD 11 billion. With respective market shares of 10%, Japan and the EMEA (Europe, Middle East and Africa) region are the regions with the lowest revenue in the semiconductor market. The Asia/Pacific region, which has a global market share of more than 60%, continues to be the region with the highest revenue, with China now accounting for 32 percentage points, or half, of that figure. The regions with the second highest revenue, North and South America, decreased their market share slightly compared to the prior year, to 19%.



## Business Development

### SALES REVENUES

The PVA TePla Group generated consolidated sales revenues of EUR 86.6 million (prior year: EUR 71.5 million), which were significantly higher than in the prior year as a result of the high order backlog at the beginning of 2016. Germany accounted for 34% of consolidated sales revenues (prior year: 21%). The Asian market continued to be very important, with the region accounting for 44% of total sales revenues (prior year: 49%). A total of 14% (prior year: 16%) of sales revenues were generated in other European countries. North America accounted for 7% (prior year: 9%) of total sales revenues. Other regions contributed 1% to revenues (prior year: 5%).

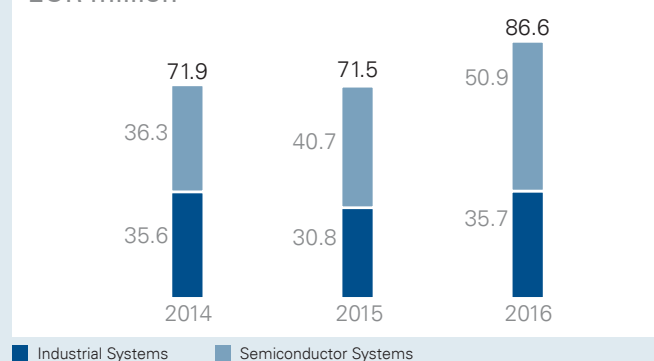


The section below provides a detailed description of sales revenues generated by the Industrial Systems and Semiconductor Systems divisions.

The **Industrial Systems division** achieved sales revenues totaling EUR 35.7 million (prior year: EUR 30.8 million). It accounted for 41% of the total sales revenues for the Group. Sinter systems for hard metal production accounted for around a third of system sales in the Vacuum Systems business unit. The remaining sales revenue was almost equally distributed across the remaining product portfolio, e.g. systems for the vacuum brazing of metals and ceramics and plasma nitriding systems used to harden steel surfaces.

Sales revenues in the **Semiconductor Systems division** amounted to EUR 50.9 million in 2016 (prior year: EUR 40.7 million), thereby accounting for 59% of the total sales revenues for the PVA TePla Group. Crystal growing systems for the semiconductor industry account for approximately a third of sales revenues in this division. The remaining sales revenue is generated by the Metrology and Plasma Systems business unit.

Consolidated Sales Revenues by Division  
EUR million



### INCOMING ORDERS

At EUR 70.5 million, total incoming orders for the Group in fiscal year 2016 were below their level in the prior year (EUR 101.5 million). The book-to-bill ratio of 0.8 at Group level (prior year: 1.4) reflects this trend. Both the Industrial Systems and Semiconductor divisions were affected by the decrease. Both divisions are subject to the sometimes significant volatility of investment cycles in their sectors.

The **Industrial Systems division** received incoming orders totaling EUR 27.1 million (prior year: EUR 45.9 million), thereby accounting for 38% of total incoming orders. Incoming orders in 2016 were lower than in 2015. That was primarily due to a decrease in orders for hard-metal sintering systems. All other business units achieved a satisfactory level of incoming orders. A total of 84% of the orders for vacuum systems came from abroad, with Asian customers accounting for 73% of all orders.

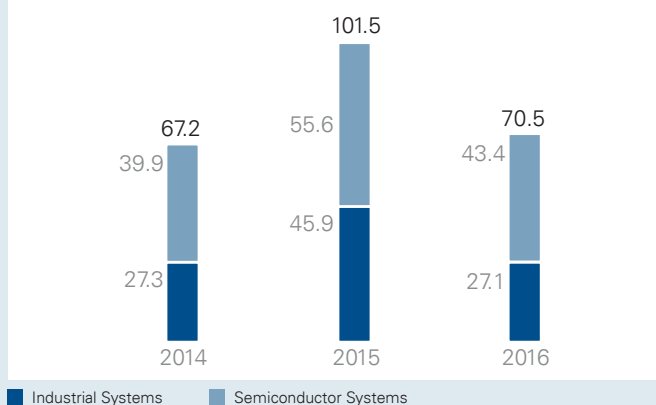
In 2016, the **Semiconductor Systems division** received incoming orders totaling EUR 43.4 million (prior year: EUR 55.6 million), accounting for 62% of the PVA TePla Group's



total incoming orders. It should be taken into account that a large order for the delivery of crystal growing systems was received in 2015. No comparable order was planned for 2016. All the business areas – crystal growing, plasma and analysis systems – achieved a good level of incoming orders.

### Order Income by Division

EUR million

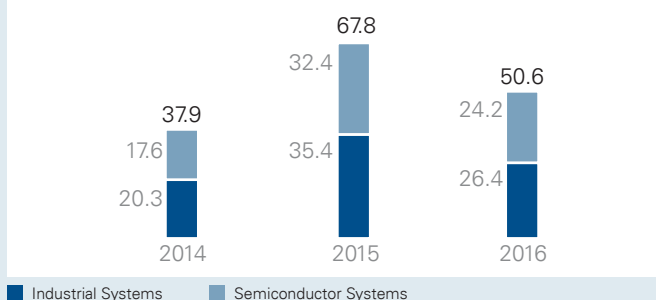


### ORDER BACKLOG

The PVA TePla Group's order backlog is reported after deducting sales revenues previously recognized applying the percentage of completion method (PoC). Order backlog for the Group totaled EUR 50.6 million as of December 31, 2016 (prior year: EUR 67.8 million). The order backlog in the Industrial Systems division as of December 31, 2016 stood at EUR 26.4 million (prior year: EUR 35.4 million). The order backlog of the Semiconductor Systems division stood at EUR 24.2 million (prior year: EUR 32.4 million).

### Order Backlog by Division

EUR million



### PRODUCTION

In 2016, systems production and contract processing were performed in Germany at the Wetttemberg, Westhausen and Jena locations. The production location outside Germany is Corona in the United States. Vertical integration remained low across all areas. Only a small number of parts are manufactured in-house. This means material costs are relatively high in percentage terms, but allows for rapid and flexible adjustment of production capacity as necessary to meet changes in demand when the level of incoming orders fluctuates.

In 2016, production capacities at the Jena and Wetttemberg, Germany, locations were fully utilized owing to the use of flexitime models.

### Position

### RESULTS OF OPERATIONS

In 2016, operating profit (EBIT) amounted to EUR 3.9 million (prior year: EUR 0.1 million), thereby meeting the forecast published at the beginning of the year 2016 in the upper target range of EUR 2 million and EUR 4 million. The consolidated net result for the period totaled EUR 2.9 million (prior year: EUR -1.4 million), and was positive for the first time since 2012. The EBIT margin amounted to 4.5% (prior year: 0.1%). The return on sales was 3.4% (prior year: -2.0%).

Based on consolidated sales revenues of EUR 86.6 million (prior year: EUR 71.5 million), gross profit amounted to EUR 20.4 million (prior year: EUR 16.7 million). Sales revenues were EUR 15.1 million (21%) higher than in the prior year as a result of the significant increase in incoming orders for crystal growing systems in the Semiconductor Systems division. The gross margin of 23.6% was slightly higher than last year's figure (23.3%). The gross result was negatively impacted by costs of EUR 0.6 million relating to the relocation of the subsidiary PVA Metrology and Plasma Solutions from Kirchheim, Germany to Wetttemberg, Germany, and increased warranty and subsequent costs of EUR 0.6 million in the Industrial Systems division. That was not only offset by the overall increase in sales revenues in the Semiconductor Systems division, but also, in particular, by increased sales revenues from high-margin systems, which led to a disproportionate increase in the gross margin in this division.

Selling and distributing expenses of EUR 8.9 million increased by EUR 0.8 million compared to the prior year (EUR 8.1 million) due to higher sales commissions resulting from the increase in sales revenues, and additional expenses for sales employees. Despite the increase in sales revenues and severance payments of EUR 0.1 million, administrative expenses of EUR 5.8 million (prior year EUR 5.8 million) remained stable at the prior year's level. The administrative cost ratio therefore decreased to 6.7% (prior year: 8.1%). R&D costs of EUR 3.0 million (prior year: EUR 3.2 million) were slightly lower than in the prior year and primarily consisted of development project expenses in the plasma and metrology systems business units. The net balance of other operating expenses and income of EUR 1.2 million (prior year: EUR 0.6 million) was higher than in the prior year. Other operating income of EUR 2.8 million (prior year: EUR 2.4 million) predominantly included income from grants in the context of R&D projects (EUR 0.9 million, prior year: EUR 0.3 million), income from exchange rate differences (EUR 0.7 million, prior year: 0.4 million) and income from the release of provisions (EUR 0.3 million, prior year: EUR 0.4 million). Other operating expenses of EUR 1.6 million (prior year: EUR 1.8 million) were lower than in the prior year and primarily related to expenses from exchange rate differences (EUR 0.8 million, prior year: 0.7 million) and specific valuation allowances for trade receivables (EUR 0.1 million, prior year: 0.2 million).

The Industrial Systems division achieved an operating result (EBIT) of EUR -0.2 million (prior year: EUR 2.6 million) as a result of increased warranty costs and subsequent costs. In the Semiconductor Systems division, the increase in sales revenues and the shift towards higher-margin orders resulted in an operating result (EBIT) of EUR 6.7 million (prior year: EUR -0.5 million). "Holding costs" increased to EUR 2.6 million (prior year: EUR 2.0 million), particularly as a result of increased bonuses paid to Management Board members. The holding costs include expenses which are not directly related to the Group's operating performance and do not involve service functions.

The net balance of interest income and interest expenses was EUR -0.8 million (prior year: EUR -0.7 million), including EUR -0.3 million due to the discounting of pension provisions and EUR -0.1 million relating to the deferral of payments with an effect on interest in the scope of the syndicated loan contract. The net result before tax amounted to EUR 3.0 million (prior year: EUR -0.6 million) and the consolidated net result amounted to EUR 2.9 million (prior

year: EUR -1.4 million). Income taxes, which totaled EUR 0.1 million (prior year: EUR 0.9 million), comprised current tax expenses/tax refunds of EUR -0.1 million (prior year: EUR +0.2 million) and deferred tax expenses of EUR -0.02 million (prior year: EUR -1.1 million).

#### Comparison of Results of Operations with Forecast for 2016

For fiscal year 2016, the PVA TePla Group forecast sales revenues in the divisions in the order of EUR 40 – 45 million, consolidated sales revenues of between EUR 80 million and EUR 90 million, a gross margin of 24% and an operating result (EBIT) of between EUR 2 million and EUR 4 million. This forecast was supported by an order backlog of EUR 67.8 million on December 31, 2015 and the assumption that anticipated incoming orders in the first half of 2016 would generate sales revenues and earnings. Sales revenues in the Industrial Systems division were at EUR 35.7 million due to order shifts, while in the Semiconductor Systems division at EUR 50.9 million due to higher incoming orders. Consolidated sales revenues of EUR 86.6 million, a gross margin of 23.6% and an operating result (EBIT) of EUR 3.9 million mean that the forecast for the group was fulfilled.

#### FINANCIAL POSITION

##### Capital Structure

As of the reporting date, the PVA TePla Group reported a net financial position (balance of cash and cash equivalents and current and non-current financial liabilities) of EUR -8.9 million (prior year: EUR -3.4 million). Compared to total assets, the net debt ratio is therefore 9.4% (prior year: 3.8%).

A consortium loan agreement for EUR 7.5 million mixed line (cash and guaranteed lines) and EUR 27.5 million, as well as an increase option for additional guaranteed lines of EUR 20 million with a term of 36 months was signed in August 2015. EUR 2.7 million (prior year: EUR 4.5 million) of the cash lines and EUR 19.3 million (prior year: EUR 23.7 million) of the guaranteed lines had been utilized as of the reporting date. The Company still also has a credit line of EUR 4.3 million secured by charges on land and drawn at the reporting date, which will decline by EUR 0.3 million on schedule every six months until December 2022.

## Investments

At EUR 0.8 million (prior year: EUR 2.1 million), the investment volume in 2016 was lower than in the prior year. These investments were mainly attributable to plant and office equipment.

## Liquidity

Operating cash flow was negative in 2016 at EUR -4.4 million (prior year: EUR +5.4 million), due to the high capital tie-up and the pre-financing of the order backlog. Operating cash flow fluctuates heavily from one reporting date to the next in the Vacuum Systems and Crystal Growing Systems business units due to the project structure of orders and methods of payment. We receive considerable advance payments at the beginning of a project, which influence net cash flow positively if there are large orders. Cash flow is negative during order processing, whereas near the delivery date, the remaining amount due is paid, except for a small residual installment.

Due to the extent of the investment measures described above, cash flow from investing activities amounted to EUR -0.6 million (prior year: EUR -1.6 million). Cash flow from financing activities amounted to EUR +1.0 million (prior year: EUR -3.3 million) and, in addition to the regularly scheduled repayments of long- and short-term loans of EUR 0.8 million, includes short term borrowing to finance the increase in working capital. Interest payments totaled EUR 0.6 million (prior year: EUR 0.5 million). Total cash flow in fiscal year 2016 including exchange rate differences amounted to EUR -4.0 million (prior year: EUR +0.6 million).

## ASSET POSITION

Total assets amounted to EUR 94.7 million as of December 31, 2016, EUR 6.4 million higher than the figure of EUR 88.3 million as of December 31, 2015 (prior year).

The value of property, plant and equipment decreased to EUR 28.8 million (prior year: EUR 30.8 million) due to depreciation and impairment losses on tenants' fixtures of EUR 0.2 million at the former registered address of PVA Metrology and Plasma Solutions in Kirchheim near Munich, Germany. Intangible assets remained unchanged at EUR

8.8 million (prior year: EUR 8.8 million). The value of derivative goodwill remains unchanged at EUR 7.8 million, which is tested for impairment at least once a year. Deferred tax assets of EUR 5.3 million (prior year: EUR 4.2 million) were higher than in the prior year due to the increase in deferrals on loss carryforwards and pension provisions. Overall, non-current assets totaled EUR 42.9 million, compared to EUR 43.8 million in the prior year.

Current assets increased by EUR 7.3 million to EUR 51.8 million (prior year: EUR 44.5 million). The greatest change was due to the EUR 4.4 million increase in future receivables from construction contracts to EUR 12.2 million (prior year: EUR 7.8 million) and the EUR 3.8 million increase in trade receivables to EUR 12.7 million, both due to the high order backlog at the beginning of the year and the resulting increase in sales revenues in the second half of 2016. The high level of incoming orders in the prior year also led to an increase of EUR 1.0 million in capital tied up in raw materials, consumables and supplies to EUR 9.2 million (prior year: EUR 8.2 million) and an increase of EUR 2.5 million in work in progress to EUR 11.2 million (prior year: EUR 8.7 million). Meanwhile, cash decreased by EUR 4.0 million to EUR 2.5 million (prior year: EUR 6.5 million). A group-wide cash pool was introduced in fiscal year 2016. It includes the companies in the USA and Singapore. The aim is to increase the daily availability of liquidity reserves and better optimize interest.

On the liabilities side of the balance sheet, non-current liabilities (including non-current provisions) rose by a small margin to EUR 21.8 million (prior year: EUR 20.9 million). The reported value of pension provisions increased by a small margin to EUR 14.3 million (prior year: EUR 13.3 million) due to the decrease in the discount rate. Non-current financial liabilities decreased to EUR 3.8 million (prior year: EUR 4.6 million) due to the scheduled repayment of bank loans. Deferred tax assets increased to EUR 2.8 million (prior year: EUR 1.9 million) mainly due to higher deferred taxes in connection with the accounting of long-term construction contracts pursuant to IAS 11. Other non-current provisions rose mainly as a result of planned additions to long-term remuneration components.

Current liabilities increased to EUR 32.6 million (prior year: EUR 29.4 million). Working capital was borrowed to pre-finance the order backlog, which led to an increase of EUR 2.3 million in current financial liabilities to EUR 7.6 million

(prior year: EUR 5.3 million). Advance payments received on orders decreased to EUR 10.5 million (prior year: EUR 12.7 million). It should be noted that only payments received at the inception of the order or partial payments that do not correspond to the progress of completion are presented separately as advance payments. Otherwise they are netted against construction contracts and reported under coming receivables on construction contracts (asset) or under obligations on construction orders (liability).

Trade payables and obligations on construction contracts increased to EUR 4.9 million (prior year: EUR 3.2 million) and EUR 1.0 million (prior year: 0.5 million) respectively due to the increase in incoming orders and the resulting rise in the order volume. Accrued liabilities decreased slightly to EUR 4.7 million (prior year: EUR 5.0 million). Other current provisions increased by EUR 0.6 million to EUR 2.3 million (prior year: EUR 1.7 million) due to the increased provisions for warranty costs and subsequent costs.

Shareholders' equity increased to EUR 40.3 million (prior year: EUR 37.9 million) due to the consolidated net result of EUR 2.9 million (prior year: EUR -1.4 million), which was offset slightly by actuarial effects relating to pension provisions recognized directly in equity of EUR -0.7 million. Due to the higher total assets, the equity ratio decreased from 43.0% in the prior year to 42.5%.

## EMPLOYEES

The Group had 377 employees on the balance sheet date (prior year: 361 employees). The number of employees in the Industrial Systems division increased from 173 (as of December 31, 2015) to 182. Compared to the number of employees as of December 31, 2015 (160) the number of employees in the Semiconductor Systems division increased slightly to 164 (December 31, 2016). From a regional perspective, the largest share of employees by far is in Germany at 340 (prior year: 316). There were 21 employees in the USA at the end of 2016 (prior year: 27), while 16 people were employed in Asia (prior year: 18). In 2016, the

number of apprentices in PVA TePla Group amounted to 13 (prior year: 9). These young men and women were being trained in commercial or industrial professions.

## SUMMARY ASSESSMENT OF ECONOMIC DEVELOPMENT

PVA TePla can look back on a positive fiscal year which corresponded with the original forecasts. At EUR 86.6 million, sales revenues were significantly higher than in the prior year and operating profit of EUR 3.9 million was achieved, an improvement of EUR 3.8 million compared to the prior year. The gross margin improved slightly from 23.3% to 23.6%.

The incoming order situation in the past year was mixed. While incoming orders in the Semiconductor Systems division developed positively, incoming orders in the Industrial Systems decreased due to the weakness of the hard metals segment. As of December 31, 2016, the Group order backlog amounted to EUR 50.6 million. This order backlog will primarily contribute to sales revenues in 2017.

## 4. RISK, OPPORTUNITY AND FORECAST REPORT

### Risk and Opportunities Report

The divisions of the PVA TePla Group are exposed to an array of risks that are inextricably linked to corporate activities. Risk is understood to be the possibility of events or activities jeopardizing the ability of the Group or one of its divisions to reach its targets. At the same time, it is also important for the PVA TePla Group to identify opportunities for the Company, take advantage of these opportunities and reinforce the Group's competitive position. Risks and opportunities are not offset against one another. Risks and opportunities are presented as follows.

#### Assessment of probability of occurrence / Potential scale

Level		Probability of occurrence	
Improbable	0% <	Probability of occurrence	≤ 20%
Possible	20% <	Probability of occurrence	≤ 70%
Probable	70% <	Probability of occurrence	≤ 100%

Level		Potential scale	
Low	EUR 0 <	Scale	< EUR 500 thousand
Moderate	EUR 500 thousand ≤	Scale	< EUR 1.000 thousand
High		Scale	≥ EUR 1.000 thousand

Risks are assessed on the basis of probability of occurrence as either improbable, possible or probable, as well as in terms of the potential scale of the risk. The valuation of the potential scale refers to the operating result (EBIT) of the PVA TePla Group.

#### RISK AND OPPORTUNITIES STRATEGY

The risk and opportunity strategy is embedded in the corporate strategy and is designed to secure the continuation of the Company as a going concern and guarantee its further development. The resulting strategy assesses the risk and opportunities of business activities. In the core activities of the Company/the Group, we make a conscious decision to enter into limited and containable risks, if they make appropriate compensation likely or are inevitable. In some cases, we allocate the risks to other parties. This mainly includes concluding suitable insurance policies. This process is conducted in close cooperation with an experienced and specialized insurance broker. It is regularly reviewed for efficiency and optimized where necessary.

Other risks, which are not related to core and support processes, are avoided as far as possible. A "Risk Manual" has been made available to the members of the Management Board and employees, which includes instructions on

processes and a catalog of measures to safeguard appropriate and sustainable risk management. The manual details the concrete processes involved in risk management. It aims at the completeness of all risk-related activities and measures, i.e. the identification, assessment, controlling, reporting and monitoring of risks. Based on defined risk categories, risks at divisions, operating units as well as central units are identified and assessed according to their likelihood and potential damage.

#### RISK MANAGEMENT

Due to the organizational structure, risk management is carried out locally in the PVA TePla AG, in the subsidiaries and business processes. The Management Board members and Managing Directors are therefore responsible for central processes of the risk management system. The main objective of the risk management system is the early recognition of risks, in order to regularly provide the Management Board with up to date information on the current risk situation within PVA TePla. The Management determines the limits for the reporting structure. The duties of those in charge include developing and where necessary installing measures to prevent, mitigate and hedge against risks. The main risks as well as the implemented measures are regularly monitored.

The risk reports are regularly compiled and analyzed by central risk management and checked and discussed by the Management Board and Supervisory Board. In addition to regular reporting, a reporting system has been installed within the Group to immediately report the occurrence of unexpected risks. The system also includes an annual risk inventory, in which all of the risks relevant to the Group are reported and their relevance and possible effects assessed. Measures to reduce identified risk are defined and their implementation monitored.

The risk management system enables the Management Board to identify material risks at an early stage and to implement countermeasures. The key features of the risk management system described above are applied throughout the Group. As far as processes in financial disclosure are concerned, this means that identified risks are reviewed and assessed for their potential impact on disclosures in the respective financial reports. The idea is to provide important information at an early stage about potential changes in the fair value of assets and liabilities, possible impairments and important information to assess the necessity of forming and reversing provisions.

The adequacy and efficiency of the risk management system is reviewed on a regular basis at Management Board level and adjusted where necessary.

In 2007 an internal audit system was also established. An auditing firm was commissioned to set this up. The Management and Supervisory Boards agreed a medium-term plan, according to which all divisions of PVA TePla Group will be systematically audited.

#### INTERNAL CONTROL AND RISK MANAGEMENT SYSTEM FOR THE GROUP FINANCIAL DISCLOSURE PROCESS

The objective of the methods and measures we have put in place is to secure the assets of the Company and enhance operating efficiency. The internal control system that has been implemented is intended to ensure the reliability of accounting and reporting and to ensure compliance with internal rules as well as legal regulations and the Artic-

les of Association. We assure the adequate separation of functions and have also implemented appropriate spans of control. Furthermore, we make sure that responsibilities do not overlap and that tasks, expertise and responsibilities are pooled. We have also integrated controls into the workflows. Key components of these structures and controls include strict compliance with the system of checks and balances for all essential accounting processes, effective and precisely defined access rights for our IT systems, spot checks of employees at all levels by the respective superior, the use of uniform Group-wide reporting and forms, and control over the structural and process organization including the key operational Company processes within the scope of our certified quality management system. The essential features of the internal control system described above apply to all functional areas. In the accounting process, the implementation of the structural and process organization controls within the internal control system assures data integrity for the information that flows into financial reporting.

In addition to these controls implemented in the organization, the individual functional areas are also monitored by superiors and the internal audit department. The internal audit department is responsible for reviewing the functioning and effectiveness of the internal control system. In order to conduct the audit, the internal audit department has comprehensive information and review rights.

Consolidation and the Group accounting process are based on the decentralized preparation of financial statements by each of the Group companies. These financial statements are prepared and submitted according to uniform Group-wide standards and data formats. The central accounting system is connected with the ERP system through numerous interfaces.

The entire process is controlled and verified by the central Group Accounting and Controlling department. Here the data is also verified with regard to form and content. All of the employees involved in the process receive training at regular intervals. The parts of the internal control system relevant to financial reporting are reviewed in terms of effectiveness by the auditor as part of a risk-oriented approach.



In conclusion, we would like to point out that neither an internal control system nor a risk management system can ensure with absolute certainty that the related objectives will be achieved. Like all discretionary decisions, resolutions to implement suitable systems can also be incorrect in principle. Controls may not be adequate on a case by case basis due to simple errors or mistakes, or changes to environment variables may be recognized too late in spite of corresponding monitoring.

## DESCRIPTION OF RISKS AND OPPORTUNITIES

The PVA TePla Group differentiates between business opportunities and risks, operational opportunities and risks, and financial opportunities and risks. These constitute the pivotal areas for the Group. Opportunities and risks do not exist to the same extent in all sub-segments. The following generally provides a net presentation of risks (by measures).

### Business Opportunities and Risks

#### Assessment of the German Economy

Slight growth is expected in the German economy in 2017. The German Council of Economic Experts predicts inflation-adjusted GDP growth of 1.3%. That does not represent a slowing of the economic upturn, but rather a calendar effect – the upturn continues. That growth is largely driven by private consumption and residential construction. With an increase of 431,000 people, the rise in employment also continues. Gross investment in plant and equipment continues to increase moderately. Following an increase of 2.5% in 2016, a rise of just 2.0% is expected in 2017. In particular, no significant increase in investment in equipment is expected.

#### Assessment of the Global Economy

In 2017, the International Monetary Fund (IMF) expects moderate real global growth of 3.4%. Despite the continued slight slowing of growth in China to 6.5% (prior year: 6.7%), increased growth of 4.5% is forecast for the emerging and developing countries as a whole. The recovery of

raw material prices could realistically end the recessions in Russia and Brazil. India's overall economic development is also expected to improve again in fiscal year 2017/2018 due to structural reforms. A further slight increase in the growth rate, to 1.9%, is forecast for the industrialized countries. That increase will result from the expected recovery in the USA (+2.3%) and Canada (+1.9%), along with nearly constant growth in the Eurozone (+1.6%). Despite this generally positive news, a high level of uncertainty remains. In January 2017, the International Monetary Fund acknowledged that there is an unusual breadth of upward and downward risks. The future development of the USA and the United Kingdom were, in particular, very difficult to assess at the time when the forecast was published.

#### Market Risks

The key risk in the markets in which PVA TePla operates is the fluctuation in customers' investment activity, the global economy and political developments in general, and global competitive and price pressures. Statements regarding future developments of individual markets or decisions relating to economic policy in emerging markets cannot be made with sufficient accuracy.

The semiconductor business, a key sector for the Group, is highly cyclical in nature. Although the semiconductor industry has enjoyed average annual growth rates well above those of most so-called old economy industries in recent decades, this average includes periods of both robust growth and recession. According to market research institutions, investment activity in the semiconductor industry was stagnant or declining between 2011 and 2016, but will increase significantly from 2017. Investments in wafer capacities, an essential market for PVA TePla, were, in particular, subject to heavy fluctuation in recent years.

The solar market, characterized by high overcapacities in the last few years, was dominated by Chinese suppliers. After years of exceptional growth, the solar market and its supplier industry have been hard hit. In response, PVA TePla has closed down production capacities in Denmark in 2013 and 2014 and reduced staff numbers at all locations as a result of the market downturn.



In the Industrial Systems division, the focus of business is on hard metal sintering systems, with a high percentage in China. Considerably higher volatility has been registered in this business unit since 2012. The introduction of new technologies leading to the substitution of existing materials could have a lasting effect on markets. For example, the mention of new tunneling technology by the American entrepreneur Elon Musk has led to close observation by manufacturers of traditional tunneling machinery, which use hard metals in their cutting tools.

### Market Opportunities

In markets such as hard metal manufacturing, the semiconductor industry and photovoltaics, PVA TePla provides process technologies that will remain a firm part of each respective value chain in the future. In the area of heat treatment systems, the development of new user markets resulted from the further development of what is known as a hot press, with PVA TePla currently operating the largest system in Europe. Examples of these new markets, in which this type of system could be used, include the aviation industry or the tool industry. In the semiconductor industry, for example, these process technologies could include systems for growing high-purity silicon crystals or silicon carbide crystals for high performance electronics, or analytical systems for non-destructive quality control in LED or MEMS production. Demand for plasma and analysis systems is correlated with trends in semiconductor markets (e.g. MEMS, LED, OLED/PLED, IGBT). Further growth for these products of PVA TePla is expected due to the anticipated growth in the semiconductor market in the medium term and new applications for plasma systems in the semiconductor/life science/industrial sectors. The semiconductor market will see stronger growth in the medium term, driven by the acceleration in connectivity of devices in industry and the private sector (i.e. "Internet of Things, Industry 4.0"). The budget for 2017 also includes moderate estimates in relation to sales revenues from new and further developments with small unit sales forecast. This was due to attempts to reduce the reliance on systems with a product lifecycle that is difficult to forecast. No opportunities from major orders in the semiconductor market were taken into consideration in the budget.

Considerable overcapacity in the solar market and significant declines in sales prices across the entire supply chain of the solar industry resulted from significant investments to expand capacity, particularly by Chinese companies.

There is also a wide range of further growth markets for the solar industry: North America, Japan, India, Australia, Morocco, the MENA region (Middle East and North Africa), as well as South Africa and South America. Opportunities also exist in markets where production capacities are set to expand because of economic policy considerations and own technologies. And some locations in Europe offer opportunities for larger projects. However, these opportunities are often accompanied by problems financing planned projects. It is highly likely that a system technology will prevail that guarantees maximum efficiency and optimal cost of ownership. Given that PVA TePla can provide such systems, medium to long-term market prospects are cautiously optimistic, even given the difficult photovoltaics market at present. This also opens up opportunities of new, larger system orders for PVA TePla. However, as a precaution, no major new orders have been considered as part of the budget.

### Economic Risks

Analysts forecast global GDP growth of 3.4% in 2017. Despite this positive outlook, the overall economic situation remains highly uncertain. The implications of current political developments in a number of key countries for the global economy – for example the Brexit – remain uncertain at present. The debt crisis in the established industrialized countries continues to fester and may prove detrimental to the economies of the emerging markets, a key market for the PVA TePla Group. Weakening growth rates in emerging markets, particularly in China, are evidence of this problem. The Chinese market is extremely important to PVA TePla, especially in the area of vacuum systems. The slowdown of economic development in China over the past few years and of the correlation between products manufactured using PVA TePla systems and the expansion of infrastructures means that there is a chance of investment restraint. The sanctions imposed on Russia by the West concern a market that is of interest to the PVA TePla Group, not least because Russian customers have showed a desire to expand and widen the country's technological basis.

These market and economic risks are reduced by diversifying the range of products and services across different sectors including semiconductors, photovoltaic, tool making and hard metal technology, the production of high-quality metals and ceramics, the automotive and aerospace industries, and the electrical and electronic engineering sectors. The effects of cyclical, foreseeable fluctuations in market

volume are primarily offset by increasing or decreasing outsourcing levels, although unexpectedly high demand can give rise to production bottlenecks. The strategy of maintaining a relatively low level of vertical integration allows rapid response in this regard. The PVA TePla Group also provides high-quality contract processing work such as plasma treatment, high-vacuum brazing and heat treatment of components in which greater customer demand has historically been seen in times of generally restrained capital expenditure. In fiscal years 2013 and 2014, PVA TePla was unable to strike a balance within the scope of this diversification and synergy strategy that kept the Group profitable on account of the strong degree of parallel development in the sales markets' cycles. As a result, extensive consolidation measures were introduced affecting locations and employee numbers. A sustained shortfall in terms of expected orders, particularly those from China, and the further lack of compensatory opportunities would open up the risk of further consolidation measures becoming necessary.

#### Risks from Technological Developments

The risk of losing orders due to a new, unexpected technology appearing on the market (horizontal entry) is monitored worldwide and assessed by continuous observation of the latest research and development and published studies specific to the various sectors, and by maintaining dialog with key customers and research institutes. In addition to ongoing development activities, technological product optimization is further supported by, among other things, an in-house laboratory as well as the operation of in-house service centers in which materials are processed for customers. Here, the Company's development department stays abreast of the latest material quality requirements of customers. The technical complexity of our products and rapid technological advances pose research and development-related risks. Medium and long-term success is dependent on developing marketable products and gene-

rating sufficient revenues within appropriate time frames in order to provide adequate cash flow for the Group's internal financing. The technical complexity of our products and the standards demanded by our customers may also give rise to risks that can generate increased warranty-related expenditures.

#### Opportunities from Technological Developments

As a supplier of technologies for the production and processing of materials, parts and components for high-tech industries, where vacuum and high temperature play a key role for production, new areas of application for materials produced using our systems may result in additional demand. Moreover, new requirements for materials, requiring new types of systems in our areas of expertise may arise. In view of climate change, energy savings to slow down the pace of global warming are a priority. New materials which lead to a considerable longer service life of devices and structures especially contribute to energy savings. New materials for lightweight constructions also improve energy efficiency. This will significantly improve the opportunities for our systems technology in the development and production of materials to be developed around the world.

#### Risks from Trade Barriers

As an international Group with a high share of export business, PVA TePla is essentially susceptible to trade barriers or sanctions. Current geopolitical developments mean that the trend is going towards tighter sanctions. They relate to Russia, in particular, but may also affect other regions, depending on political developments. PVA TePla continually reviews the need for export licenses and, in the case of high-risk orders, hedges the political risk through capital goods credit insurances. A susceptibility to trade barriers will always remain, as contracts with insurance companies are only a limited option when political risks escalate.

Risk category	Probability of occurrence	Scale	Category of opportunity	Scale
Market risks	Possible	High	Market opportunities	High
Global economic risks	Probable	Moderate		
China economic risks	Possible	High		
Risks from technological developments	Possible	High	Opportunities from technological developments	High
Risks from trade barriers	Possible	High		

## Operating Opportunities and Risks

### Risks from Suppliers

The risk of delivery delays and non-delivery is countered by identifying and prescreening additional suppliers in combination with close monitoring of existing suppliers. Dependence on individual suppliers cannot be ruled out, but is largely limited by having multiple qualified suppliers for key components wherever possible, and diversifying deliveries among them. The risk of supplier failure (e.g. as a result of insolvency) is substantially reduced by considering the supplier's economic situation and the systematic selection and evaluation of alternative suppliers. Care is taken to ensure that all major suppliers have adequate quality management systems and third-party liability insurance coverage in place.

### Risks and Opportunities from Investments and M&A

Since January 1, 2015, the entire operating business of PVA TePla has been transferred to subsidiaries. Besides the considerably more flexible and market- and customer-centric structures of the subsidiaries, using synergies and pooling capacities is of paramount importance. Negative economic developments can endanger anticipated sales revenues and earnings targets at individual subsidiaries under certain circumstances. Resulting adjustments cannot always be offset by pooling and can lead to a reduction in production and personnel capacities at individual subsidiaries or locations. All subsidiaries are subject to a continuous monitoring process in order to give prompt support to these investments and to ensure that their profitability is guaranteed. The difficult market environment at the current time is causing many manufacturers of heat treatment systems to consolidate. PVA TePla will also scrutinize potential acquisition targets around the world. As a rule, the focus of acquisitions is on companies that can usefully complement the PVA TePla Group either in terms of technology or in terms of market development and can contribute to the pooling of resources.

### Personnel risks

The success of the PVA TePla Group primarily depends on its employees and their expertise. However, competition for skilled employees and managers in the industries and regions in which PVA TePla operates is intense. The Group's

future success therefore largely depends on its ability to hire, integrate and retain qualified personnel. Demographic developments are forcing the Company to deal with an aging workforce and securing a young generation of qualified specialists and managers. Should the personnel risk materialize, it is expected to impact the business activities and also the results of the PVA TePla Group depending on the extent of the bottlenecks in personnel.

### Risks in Connection with Information Technology

The risk of IT equipment failures and the threat posed by software viruses and other malware (such as so-called Trojans) are reduced through regular and appropriate backups, adopting suitable protective measures against external influences (e.g. constantly updated virus protection systems and firewalls) and maintaining suitable access control systems and password changes. In view of the increased threat of cybercrime and attacks by hackers, the probably of occurrence was lifted and additional precautions were implemented such as additional training for employees and mail filters. Despite all precautions, IT problems and the related negative impact on business processes cannot be completely ruled out.

### Natural Hazards and Environmental Risks

Overall, appropriate insurance policies were concluded for natural hazards at PVA TePla AG locations. Due to the Company's business structure, with its focus on engineering and assembly and to a very limited extent its use of hazardous materials and other substances with risks for safety and the environment, the extent of environment risk posed by the activities of PVA TePla is very limited. For this reason, an environmental liability and accidental damage insurance policy with adequate coverage was concluded for this, too.

### Risks from Legal Disputes

A subsidiary of PVA TePla AG, PVA TePla America, Inc., currently faces legal proceedings.

Legal action has been taken against the subsidiary PVA TePla America Inc. because of alleged defects in a plasma system. The system was not delivered to the Turkish claimant, but to a US customer who leased it to the claimant. The compensation sum has not yet been settled. PVA TeP-

la assumes that there is neither case for third-party liability nor that the end customer could have sustained any major disadvantages due to property damage.

In the course of the fourth quarter of 2016, there have been an increasing number of indications from PVA TePla's lawyers that the legal action will be settled in favor of PVA TePla.

Further legal action that was pending in the prior fiscal year has been settled: PVA TePla AG was taken to court by the liquidator of an American manufacturer of polysilicon for repayment of the purchase price paid in fiscal years 2010 and 2011 for the delivery of crystal growing systems.

That claim was rejected without the possibility of appeal by the United States Bankruptcy Court in February 2017.

Risk category	Probability of occurrence	Scale
Risks from suppliers	Possible	High
Risks from investments and M&A	Possible	High
Risks in connection with information technology	Possible	High
Natural hazards and environmental risks	Improbable	High
Legal disputes	Improbable	High
Personnel risks	Possible	High

## Financial Opportunities and Risks

### Liquidity Risks and Risks from Failing to Meet Loan Commitments

Due to the conclusion of a syndicated loan agreement in August 2015 for a mixed line of EUR 7.5 million (cash and guarantee line) and EUR 27.5 million in guarantee lines, as well as an option to increase these lines by EUR 20 million with a term of 36 months, PVA TePla AG has a stable financing structure. PVA TePla also has a long-term credit line related to investment property, currently amounting to EUR 4.3 million, which can be utilized for operating funds at any time and decreases half-yearly by EUR 333 thousands. The

Group therefore has sufficient credit lines for financing operations, including the expansion of business volume, and sufficient guarantee lines for the provision of advance payment guarantees to customers.

The syndicated loan agreement defines financial covenants for compliance with specific financial indicators. In the event that targets are missed, there is the risk of a financial covenants breach which could lead to the extraordinary right of termination for the lender. Even though there are no indications at the current time of negative deviations from the target and potential financial covenant breaches, there remains a residual risk that, in the event of failing to meet the targets, the credit lines and guaranteed lines could be significantly reduced or completely terminated. Given that the Group has financing alternatives even in this scenario, the Management Board does not believe that the PVA TePla Group is at risk of short- or medium-term insolvency.

### Risks and Opportunities from Changes in Exchange Rates

Despite hedging of exchange rate risks in individual transactions, there is a risk that the EUR/USD exchange rate in particular may move unfavorably, eroding our competitive position in this currency zone and exerting pricing pressure. In principle, the risk of currency volatility is addressed by having local production and increasing the level of purchasing within the respective currency zone if required.

No hedging measures are taken in the Group in relation to changes in valuation relating to the conversion of net assets at foreign Group companies outside of the Eurozone and their income and expenses. The tendency towards a "weaker" euro compared to the US dollar continues to strengthen our position against competitors in the dollar currency zone.

### Risks from Tax Issues

Because of the volume of major orders from abroad, the complexity of the related tax issues has increased. These include particular the topics transfer pricing and business between the companies of the PVA TePla Group and VAT, especially on services and tax arrangements for employees who are sent abroad. We address these issues in close cooperation with our tax advisors and have not identified any

material risks in this area. There are, however, increasing expenses with respect to these consultations, the internal administration and the implementation of regulations with the associated registrations.

#### **Risk Reporting on the Use of Financial Instruments**

Financial instruments arise as part of PVA TePla's core business activities (e.g. trade receivables and payables). Financial instruments are employed to finance business activities (e.g. loans from banks) or they arise from business activities (e.g. investment of excess current liquidity). In addition, derivative financial instruments are utilized to eliminate or limit risks from operating activities (e.g. exchange rate risks) or from financing (e.g. interest rate risks). Financial instruments are not used in isolation without connection to actual business activities. Opportunities and risks in connection with the respective relevant financial instrument categories are presented below (for further information see note 27 of the Group notes):

##### **Trade Receivables:**

Liquidity and credit risks involved in financing business operations are reduced, in the case of major orders, by means of customer/supplier financing. A contractual installment payment schedule is negotiated in most cases, starting at an average of 30% minimum due upon receipt of the order for a single system. Collateral arrangements (e.g. letters of credit) are also frequently required to protect against default on receivables, in combination with intensive receivables monitoring.

In contrast, the Group itself only has to make advance payments to a few suppliers. In addition, the Group optimizes its external cash flow requirements through rolling cash flow forecasts for Group companies and short-term intra-Group loans.

Due to the short-term nature of the items, there is no significant market risk.

##### **Other Receivables:**

Due to the short-term nature of the items, there is no significant market risk.

##### **Payments in Advance:**

The individual Group companies primarily make payments in advance only to suppliers for larger deliveries/major components. On the purchasing side, advance payments are only made in return for a corresponding advance payment guarantee. Such guarantees ensure that the Group does not incur any discernible risks.

##### **Financial Liabilities:**

- » This item primarily includes bank loans to finance working capital.
- » These loans are all either agreed at fixed interest rates for the entire term or hedged accordingly in the case of loans with variable nominal interest rates, effectively rendering them synthetic fixed interest rate loans.
- » Effective March 3, 2014, two fixed-interest real estate loans, which were secured by charges and land, for a new building in Wettenberg, Germany, for a total of EUR 5,684 thousand were terminated and combined into a new loan of EUR 6,000 thousand with a term until December 2022. The new loan has already been synchronized with existing interest hedges of EUR 6,000 thousand.
- » As market interest rates at the balance sheet date were once again lower than the interest rates underlying the aforementioned hedging transactions, a provision for other liabilities was necessary totaling EUR 647 thousand (prior year: EUR 790 thousand) in the consolidated financial statements and a provision for impending losses totaling EUR 585 thousand (prior year: EUR 683 thousand) was necessary in the single-entity financial statements of PVA TePla AG.
- » A long-term loan for the financing of buildings at the Wettenberg, Germany, location was utilized to finance short-term working capital. This loan with a variable nominal interest rate and no underlying interest rate hedge offers a low market risk from changes to corresponding market interest rates.
- » Due to the extremely low interest rates environment at the moment and a no anticipated rise in market rates in the medium term, no interest hedge has been concluded yet for this loan.

**Trade Payables:**

- » These are short-term items invoiced almost exclusively denominated in Euros. Hence there is no relevant market or credit risk.

**Other Liabilities:**

Due to the short-term nature of the items, there is no significant market risk.

**Exchange Rate Hedging:**

- » A large proportion of Group sales revenues, including those of PVA TePla AG, are generated in foreign markets. Projects are predominantly billed in Euros, also for non-Eurozone countries. Otherwise, in each individual case, the hedging of currency risks is assured by means of forward exchange contracts. Since these are closed positions in relation to the underlying transaction with matching payment amounts and deadlines, there is no significant market risk. Calculations for the underlying transactions are based on the respective hedged forward rates.
- » Due to the aforementioned selection of suppliers from around the world, some purchases are made in foreign currencies. US Dollar cash balances are used to a limited extent to meet payment obligations via natural hedging. Other foreign currency obligations and larger US Dollar payments are hedged with forward exchange transactions whose payment structure corresponds with the underlying transaction, thereby avoiding currency risk. Please refer to the explanations above for delivery/materials procurement risks.

**Interest Rate Hedging:**

- » Some of the loans to finance new facilities were concluded at variable nominal interest rates and the interest rate was hedged, effectively making these synthetic fixed interest rate loans.
- » For more details concerning risks arising from these financial instruments, please refer to the information above on financial liabilities.

<b>Risk category</b>	<b>Probability of occurrence</b>	<b>Scale</b>
Risks from changes in exchange rates	Improbable	Low
Risks from tax issues	Improbable	Low
Risks from financial liabilities	Improbable	Moderate
Risks from trade payables	Improbable	Low
Liquidity risks	Improbable	High
Risks from financial covenants breaches	Improbable	High

**GENERAL STATEMENT BY THE MANAGEMENT BOARD**

The Management Board of PVA TePla AG is responsible for the risk management of the Group and assesses the Group's risks and opportunities. Their conclusions are summarized as follows.

**Summary**

The Group's risk profile in fiscal year 2016 did not change compared to 2015. The main risks stem from the market developments mentioned above, the related reticence of our customers to invest, technological developments, the supplier risk and risks from trade barriers. Restructuring measures have been implemented to counteract this development which in the past has been characterized by increased volatility in incoming orders in both divisions. The completed personnel reduction and site consolidation programs will lead to lower breakeven sales revenues in future. With the relocation of the operations of PVA Metrology and Plasma Solutions at the beginning of 2016, additional steps were initiated to further reduce the breakeven point. The Company will also continue to work on increasing its sales activities in markets, which will become more attractive in future. Personnel risks, IT security risks, risks from legal disputes and the risks from credit covenant breaches remained unchanged in the last financial year. Risks potentially jeopardizing the continued existence of the Company and the Group as a going concern are monitored by means



of suitable countermeasures. We consider all other risks to only have low residual risks on account of their low likelihood, their low potential damage or countermeasures that have been taken. The opportunities presented in this report constitute both untapped potential for PVA TePla but also significant challenges. The fundamentally flexible production structure means that PVA TePla Group companies are well equipped to capitalize on any opportunities that may arise.

### Forecast Report

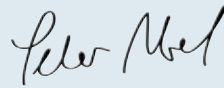
The forecast report describes the expected business development of the PVA TePla Group in fiscal year 2017. The statements in this chapter were made on the basis of the current Group portfolio and customers' portfolios and the above-mentioned assumptions on future macroeconomic and industry developments. The actual results may, as is often the case in the project business, deviate substantially from the forecast development if the underlying assumptions later prove to be incorrect.

The PVA TePla Management Board anticipates consolidated sales revenues on the scale of EUR 85 million and an EBITDA-margin on the scale of 6%.

The Industrial Systems and Semiconductor Systems divisions are expected to account for half of the consolidated sales revenues.

Wettenberg, March 24, 2017

PVA TePla AG  
Management Board



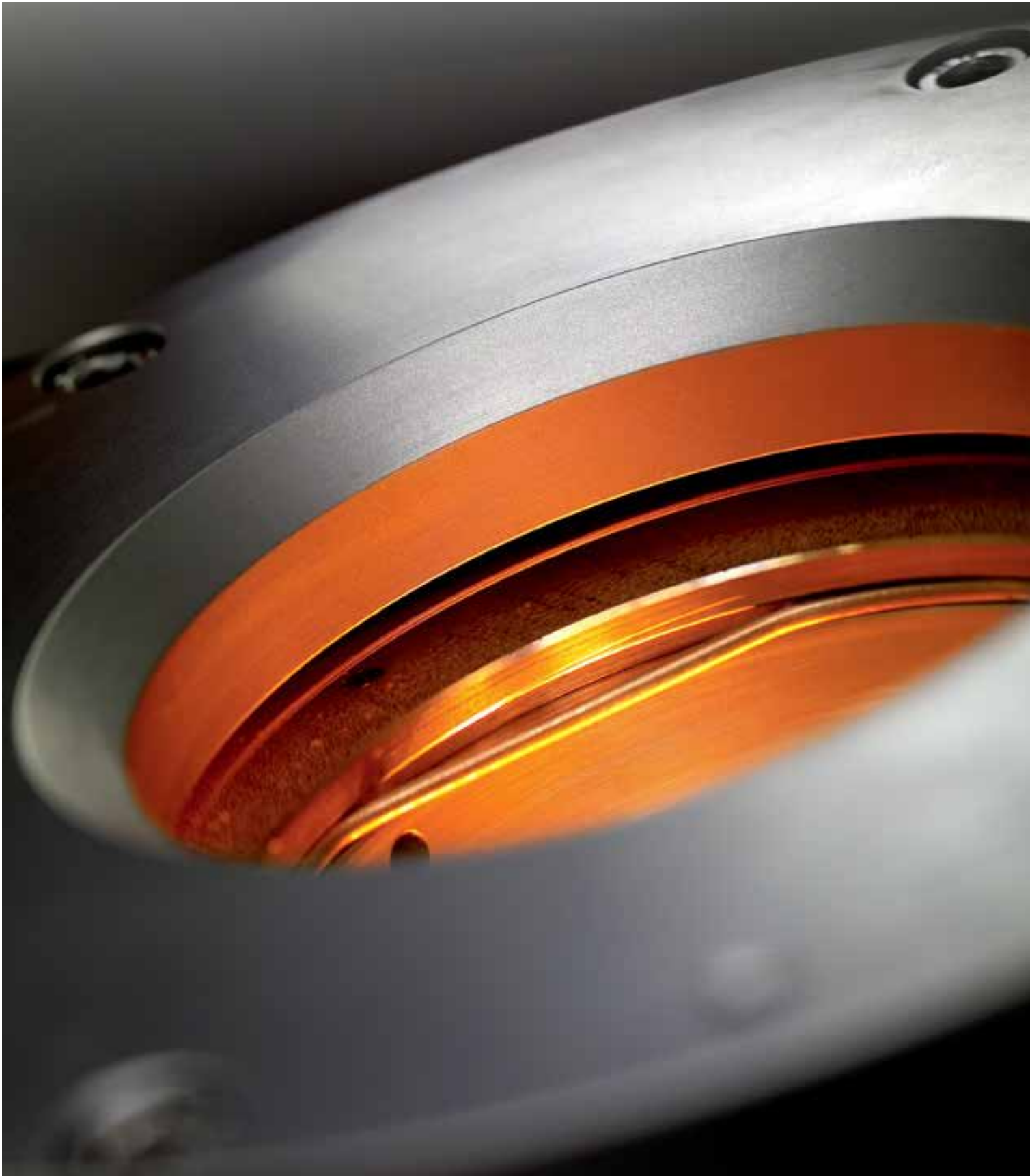
Peter Abel  
Chief Executive Officer



Oliver Höfer  
Chief Operating Officer







## GROUP FINANCIAL STATEMENTS

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# Group Financial Statements

## CONSOLIDATED BALANCE SHEET

<b>ASSETS</b> EUR'000	Notes	Dec. 31, 2016	Dec. 31, 2015
<b>Non-current assets</b>			
<b>Intangible assets</b>	(4)	<b>8,807</b>	<b>8,812</b>
Goodwill		7,808	7,808
Intangible assets under development		0	179
Other intangible assets		949	775
Payments in advance		50	50
<b>Property, plant and equipment</b>	(5)	<b>28,782</b>	<b>30,802</b>
Land, property rights and buildings, including buildings on third party land		23,738	24,716
Plant and machinery		3,926	3,558
Other plant and equipment, fixtures and fittings		1,043	1,201
Advance payments and assets under construction		75	1,327
<b>Non-current investments</b>	(6)	<b>11</b>	<b>10</b>
<b>Deferred tax assets</b>	(11)	<b>5,291</b>	<b>4,184</b>
<b>Total non-current assets</b>		<b>42,891</b>	<b>43,808</b>
<b>Current assets</b>			
<b>Inventories</b>	(7)	<b>21,092</b>	<b>18,361</b>
Raw materials and operating supplies		9,239	8,196
Work in progress		11,205	8,685
Finished products and goods		648	1,480
<b>Coming receivables on construction contracts</b>	(8)	<b>12,224</b>	<b>7,821</b>
<b>Trade and other receivables</b>	(9)	<b>15,999</b>	<b>11,794</b>
Trade receivables		12,704	8,926
Payments in advance		1,954	1,443
Other receivables		1,341	1,425
<b>Tax repayments</b>		<b>16</b>	<b>3</b>
<b>Cash</b>	(10)	<b>2,514</b>	<b>6,492</b>
<b>Total current assets</b>		<b>51,845</b>	<b>44,471</b>
<b>Total</b>		<b>94,736</b>	<b>88,279</b>

The following notes are an integral part of the Group Financial Statements.

<b>LIABILITIES AND SHAREHOLDERS' EQUITY</b> EUR'000	Notes	<b>Dec. 31, 2016</b>	Dec. 31, 2015
<b>Shareholders' equity</b>	(12)		
Share capital		21,750	21,750
Revenue reserves		22,281	19,349
Other reserves		-3,642	-3,074
Minority interest		-84	-84
<b>Total shareholders' equity</b>		<b>40,305</b>	<b>37,941</b>
<b>Non-current liabilities</b>			
Non-current financial liabilities	(14)	3,768	4,556
Other non-current liabilities		551	812
Retirement pension provisions	(15)	14,339	13,327
Deferred tax liabilities	(23)	2,786	1,914
Other non-current provisions	(16)	342	292
<b>Total non-current liabilities</b>		<b>21,786</b>	<b>20,901</b>
<b>Current liabilities</b>			
Short-term financial liabilities	(17)	7,648	5,313
Trade payables		4,871	3,165
Obligations on construction contracts	(18)	964	516
Advance payments received on orders	(19)	10,450	12,706
Accruals	(20)	4,745	5,037
Other short-time liabilities		1,569	999
Provisions for taxes		49	35
Other short-term provisions	(16)	2,349	1,666
<b>Total current liabilities</b>		<b>32,645</b>	<b>29,437</b>
<b>Total</b>		<b>94,736</b>	<b>88,279</b>

The following notes are an integral part of the Group Financial Statements.

## CONSOLIDATED INCOME STATEMENT

EUR'000	Notes	Jan. 1 - Dec. 31, 2016	Jan. 1 - Dec. 31, 2015
<b>Sales revenues</b>	(21)	<b>86,595</b>	<b>71,543</b>
Cost of sales		-66,182	-54,844
<b>Gross profit</b>		<b>20,413</b>	<b>16,699</b>
Selling and distributing expenses		-8,889	-8,101
General administrative expenses		-5,836	-5,818
Research and development expenses	(22)	-2,970	-3,236
Other operating income		2,763	2,400
Other operating expenses		-1,591	-1,849
<b>Operating result (EBIT)</b>		<b>3,890</b>	<b>95</b>
Finance revenues		143	227
Finance costs		-988	-880
<b>Financial result and share of profits from associates</b>		<b>-845</b>	<b>-653</b>
<b>Net result before tax</b>		<b>3,045</b>	<b>-558</b>
Income taxes	(23)	-114	-891
<b>Consolidated net result for the year</b>		<b>2,931</b>	<b>-1,449</b>
<b>of which attributable to</b>			
Shareholders of PVA TePla AG		2,931	-1,450
Minority interest		0	1
<b>Consolidated net result for the year</b>		<b>2,931</b>	<b>-1,449</b>
<b>Earnings per share</b>			
Earnings per share (basic) in EUR	(24)	0.13	-0.07
Earnings per share (diluted) in EUR		0.13	-0.07
Average number of share in circulation (basic)		21,749,988	21,749,988
Average number of share in circulation (diluted)		21,749,988	21,749,988

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

EUR'000	Jan. 1 - Dec. 31, 2016	Jan. 1 - Dec. 31, 2015
<b>Consolidated net result for the year</b>	<b>2,931</b>	<b>-1,449</b>
of which attributable to shareholders of PVA TePla AG	2,931	-1,450
of which attributable to minority interest	0	1
<b>Other comprehensive income</b>		
<b>Items that may be reclassified to profit or loss</b>		
Currency changes	113	387
Income taxes	0	-5
<b>Changes recognized outside profit or loss (currency changes)</b>	<b>113</b>	<b>382</b>
Changes in fair values of derivative financial instruments	0	2
Income taxes	0	-1
<b>Changes recognized outside profit or loss (derivative financial instruments)</b>	<b>0</b>	<b>1</b>
<b>Total of items that may be reclassified to profit or loss</b>	<b>113</b>	<b>383</b>
<b>Items that will never reclassified to profit or loss</b>		
Changes in pension provisions	-958	270
Income taxes	278	-78
<b>Changes recognized outside profit or loss (pension provisions)</b>	<b>-680</b>	<b>192</b>
<b>Total of items that will never reclassified to profit or loss</b>	<b>-680</b>	<b>192</b>
<b>Other comprehensive income after taxes (changes recognized outside profit or loss)</b>	<b>-567</b>	<b>575</b>
of which attributable to shareholders of PVA TePla AG	-567	575
of which attributable to minority interest	0	0
<b>Total comprehensive income</b>	<b>2,364</b>	<b>-874</b>
of which attributable to shareholders of PVA TePla AG	2,364	-875
of which attributable to minority interest	0	1



## CONSOLIDATED CASH FLOW STATEMENT

EUR'000	Jan. 1 - Dec. 31, 2016	Jan. 1 - Dec. 31, 2015
Consolidated net result for the year	2,931	-1,449
<b>Adjustments to the consolidated net result for the year for reconciliation to the cash flow operating activities:</b>		
+ Income taxes	114	891
- Finance revenues	-143	-227
+ Finance costs	988	880
<b>= Operating result</b>	<b>3,890</b>	<b>95</b>
+/- Income tax payments	-34	315
+ Amortization and depreciation	2,616	2,346
+/- Gains/losses on disposals of non-current assets	-4	-68
+/- Other non-cash expenses/income	-469	-121
	<b>5,999</b>	<b>2,567</b>
+/- Increase/decrease in inventories, trade receivables and other assets	-11,048	755
+/- Increase/decrease in provisions	602	-548
+/- Increase/decrease in trade payables and other liabilities	6	2,674
<b>= Cash flow from operating activities</b>	<b>-4,441</b>	<b>5,448</b>
+ Proceeds from disposals of intangible assets and property, plant and equipment	117	450
- Payment of intangible assets and property, plant and equipment	-699	-2,076
+ Interest receipts	1	44
<b>= Cash flow from investing activities</b>	<b>-581</b>	<b>-1,582</b>
- Payments from redumption of debt and loans	-789	-6,890
+/- Change in short-term bank liabilities	2,335	4,164
- Payment of interest	-557	-524
<b>= Cash flow from financing activities</b>	<b>989</b>	<b>-3,250</b>
Net change in cash	-4,033	616
+/- Effect of exchange rate fluctuations on cash	55	151
+ Cash at the beginning of the period	6,492	5,725
<b>= Cash at the end of the period</b>	<b>2,514</b>	<b>6,492</b>

## CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

EUR'000	Shared issues		Revenue reserves	Other equity components	Pension provisions	Total	Minority interest	Total shareholders' interest
	Number							
As at January 1, 2015	21,749,988	21,750	20,799	-178	-3,471	38,900	-85	38,815
Total income			-1,450	383	192	-875	1	-874
Dividend			0	0	0	0	0	0
As at December 31, 2015	21,749,988	21,750	19,349	205	-3,279	38,024	-84	37,491
As at January 1, 2016	21,749,988	21,750	19,349	205	-3,279	38,024	-84	37,491
Total income			2,931	113	-680	2,364	0	2,364
Dividend			0	0	0	0	0	0
As at December 31, 2016	21,749,988	21,750	22,279	318	-3,959	40,387	-84	40,305

# Group Notes

## A. GENERAL INFORMATION AND BASIS OF PRESENTATION

### 1. GENERAL INFORMATION

#### **Domicile and Legal Form of the Company**

PVA TePla AG is a stock corporation in accordance with German law. The Company is entered in the Commercial Register of the Giessen Local Court under HRB 6845. The registered address of the Company is 35435 Wettenberg, Germany.

#### **Business Activities**

PVA TePla AG (the "PVA TePla Group", "PVA TePla" or the "Group") offers its customers systems for the production and refinement of high-quality materials, which are processed for example under high temperature, vacuum, high pressure and in plasma.

The market for these systems is related to the latest developments in material and surface technologies, for example silicon wafer technology for microelectronics and silicon carbide wafer technology for high-performance electronics as well as wafer technology for monocrystalline or multi-crystalline solar cells in the Crystal Growing Systems business area

structural material technologies for aviation and aerospace, energy technology and hard metal tools in the Industrial Systems business area,

the production technologies for micro-electronic-mechanical systems (MEMS) and high brightness light emitting diodes (HB LED) as well as the technology for the fabrication of ultra-thin wafers in the Plasma Systems business area, the technology for hydrophobic coatings on electronic assemblies and on plastics in medical technology in the Coating Systems business area,

the technology of non-destructive quality inspection of wafers using laser light and complex semiconductor components using scanning acoustic microscopy in the Analytical Systems business area.

High-tech materials and their surfaces will undoubtedly continue to depend on manufacturing processes under vacuum, high temperatures, high pressure and in plasma in the future, and therefore on the product range and technologies of the PVA TePla Group.

With locations in Germany, the USA, China, Taiwan and Singapore, PVA TePla maintains business relationships around the world.

The fiscal year for PVA TePla AG and its subsidiaries is the calendar year.

The business activities of the Group are divided into two divisions: Industrial Systems and Semiconductor Systems. The Group's reporting is also organized according to this structure. In addition, Holding Costs are reported separately.

#### **General Principles and Accounting Standards**

As a capital market-oriented parent company domiciled in a member state of the EU from fiscal year 2005 onwards, PVA TePla has been obliged to prepare and publish its consolidated financial statements in accordance with International Financial Reporting Standards (IFRS) and section 315a of the Handelsgesetzbuch (HGB, German Commercial Code). The consolidated financial statements of PVA TePla for the fiscal year from January 1 to December 31, 2016 have therefore been prepared in accordance with the IFRS regulations issued by the International Accounting Standards Board (IASB) as of the balance sheet date and with the binding interpretations of the International Financial Reporting Interpretations Committee (IFRIC).

In addition, the notes to the financial statements contain certain disclosures to meet the requirements of section 315a (1) HGB. In accordance with section 315a HGB in conjunction with section 315 HGB, the consolidated financial statements under IFRS have been supplemented by a Group management report.

The income statement has been prepared in accordance with the cost of sales method of presentation.

The consolidated financial statements convey a true and fair view of the net assets, financial position and results of operations of PVA TePla.

### New Statements Issued by the IASB

The IASB has issued the following standards, interpretations and amendments to existing standards that could be relevant for the PVA TePla Group. Regulations that are not yet mandatory and not yet adopted by the European Commission have not been applied in advance by PVA TePla.

Standard/ interpretation		Mandatory application	Adoption by the EU Commission*	Effects
Amendments of IFRS 10, IFRS 12 and IAS 28	Investments in Associates (amendments of IFRS 10, IFRS 12 and IAS 28)	January 1, 2016	Yes	None
Annual improvements to the IFRS cycles 2010-2012	Amendments of IFRS 2, IFRS 3, IFRS 8, IFRS 13, IAS 16/38 and IAS 24	July 1, 2014	Yes	Additional note disclosures
Amendments of IAS 19	Performance-based plans; employee benefits	July 1, 2014	Yes	None
Amendments of IFRS 11	Reporting of shares acquired from cooperations	January 1, 2016	Yes	None
Amendments of IAS 16 and IAS 38	Clarification of permissible methods of depreciation and amortization	January 1, 2016	Yes	None
Amendments of IAS 16 and IAS 41	Accounting for bearer plants	January 1, 2016	Yes	None
Amendments of IAS 27	Equity method in the separate financial statements	January 1, 2016	Yes	Only for IFRS separate financial statements
IFRS 15	Revenue from contracts with customers	January 1, 2018	Yes	The explanation is presented below the table
IFRS 9	Financial instruments	January 1, 2018	Yes	Additional note disclosures
IFRS 16	Leasing	January 1, 2019	Yes	The assessment of implications of the application of IFRS 16 for the consolidated financial statements is not complete. We assume at this time that there will be no effects.
Annual improvements to the IFRS cycle 2012 -2014	Amendments of IFRS 5, IFRS 7, IAS 19 and IAS 34	January 1, 2016	Yes	Nothing significant
Amendments of IAS 1	Disclosure initiative (amendments of IAS 1)	January 1, 2016	Yes	Partial streamlining of the note disclosures

\*As of March 2017

PVA TePla AG generally only implements new standards and interpretations as application becomes required.

PVA TePla AG generally only implements new standards and interpretations as application becomes required. An internal assessment on the effects of applying IFRS 15 in comparison to the existing regulatory framework came to the following conclusions:

The PVA TePla Group currently realizes sales revenues from construction contracts in accordance with the provisions of IAS 11, which in fact are very similar to the provisions of IFRS 15.35 et seq. in terms of the timeframe for sales realization, but do not have congruent implementation criteria. At present, disclosed sales revenues according to IAS 11 consist of 11.7% of Group sales revenues.

The application of IFRS 15 is generally not limited to contracts with customers, but applicable to all contractual obligations that fulfill the criteria of IFRS 15.35. Against the background of PVA TePla's business activities, this relates in particular to the fulfillment of the criteria of IFRS 15.35 c) and thus the creation of an asset without an alternative use (similar to IAS 11) and also a legal claim to payment of services already rendered including an appropriate profit surcharge.

In view of the contracts currently subject to IAS 11, this presupposes an option to enforce payment claims including an appropriate profit surcharge in the event that a contract is terminated. A random sample analysis as at Dec. 31, 2016 showed that this was fulfilled with the exception of the following cases. In contrast to the current practice, the time-related realization of sales revenues is no longer possible for a larger contract and for contracts currently presented under application of the ZPM-method due to estimation uncertainties. A quantification of the effects derived in this context has not yet been performed.

The sales revenues date arising from contractual obligations according to IAS 18 may be postponed to a minor extent. The importance of multi component contracts beyond the legal regulation on warranty commitments is also estimated to be minor.

### Reporting Currency and Currency Translation

The consolidated financial statements are prepared in euros (EUR). Currency translation is performed in accordance with the functional currency concept set out in IAS 21 (The Effects of Changes in Foreign Exchange Rates), which focuses on the primary economic environment. The translation of assets and liabilities as well as contingent liabilities and other financial obligations is performed at the prevailing rate on the balance sheet date (middle rate). By contrast, income statement items are translated using average exchange rates for the fiscal year, while shareholders' equity is translated at historical rates. Translation differences arising from exchange rate fluctuations between different fiscal years are reported in "Other reserves" under shareholders' equity. Evaluation in subsequent periods is performed in accordance with IAS 21.23.

Cumulative exchange differences from the currency translation of subsidiaries were not set to zero on the transition date (January 1, 2004), but instead are shown as a separate item in consolidated shareholders' equity.

The material exchange rates of countries outside the Eurozone that are included in the consolidated financial statements are as follows:

EUR = 1	Average exchange rate		Exchange rate on the balance sheet date	
	2016	2015	Dec. 31, 2016	Dec. 31, 2015
USA (USD)	1.1066	1.1096	1.0541	1.0887
China (CNY)	7.3496	6.9730	7.3202	7.0608
Denmark (DKK)	7.4454	7.4586	7.4344	7.4626
Singapore (SGD)	1.5278	1.5251	1.5234	1.5417
Taiwan (TWD)	35.6982	35.2212	33.9742	35.9345
Japan (JPY)	120.2400	137.3100	123.4000	131.0700

As all consolidated subsidiaries are domiciled in countries with no hyperinflation at present, IAS 29 is not applicable.

### Estimates and Assumptions

The preparation of the consolidated financial statements requires estimates and assumptions to be made by management. These influence the presentation of assets and liabilities, the disclosure of contingent liabilities at the balance sheet date as well as the presentation of income and expenditures for the year under review.

In particular, this relates to allowances for bad debts, the degree of completion of customer-specific production orders, the amount and likelihood of utilization of other provisions, the measurement of goodwill and the recognition of deferred tax assets from tax loss carryforwards. Management bases its judgment of these assumptions and estimates on past experience, estimates from experts (e.g. lawyers, rating agencies and associations) and the results of carefully weighing up different scenarios. Changes in the economic situation that deviate from the assumptions applied and that lie beyond the control of management may result in the actual amounts differing from the original estimates. If the original basis of estimation changes, accounting for the respective balance sheet items will be adjusted with an effect on the income statement.

### Roundings

The tables and figures used in these notes are based on precisely calculated amounts that are subsequently rounded to the nearest thousand euros. Accordingly, rounding differences within the tables cannot always be avoided.

## 2. CONSOLIDATION

### Companies Included in Consolidation

The present consolidated financial statements of PVA TePla include fully consolidated subsidiaries. All subsidiaries in which PVA TePla holds a majority of the shareholders' voting rights (control) are fully consolidated.

The following companies are included in the consolidated financial statements as of December 31, 2016 on a fully consolidated basis:

Name	Corporate domicile	Ownership interest
PVA TePla AG (parent company)	Wettenberg, Germany	
PVA Control GmbH	Wettenberg, Germany	100 %
PVA Industrial Vacuum Systems GmbH	Wettenberg, Germany	100 %
PVA Löt- und Werkstofftechnik GmbH	Jena, Germany	100 %
PVA TePla (China) Ltd.	Beijing, PR China	100 %
PVA Metrology & Plasma Solutions Taiwan Ltd.	Hsinchu, Taiwan	100 %
PVA Crystal Growing Systems GmbH	Wettenberg, Germany	100 %
PVA Metrology & Plasma Solutions GmbH	Wettenberg, Germany	100 %
PVA TePla America Inc.	Corona / CA, USA	100 %
PVA TePla Analytical Systems GmbH	Westhausen, Germany	100 %
PVA TePla Singapore Pte. Ltd.	Singapore	100 %
PVA Vakuum Anlagenbau Jena GmbH	Jena, Germany	100 %
Xi'an HuaDe CGS Ltd.	Xi'an, PR China	51 %

Vakuum Anlagenbau Service GmbH, Hanau (shareholding: 100%) is not included in the consolidated financial statements. On April 25, 2003, insolvency proceedings were initiated with respect to the Company's assets. Accordingly, management control is no longer exercised by PVA TePla. The carrying amounts of the interests in the Company were written off in previous years. According to information from the liquidator on March 1, 2017, insolvency proceedings have not yet been concluded.

Semiconductor Systems Xi'an Ltd., which was newly founded in 2016, continues to not be included in the consolidated financial statements due to its subordinate importance.



CTNS Systems GmbH, Wetztenberg, Germany, which was purchased during the second quarter of 2016 (purchase price: EUR 35 thousand), was merged on August 31, 2016 with PVA Control GmbH, Wetztenberg, Germany, which is a wholly-owned subsidiary of PVA TePla AG, with retroactive effect to January 1, 2016. This merger did not entail any significant impact on the consolidated financial statements.

Munich Metrology Taiwan Ltd. was renamed PVA Metrology & Plasma Solutions Taiwan Ltd.

No further changes have occurred since the 2015 consolidated financial statements.

### Principles of Consolidation

The financial statements of the companies included in the consolidated financial statements have been prepared in accordance with IFRS 10 (Consolidated Financial Statements) and IAS 27 (Consolidated and Separate Financial Statements) on the basis of uniform accounting and valuation principles.

The consolidation of investments in subsidiaries is carried out according to IAS 36, under which the cost of acquisition of the participating interests are offset against the fair values of the assets and liabilities acquired. Any excess of cost over fair value is recognized as goodwill and subjected to impairment testing at least once a year. If there is an excess of fair value over cost, this is recognized in income after the fair values of the assets and liabilities acquired have been reviewed. If less than 100% of the shares are acquired, the historical cost of the participating interest is offset against the proportionate fair values of the assets and liabilities acquired. Minority interests are recognized in shareholders' equity at the amount of the remaining fair values, including profits and losses attributable to them.

If the percentage shareholding of the parent changes after control is acquired (step acquisition), any difference is recognized directly in equity without impact on the income statement.

## 3. ACCOUNTING AND VALUATION PRINCIPLES

### Intangible Assets

Intangible assets primarily consist of the proportion of goodwill arising in connection with company acquisitions, which represents the excess of the purchase price over the net fair value of the net assets acquired.

The treatment of company mergers before the transition date was retained by invoking the exemption option under IFRS 1. In accordance with IFRS 1, goodwill amounts were transferred to the IFRS opening balance sheet at their carrying amounts in accordance with the previous accounting standard, providing the recognition criteria for intangible assets and contingent liabilities were met. Goodwill is not subject to amortization but instead is tested for impairment at least once a year or whenever there are indications of impairment and, if necessary, is written down to its lower fair value.

Other intangible assets with limited useful lives are carried at cost, reduced by normal straight-line amortization from the date on which they are first ready for use. Useful lives of three to eight years (for software: three to five years) are applied. Amortization of intangible assets is allocated to the functional areas utilizing the assets concerned. Useful lives are reviewed annually and, if necessary, adjusted to meet future expectations.

Internally generated intangible assets are capitalized when IAS 38 criteria are met. After they are capitalized for the first time, the asset is carried at cost less cumulative depreciation and cumulative impairment. Capitalized development costs contain all directly attributable costs plus their share of overheads and are depreciated over their scheduled useful life. Internally generated intangible assets that are not yet complete are subject to an annual impairment test.

### Property, Plant and Equipment

Property, plant and equipment is carried at cost less cumulative depreciation. Depreciation is recognized on a straight-line basis over the expected useful life of the asset; in the case of tenants' fixtures or leasehold improvements, if appropriate, in accordance with the shorter duration of the lease. Pursuant to IAS 20.24, investment subsidies and tax-free investment contributions received are deducted from the book value of the relevant assets. Borrowing costs that can be assigned directly to the acquisition, construction or production of a qualifying asset are capitalized as part of the acquisition or production cost of said asset. Expenditure for maintenance and repairs is expensed in the period in which it is incurred. The cost of an asset and the related cumulative depreciation are derecognized when assets are scrapped or disposed of, with any book gains or losses recognized in the income statement under "Other operating income" or "Other operating expenses".

Depreciation is conducted according to the following economic useful lives:

	<b>Years</b>
Buildings	25 - 33
Plant and machinery	3 - 20
Other plant and equipment, fixtures and fittings	2 - 14

Accordingly, low-value assets with an acquisition value of no more than EUR 410 are fully depreciated in the year of acquisition. All other assets with acquisition values greater than this are capitalized and depreciated over their normal useful lives.

Depreciation of property, plant and equipment is allocated to the functional areas utilizing the respective assets.

#### **Impairment and Write-downs of Intangible Assets and Property, Plant and Equipment**

Where the value of intangible assets or property, plant and equipment calculated using the principles described above is greater than the value attributed to them at the balance sheet date, impairment losses and write-downs are recognized accordingly. The fair value to be applied is calculated on the basis of either the net proceeds of sale or the present value of the estimated future cash flows from the use of the asset, whichever is higher. Impairment losses and write-downs are reported in other operating expenses.

In accordance with IAS 36, the carrying amount of goodwill is reviewed by way of an impairment test at least once a year. This test must be completed annually and whenever there is an indication that the value of the cash-generating unit has been impaired.

Goodwill is allocated to cash-generating units in accordance with IAS 36 (Impairment of Assets). In accordance with IAS 36.80 (b), each cash-generating unit may not be larger than a segment for the purposes of segment reporting.

PVA Industrial Vacuum Systems GmbH is treated as an independent cash-generating unit in the Industrial Systems division. The goodwill of PlaTeG GmbH was transferred to this company after its merger in the 2015 fiscal year.

Within the Semiconductor Systems division, impairment tests on goodwill are conducted in three cash-generating units. As in the previous year, this affects the subsidiary PVA TePla Analytical Systems GmbH based in Westhausen. PVA Crystal Growing Systems GmbH is also treated as an independent cash-generating unit since 2015. The goodwill of PVA TePla AG was transferred to this company after leasing the business operations. PVA Metrology & Plasma Solutions GmbH is also treated as an independent cash-generating unit since 2015. The goodwill of Munich Metrology GmbH was transferred to this company after the merger in the 2015 fiscal year.

This breakdown of cash-generating units also corresponds to the levels at which the related goodwill is monitored and managed.

The recoverable amount of each cash-generating unit is calculated as its value in use via the discounted cash flow method. Using this method, cash flows are discounted on the basis of the adopted medium-term business plan with a planning horizon of three years and an extrapolation of this plan in line with expected market trends. Underlying these discounted cash flow calculations are forecasts for each cash-generating unit, which are based on the financial budgets approved by management and also used for internal purposes.

Key assumptions for the purpose of determining the fair value of each cash-generating unit by management include assumptions regarding the development of incoming orders, sales revenues, margins, investments and personnel. The values of these parameters are based on past experience as well as foreseeable future developments. 1% was applied as the growth rate for the extrapolation of the budget figures in calculating the perpetual annuity for all cash-generating units.

The discount rate is based on the segment-specific weighted average cost of capital of the companies (WACC approach) and contains a reasonable risk premium. The parameters market risk and beta have the largest effect on the calculation of impairment.

Necessary write-downs are identified by comparing the carrying amounts of the cash-generating units with the recoverable amounts. If the carrying amount of a cash-gene-

rating unit exceeds the recoverable amount, the carrying amount of that cash-generating unit is written down by the difference. The impairment loss will be allocated to goodwill and higher amounts will be distributed proportionately between the assets of the cash-generating unit.

Impairment losses are reversed if the reasons for their recognition no longer exist. The reversal of an impairment loss is limited to the amortized carrying amount that would have resulted if no impairment losses had been recognized in the past. Income from such reversals is reported in "Other operating income." Impairment losses on goodwill may not be reversed.

### Leasing

All agreements under which the right to use an asset for a fixed period of time is transferred in exchange for payment are deemed to be leases. This also applies to agreements where the transfer of such a right is not expressly stated. Based on the risks and opportunities of leased item, an assessment is made whether the lessee (so-called finance leases) or the lessor (so-called operating leases) has the economic ownership of the leased item.

PVA TePla AG is the lessee of property, plant and equipment and lessor in connection with the leasing of its own buildings. In fiscal year 2016, as in the previous year, all leases of PVA TePla were treated as operating leases with lease installments expensed as incurred.

### Inventories

Inventories are recognized at cost in accordance with the weighted average cost method or net realizable value, whichever is lower. In accordance with IAS 2 (Inventories), cost includes not only directly attributable costs, but also production and material overheads as well as write-downs. Fixed overheads are taken into account on the basis of the normal capacity utilization of the production facilities. The cost of idle production capacity is recognized in income under "Cost of sales." Write-downs are charged on inventories when their cost exceeds the expected net realizable value. The net realizable value is the expected disposal proceeds less any costs which are incurred until the sale.

### Coming Receivables on Construction Contracts

As part of the partial recognition of sales revenues from customer-specific construction contracts based on the percentage of completion, any amount due from customers

for contract work is reported as an asset in accordance with IAS 11.42. This item is shown separately under "Coming receivables on construction contracts."

### Receivables

Receivables are carried at their nominal amount.

Appropriate bad debt allowances are recognized for trade receivables in order to cover possible default risks.

### Cash

Cash comprises all freely available liquid funds such as cash in hand and cash in current accounts, as well as other current bank balances available.

### Derivative Financial Instruments/Exchange Rate Hedging

Some sales are concluded in foreign currencies. As a rule, forward exchange contracts are entered into to hedge exchange rate risks in these cases.

These cases are represented as fair value hedges. The measurement effects resulting from changes in exchange rates for assets (trade receivables) recognized in the balance sheet or open sales transactions in foreign currencies are measured at fair value while the adjustment of the carrying amount for reflecting the fair value is recognized in the income statement as a component of other operating expenses or income. In accordance with IFRS, hedging instruments are also measured at fair value. If hedging is implemented completely, the opposing effects on earnings will compensate each other.

### Derivative Financial Instruments/Interest Rate Hedging

Interest rate hedges were concluded to hedge interest rate risks for the financing of investments in new buildings. If the hedge relationship is effective, the positive market value of these instruments is recognized under "Other receivables." In this case, the offsetting entry is reported in equity under "Other reserves." The negative market value of these instruments is reported under other financial liabilities. The offsetting entry of the market value is reported in "Other reserves" without impact on the income statement.

For ineffective hedge relationships, changes in market value are recognized in the income statement in the financial result (net finance revenue or net finance costs).

As in 2015, the negative market values of all financial derivatives in fiscal year 2016 were reported as expenses in net finance costs under other financial liabilities.

#### **Deferred Investment Grants from Public Funds**

Some items of capital expenditure are supported by investment subsidies and tax-free investment grants. In accordance with IAS 20.24, these amounts are deducted from the carrying amount of the relevant assets.

#### **Presentation of Equity**

With the publication of amendments to IAS 1, new regulations regarding the presentation of other comprehensive income were introduced, which are applicable for fiscal years beginning on or after July 1, 2012.

PVA TePla AG will keep the separate presentation of income statement and the statement of comprehensive income. The presentation of other comprehensive income was changed so that individual subtotals can be shown for those that can be reused and those that cannot.

#### **Payables**

In accordance with IAS 39, liabilities are carried at amortized cost on the balance sheet date, which generally corresponds to the amount due on settlement.

#### **Obligations on Construction Contracts**

As part of the partial recognition of sales revenues from customer-specific construction contracts based on the percentage of completion, any amount due to customers for contract work is reported as a liability in accordance with IAS 11.42. This results from the excess of invoiced amounts over the corresponding proportionate revenue. These items are reported separately under "Obligations on construction contracts" on the balance sheet in the same manner as "Coming receivables on construction contracts".

Only partial payments that are due on the basis of the progress of each individual system, and hence that meet the scope of progress billing, are recognized as invoiced amounts. Payments received at the inception of the order or partial payments that do not correspond to the progress of completion are presented separately as advance payments.

#### **Obligations from Pension Commitments**

Obligations from direct pension commitments are calculated in accordance with IAS 19 (Employee Benefits) using the projected unit credit method while taking future salary and pension adjustments into account. Actuarial reports are obtained annually for this purpose. The service cost for pension beneficiaries is derived from the scheduled change in provisions for pension commitments.

Pension obligations in Germany are calculated on the basis of the biometric 2005 G mortality tables issued by Professor Dr. Klaus Heubeck. There are no pension obligations outside Germany. Actuarial gains and losses have a direct impact on the consolidated balance sheet and are recognized in other comprehensive income.

#### **Accruals**

Accruals are liabilities payable for goods or services received that are neither paid nor invoiced or formally agreed upon by the supplier at the balance sheet date. This also includes amounts owed to employees.

#### **Other Provisions**

In accordance with IAS 37 (Provisions, Contingent Liabilities and Contingent Assets), provisions for other financial obligations are recognized when a present obligation towards a third party arises from a past event, future settlement is probable and the amount can be reliably estimated. Non-current provisions with a remaining term of more than one year are recognized at the amount required to settle the obligation, discounted to the balance sheet date.

#### **Deferred Taxes**

Taxes are deferred in accordance with IAS 12 (Income Taxes) for temporary differences arising between the amounts in the consolidated balance sheet and the tax base of the companies included in consolidation, as well as for consolidation adjustments and tax loss carry-forwards. Deferred tax assets and liabilities are also recognized for temporary differences arising from company acquisitions, with the exception of temporary differences on goodwill. Deferrals are recognized in the probable amount of the tax charge or relief in subsequent fiscal years. Tax assets from deferrals are only recognized if it is reasonably certain they will be recovered.

Due to volatility in the market environment and repeated budget deviations in the past years, the time period for determining whether loss carry-forwards can be realized was limited to three years. Provided utilization of loss carry forwards appears likely for 2017 to 2019 based on the current budget, loss carry forwards were reported in deferred tax assets. Conversely, loss carry-forwards not expected to be realized until after 2019 were not or no longer recognized. Given the limited forecast period, only loss carry forwards of EUR 8,264 thousand were regarded as recoverable and relevant write-downs were carried out. The recoverability assumption is based on a detailed three-year budget, existing confidence regarding sales revenue for the 2017 fiscal year due to the order backlog and the documented reduction of break-even sales to less than EUR 75 million by reaching the turnaround in 2015.

Deferred taxes are calculated on the basis of the tax rates in force or announced in the individual countries at the realization date in accordance with the current legal situation.

#### **Revenue Recognition**

Sales revenues are recognized as soon as the goods are delivered or the services are performed, the transfer of risk has taken place and no technical risks or specific opposing contractual regulations exist. All sales revenues are recognized on the date of delivery or performance, as management regards other services and sales arrangements, such as seminars and training, as immaterial to the serviceability of the systems. Income from services and repair work is recognized when the related projects are completed.

Income from customer-specific construction contracts is generally realized in accordance with IAS 11 (Construction Contracts) on the basis of the progress of the work (percentage of completion method), as a reliable estimate of the outcome of the contract the products to be delivered, the terms of payment and the manner in which the work is to progress is clearly defined in the contracts and the fulfillment of the contractual arrangements by both the purchaser and the seller is considered to be probable. The degree of completion is determined as the ratio of the costs incurred at the balance sheet date to the estimated total costs (cost-to-cost method). Anticipated losses from long-term construction contracts are immediately expensed in full. If not all of the criteria mentioned above are met for individual orders, what is known as the zero profit margin method is applied. Accordingly income is only realized in

the amount of costs that have already been incurred and are likely to be covered by corresponding proceeds. During the production period, sales revenues are only realized in the amount of the order costs and therefore without a profit component. Billing for contracts that are not for job-order manufacturing only takes place after performance is complete.

Warranty provisions are recognized at the balance sheet date for realized sales revenues. These provisions are based on estimates and past experience.

#### **Research and Development Expenses**

PVA TePla is engaged in high-tech mechanical engineering in single unit and small series production. The continued development of products is closely linked to research into new procedures and processes and the development of new product features. Activities in these two areas partially alternate in the course of a project. Accordingly, the separation of research and development activities, and hence the separation of the respective costs, does not generally offer sufficient information value. Similarly, an estimate of probable benefits is too unreliable in light of the uncertainties in future market trends.

This means that of the conditions specified in IAS 38 (Intangible Assets) for the capitalization of development costs, two important criteria are not met. Accordingly, such costs are not capitalized. Research and development expenses are therefore usually expensed in the period in which they are incurred.

Renowned research and development institutions work with us to a minor extent under cooperation agreements (service contracts). Provided adequate indication as to the usability of the development results is available and the other IAS 38 conditions are met, internally generated intangible assets are capitalized.

#### **Interest**

Interest and other borrowing costs are expensed in the period in which they are incurred.

#### **Other Financial Obligations**

A discount rate of 4.5% (previous year: 4.5%) has been applied in determining the present value of other financial commitments.

## B. NOTES ON INDIVIDUAL BALANCE SHEET ITEMS

### 4. INTANGIBLE ASSETS

Changes in intangible assets in the year under review and in the previous year are shown in the consolidated statements of changes in fixed assets for the years 2016 and 2015.

The carrying amounts of intangible assets are composed as follows:

EUR'000	Dec. 31, 2016	Dec. 31, 2015
<b>Intangible assets</b>		
Goodwill	7,808	7,808
Intangible assets under development	0	179
Other intangible assets	949	775
Payments in advance	50	50
<b>Total</b>	<b>8,807</b>	<b>8,812</b>

Goodwill is allocated to cash-generating units as follows:

Cash Generating Units (CGU)	Goodwill EUR'000
PVA TePla Analytical Systems GmbH	4,831
PVA Crystal Growing Systems GmbH	2,734
PVA Metrology & Plasma Solutions GmbH	193
PVA Industrial Vacuum Systems GmbH	50
<b>Total</b>	<b>7,808</b>

In the course of impairment testing, the recoverable amount for the main cash-generating units was determined based on the value in use. A segment-specific cost of capital was calculated to discount the expected cash flows in determining the value in use. The cost of capital for the units under review was between 11.0% and 11.8%.

The underlying assumptions of key planning indicators (such as sales revenue growth, cash flows, discount rates) reflect past experience and are set according to external information sources. Planning is based on a financial planning horizon of three years. For an impairment test, growth of 1 % has been set for cash flow for the following period. The underlying USD/EUR exchange rate is 1.0541. The cash flow is discounted according to cost of capital approach while taking into account specific tax effects of the divisions.

For cash generating units with significant goodwill we have made the following assumptions:

For the Analytical Systems business unit, we expect average geometric sales revenue growth (CAGR determination) of 7% (previous year: 4%) in the next three years due to the continued high-level of investments in the semiconductor industry and the further effects of sales activities. We expect sales revenues to remain nearly constant for 2018 through 2019 in the Crystal Growing Systems business unit.

There were no impairment write-downs to the lower value in use for fiscal year 2016 (previous year: EUR 0 thousand).

If the discount interest rate increases by 2.0 percentage points and circumstances remain consistent, this would result in the determined recoverable amount (value in use) for the cash-generating unit PVA Crystal Growing Systems GmbH corresponding with the carrying amount. The same result would be determined if the EBIT applied within the context of the cash flow forecast decreased by 20%. No major contracts were taken into account in the budget underlying this assessment.

Information on the approach and assumptions used for impairment testing are found under note 3 of the Group notes.

Amortization of other intangible assets amounted to EUR 271 thousand in 2016 and EUR 241 thousand in 2015, and were primarily reported in the cost of sales.



## 5. PROPERTY, PLANT AND EQUIPMENT

Changes in property, plant and equipment in the year under review and in the previous year are shown in the consolidated statements of changes in fixed assets for 2016 and 2015, which are attached as an appendix.

The carrying amounts of property, plant and equipment are composed as follows:

EUR'000	Dec. 31, 2016	Dec. 31, 2015
<b>Property, plant and equipment</b>		
Property, plant and equipment		
Land, property rights and buildings, including buildings on third party land	23,738	24,716
Plant and machinery	3,926	3,558
Other plant and equipment, fixtures and fittings	1,043	1,201
Advance payments and assets under construction	75	1,327
<b>Total</b>	<b>28,782</b>	<b>30,802</b>

The "Land, property rights and buildings, including buildings on third-party land" item mainly consists of buildings in Wetttemberg and Jena owned by the Group.

Amortization of other property, plant, and equipment amounted to EUR 2,345 thousand in 2016 and EUR 2,089 thousand in 2015.

Land has been encumbered with a charge in the amount of EUR 18,000 thousand in order to secure the PVA TePla AG loans for the financing of new facilities in Wetttemberg. One of these loans is valued at EUR 4,333 thousand (previous year: EUR 5,000 thousand) on the balance sheet date and has a remaining term until January of 2023. The second loan has been drawn in full as at the reporting date (EUR 4,000 thousand) as working capital and was not drawn in full in the prior year (framework previous year: EUR 4,667 thousand).

For the land charges mentioned above, an agreement to assign the restitution claim and a non-recurring loan undertaking were concluded between the affected banks within the scope of the syndicated loan contract concluded in August 2015. Therefore the land charges serve as front-ranking collateral under the contractual relationship mentioned above and only second-ranking collateral under the syndicated loan contract. With the conclusion of the syndicated loan contract, an additional land charge of EUR 7.3 million was registered for the Jena location.

Subsidiary PVA Löt- und Werkstofftechnik GmbH, Jena, Germany concluded an installment purchase contract in fiscal year 2010 to finance a brazing furnace, for which PVA TePla AG has issued a directly enforceable guarantee and an extended retention of title to the leasing company. On December 31, 2016 the book value of the furnace was EUR 466 thousand (previous year: EUR 531 thousand). The carrying amount of the loan on the other hand was EUR 188 thousand at year end (previous year: EUR 288 thousand).

In order to secure PVA TePla AG's loan for the financing of the photovoltaic plant in Wetttemberg, the plant was assigned as security. The book value of the photovoltaic plant was EUR 86 thousand on December 31, 2016 (previous year: EUR 92 thousand), and the loan valued at EUR 35 thousand (previous year: EUR 51 thousand) has a remaining term until December 2018.

There are no other material restrictions on ownership or title in respect of the property, plant and equipment reported.

There are no significant non-current assets that could be allocable to third countries.

## 6. NON-CURRENT INVESTMENTS

The book values of the financial assets include other receivables in the amount of EUR 11 thousand (prior year: EUR 10 thousand).

## 7. INVENTORIES

Inventories are composed as follows:

EUR'000	Dec. 31, 2016	Dec. 31, 2015
Raw materials and operating supplies	9,239	8,196
Work in progress	11,205	8,685
Finished products and goods	648	1,480
<b>Total</b>	<b>21,092</b>	<b>18,361</b>

Inventories in 2016 include write-downs of EUR 3,898 thousand (previous year: EUR 7,788 thousand). Write-downs are primarily attributable to typical write-downs for non-marketability and reductions for loss-free valuation.

The significant inventories of the Group companies were transferred by way of security under a syndicated loan contract. This includes the inventories of PVA TePla AG, PVA Vakuum Anlagenbau Jena GmbH, PVA TePla Analytical Systems GmbH and PVA Industrial Vacuum Systems GmbH. Retention of title by suppliers to the extent customary in the industry applies as well.

## 8. COMING RECEIVABLES ON CONSTRUCTION CONTRACTS

Contract costs accounted for using the percentage of completion method and revenues from work in progress in the system construction business are as follows:

EUR'000	Dec. 31, 2016	Dec. 31, 2015
Capitalized production costs including contract profits	28,105	18,969
for which advance payments received (progress billings)	-15,881	-11,148
<b>Total</b>	<b>12,224</b>	<b>7,821</b>

Additional advance payments received for PoC orders in the amount of EUR 8,086 thousand (previous year: EUR 10,458 thousand) are included in the advance payments of EUR 10,450 thousand (previous year: EUR 12,706 thousand) reported under current liabilities. Obligations on construction contracts in the amount of EUR 964 thousand (previous year: EUR 516 thousand) – on contracts where payments received according to the percentage of completion exceed the contract costs incurred plus proportionate profits – are also shown under current liabilities. Further information can be found under notes 18 and 19.

## 9. RECEIVABLES

Receivables are composed as follows:

EUR'000	Dec. 31, 2016	Dec. 31, 2015
Trade receivables	12,704	8,926
Advance payments	1,954	1,443
Other receivables	1,341	1,425
<b>Total</b>	<b>15,999</b>	<b>11,794</b>

Other receivables include prepaid expenses.

Trade receivables consist of the following:

EUR'000	Dec. 31, 2016	Dec. 31, 2015
Trade receivables	13,052	9,451
Bad debt allowances	-348	-524
<b>Total</b>	<b>12,704</b>	<b>8,926</b>

In the course of ordinary business, supplier credit is granted to a broad range of customers. The creditworthiness of customers is regularly reviewed. Bad debt allowances are recognized to cover potential risks.

Write-downs on trade receivables developed as follows in the fiscal year:

EUR'000	2016	2015
<b>Write-downs on January 1</b>	<b>524</b>	<b>593</b>
Currency translation differences	0	1
Addition	120	68
Utilization	-38	0
Release	-259	-138
<b>Write-downs on December 31</b>	<b>348</b>	<b>524</b>

The trade receivables of the Group companies were ceded under a syndicated loan contract. These include the trade receivables of PVA TePla AG, PVA Vakuum Anlagenbau Jena GmbH, PVA TePla Analytical Systems GmbH, PVA Crystal Growing Systems GmbH, PVA Metrology & Plasma Solutions GmbH and PVA Industrial Vacuum Systems GmbH.

Other receivables are composed as follows:

EUR'000	Dec. 31, 2016	Dec. 31, 2015
Deferred prepayments	307	365
Receivables from investment incentives	194	90
Value added tax due	190	227
Accounts payable with debit balances	67	28
Others	584	715
<b>Total</b>	<b>1,342</b>	<b>1,425</b>

Derivative financial instruments are carried at market value. Due to their short-term nature, the market value of other items does not significantly deviate from the carrying amounts presented.

## 10. CASH

Cash of EUR 2,514 thousand (previous year: EUR 6,492 thousand) primarily consist of current bank balances. Cash in hand amounted to EUR 5 thousand (previous year: EUR 8 thousand). Cash also includes EUR 112 thousand that was deposited as collateral for a bank guarantee.

## 11. DEFERRED TAX ASSETS

For further details, please refer to note 23 "Income taxes".

## 12. SHAREHOLDERS' EQUITY

### Share Capital

As of December 31, 2016, PVA TePla AG issued no-par value shares with a nominal interest in the share capital of EUR 1.00 each.

### Contingent and Authorized Capital

There was no contingent capital as of December 31, 2016.

At the same time, the Annual General Meeting of PVA TePla AG authorized the Management Board to increase the Company's share capital with approval of the Supervisory Board on one or more occasions during the period until June 30, 2017 by a total of up to EUR 10,874,994 by issuing 10,874,994 new no-par value bearer shares against cash and/or non-cash contributions with shareholders' subscription rights excluded to the extent permitted by law. No capital increases from this authorized capita were resolved in 2016.

## 13. DEFERRED INVESTMENT GRANTS FROM PUBLIC FUNDS

PVA TePla has received financial incentives from various public authorities under government business development programs, including funding for the construction of

production facilities. Pursuant to IAS 20.24, investment subsidies and tax-free investment contributions received are deducted from the book value of the relevant assets.

#### 14. NON-CURRENT FINANCIAL LIABILITIES

Non-current financial liabilities totaled EUR 3,768 thousand (previous year: EUR 4,556 thousand) – all of which were liabilities to banks.

Non-current financial liabilities primarily relate to loans for the financing of construction measures in Wettberg.

Non-current financial liabilities are composed as follows:

EUR'000	Dec. 31, 2016	Dec. 31, 2015
Non-current financial liabilities	4,557	5,339
Portion of non-current financial liabilities due in less than one year	-789	-783
<b>Non-current financial liabilities less current portion</b>	<b>3,768</b>	<b>4,556</b>

The average weighted interest rate for non-current financial liabilities was 1.04% (previous year: 1.14%). Non-current financial liabilities were reduced to EUR 3,768 thousand (previous year: EUR 4,556 thousand) due to scheduled loan amortization.

The repayment commitments for these non-current financial liabilities are structured as follows:

EUR'000	2016	2015
<b>Due</b>		
Up to 1 month	343	343
Between 1 and 3 months	19	19
Between 3 and 1 year	421	421
Between 1 and 5 years	2,774	2,890
More than 5 years	1,000	1,667

The loan for the financing of investments in machinery for the subsidiary PVA Löt- und Werkstofftechnik GmbH, Jena, Germany is secured through the transfer of ownership of the assets to be financed. The carrying amount of this collateral on December 31, 2016 was EUR 466 thousand (previous year: EUR 531 thousand).

The financial liabilities of PVA TePla AG are carried at amortized cost.

#### 15. PENSION PROVISIONS

##### Basic Principles

In the area of company pension schemes, a distinction is made between defined benefit plans and defined contribution plans. In the case of defined benefit plans, the Company is obliged to pay defined benefits to active and former employees.

In the case of defined contribution plans, the Company does not enter into any additional obligations other than making earmarked contributions.

##### Defined Benefit Plans

Provisions for pension obligations are recognized on the basis of pension plans for commitments to pay retirement, invalidity and dependents' benefits. The amount of benefit usually depends on the number of years of service and the salary of the respective employee.

Pension commitments exist at PVA TePla AG, PVA Industrial Vacuum Systems GmbH, PVA Crystal Growing Systems GmbH and PVA Vakuum Anlagenbau Jena GmbH and refer exclusively to former commitments. New pension commitments are generally no longer granted.

Obligations are calculated using the projected unit credit method, under which future obligations are measured on the basis of the proportionate benefit entitlement acquired at the balance sheet date. Measurement takes into account assumptions on trends for the relevant factors affecting the amount of benefits.

There is no external financing via a pension fund. The resulting residual risks from accounting of pension obligations are related to risks from the change in actuarial parameters, which are shown in the table below. The largest risk is the interest rate, where we refer to the separate sensitivity analysis.

In detail, the calculation is based on the following actuarial premises:

in %	Dec. 31, 2016	Dec. 31, 2015
Income trend	3.00	3.00
Pension trend	1.25	1.25
Staff turnover	1.50	1.50

The interest rate used for calculation at PVA TePla AG for candidates and retired persons was 1.75% (previous year: 2.4% and 1.9%), 2.0% (previous year: 2.4% and 1.9%) at PVA Industrial Vacuum Systems GmbH and PVA Crystal Growing Systems GmbH, and 2.05% (previous year: 2.4% and 1.9%) at PVA Vakuum Anlagenbau Jena GmbH. Biometric parameters have been calculated on the basis of the 2005 G mortality tables issued by Professor Klaus Heubeck. The measurement of pension obligations is supported by actuarial reports.

Since fiscal year 2013, the interest portion included in pension expenses is reported under net interest income.

Changes in recognized provisions for pensions are as follows:

EUR'000	2016	2015
Pension provisions on Jan. 1	13,327	13,975
Expenditure on retirement pensions	1,401	-291
Pension payments	-389	-357
<b>Pension provisions on Dec. 31</b>	<b>14,339</b>	<b>13,327</b>

At the balance sheet date, it can be assumed that EUR 437 thousand (previous year: EUR 396 thousand) will be fulfilled within the next twelve months and EUR 13,902 thousand (previous year: EUR 12,930 thousand) will be fulfilled at a later date (over a very long term for some portions).

Changes in the present value of future pensions are as follows:

EUR'000	2016	2015
Present value of future pensions on Jan. 1	13,327	13,975
Current service expense for services provided by employees in the fiscal year	149	176
Subsequent service expense	0	-574
Interest expense	295	310
Pension payments	-389	-357
Actuarial gains (-) and losses (+)	957	-203
<b>Present value of future pensions on Dec. 31</b>	<b>14,339</b>	<b>13,327</b>

Current official service expenditures and the positive subsequent official service expenditures due to an amendment to the pension regulations are included primarily in manufacturing costs and administrative expenses.

#### Sensitivity Analysis

When keeping to the other assumptions, the changes reasonably assumed possible on the balance sheet date would have influenced the defined pension plans as follows, based on actuarial gains and losses:

Effect in EUR'000 on Dec. 31, 2016	Increase	Reduction
Discount rate (0.25% change)	-530	559
Future pension increases (0.25% change)	446	-428

On December 31, 2016, the weighted average term of defined pension plans was 15.5 years.

Overview of the present value of pension obligations for the current year and previous years:

EUR'000	2016	2015	2014	2013	2012
Pension obligations	14,339	13,327	13,975	11,377	11,338
Actuarial gains (-) / losses (+)	957	-203	2,370	-206	2,296

Actuarial gains and losses have a direct impact on the consolidated balance sheet and are only recognized in other comprehensive income.

#### Defined Contribution Plans

Defined contribution plans of relevance to PVA TePla take the form of the employer's statutory pension insurance contributions, pension fund contributions and direct insurance contributions. In fiscal year 2016, the corresponding expenditure amounted to EUR 1,945 thousand (previous year: EUR 1,905 thousand).

#### 16. OTHER PROVISIONS

Other provisions amounted to EUR 2,691 thousand (previous year: EUR 1,958 thousand) and changed during the reporting period as follows:

EUR'000	Jan. 1, 2016	Utilization	Release	Addition	Dec. 31, 2016
Warranty	942	375	150	761	1,178
Subsequent costs	398	317	37	540	584
Archiving	84	34	13	6	43
Penalties	68	0	0	231	299
Others	466	128	102	351	587
<b>Total</b>	<b>1,958</b>	<b>854</b>	<b>302</b>	<b>1,889</b>	<b>2,691</b>

Provisions were recognized solely in respect of obligations to third parties where utilization is highly probable. Provisions are measured at the amount of probable utilization.

Other provisions contain long-term components in the amount of EUR 342 thousand (previous year: EUR 292 thousand). These relate primarily to provisions for archiving as well as non-current payments in connection with long-term performance-based compensation for the Management Board, and are shown separately in the balance sheet. All other provisions are short-term in nature.

#### 17. CURRENT FINANCIAL LIABILITIES

PVA TePla AG concluded a new loan agreement with a banking consortium under leadership of Commerzbank AG, Frankfurt am Main in fiscal year 2015. The loan agreement has a term of 36 months and ends in August of 2018. Financing includes a bank credit line of EUR 7.5 million, a guaranteed credit line of EUR 27.5 million and an increase option for another EUR 20 million. Interest is according to EURIBOR with a graduated margin based on the debt ratio. The bank credit line totaling EUR 2.7 million (previous year: EUR 4.5 million) and the guaranteed credit line totaling EUR 19.5 million (previous year: EUR 23.6 million) were utilized as at the reporting date. The syndicated loan agreement defines financial covenants for meeting common financial ratios.



## 18. OBLIGATIONS ON CONSTRUCTION CONTRACTS

Among other things, the PVA TePla Group manufactures large-scale systems under customer-specific contracts for which customers make payments in accordance with the progress of the contract. The negative balance resulting from sales revenues and progress billing, which is recorded on the basis of the percentage of completion, is presented in the balance sheet as obligations on construction contracts.

Obligations on construction contracts are composed as follows:

EUR'000	Dec. 31, 2016	Dec. 31, 2015
Advance payments received (progress billing)	3,528	2,083
less contract costs incurred (incl. share of profit)	-2,564	-1,567
<b>Total</b>	<b>964</b>	<b>516</b>

## 19. ADVANCE PAYMENTS RECEIVED ON ORDERS

The financing of the PVA TePla Group is largely based on the advance payments and interim payments received from customers, particularly in the case of larger contracts. The value of the advance payments received as of December 31, 2016 was EUR 10,450 thousand (previous year: EUR 12,706 thousand). Advance payments received on production orders according to IAS 11 are offset against the corresponding asset items according to the percentage of completion and are not included here.

## 20. ACCRUALS

Accruals are liabilities payable for goods or services received that are neither paid nor invoiced or formally agreed upon by the supplier at the balance sheet date. This also includes amounts owed to employees.

Accrued liabilities are composed as follows:

EUR'000	Dec. 31, 2016	Dec. 31, 2015
Obligations to employees	2,196	1,731
Obligations to suppliers	2,360	3,005
Other commitments	189	301
<b>Total</b>	<b>4,745</b>	<b>5,037</b>

All of the reported amounts are short-term in nature.

## C. NOTES ON INDIVIDUAL INCOME STATEMENT ITEMS

### 21. SALES REVENUES

PVA TePla principally generates its sales revenues through the sale of systems. Additional sales revenues are generated from services and by supplying spare parts (referred to collectively as after-sales service), as well as providing services for customers in the Company's own facilities (contract processing, mainly carried out by PVA Löt- und Werkstofftechnik GmbH, in the field of plasma treatment by PVA TePla America Inc., and in the vacuum field by PVA Industrial Vacuum Systems GmbH). Sales revenues can be broken down into these categories as follows:

EUR'000	2016	in %	2015	in %
Systems	66,827	77	53,923	75
After-sales	15,117	17	13,171	18
Contract processing	3,102	4	3,636	5
Others	1,549	2	813	2
<b>Total</b>	<b>86,595</b>	<b>100</b>	<b>71,543</b>	<b>100</b>

The following revenue from customer specific contract production resulted from the partial realization of sales revenues in accordance with the percentage of completion method for customer-specific contracts already initiated by the balance sheet date and reported as future receivables on construction contracts or obligations on construction contracts:

EUR'000	Dec. 31, 2016	Dec. 31, 2015
Revenue from customer-specific contract production	29,376	17,458
For which contract costs incurred	-21,958	-13,880
<b>Gains from customer-specific contract production</b>	<b>7,418</b>	<b>3,578</b>

## 22. RESEARCH AND DEVELOPMENT EXPENSES

Research and development expenses reported on the income statement amounted to EUR 2,970 thousand in 2016 and EUR 3,236 thousand in 2015. Income from research and development project grants of EUR 911 thousand in 2016 and EUR 317 thousand in 2015 was recognized separately under "Other operating income".

## 23. INCOME TAXES

Income taxes are calculated on a best estimate basis for the projected weighted average tax rate for the full fiscal year.

Since fiscal year 2015 a tax rate of 29% is applied for these companies. This includes corporation tax of 15%, a solidarity surcharge of 5.5% on corporation tax, and trade tax of 13.4%.

Deferred taxes were measured after they had been incurred using the tax rate stated above or country-specific tax rates for companies outside of Germany.

The actual tax charge is based on probable future tax liabilities and repayment claims.

Income taxes are broken down as follows:

EUR'000	2016	2015
Actual tax expense	-61	186
Current tax expenses	-50	-32
Prior-period tax charges (-) / income	-11	218
Deferred tax expense (-) / income	-53	-1,077
Credit from tax loss carry-forwards	792	1,155
Write-downs on deferred tax assets	0	-1,285
Other deferred taxes	-845	-947
<b>Income taxes</b>	<b>-114</b>	<b>-891</b>

Deferred taxes of EUR -278 thousand (previous year: EUR -58 thousand) were recognized directly in equity without affecting the income statement. These are attributable in full to effects recognized in equity for pension provisions.

The following table shows the reconciliation of expected and actual tax expense:

	2016		2015	
	EUR'000	in %	EUR'000	in %
Results before taxes	3,045		-558	
Expected tax charges (-) / income	-883	-29	162	-29
Tax rate changes	0	0	48	-9
Changes in tax rates for foreign companies	7	9	45	-8
Proportion of tax for permanent differences and temporary differences for which deferred taxes were not recorded	-66	2	-18	3
Prior-period current income tax	-12	0	219	-39
Change in allowances	905	30	-1,285	230
Other effects & adaptations	-65	2	-61	11
<b>Actual tax charges (-) / income</b>	<b>-114</b>	<b>-4</b>	<b>-891</b>	<b>160</b>

Deferred taxes from differences in tax rates for foreign companies are due to the fact that PVA TePla Group companies outside Germany are subject to different tax rates than companies in Germany.

Deferred taxes relate to:

EUR'000	Dec. 31, 2016		Dec. 31, 2015	
	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities
Non-current Assets	174	83	175	201
Inventories	354	118	157	0
Obligations on construction contracts	0	2,202	0	1,155
Receivables	0	90	2	231
Tax loss carry-forwards	2,709	0	7,541	0
Pension provisions	1,850	0	1,638	0
Other provisions / accruals	41	177	278	277
Others	190	116	0	50
<b>Total</b>	<b>5,291</b>	<b>2,786</b>	<b>4,184</b>	<b>1,914</b>
<b>Balance of deferred tax</b>		<b>2,505</b>		<b>2,270</b>

On December 31, 2016, the German companies have tax loss carry-forwards of EUR 23,056 thousand (previous year: EUR 22,495 thousand) that apply solely to the subsidiaries PVA Metrology & Plasma Solutions GmbH, Wetztenberg, Germany and PVA TePla AG, Wetztenberg, Germany.

PVA TePla America Inc. also has loss carry-forwards of EUR 5,987 thousand (USD 4.8 million in federal tax; USD 1.2 million in state tax), which will be utilized gradually starting from 2021 (federal tax) and from 2017 (state tax), unless utilized prior to that date, and can therefore only be used in part according to current plans.

Due to volatility in the market environment and repeated budget deviations in the past years, the time period for determining whether loss carry-forwards can be realized was limited to three years. Provided utilization of loss carry-forwards appears likely for 2017 to 2019 based on the current budget, loss carry-forwards were reported in deferred tax assets. Conversely, loss carry-forwards not expected to be realized until after 2019 were not or no longer recognized.

Given the limited forecast period, only loss carry forwards of EUR 8,264 thousand for the German companies and EUR 754 thousand for PVA TePla America Inc. were regarded as recoverable and relevant write-downs were carried out.

## 24. EARNINGS PER SHARE

Consolidated net profit for the year before minority interests amounted to EUR 2,931 thousand (previous year: EUR -1,450 thousand). As in the previous year, an average of 21,749,988 no-par value shares was in circulation in fiscal year 2016.

Earnings per share are calculated as the consolidated net profit before minority interests divided by the weighted average number of shares outstanding during the year.

Calculation of earnings per share for 2016 and 2015:

	2016	2015
Numerator: Consolidated net result for the year before minority interests (EUR'000)	2.931	-1.450
Denominator: Weighted number of shares outstanding - basic	21,749,988	21,749,988
<b>Earnings per share (EUR)</b>	<b>0.13</b>	<b>-0.07</b>

At the balance sheet date, no stock options were issued to employees and members of the Management and Supervisory Boards entitling them to purchase PVA TePla AG shares. As a result, there were no dilution effects in regards to earnings per share as of December 31, 2016.

## 25. APPROPRIATION OF NET PROFIT/ RETAINED EARNINGS

The separate financial statements of PVA TePla AG (according to commercial law regulations) as of December 31, 2016 report a net loss for the year of EUR -746 thousand (previous year: EUR -5,826 thousand) and overall reduced retained earnings of EUR 5,919 thousand (previous year:

EUR 6,667 thousand). These retained earnings represent the distributable amount of EUR 5,298 thousand in accordance with IAS 1.79(v).

The Management Board and Supervisory Board propose that the retained earnings reported in the 2016 annual financial statements amounting to EUR 5,919 thousand be carried forward to a new account at the same amount. There were no withdrawals from the share premium or retained earnings.

## D. NOTES ON THE CASH FLOW STATEMENT AND ON CAPITAL MANAGEMENT

The cash flow statement has been prepared using the indirect method in accordance with IAS 7.20. The cash in the cash flow statement corresponds to the balance sheet item of the same name.

Business transactions not affecting cash have not been included in the cash flow statement.

Payments for investments in intangible assets and property, plant and equipment include only cash effective acquisitions.

The primary objective of PVA TePla's capital management is to ensure the financial flexibility required to reach the defined growth and yield targets, thereby enabling growth in the Company's value. The contents of capital management cover shareholders' equity and the external borrowing necessary to finance the Company's operations. The key indicator for capital management is the equity ratio. Actual management is performed by optimizing yields and setting limits on the commitment of funds. Further objectives of capital management include ensuring the Group's liquidity by agreeing appropriate and sufficient credit lines and maintaining the current ratio of advance payments, as well as optimizing the financial result in order to improve yields.

The capital management of PVA TePla therefore includes the following:

EUR'000	Dec. 31, 2016	Dec. 31, 2015
Shareholders' equity	40,305	37,941
Current and non-current financial liabilities	11,416	9,869
Advance payments received	10,450	12,706
<b>Total amount</b>	<b>62,171</b>	<b>60,516</b>
<b>Total assets</b>	<b>94,736</b>	<b>88,279</b>
Equity ratio	42.5%	43.0%

Equity increased to EUR 40,305 thousand in the 2016 fiscal year (previous year: EUR 37,941 thousand). A credit line of EUR 4,600 thousand used for working capital was utilized at the beginning of 2016. Together with other planned redemptions, the financial liabilities were therefore increased to EUR 11,416 thousand (previous year: EUR 9,869 thousand). The equity ratio decreased to 42.5% in 2016 (previous year: EUR 43.0%).

## E. ADDITIONAL DISCLOSURES

### 26. SEGMENT REPORTING

Since January 1, 2015 the PVA TePla Group has been organized with the Industrial Systems and Semiconductor Systems divisions as well as Holding Costs. Performance is assessed and decisions regarding the assignment of resources to the segments are made on the basis of PVA

TePla AG's two divisions. The following segment reporting therefore follows the Group's organizational structures on PVA TePla's Group internal management system.

"Holding Costs" were first included in segment reporting when the reorganization began on January 1, 2015 and contributed EUR -2.6 million to EBIT in the 2016 fiscal year. They include expenditures not directly related to the business operations of the Group and not encompassing service functions (known as shareholder costs), and were allocated to the divisions in the past.

The following tables provide a general overview of the operating segments of the PVA TePla Group. Segment reporting in accordance with IFRS 8 also includes a reconciliation of the total result of the segments to the consolidated result for the year.

Sales revenues by divisions for fiscal years 2016 and 2015 are as follows:

EUR'000	2016		2015	
	External sales revenues	Internal sales revenues	External sales revenues	Internal sales revenues
<b>Segment revenues</b>				
Industrial Systems	35,674	1,835	30,789	2,788
Semiconductor Systems	50,921	1,767	40,754	388
<b>Consolidated revenues</b>	<b>86,595</b>	<b>3,602</b>	<b>71,543</b>	<b>3,176</b>

The types of revenue shown in section 21 are accrued in both divisions.

The operating profit by segments for fiscal years 2016 and 2015 is as follows:

	2016		2015	
	EUR'000	in %	EUR'000	in %
<b>Operating profit by segment</b>				
Industrial Systems	-232	-0.6	2,618	8.5
Semiconductor Systems	6,723	13.2	-479	-1.2
Holding Costs	-2,613		-1,991	
Consolidation	12		-53	
<b>Consolidated operating result</b>	<b>3,890</b>	<b>4.5</b>	<b>95</b>	<b>0.1</b>

The reconciliation of the segment results (EBIT) to the consolidated net result for the period is as follows:

EUR'000	2016	2015
Total segment results	3,878	148
Consolidation	12	-53
Consolidated operating profit (EBIT)	3,890	95
Financial result	-845	-653
Results before taxes	3,045	-558
Income taxes	-114	-891
<b>Consolidated net result</b>	<b>2,931</b>	<b>-1,449</b>

Other significant non-cash-effective segment expenses were not incurred.

The following sales revenues by region were generated in fiscal years 2016 and 2015:

EUR'000	2016		2015	
	in %	in %		
<b>Sales revenues by sales region</b>				
Asia	38,410	44	35,041	49
Germany	29,336	34	15,354	21
Europe (excluding Germany)	12,200	14	11,484	16
North America	5,968	7	6,508	9
Others	681	1	3,156	5
<b>Consolidated revenues</b>	<b>86,595</b>	<b>100</b>	<b>71,543</b>	<b>100</b>

EUR 14.7 million, or 17.0%, of sales revenues was generated with the Group's largest customer in fiscal year 2016.

As a matter of principle, transactions involving intersegment sales and revenues are conducted at arm's length conditions.

## 27. FINANCIAL INSTRUMENTS

This section contains a summary presentation of the Group's financial instruments and derivative financial instruments. Details of the individual categories of financial instruments are provided in the notes on the respective balance sheet and income statement items.

### Principles of the Risk Management System

In addition to default risk and liquidity risk, the Company's assets, liabilities and planned transactions are subject to risks from changes in exchange rates and interest rates. The aim of financial risk management is to minimize these risks through ongoing operating and finance-oriented activities. Selected derivative instruments are employed to hedge market price risks, depending on the assessment of the respective risk. Derivative financial instruments are used solely as hedging instruments, meaning that they

are not employed for trading or other speculative purposes. The basic details of the financial policy are established annually by the Management Board and monitored by the Supervisory Board. The Management Board is directly responsible for the implementation of the financial policy and ongoing risk management.

### Categories of Financial Instruments

The financial instruments held by the Group are assigned to the following categories:

	Financial assets and liabilities carried at fair value through profit / loss affecting profit		Financial assets and liabilities carried at fair value through profit / loss not affecting profit		Extended loans and receivables		Financial liabilities		PoC receivables	
	Fair value		Fair value		Amortized cost		Amortized cost		Amortized cost	
EUR'000	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
<b>Non-current assets</b>										
Investment property	0	0	0	0	0	0	0	0	0	0
Non-current financial assets	0	0	0	0	11	10	0	0	0	0
<b>Current assets</b>										
Coming receivables on construction contracts	0	0	0	0	0	0	0	0	12,224	7,821
Trade receivables	0	0	0	0	12,703	8,926	0	0	0	0
Other receivables and assets	0	15	0	0	3,381	2,856	0	0	0	0
Cash	0	0	0	0	2,514	6,492	0	0	0	0
Other financial assets	0	0	0	0	0	0	0	0	0	0
<b>Non-current liabilities</b>										
Financial liabilities	0	0	0	0	0	0	3,768	4,556	0	0
Other liabilities	464	586	0	0	0	0	87	226	0	0
<b>Current liabilities</b>										
Financial liabilities	0	0	0	0	0	0	7,648	5,313	0	0
Trade payables	0	0	0	0	0	0	4,940	3,165	0	0
Other liabilities	290	314	0	0	0	0	17,486	18,977	0	0
<b>Net finance result</b>	<b>131</b>	<b>118</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>-488</b>	<b>-354</b>	<b>0</b>	<b>0</b>



With the exception of financial liabilities carried at amortized cost, the carrying amounts in all categories largely correspond to the respective market values. No separate comparison of carrying amounts and market values is provided. In accordance with IFRS 7.27A, financial instruments measured at fair value must be assigned to different levels. PVA TePla AG's financial instruments measured at fair value are allocated to "level 2" at which measurement is based on stock exchange or market prices of similar instruments or on measurement models based on input parameters observable in the market.

The fair values of both forward exchange contracts and interest hedges were determined on the basis of discounted expected future cash flows, using market interest rates applicable to the remaining terms of the financial instruments.

The net gain of EUR 131 thousand (previous year: EUR 118 thousand) from the financial assets and liabilities measured at fair value through profit or loss comprises changes in the market value of derivative hedging instruments.

The net gain for the financial assets and liabilities measured at fair value without affecting profit or loss amounted to EUR 0 thousand (previous year: EUR 2 thousand).

The net gain from issued loans and receivables recognized at amortized cost amounted to EUR 0 thousand (previous year: EUR 1 thousand).

The net gain on financial liabilities recognized at amortized cost includes interest expense of EUR 488 thousand (previous year: EUR 354 thousand).

#### **Credit Risk**

The Company is exposed to counterparty default risk as a result of its operating activities and certain financing activities.

In its operating business, accounts receivable are monitored on a decentralized, ongoing basis. Default risks are taken into account through specific valuation allowances and flat-rate specific valuation allowances.

For the breakdown of receivables and valuation allowances, see Note 9. Valuation allowances were recognized for expected bad debts.

Theoretically, the maximum default risk is shown by the carrying amounts of the financial assets recognized in the balance sheet. The PVA TePla Group recognized valuation allowances of EUR 348 thousand (previous year: EUR 524 thousand) on trade receivables to cover known risks. Risks from advance payments are avoided with advance payment bonds. There are no discernible risks from other receivables. The PVA TePla Group did not have any other material agreements which could reduce the maximum default risk as of the balance sheet date.

#### **Liquidity Risk**

Revolving liquidity planning is performed in order to ensure the Company's solvency and financial flexibility at all times.

To the extent necessary, a liquidity reserve is held in the form of credit facilities and, if required, in cash.

For more information on the maturities of the individual financial liabilities, see the disclosures on the relevant balance sheet items in note 14. The maturity analysis of the derivative financial liabilities can be found in the sections "Currency risks" and "Interest hedges".

#### **Market Risk**

With regard to market price risk, the Company is exposed to currency risks, interest rate risks and other price risks.

#### **Currency Risks**

The Company's currency risks primarily result from its operating activities, financing measures and investments. Foreign currency risks with a significant impact on the Group's cash flow are hedged.

Foreign currency risks from operations primarily arise when planned transactions are settled in a currency other than the functional currency (EUR). These planned transactions relate in particular to expected future sales revenues invoiced in US dollars.

PVA TePla AG enters into forward exchange contracts to hedge its payment obligations. These derivative financial instruments have a term to maturity of up to one years and hedge payment obligations of EUR 1,692 thousand (previous year: EUR 4,562 thousand) as at December 31, 2016. The expected net payments from currency hedging instruments are as follows:

Expected net payments EUR'000	Dec. 31, 2016	Dec. 31, 2015
Up to 1 month	-60	-31
Between 1 and 3 months	-26	-18
Between 3 months and 1 year	-20	-25
Between 1 and 5 years	0	-22

Currency risks due to foreign currency invoices are mainly hedged by forward exchange contracts, meaning that changes in exchange rates from foreign currency transactions have no significant effect on profit/loss or shareholders' equity.

For the prospective effectiveness measurement it is checked that key parameters of hedging instruments (nominal amount, term, etc.) match the hypothetical derivatives, and the cumulative dollar offset method is used for the retrospective effectiveness measurement.

Interest income and expenses from financial instruments at the German companies are recognized in the functional currency (EUR). This means that foreign currency risks can only arise from the financial instruments and assets held by the individual companies outside Germany that would be taken directly to currency reserves in equity.

For this reason, only an equity-based sensitivity analysis is performed.

If the value of the euro had been 10% higher (lower) compared to the US dollar on December 31, 2016, the other reserves in equity would have been EUR 216 thousand lower (EUR 263 thousand higher) (December 31, 2015: EUR 183 thousand lower (EUR 242 thousand higher)).

If the value of the euro had been 10% higher (lower) compared to the other currencies relevant to the Group on December 31, 2016 the other reserves in equity would

have been EUR 65 thousand lower (EUR 79 thousand higher) (December 31, 2015: EUR 7 thousand lower (EUR 16 thousand higher)).

### Interest Hedges

The Company is mainly subject to interest rate risk in the Eurozone. Taking the existing and planned debt structure into account, the Company uses interest rate derivatives (interest rate swaps) in order to counteract interest rate risks.

In accordance with IFRS 7 interest rate risks are presented using sensitivity analyses. These represent the effects of changes in market interest rates on interest payments, interest income and expenses, other earnings components and, where applicable, shareholders' equity.

Sensitivity analyses in accordance with IFRS 7 were performed for financial derivatives (swaps) not forming part of an effective hedge. If the market interest rate at December 31, 2016 had been 100 bp higher, earnings would have increased by EUR 120 thousand (previous year: EUR 174 thousand). Conversely, if the market interest rate at December 31, 2016 had been 100 bp lower, earnings would have decreased by EUR 127 thousand (previous year: EUR 164 thousand).

Interest rate hedges with a total original volume of EUR 11,600 thousand were entered into in order to hedge the interest rate risk for the financing of investments in new buildings at the Wettenberg site. The outstanding balance of these hedging transactions on the reporting date of December 31, 2016 is EUR 4,333 thousand (previous year: EUR 5,000 thousand). The interest hedges have a term to maturity of up to seven years. The expected net payments from interest hedging instruments are as follows:

Expected net payments EUR'000	Dec. 31, 2016	Dec. 31, 2015
Up to 1 month	-97	-106
Between 1 and 3 months	0	0
Between 3 months and 1 year	-87	-97
Between 1 and 5 years	-363	-512
More than 5 years	-101	-75

The remaining interest hedging instruments and underlying loans were concluded in 2007 on the basis of the corresponding interest rates. They hedge long-term, flexible financing for new construction at the Wettenberg location.

Effective on March 3, 2014 PVA TePla AG canceled two fixed-interest, mortgaged real estate loans for new construction in Wettenberg totaling EUR 5,684 thousand and combined them into a new loan for EUR 6,000 thousand with a term until December of 2022. The new loan was synchronized with existing interest hedging transactions for a total of EUR 6,000 thousand. However, effectiveness between the new underlying transactions and existing hedging transactions could not be achieved on the reporting date according to IFRS. The negative fair value of these hedging transactions was EUR -647 thousand on December 31, 2016 (previous year: EUR -790 thousand); fair value changes of EUR 143 thousand were recorded in financial expenses through profit or loss in the fiscal year (previous year: EUR 184 thousand) in financial income.

The corresponding contra-entry of the fair values of the interest derivatives as well as the applicable deferred taxes is made in other current and non-current financial liabilities as well as deferred tax assets or liabilities depending on changes in fair value.

#### Other Price Risks

As part of the description of market risks, IFRS 7 also requires disclosures on how hypothetical changes in other price risk variables would affect the prices of financial instruments. In particular, these risk variables include quoted prices and indices.

At December 31, 2016 and December 31, 2015 the Company did not hold any financial instruments that were subject to other notable price risks.

## 28. LEASING

PVA TePla is the lessee of property, plant and equipment and lessor in connection with the leasing of its own buildings. The leasing arrangements entered into by PVA TePla are all classified as operating leases. There are two main groups of leasing arrangements:

#### Rent of Buildings

PVA TePla has rented premises for production and administration from third parties at its sites in Kirchheim, Munich, Jena, Westhausen, Corona/California (USA) and Beijing (China) as well as in Singapore. In 2016, the monthly rent was EUR 10 thousand (previous year: EUR 16 thousand) at the Kirchheim site, EUR 4 thousand (previous year: 4 thousand) at the Jena site, EUR 8 thousand (previous year: EUR 15 thousand) for the Westhausen site, EUR 10 thousand (previous year: 9 thousand) for the Corona site, EUR 2 thousand (previous year: EUR 2 thousand) for the Beijing site and EUR 5 thousand (previous year: EUR 9 thousand) for the Singapore site.

The relevant rental agreements are standard agreements for the rental of commercial premises. In 2016, a total of EUR 466 thousand was paid under these agreements (previous year: EUR 540 thousand). Over the next few years, the minimum commitments can be broken down as follows:

EUR'000	Payments	Present value
<b>Remaining terms</b>		
Up to 1 year	470	450
Between 1 and 5 years	439	391
More than 5 years	11	8

#### Sublease of Buildings

Lease proceeds of EUR 5 thousand (previous year: EUR 50 thousand) were collected in 2016. Income from leasing over the coming years can be broken down as follows:

EUR'000	Payments	Present value
<b>Remaining terms</b>		
Up to 1 year	40	38
Between 1 and 5 years	7	7
More than 5 years	0	0

### Lease of Vehicles

PVA TePla AG restricts the number of company vehicles to an absolute minimum. As a matter of principle, cars for private use are provided on a priority basis to members of the Management Board and managing directors as well as individual employees with a great deal of external activities. Above and beyond this, fleet vehicles are used for business travel. Since 2004, new vehicles have been leased. In 2016, expenditures of EUR 129 thousand were incurred for such leases (previous year: EUR 146 thousand). Over the next few years, the minimum commitments can be broken down as follows:

EUR'000	Payments	Present value
<b>Remaining terms</b>		
Up to 1 year	100	95
Between 1 and 5 years	216	189
More than 5 years	35	27

### Other Leases

In addition to the aforementioned leases, the Company has other leases which mainly pertain to operating and office equipment. In 2016, expenditures of EUR 102 thousand were incurred for such leases (previous year: EUR 75 thousand). Over the next few years, the minimum commitments can be broken down as follows:

EUR'000	Payments	Present value
<b>Remaining terms</b>		
Up to 1 year	58	55
Between 1 and 5 years	72	64
More than 5 years	0	0

## 29. CONTINGENT LIABILITIES AND OTHER FINANCIAL OBLIGATIONS

### Commitments from Current Agreements

Commitments under rental and lease agreements are discussed above (see note 28).

Total commitments from master purchase agreements can be broken down as follows:

EUR'000	Payments	Present value
<b>Remaining terms</b>		
Up to 1 year	82	79
Between 1 and 5 years	0	0
More than 5 years	0	0

Total commitments from other agreements (e.g. servicing agreements, security services) can be broken down as follows:

EUR'000	Payments	Present value
<b>Remaining terms</b>		
Up to 1 year	520	498
Between 1 and 5 years	227	204
More than 5 years	11	8

Furthermore, the following contingent liabilities exist at December 31, 2016:

Legal action has been taken against the subsidiary PVA TePla America Inc. because of alleged defects in a plasma system. This system was not delivered to the Turkish claimant but to an American customer leasing it to the claimant. A compensation amount has not been specified to date. PVA TePla believes that third-party liability does not exist nor that the end customer could have suffered significant losses due to material defects.

During the course of the fourth quarter of 2016, the lawyers for PVA TePla have indicated that there is growing evidence that the court dispute will be resolved in favor of PVA TePla.

PVA TePla AG is being taken to court by the liquidator of an American manufacturer of polysilicon for repayment of the purchase price paid in fiscal years 2010 and 2011 for the delivery of crystal growing systems.

In February 2017, the lawsuit was dismissed by the United States Bankruptcy Court without the possibility of appeal.

### 30. COST OF MATERIALS

The cost of sales for fiscal years 2016 and 2015 contains expenditures on materials as follows:

EUR'000	2016	2015
Cost of raw materials, consumables and supplies and of goods purchased and held for resales	38,622	31,682
Cost of purchased services	3,766	1,999
<b>Total cost of materials</b>	<b>42,389</b>	<b>33,681</b>

The materials ratio (cost of materials to total sales revenues) amounted to 49.0% in fiscal year 2016, compared to 47.1% in the previous year.

### 31. PERSONNEL EXPENSES

Personnel expenses for fiscal years 2016 and 2015 are composed as follows:

EUR'000	2016	2015
Wages and salaries	24,661	23,123
Social charges	4,393	3,550
<b>Total personnel expenses</b>	<b>29,055</b>	<b>26,673</b>

The personnel costs include severance and release from employment in the amount of EUR 531 thousand (previous year: EUR 223 thousand). As a proportion of sales, personnel costs fell to 33.6% in the 2016 fiscal year compared to 37.3% in the previous year. The percentage decrease is largely due to increased sales revenues. Social security contributions in fiscal year 2016 include pension expenses of EUR 224 thousand (previous year: EUR 526 thousand).

The average number of employees for the year was 373 (previous year: EUR 358).

The average number of employees by function has changed compared to the previous year as follows:

Number of employees by function (average for the year)	2016	2015
Administration	46	46
Sales	55	52
Engineering, research and development	82	79
Production and service	190	181
<b>Total number of employees</b>	<b>373</b>	<b>358</b>

The number of employees includes 9 assistants (previous year: 11).

### 32. AMORTIZATION AND DEPRECIATION

Depreciation and amortization are discussed in the disclosures on non-current assets (see notes 4 and 5).

### 33. RISK MANAGEMENT

The current risks and opportunities and PVA TePla's risk management system are presented in detail in the management report. Please refer to section 3 of the management report for more information.

### 34. EXECUTIVE BODIES OF THE COMPANY

The total remuneration of members of the Management Board in the 2016 fiscal year amounted to EUR 591 thousand. The remuneration of the Management Board members consists of a basic salary not based on performance, other benefits (mainly non-cash benefits from the use of a company car, subsidized contributions to health insurance and contributions to a pension fund) and performance-based, variable remuneration components in the form of bonus payments. The performance-based, variable remuneration component is different for each Management Board member.

There is no variable, performance-based or other bonus remuneration for the CEO Peter Abel.

The following bonus provision applies to the COO Oliver Höfer: A short-term bonus payment is calculated as a percentage of the net income for the year for the PVA TePla Group that exceeds a minimum of EUR 5 million for the first half of 2016. In principle, this bonus is limited to one quarter of the respective base salary. In the second half of 2016, there is a short-term remuneration payment as a percentage of positive Group EBIT. This amount is limited to half of the fixed annual salary. The long-term bonus for the first half of 2016 is converted into notional shares using a current reference and is then calculated three years later using the reference exchange rate valid on that date. The amount of the bonus may be no more than the fixed annual salary. As of the 2017 fiscal year, only a short-term bonus will be granted, which is calculated as a percentage of EBIT. The annual bonus is limited to the annual fixed salary.

The bonus provision for the CFO Henning Döring for fiscal year 2016 called for a short-term payment as a percentage of the positive net profit of the Group. This amount may be no more than the annual fixed salary. A flat-rate bonus of EUR 10,500 shall be paid for fiscal year 2017.

On this basis, members of the Management Board received the following remuneration in fiscal year 2016:

EUR'000	Salary	Other benefits	Performance-related components	Total 2016	Total 2015
Peter Abel	120	0	0	120	120
Oliver Höfer	180	12	64 <sup>*)</sup>	256	321
Henning K. G. Döring	156	9	50	215	158
<b>Total</b>	<b>456</b>	<b>21</b>	<b>114</b>	<b>591</b>	<b>599</b>

<sup>\*)</sup> Payment of long-term compensation is made after a period of commitment of three years, taking into account the then share price relevant.

The values presented above for the performance-based component include amounts granted in 2016 for fiscal year 2015 less the amounts recognized and reported as provisions in fiscal year 2015. Provisions established in 2016 for fiscal year 2016 are also included.

The performance-based component for the Management Board includes a long-term, performance-based component of EUR 64 thousand in fiscal year 2016. This share-based remuneration component was calculated based on an option price model.

Non-current payments are due in connection with the long-term performance-based compensation mentioned above. All other remuneration listed above is payable over the short term. Employer contributions to pension insurance are not paid. Pension commitments exist solely based on the past, for the CEO Peter Abel in the amount of EUR 747 thousand (previous year: EUR 673 thousand). Since his reentry into the Management Board, no other pension obligations have been agreed. There are no pension obligations for the other members of the Management Board.

No share options were granted to members of the Management Board in fiscal year 2016. The contracts for the members of the Management Board foresees settlement payments in the event of the premature termination of activities as member of the Management Board, the amount of which depending on contract of employment is limited up to two years' salary (settlement cap). In the event of change of control and a subsequent premature termination of Management Board activities, the members receive remuneration which should not exceed 150% of the settlement cap.

In 2016, EUR 66 thousand was paid to former members of the Management Board as pensions. As at the balance sheet date, there was a provision of EUR 826 thousand for these pension obligations.

#### Supervisory Board

In fiscal year 2016, the Supervisory Board of PVA TePla AG consisted of:

Alexander von Witzleben, Weimar (Chairman)

» Feintool International Holding AG, Lyss  
(President of the Administration Board)

Member of the following other supervisory bodies:

- » VERBIO Vereinigte BioEnergie AG, Leipzig  
(Chairman of the Supervisory Board)
- » Siegwark Druckfarben AG & Co. KGaA, Siegburg  
(Member of the Supervisory Board)
- » KAEFER Isoliertechnik GmbH & Co. KG, Bremen  
(Member of the Advisory Board)



- » Arbonia AG, Arbon/Switzerland  
(President of the Advisory Board and CEO)  
(formerly AFG Arbonia-Forster-Holding AG)
- » Artemis Holding AG, Aarburg/Switzerland  
(Member of the Advisory Board)
- » Looser Holding AG, Arbon, Switzerland  
(President of the Advisory Board since Dec. 13, 2016)

**Dr. Gernot Hebestreit**, Leverkusen (Deputy Chairman)

- » Global Leader Clients and Markets,  
Grant Thornton International Limited, London/UK

Member of the following other supervisory bodies:

- » Comvis AG, Essen (Deputy Chairman  
of the Supervisory Board)

**Prof. Dr. Markus H. Thoma**, Schöffengrund

- » Professor of Plasma and Astronautics  
at the University of Giessen

The Supervisory Board now receives a fixed total remuneration of EUR 100 thousand for its activities per fiscal year.

EUR'000	Fixed remuneration 2016	Variable remuneration 2016	Fixed remuneration 2015	Variable remuneration 2015
Alexander von Witzleben (chairman)	50	0	50	0
Dr. Gernot Hebestreit	25	0	25	0
Prof. Dr. Markus H. Thoma	25	0	25	0
<b>Total</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>0</b>

This total remuneration is divided between the members of the Supervisory Board in such a way that the Chairman of the Supervisory Board receives double the amount paid to each regular member of the Supervisory Board. Members who leave the Supervisory Board during the fiscal year receive pro rata remuneration for their period of service.

## 35. RELATED PARTIES

Business transactions with related parties are on the one hand transactions with companies in which executive officers of PVA TePla AG have significant shareholdings or over which they exercise significant influence. On the other hand, these are business transactions with companies controlled by parties that may exercise significant influence on PVA TePla (particularly via participating interests in the Company).

In the past, only the relationship to the majority shareholder Peter Abel is relevant in this context. In the past, PVA TePla AG's relevant transactions with related parties principally encompass the purchases from ComTelNet Systems GmbH, Wettenberg, Germany. As this company was purchased in fiscal year 2016, with economic effect from January 1, 2017, (purchase price: EUR 35 thousand) and was merged with PVA Control GmbH, there are currently no transactions with related parties. In fiscal year 2016, the value of purchases from these companies totaled EUR 0 thousand (previous year: EUR 465 thousand) and the value of sales was EUR 0 thousand (previous year: EUR 38 thousand). At the time of purchase, the value of the purchases for the fiscal year 2016 amounted to EUR 331 thousand. The balance of outstanding receivables and liabilities on the reporting date of December 31, 2016 was EUR 0 thousand (previous year: EUR 0 thousand) and EUR 0 thousand (previous year: EUR 57 thousand) respectively. All transactions took place at arm's length conditions.

## 36. AUDIT FEES (SECTION 314 HGB)

The auditors' fees recognized as expenses for PVA TePla AG and the other companies of the PVA TePla Group amounted to:

EUR'000	2016	2015
Audit of annual financial statements	245	232
Other assurance or valuation services	0	0
Tax consulting services	0	0
Other services	0	0



Of the aforementioned costs, EUR 15 thousand relate to the previous year.

### 37. DECLARATION ON CORPORATE GOVERNANCE IN ACCORDANCE WITH ARTICLE 161 AKTG

The declaration of compliance with the German Corporate Governance Code as required by Section 161 of the German Stock Corporation Act (AktG) was again submitted by the Management Board and the Supervisory Board in the course of the fiscal year.

This declaration forms part of the separate corporate governance report and is permanently accessible to shareholders on the Company's website ([www.pvatepla.com](http://www.pvatepla.com)) along with the declarations for previous fiscal years.

### 38. ADDITIONAL DISCLOSURES

The following companies included in the consolidated financial statements of PVA TePla AG have utilized the exemption pursuant to Section 264 (3) HGB:

- » PVA Löt- und Werkstofftechnik GmbH
- » PVA Control GmbH
- » PVA TePla Analytical Systems GmbH
- » PVA Vakuum Anlagenbau Jena GmbH
- » PVA Industrial Vacuum Systems GmbH
- » PVA Crystal Growing Systems GmbH
- » PVA Metrology & Plasma Solutions GmbH

### 39. AUTHORIZATION OF THE FINANCIAL STATEMENTS FOR PUBLICATION

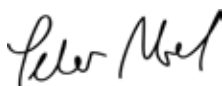
On March 24, 2017, the Management Board of PVA TePla AG authorized the present consolidated financial statements for fiscal year 2016 to be released to the Supervisory Board. This represents the authorization for publication described in IAS 10.6.

### 40. SIGNIFICANT POST-BALANCE SHEET DATE EVENTS

There have been no significant changes with regard to the company's situation and industry environment since the start of fiscal year 2017. There are also no major changes intended with regard to the organization, administration or legal structure of the Group or in the area of personnel.

Wettenberg, March 24, 2017

PVA TePla AG



Peter Abel  
Chief Executive Officer



Oliver Höfer  
Chief Operating Officer



## CONSOLIDATED STATEMENT OF CHANGES IN FIXED ASSETS

as at December 31, 2016

EUR'000	Acquisition and manufacturing costs						Balance Dec. 31, 2016
	Jan. 1, 2016	Acquisitions 2016	Additions 2016	Transfers 2016	Disposals 2016	Exchange differences	
<b>Intangible assets</b>							
1. Goodwill	12,658	0	0	0	0	0	12,658
2. Intangible assets under development	179	0	0	-179	0	0	0
3. Other intangible assets	5,035	0	68	357	0	3	5,481
4. Payments in advance	50	0	0	0	0	0	50
<b>Total</b>	<b>17,922</b>	<b>0</b>	<b>68</b>	<b>196</b>	<b>0</b>	<b>3</b>	<b>18,189</b>
<b>Property, plant and equipment</b>							
1. Land, property rights and buildings, including buildings on third party land	33,377	0	0	0	0	3	33,380
2. Plant and machinery	7,977	0	44	1,254	284	50	9,041
3. Other plant and equipment, fixtures and fittings	4,021	56	269	64	20	3	4,393
4. Advance payments and assets under construction	1,327	0	261	-1,514	0	0	74
<b>Total</b>	<b>46,703</b>	<b>56</b>	<b>574</b>	<b>-196</b>	<b>304</b>	<b>56</b>	<b>46,889</b>
<b>Investment property</b>	<b>303</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>303</b>	<b>0</b>	<b>0</b>
<b>Total</b>	<b>64,928</b>	<b>56</b>	<b>642</b>	<b>0</b>	<b>607</b>	<b>59</b>	<b>65,078</b>

Accumulated amortization and depreciation							Residual carrying values		
Balance Jan. 1, 2016	Additions 2016	Transfers 2016	Disposals 2016	Write-ups 2016	Exchange differences	Balance Dec. 31, 2016	Dec. 31, 2016	Dec. 31, 2015	
4,850	0	0	0	0	0	4,850	7,808	7,808	
0	0	0	0	0	0	0	0	179	
4,261	271	0	0	0	1	4,533	949	775	
0	0	0	0	0	0	0	50	50	
<b>9,111</b>	<b>271</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>9,383</b>	<b>8,807</b>	<b>8,812</b>	
8,661	979	0	0	0	3	9,643	23,738	24,716	
4,420	820	0	173	0	48	5,115	3,927	3,558	
2,820	546	0	19	0	3	3,350	1,043	1,201	
0	0	0	0	0	0	0	74	1,327	
<b>15,901</b>	<b>2,345</b>	<b>0</b>	<b>192</b>	<b>0</b>	<b>54</b>	<b>18,108</b>	<b>28,781</b>	<b>30,801</b>	
303	0	0	303	0	0	0	0	0	
<b>25,315</b>	<b>2,616</b>	<b>0</b>	<b>495</b>	<b>0</b>	<b>55</b>	<b>27,490</b>	<b>37,588</b>	<b>39,613</b>	

## CONSOLIDATED STATEMENT OF CHANGES IN FIXED ASSETS

as at December 31, 2015

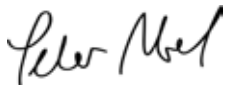
EUR'000	Acquisition and manufacturing costs						Balance Dec. 31, 2015
	Jan. 1, 2015	Acquisitions 2015	Additions 2015	Transfers 2015	Disposals 2015	Exchange differences	
<b>Intangible assets</b>							
1. Goodwill	12,658	0	0	0	0	0	12,658
2. Intangible assets under development	0	0	179	0	0	0	179
3. Other intangible assets	6,469	0	128	0	1,564	2	5,035
4. Payments in advance	30	0	20	0	0	0	50
<b>Total</b>	<b>19,157</b>	<b>0</b>	<b>328</b>	<b>0</b>	<b>1,564</b>	<b>2</b>	<b>17,922</b>
<b>Property, plant and equipment</b>							
1. Land, property rights and buildings, including buildings on third party land	33,359	0	7	1	0	10	33,377
2. Plant and machinery	7,018	0	1,642	30	869	157	7,977
3. Other plant and equipment, fixtures and fittings	5,815	0	231	15	2,050	10	4,021
4. Advance payments and assets under construction	101	0	1,271	-45	0	0	1,327
<b>Total</b>	<b>46,294</b>	<b>0</b>	<b>3,152</b>	<b>0</b>	<b>2,919</b>	<b>177</b>	<b>46,703</b>
<b>Investment property</b>	<b>694</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>390</b>	<b>0</b>	<b>303</b>
<b>Total</b>	<b>66,144</b>	<b>0</b>	<b>3,479</b>	<b>0</b>	<b>4,874</b>	<b>179</b>	<b>64,929</b>

Accumulated amortization and depreciation							Residual carrying values		
Balance Jan. 1, 2015	Additions 2015	Transfers 2015	Disposals 2015	Write-ups 2015	Exchange differences	Balance Dec. 31, 2015	Dec. 31, 2015	Dec. 31, 2014	
4,850	0	0	0	0	0	4,850	7,808	7,808	
0	0	0	0	0	0	0	179	0	
5,584	241	0	1,564	0	0	4,261	775	886	
0	0	0	0	0	0	0	50	30	
<b>10,434</b>	<b>241</b>	<b>0</b>	<b>1,564</b>	<b>0</b>	<b>0</b>	<b>9,111</b>	<b>8,812</b>	<b>8,724</b>	
7,638	1,008	0	-5	0	10	8,661	24,716	25,722	
4,458	669	0	850	0	143	4,420	3,558	2,560	
4,441	412	0	2,043	0	10	2,820	1,201	1,373	
0	0	0	0	0	0	0	1,327	101	
<b>16,537</b>	<b>2,089</b>	<b>0</b>	<b>2,888</b>	<b>0</b>	<b>163</b>	<b>15,901</b>	<b>30,801</b>	<b>29,756</b>	
327	16	0	40	0	0	303	0	367	
<b>27,298</b>	<b>2,346</b>	<b>0</b>	<b>4,492</b>	<b>0</b>	<b>163</b>	<b>25,315</b>	<b>39,613</b>	<b>38,847</b>	

# Responsibility Statement

„To the best of our knowledge we assure that in accordance with the applicable reporting principles, the Consolidated Financial Statements give a true and fair view of the net assets, financial position and profit or loss of the Group, and the Group Management Report - which has been combined with the Management Report of PVA TePla AG - gives a true and fair view of the development and performance of the business and the position of the Group, together with a description of the principle opportunities and risks associated with the expected development of the group.“

Wettenberg, March 24, 2017



Peter Abel  
Chief Executive Officer



Oliver Höfer  
Chief Operating Officer



# Auditor's Report

We have audited the consolidated financial statements of PVA TePla AG, Wettenberg – comprising the balance sheet, the statement of comprehensive income, the income statement, the statement of changes in equity, the cash flow statement and the notes to the consolidated financial statements as well as the group management report for the fiscal year from January 1 to December 31, 2016. The preparation of the consolidated financial statements and the group management report in accordance with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to section 315a (1) of the German Commercial Code (HGB) is the responsibility of the Company's legal representatives. Our responsibility is to express an opinion on the consolidated financial statements and the group management report based on our audit.

We conducted our audit of the consolidated financial statements according to Section 317 of the German Commercial Code (HGB) and the audit principles established by the Institut der Wirtschaftsprüfer (IDW) (Institute of Auditors in Germany). 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. Audit procedures are established based on our knowledge of the company's business activities, the economic and legal environment in which the group operates, and expectations regarding possible errors. 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 entities to be included in consolidation, the accounting and consolidation principles used and significant estimates made by the legal representatives, as well as evaluating the overall presentation of the annual financial statements and the group management report. In our opinion, our audit provides a sufficiently secure basis to issue an opinion.

Our audit did not result in any objections.

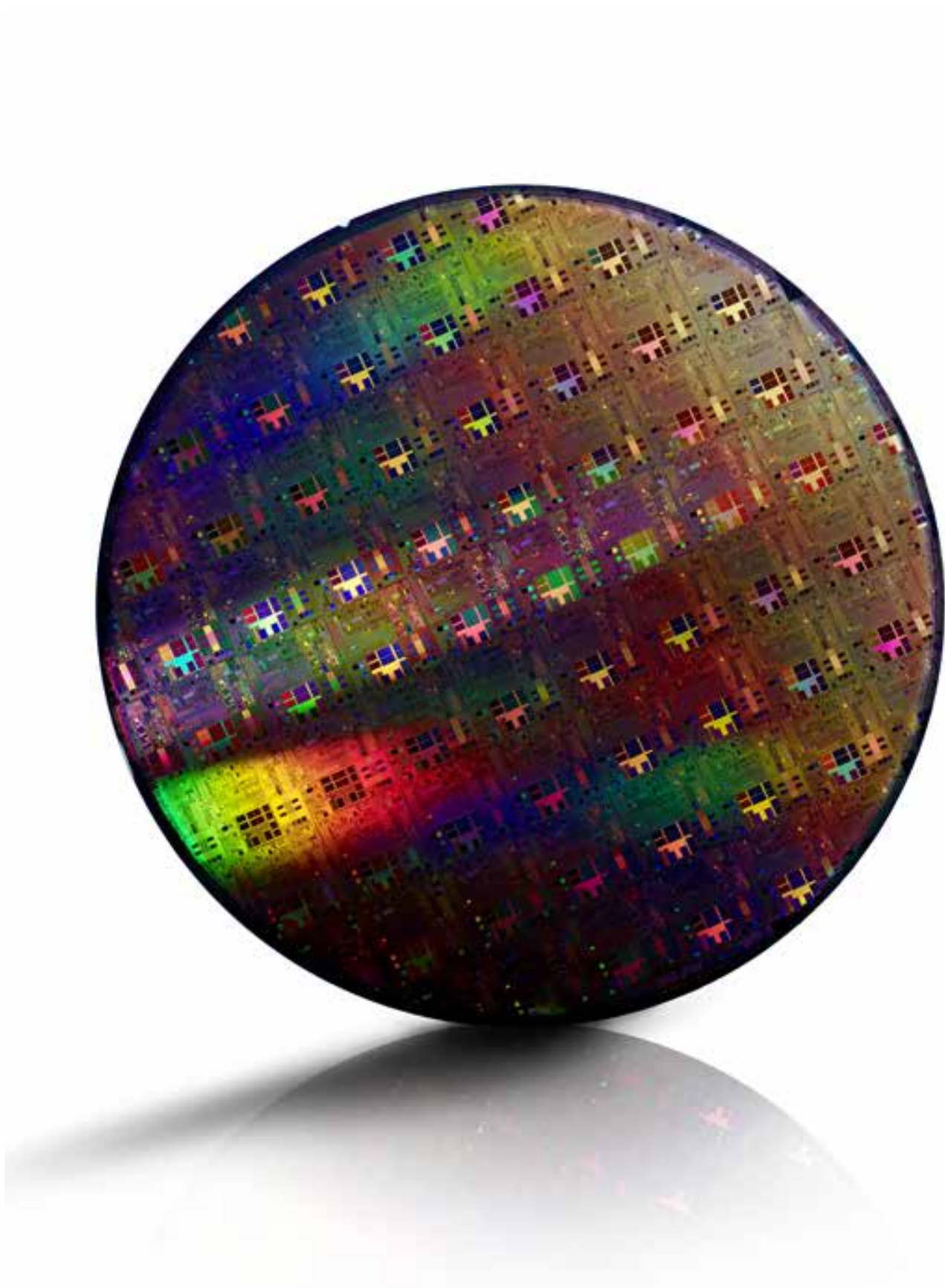
In our opinion, based on the findings of our audit, the consolidated financial statements comply with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to section 315a (1) of the German Commercial Code (HGB) and give a true and fair view of the net assets, financial position and results of operations of the Group in accordance with these requirements. The group management report complies with the legal requirements, is consistent with the consolidated financial statements and, as a whole, provides a suitable understanding of the Company's position and suitably presents the opportunities and risks of future development.

Frankfurt/Main, March 24, 2017

Ebner Stolz GmbH & Co. KG  
Audit Firm Tax Consulting Firm

Marcus Grzanna  
Auditor

Carl-Markus Groß  
Auditor



## FINANCIAL CALENDAR

<b>Date</b>	<b>Advise</b>	
May 12, 2017	Interim Announcement to the first quarter	
June 21, 2017	Annual Shareholders Meeting	Congress Center Giessen
August 11, 2017	Half-Year Report	
November 10, 2017	Interim Announcement to the third quarter	
November 27-29, 2017	German Equity Forum	Frankfurt

## IMPRINT

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