

# VALOE CORPORATION ANNUAL REPORT 2018

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# VALOF IN BRIFF

- Valoe is an innovative technology company based in Finland that operates in the clean energy business and specialises in
  efficient utilisation of solar energy. Valoe develops and sells Finnish solar energy technology to global markets.
- Valoe's core competencies include solar energy solutions, in particular the technology related to solar power generation and storage.
- Valoe develops and sells both solar modules and cells as well as automated production technology. Further, the company
  designs and delivers solar power plants that are based on Valoe's own technology.
- Value is interested in the hydrogen economy, including fuel cells and other methods of storing solar energy.
- Valoe's strategy is based on strong partnership network. In research and development, Valoe cooperates with the global leaders in the photovoltaic technology. In addition, Valoe needs reliable manufacturing partners for the production of special components for solar modules as well as for production and distribution of finished modules.
- Valoe operates in the global clean energy markets. The company operates also in developing countries, where electricity
  consumption is growing even faster than in Western countries. Valoe's goal is to achieve a strong position especially as a
  technology developer and trader.
- Valoe's head office is in Mikkeli, Finland.
- Valoe's shares are listed on the NASDAQ OMX Helsinki Ltd.

# YFAR 2018 IN BRIFF

# Financing

- In December 2017 the company resolved on a directed share issue. In total 8,721,077 new shares were acceptably subscribed in the offering ended in the reporting period in January 2018. Thus, the company collected in the offering in total approximately EUR 859,000 new capital before fees and costs and the indebtedness of the company decreased in total approximately by EUR 9,257,000.
- On 19 April 2017 Valoe and Bracknor Investment signed a convertible note facility agreement accompanied by share subscription warrants. The facility agreement expired on 19 October 2018. Valoe withdrew a total of EUR 1.65 million from the financing facility and Bracknor converted all notes to Valoe's shares. After the expiry of the agreement Bracknor holds share subscription warrants. Bracknor has the right at its option to exercise all or any of the warrants according to the terms of the warrants prior to 19 October 2023.
- During the reporting period, Valoe issued two convertible bonds. In April 2018 Valoe issued a convertible bond of MEUR 1.0 at the most in order to strengthen the company's capital structure. The convertible bond was fully subscribed. Out of the subscriptions, a total of EUR 0.9 million was paid in cash and EUR 0.1 million was paid by setting the subscription price off against the subscribers' receivables from the company. In October 2018 Valoe issued the Convertible Bond 2/2018 of EUR 2,195,289.10 and directed it, in deviation from the shareholders' pre-emptive subscription rights, to Ilmarinen Mutual Pension Insurance Company. Ilmarinen Mutual Pension Insurance Company subscribed the Convertible Bond against the subscriber's loan receivable from Valoe by converting the loan capital and the interests of the Convertible Bond 1/2015 into the Convertible Bond 2/2018 that is a capital loan and due on 15 October 2021.
- On 20 December 2018 Valoe disclosed that it has entered into a convertible note facility agreement with Winance concerning a funding arrangement of up to EUR 2,000,000 in convertible loan notes that will be accompanied by share subscription warrants. Under the Arrangement, Valoe issues convertible notes to Winance. The convertible notes may be drawn down in maximum of 4 sequential tranches of EUR 500,000 each during a period of 24 months from the drawdown of the first tranche provided that the preconditions for each tranche are met. Winance has the right to convert each tranche into the company's newly issued or treasury shares. In addition, Winance will receive Warrants stripped from the convertible notes at the drawdown of each tranche. The warrants entitle Winance to subscribe to additional shares of the company. Valoe has an obligation to draw down a minimum of two tranches of the convertible notes, i.e. a total minimum of EUR 1,000,000. The

remainder of the convertible notes, a total of 2 tranches i.e. EUR 1,000,000, may be drawn down by the company at its discretion.

#### Research and Development

- During the reporting period Valoe made significant investments in its research and development. In April 2018 Valoe introduced Chrome II, a new glass-glass solar module including Valoe's own MWT (Metal Wrap Through) cell, on the market.
- In April 2018 Valoe announced that it has purchased a solar cell production line from Italian Megacell S.r.l.; under liquidation, and that the company has signed a cooperation agreement with Soli Tek Cells JSC, a solar cell manufacturer based in Lithuania. The cell production line Valoe purchased from Italy has been transferred to Soli Tek Cells JSC's premises in Lithuania.
- In May 2018 Valoe disclosed that it has signed a development and technology transfer agreement with German ISC Konstanz. The purchase of the cell production line from Italy and the cooperation agreements with both SoliTek and ISC Konstanz support Valoe's objective to develop, for Valoe's modules, an IBC (Interdigidated Back Contact) cell and a bifacial cell BiSoN also based on n-type silicon cell and IBC technology ZEBRA as well as to modify Valoe's current module structure in a way where the features of IBC and BiSoN can be utilized in the best possible way. Additionally, Valoe and ISC Konstanz have agreed on licensing the abovementioned cell types to Valoe and its future manufacturing partners.
- After the end of the reporting period, Valoe disclosed on 19 February 2019 that it has acquired the solar cell production business of SoliTek R&D JSC. Provided that the required financing is available, the acquisition will facilitate the development of an IBC cell and related production technology within a time frame where the IBC cell would be at Valoe's use during the second half of 2019.

#### The Major Orders

• In April 2018 Valoe and ForUs Capital Oy signed delivery contracts totalling about EUR 0.45 million. The contracts are part of the framework agreement between Valoe and ForUs Capital Oy, disclosed on 7 August 2017, on delivering solar power plants worth approximately a total of EUR 4 million to Finland. ForUs Capital sells electricity generated by the solar power plants to its own partners. The total value of the binding delivery contracts with ForUs Capital Oy signed by the end of the reporting period totals approximately EUR 1.1 million. Valoe has been delivering the orders since the autumn 2017 and almost all the power plants ordered by the end of the reporting period were delivered by the end of 2018.

#### Financials

- In the financial year 2018, the net sales of Valoe Group, under the IFRS standards, increased by 140 percent. The net sales were EUR 1.3 million (in 2017 EUR 0.6 million). The EBIT was EUR -2.5 million (EUR -3.1 million), the profit for the period was EUR -4.2 million (EUR -5.8 million), undiluted earnings per share were EUR -0.28 (EUR -1.23) and the EBITDA EUR -1.2 million (EUR -1.7 million). Valoe Corporation's equity ratio at the end of 2017 was -60.5 percent (-52.8 percent) and Valoe Group's equity ratio was -61.5 percent (-47.3 percent).
- Valoe's Asian customer has ongoing negotiations on arranging financing for a factory delivery in Asia worth EUR 26.5 million. Valoe will enter the order in its order book only after the customer has secured financing for the factory project.
- Valoe will not disclose financial guidance for the financial year 2019.
- All of Valoe's stock exchange releases and other releases can be found on the company's website www.valoe.com.

# MANAGING DIRECTOR'S REPORT

#### **IIKKA SAVISALO**



#### Dear Shareholders

I found the financial year 2018 positive, although the financial indicators still do not meet the company's objectives. Finally, the company's net sales began to increase thanks to power plant deliveries in Finland. The back contact modules have a market also in Finland! Price competition in the industry was very tough but we managed to obtain a reasonable price for our deliveries thanks to the well-received Chrome II glass-glass module where both the module structure and Valoe's first own polycrystalline cell work perfectly. It is good to move on to the new year.

However, the great leap in 2018 was the acquisition of an IBC cell line, which was carried out in two parts. In spring 2018, Valoe bought a cell production line from Italy and in February 2019 Valoe agreed to acquire another production line and factory infrastructure from Solitek in Lithuania. The new and modern cell plant combining the acquired production lines will ramp up during the financial year 2019. This provides Valoe with the prerequisites for producing the world's best solar modules in terms of efficiency. Deliveries of the new Chrystal module family are scheduled to begin in late 2019.

As expected, the IBC cell has opened doors and new opportunities for Valoe outside the traditional solar module sales. Several European and American companies have shown interest in the technology.

As we have previously stated, the energy produced by Valoe's solar modules shall be the greenest as well as the cheapest energy in the market. There start to be operators in the market who believe Valoe will achieve this ambitious goal. One example of this is the good cooperation with ForUs Capital Oy. The cooperation began well in 2018 and we believe it will continue in 2019 contributing to growth in the traditional and important solar power plant market.

Valoe has repeatedly told about its 24-7-365 solar power concept. We hoped to implement the first full-size pilot already in 2018. However, this did not happen. Our work around the project continues and the project is expected to see daylight in 2019.

The company's financial situation has probably been one of the most difficult challenges Valoe has faced in recent years and the financial risk had not yet disappeared at the time of writing this Annual report. At the moment, however, it seems that the company's technology has evolved to a level where the financiers' belief in the company has begun to grow and sufficient long-term funding is available.

In this report, I have not mentioned Valoe's project in Ethiopia or other opportunities in Africa. However, we have not forgotten them. The launch of the Ethiopian project requires wider funding base and we have ongoing discussions with several organizations in order to arrange new funding. The company also has new projects in Africa. We will disclose more information on them as soon as we are sure of their feasibility. The IBC cell has opened significant paths for the company to the European and US markets, and I believe they will offer Valoe new, interesting opportunities already in 2019.

As I am writing this report, it is time to express our deep gratitude to all of our employees, whose growing team has, throughout the year, been committed to our goals and despite our inadequate resources worked hard to achieve them. Such determination will be even more important in 2019 as the ramp-up of the cell production plant in Vilnius requires resources and as the development engineers and power plant mechanics will have more and more travel days. We would also like to thank our shareholders as well as Business Finland, who have continued financing our operations also during 2018. We believe that in 2019, Valoe's financing will be in order and the company can move towards its strategic goals without interruption. The year 2019 will be more exciting than any of the previous years during which we have operated in the solar energy business.

Iikka Savisalo Managing Director

# VALOE'S STRATEGY

#### **OUR VISION**

The future of energy is in Solar.

#### **OUR MISSION**

We will enable the use of solar energy in the form of electricity everywhere, at any time 24 -7 - 365. We will accomplish this together with our manufacturing, technology and distribution partners.

#### **OUR STRATEGY**

Valoe's strategy is based on the fact that the limitations of solar energy utilization will be resolved in the future. Successful business requires capability to compete in the international markets. Valoe follows closely research and development related to its business and adapts applicable technologies to its own product concepts. Valoe's solutions are mainly based on Valoe's own technologies which the company has developed together with the world's leading experts and research institutes. The company strives for rapid and profitable growth.

We believe that the use of photovoltaic energy will grow strongly. The use of unrestrained, silent, clean and free solar power is expanding fastest in areas where there is no reliable electric grid or where the network does not operate satisfactorily. Local solar power production is efficient and cost effective. Once technical and economic issues relating to solar energy storage have been resolved there is enough solar energy to cover all global electricity demands.

Valoe focuses on research and development and co-operation with the global leaders in the photovoltaic technology.

During the past three years, Valoe has established a partner network with whom the company plans to implement the next phase of its growth strategy. Valoe's most important technology partner is ISC Konstanz, with whom Valoe has signed a development and technology transfer agreement. The first objective of the agreement is to transfer and implement the Zebra cell technology developed by ISC Konstanz at Valoe's plant in Lithuania. Valoe's other main technology partners include Energy Research Center of the Netherlands (ECN) and Fraunhofer Institute for Solar Energy Systems (Fraunhofer ISE). In addition to the technology partners, Valoe needs reliable manufacturing partners for the production of key components for solar modules as well as for the production and distribution of finished solar modules.

On 14 Febuary 2019, Valoe acquired the business operations of JCS SoliTek R&D, a Lithuanian cell manufacturer, including Solitek's cell manufacturing plant. Valoe's objective is to use an IBC cell and a bifacial cell BiSoN also based on n-type silicon cell in Valoe's back contact modules. Further, Valoe will modify its current module structure in a way that the exceptional features of IBC and BiSoN can be utilized in the best possible way. The cell manufacturing plant in Vilnius will be modernized to produce the latest versions of IBC cells.

Valoe has ongoing negotiations with number of regional partners for production and distribution of solar modules based on Valoe's technology.

# VALOE'S PRODUCTS AND SERVICES

Based on Valoe's strategy the company has the following four service and product concepts:

#### 1. SALES AND SUPPLY OF PHOTOVOLTAIC MODULES AND SYSTEMS

Sales of modules and small photovoltaic systems are Valoe's most visible product group. All Valoe's PV modules are manufactured at the company's factory in Mikkeli for the time being. They are mainly delivered to the company's distributors and future manufacturing partners. Further, the company sells and provides solar power plants and systems directly to its customers in Finland and abroad. Valoe has enhanced the sale of its modules and solar systems in Finland by building sales channels for its products systematically. ForUs Capital Oy, which specializes in the sales of electricity produced from renewable sources, has been Valoe's most important customer during 2018 and Valoe has used a major part of its sales resources to support ForUs Capital's sales to Finnish property owners, production companies and communities.

Current capacity of the company's Mikkeli factory is designed to annually produce PV modules worth max EUR 6 – 8 million at the current market prices. Encouraged by good sales prospects, Valoe has taken action to increase its production capacity in Mikkeli, Finland.

During 2018, Valoe has commenced to develop flexible and ultra-light odd form modules. According to Valoe's view there is significant market potential in such modules. This kind of modules can be used, for example, to vehicles, to anywhere energy needs of logistics chains, or to aviation and aerospace applications. In these environments, energy supply problems have generally been solved in very expensive and less environmentally friendly ways, and there is no normal competition in the market. A solar power system must have very high efficiency combined with efficient space usage in order to succeed in this market. Valoe believes that the company's back contact technology and IBC cells provide Valoe with good conditions for developing photovoltaic applications for these markets.

#### 2. DEVELOPMENT AND SALES OF PRODUCTION LINES AND RELATED COMPONENTS

Manufacturers operating in the developing markets like China are typical investors for new module manufacturing production lines. These Valoe's potential customers are now manufacturers of traditional H-patterns modules. According to the information available to Valoe many of the manufacturers are going to start manufacturing next generation back contact modules. In most cases these customers have use their own module manufacturing recipe and need only single equipment or production lines. Valoe estimates that typical price of single equipment or a production line for back contact modules is EUR 4 – 8 million. A single production equipment costs EUR 0.3 – 1.0 million.

#### 3. MANUFACTURING PARTNER NETWORK

The cornerstone of Valoe's strategy is to sign manufacturing partnership agreements or technology licensing agreements with solar module manufacturers who as newcomers on the market would commit themselves to Valoe's production technology and to using components designed for Valoe's back contact technology. Valoe provides a partner with a turnkey delivery project; secures availability of components for a partner either by manufacturing components by itself or by procuring required components from elsewhere; and as a technology partner commits itself to minority shareholding in a manufacturing company. Manufacturing partners pursued by Valoe operate mainly on developing markets and produce solar energy modules for local and nearby markets. Value of a typical turnkey plant delivery is more than ten million euros. Valoe signed its first manufacturing partnership agreement with Ethiopian LS Corp in 2016. However, the technology delivery based on the agreement has not yet been executed as per the date of this Annual Report.

On the basis of the early stages of the Ethiopian project, Valoe has gained valuable information on costs and profitability for future solar plant deliveries and projects. Valoe's manufacturing plant concept, equipment, technology and deliveries are standardized and with the experience gained in the first project the profitability of the following project deliveries can be expected to be good. Further, each delivered manufacturing plant or production line generates to Valoe continuous profitable business through component sales. Valoe's objective is that only Valoe's components are used at the manufacturing plants and production lines Valoe has delivered. The product certificates Valoe has applied for on behalf of a customer are valid only if the customer uses components approved by Valoe. Based on Valoe's experience, the availability of the components is limited elsewhere for the moment.

Valoe's growth strategy is based on signing new manufacturing partnership agreements. Valoe is aiming to sign at least 10 manufacturing partnership contracts. After achieving this amount of partnerships, Valoe's partnership network is so wide that even the biggest solar module manufacturers will not remarkably benefit from the advantage of economies of scale e.g. in raw materials purchases compared to Valoe's network.

#### 4. MODULE COMPONENTS SALES MAINLY TO MANUFACTURING PARTNERS

Special components, mainly for Valoe's manufacturing partners, are the most important part in Valoe's strategy and most remarkable in terms of net sales potential. Valoe's first component is Conductive Back Sheet (CBS) that has been developed by Valoe and is one of the most important components in a module. One normal size module production plant using back contact technology needs approximately 300,000 – 500,000 conductive back sheets in a year when operating at full capacity. Based on current estimation, considering price level in the near future, each production line will annually require back sheets worth approximately 5 – 11 million Euros. Typically, component deliveries to manufacturing partners can commence, at the earliest, about 12 months from the signing of the manufacturing partnership agreement.

In the future, Valoe plans to provide its manufacturing partners also with the company's solar cells based on the IBC technology as well as other special components. According to the company's estimates, a full-sized module factory could buy Valoe cells for about EUR 18 - 25 million annually. Other components may include for example other manufacturers' smart components, components for energy storage and software for power management and electricity invoicing.

In the long run, Valoe will include technologies related to energy storages and fuel cells as well as technologies increasing general usage of solar electricity in the company's offering. With regard to the expertise in these technologies Valoe will cooperate with its technology partners.

# **DIRECTORS' REPORT**

#### FINANCIAL DEVELOPMENT

In December 2017 the company resolved on a directed share issue in which the company offered up to 10,000,000 new shares in the company for subscription to all the creditors of the company who at the time of subscription hold indisputable receivable amounting to at least EUR 25,000 from the company. The subscription price for the new shares could be paid in cash or by set-off against indisputable receivables the subscriber had from the company. In total 8,721,077 new shares were acceptably subscribed in the offering ended in January 2018. Thus, the company collected in the offering in total approximately EUR 859,000 new capital before fees and costs and the indebtedness of the company decreased in total approximately by EUR 9,257,000.

During the financial year, Valoe issued two convertible bonds. In April 2018 Valoe issued a convertible bond of MEUR 1.0 at the most in order to strengthen the company's capital structure and to purchase a cell production line from Megacell S.r.l., under liquidation. The subscription price was EUR 0.55 per share. The convertible bond was issued in deviation from the shareholders' pre-emptive subscription rights to the parties separately approved by the Board of Directors. The loan period shall expire on 31 May 2021 on which date the convertible bond shall expire to be repayable in its entirety in accordance with the terms of the loan. An annual interest of eight (8) percent shall be paid to the capital of the Convertible Bond. The subscription period of the shares under the convertible bond begun from the subscription of the convertible bond and shall expire on 31 May 2021. The Convertible Bond was fully subscribed. During the subscription period of the Convertible Bond new investments of EUR 0.9 million was paid in cash. Out of the subscriptions, a total of EUR 0.1 million was paid by setting the subscription price off against the subscribers' receivables from the company. In October Valoe issued the Convertible Bond 2/2018 of EUR 2,195,289.10 and directed it, in deviation from the shareholders' pre-emptive subscription rights, to Ilmarinen Mutual Pension Insurance Company. Ilmarinen Mutual Pension Insurance Company subscribed the Convertible Bond against the subscriber's loan receivable from Valoe by converting the loan capital and the interests of the Convertible Bond 1/2015 into the Convertible Bond 2/2018 that is a capital loan.

In April 2018, Valoe and ForUs Capital Oy signed delivery contracts totalling approximately EUR 0.45 million. The contracts are part of the framework agreement between Valoe and ForUs Capital Oy, disclosed on 7 August 2017, on delivering solar power plants worth a total of approximately EUR 4 million to Finland. ForUs Capital sells electricity generated by the solar power plants to its own partners. The total value of the binding delivery contracts with ForUs Capital Oy signed by the end of the reporting period totals approximately EUR 1.1 million.

In December 2018 Valoe disclosed that it has entered into a convertible note facility agreement with Winance concerning a funding arrangement of up to EUR 2,000,000 in convertible loan notes that will be accompanied by share subscription warrants. Under the Arrangement, Valoe issues convertible notes to Winance. The convertible notes may be drawn down in maximum of 4 sequential tranches of EUR 500,000 each during a period of 24 months from the drawdown of the first tranche provided that the preconditions for each tranche are met. Winance has the right to convert each tranche into the company's newly issued or treasury shares. In addition, Winance will receive Warrants stripped from the convertible notes at the drawdown of each tranche. The warrants entitle Winance to subscribe to additional shares of the company. Valoe has an obligation to draw down a minimum of two tranches of the convertible notes, i.e. a total minimum of EUR 1,000,000. The remainder of the convertible notes, a total of 2 tranches i.e. EUR 1,000,000, may be drawn down by the company at its discretion.

Valoe has a product development loan from Business Finland in the amount of EUR 4.1 million out of which the company had withdrawn a total of EUR 2.9 million by the end of the reporting period. As per the date of this Annual Report there is still a total of EUR 0.8 million to be withdrawn.

Although the profit and loss effects of the Ethiopian project was removed from Valoe's books during the financial year 2016, the Ethiopian project is continued in terms of operations and the company will resume recognizing revenue based on percentage of completion when the performance obligations under the IAS have been satisfied. Valoe sees that one of the most important requirements is the opening of a EUR 9.5 million Irrevocable Letter of Credit in a bank approved by Valoe or a significant cash payment from the customer. The company may need to pledge a security for cash payment, as usual in export business.

Valoe's Asian customer has ongoing negotiations on arranging financing for a factory delivery in Asia worth EUR 26.5 million. Valoe will enter the order in its order book only after the customer has secured financing for the factory project. However, the financing negotiations are ongoing, and the outcome is not yet known. Further, Valoe has ongoing sales negotiations for several other production plants.

The following financials include Valoe Group's operations. The figures in brackets are comparison figures for the corresponding period in 2017, unless stated otherwise. The profit and loss effects of the Ethiopian project have been removed from the figures for the corresponding period in 2017. During the financial year 2017, the company reported the continuing operations and the discontinued operations separately. Since the beginning of the reporting period, the company does not report them in its profit and loss statement as there have been no discontinued operations neither during the reporting period nor during the corresponding period. However, there are liabilities related to the discontinued operations in the balance sheet.

#### NFT SALES AND RESULT

The net sales of Valoe Group's continuing operations in 2018 were EUR 1.3 million (EUR 0.6 million). The order book at the end of December stood at ca. EUR 15.9 million (EUR 16.9 million). EBITDA was EUR -1.2 million (EUR -1.7 million). Operating profit was EUR -2.5 million (EUR -3.1 million). Profit before taxes was EUR -4.2 million (EUR -5.8 million). Profit for the period was EUR -4.2 million (EUR -5.8 million). Undiluted earnings per share were EUR -0.28 (EUR -1.23). The Valoe Group's equity ratio at the end of December was -61.5 percent (-47.3 %). The equity ratio including capital loans was -0.7 percent (0.4 %). The mother company's, Valoe Corporation's equity ratio was -60.5 percent and 0.4 percent including capital loans.

#### OPFRATING ENVIRONMENT

#### **BUSINESS SECTOR**

Valoe operates in industries applying clean energy technology. The company's operating environment is global, and it provides its customers with products, solutions and services worldwide.

#### MARKET CONDITIONS

The prices of solar modules collapsed and decreased by ca. 70 percent during 2010 – 2012. The prices of low- and middle-priced modules decreased by ca. 30 percent again in 2016 and 2017. Intense price competition followed by decrease in production costs of solar energy and the fall in China's domestic sales volumes further decreased prices outside China, which has led to a rapid increase in solar electricity production worldwide and thus generated strong growth in the solar business.

The competitiveness of the solar electricity, compared to the fossil fuels and other renewable energy sources, will continue increasing faster and faster. The market share of the back contact module technology is now small but is estimated to grow strongly in the next few years. Already in 2018, the production cost of solar electricity was below the cost of traditional electricity production in some geographical areas. Valoe is prepared for its competitors introducing their own back contact modules and other innovations in the near future. The companies that will succeed in price competition will continue decreasing the prices of their standard products based on sales volumes and increasing production capacity and will continue worldwide price war. Valoe believes that innovative companies capable of continuously developing new generation technologies will succeed in the future business environment. Valoe trusts it will be one of these companies.

According to Valoe's view, the prices of low-end modules will unlikely rise. Thus, Valoe is focusing on developing production technology for next generation cells and modules. In the high-end price categories's price reduction has not been remarkable. Valoe views that the most favourable markets for the company are the markets with incomplete or malfunctioning electricity grid, e.g. in Africa but also in Asia and South America. Valoe trusts that it has even better possibilities to succeed if it is a part of the solar electricity value chain including solar electricity storages and smart grids.

According to the information now available to Valoe, there is only one major automation manufacturer, besides Valoe, in the market who provides its customers with turnkey production capacity for back contact modules. Valoe is aware that besides this automation manufacturer, there are companies developing production capacity for a similar application. However, according to Valoe's knowledge, it is the only back contact manufacturer with major existing mass production capacity for the moment.

Valoe provides production technology to all companies interested in back contact modules, e.g. large and often national solar energy projects; module subcontractors; and/or original equipment manufacturers. Valoe views that local production will increase significantly in the near future. However, Valoe is not aiming at becoming a local manufacturer but always seeks for a local partner

and an investor for a solar module factory project. Valoe is responsible for production technology, product quality and development. Local investors and partners are responsible for project funding as well as marketing and product sales.

#### COMPETITION AND VALOE'S ROADMAP

Solar module prices have continuously decreased, which has brought many major module manufacturers into problems or even bankruptcy. The results of the world's biggest Chinese manufacturers have turned negative. Valoe does not believe in increase in prices but estimates that there will be several new and better technologies in the near future. In the technology competition, Valoe finds itself to be well positioned thanks to years of development on back contact technology and lately on IBC cells.

Valoe is planning to introduce completely new and in terms of performance more competitive products in the market enabling production of solar electricity at market price. The objective can be achieved by extending the lifetime of a module and increasing a module's efficiency.

The better efficiency of next generation IBC cells can be utilized using Valoe's technology. Valoe is, for example with the funding provided by Business Finland (former Finnish Funding Agency for Technology and Innovation), strongly involved in this development and expands its special component expertise in IBC cells. An IBC cell enables the efficiency of a module to be raised from current level of below 20 percent to close to 25 percent in the next few years. Such a significant improvement in efficiency generates remarkable cost savings in a solar project. One of the most significant advantages is the reduction of space requirement of a power plant. Often, the project's profitability depends mainly on space requirement, especially in rooftop installations.

In 2018, Valoe succeeded to take the technology leap it had planned for some time. At the beginning of 2018, Valoe introduced Chrome II, a new glass-glass module with back contact cells Valoe has developed. In April 2018, the company purchased a solar cell production line from Italian Megacell S.r.I., under liquidation, and agreed on cooperation with the Lithuanian solar cell manufacturer SoliTek Cells JSC ("SoliTek"). The cell production line Valoe acquired from Italy was transferred to SoliTek's premises in Lithuania. In May 2018, the company signed a development and technology transfer agreement with the German ISC Konstanz. Pursuant to the agreement the Zebra IBC cell and the BiSoN cell, also based on an n-type cell, developed by ISC Kontanz, can be licensed to Valoe and its future manufacturing partners. In February 2019, Valoe agreed to acquire the business of Solitek R&D including Solitek's cell manufacturing plant.

The purchase of the cell production line from Italy, the cooperation agreements with SoliTek and ISC Konstanz as well as the acquisition of Solitek's cell factory support Valoe's objective to produce a solar module that is among the best in the world in terms of performance, efficiency and manufacturing costs. Valoe's back contact module including IBC cells, called Chrystal, is suitable for both rooftop installations for homes and for large solar power plants. If the company's plans succeed, Chrystal will already at the end of 2019 produce the world's cheapest electricity during its long lifetime and thus improves the price competitiveness of solar power. The current market price leaders guarantee a lifetime of 20 - 30 years for their modules. Valoe strives to select the raw materials for the components of the company's new modules and design the modules so that their economic lifespan can reach over 100 years.

Valoe adapts IBC cells as well as, if necessary, bifacial n-type BiSoN cells to its back contact modules to utilize the IBC's exceptionally good features in the best possible way. The company has already started to develop an IBC cell with efficiency of 23 – 25 % together with ISC Konstanz. Most of the development work will be done in Mikkeli and Vilnius, Lithuania.

Thanks to the company's back contact technology Valoe believes it is one of the best positioned companies in utilizing the strengths of IBC cells. Valoe views that in the near future the company's IBC back contact cells will be used in many specific applications e.g. in the automotive industry and in integrated solar applications for buildings.

According to the company's knowledge, there are only few manufacturers, such as Korean LG and American Sunpower, who use similar technology in mass production scale as Valoe uses in its new Chrystal module. If Valoe succeeds in its development goal, the company's solar module will be one of the most efficient modules in the world. According to studies, the global market share of solar modules with IBC cells will increase until at least 2027.

In the summer 2018, Valoe presented preliminary information on the company's new solar modules based on IBC cells. Valoe Chrystal Twin, the flagship model of this product family, is a bifacial module whose 60-cell version generates solar power from both sides reaching approximately 450 Wpe output under ideal conditions. Product pricing enables competitive installations even in the largest and most competitive solar parks. The very high module efficiency gives the product competitive edge in the European and US markets where installation costs represent an increasing share of the total costs of solar parks.

With the back contact technology Valoe is about to establish totally new solar applications. The company commenced test production of odd-form solar modules. Valoe develops ultra-light and efficient moldable composite modules for the transport industry to be used e.g. in vehicles, boats, ships, caravans and camper vans. Valoe has also identified new applications for mobile logistics structures. According to Valoe's development strategy the modules to be used in these kinds of solar applications must have high efficiency and lightweight structure.

During the recent years, smart modules and smart applications as well as monitoring systems have been included in small solar power plants especially. However, the smart components have not been very popular over the world mainly due to high price of the smart electronics, customers' concern about durability of the electronics and likely increasing service need. Valoe follows closely the development of the electronics but in terms of the development of the company's next module generations Valoe focuses on using mainly smart analog features. The advantage of smart analog features compared to digital ones is lower price and higher reliability in the field use over dozens of years.

#### FINANCING

On 19 April 2017, Valoe entered into a convertible note facility agreement with Bracknor Investment ("Bracknor") concerning a funding arrangement of up to EUR 3,000,000 in convertible loan notes (the "Convertible Notes") that will be accompanied by share subscription warrants (the "Warrants"). The facility agreement with Bracknor expired on 19 October 2018. Valoe withdrawn a total of EUR 1.65 million from the financing facility and Bracknor converted all of the notes to Valoe's shares. After the expiry of the agreement Bracknor holds share subscription warrants. Bracknor has the right at its option to exercise all or any of the warrants prior to 19 October 2023. The options can be exercised at a price connected to the stock exchange rate at the time of the withdrawal of the said loan tranche. The terms and conditions of the warrants have been disclosed in the stock exchange release of 19 April 2017.

At the share issue ended in January 2018 Valoe collected in total approximately EUR 0.86 million new capital and the indebtedness of the company decreased in total approximately by EUR 9.3 million. Additionally, with the Convertible Bond I/2018 with subscription period ended on 25 May 2018 the company received new cash investments of EUR 0.9 million and a total of EUR 0.1 million was paid by setting the subscription price off against the subscribers' receivables from the company.

During the reporting period, Valoe increased the amount of its product development activities significantly. In order to proceed with the development projects Valoe will require new funding. Valoe's current investment plan needs new funding of at least seven million Euros to be materialized, for which Valoe has opened discussions with its major shareholders. Valoe has also entered into funding negotiations with capital investors and industrial companies. One option is to arrange public offering either together with or separately from a directed share issue. Additionally, the company has a product development loan from Business Finland (prev. Tekes) in the amount of EUR 4.1 million out of which there is as per the date of this Annual Report a total of EUR 0.8 million still to be withdrawn. In case the Company manages to collect the intended amount of new capital in the arrangements described above, the company is able to perform its investment plan.

Considering the available financing commitments as well as the cashflow based on increased demand, the Board of Directors of Valoe views that the company has sufficient working capital at least for the next 12 months. However, without additional funding of about seven million Euros the company will not be able to proceed with the investments according to the company's strategy.

Cash flow from business operations before investments in January – December was EUR -2.1 million (EUR -3.2 million). Trade receivables at the end of the reporting period were EUR 0.03 million (EUR 0.02 million). Net financial items amounted to EUR 1.7 million (EUR 2.7 million). At the end of December, the equity ratio of Valoe Group was -61.5 percent (-47.3 %) and equity per share was EUR -0.47 (EUR -0.96). The equity ratio including capital loans was -0.7 percent (0.4 %). At the end of the reporting period, the Group's liquid assets totaled EUR 0.06 million.

Valoe's financial and other risks have been handled in the item "Risk management, Risks and Uncertainties" of this Annual Report.

#### RESEARCH AND DEVELOPMENT

Valoe continues to invest heavily in its product development. The objective of Valoe's product development is that the energy produced by Valoe's solar modules shall be the greenest as well as the cheapest energy on the market. In addition, Valoe's goal is to produce a solar module with a life span of over 100 years.

During the reporting period, the focus of Valoe's research and development has been on a project relating to cell development and optimization as well as efficiency improvement.

Valoe is investing in research and development in collaboration with the global leaders in the field of photovoltaic technology. Over the past three years, Valoe has created a partner network with which the company develops its products and technology to implement the next phase of the company's growth strategy. During the reporting period, Valoe signed a development and technology transfer agreement with ISC Konstanz. Valoe's other main technology partners include Energy Research Centre of the Netherlands (ECN) and Fraunhofer Institute for Solar Energy Systems (Fraunhofer ISE). After the reporting period, in February 2019, Valoe agreed on acquiring the business operations of JCS SoliTek R&D, a Lithuanian cell manufacturer, including Solitek's cell manufacturing plant. Valoe's objective is to develop an IBC cell and a bifacial cell BiSoN also based on n-type silicon cell for Valoe's back contact modules. Further, Valoe will modify its current module structure in a way where the exceptionally good features of IBC and BiSoN can be utilized in the best possible way. The cell manufacturing plant in Vilnius will be modernized to produce the latest versions of IBC cells.

Additionally, Valoe focuses on developing the production line concept. Equipment and machinery needed in automated module manufacturing process will increasingly be based on Valoe's own innovations and be designed by Valoe. Valoe is aiming at protecting its innovations in all important geographical areas.

Valoe's module factory in Mikkeli also has a key role in the company's research and development. Valoe's goal is to increase the capacity of the Mikkeli factory and to modify the factory to suit the production of the Chrystal module family in a way that the factory produces enough modules for the market enabling Valoe's development to utilize field experiences to develop technology and ensure competitiveness.

The Group's research and development costs during the reporting period amounted to EUR 1.3 million (EUR 1.5 million) or 99.5 (277.5) percent of net sales.

#### **INVESTMENTS**

Gross investments in the continuing operations during January –December period amounted to EUR 3.3 million (EUR 0.3 million). The investments on the reporting period as well as on the corresponding period were mainly in development costs.

#### **PERSONNEL**

At the end of December 2018, the Group employed 25 (18) people, who all worked in Finland. During the reporting period the Group's salaries and fees totaled EUR 1.3 million (EUR 1.2 million).

#### SHARES AND SHAREHOLDERS

At the end of the reporting period, Valoe's share capital amounted to EUR 80,000.00 and the number of shares was 17,136,338. The company has one series of shares, which confer equal rights in the company. On 31 December 2018, Valoe had in total 1,150,727 treasury shares.

The company had a total of 7,359 shareholders at the end of December 2018, and 12.15 percent of the shares were owned by foreigners. The ten largest shareholders held 66.6 percent of the company's shares on 31 December 2018.

The largest shareholders on 31 December 2018

		Shares	Percentage
1	OY HERTTAÄSSÄ AB	1 762 723	10,3
2	SAVCOR COMMUNICATIONS LTD PTY	1 459 235	8,5
3	GASELLI CAPITAL OY	1 356 463	7,9
4	SAVCOR INVEST B.V.	1 323 752	7,7
5	SAVCOR TECHNOLOGIES OY	1 284 701	7,5
6	VALOE OYJ	1 150 727	6,7
7	SAVCOR GROUP OY	1 071 511	6,3
8	OLLILA JORMA JAAKKO	919 528	5,4
9	OY INGMAN FINANCE AB	872 199	5,1
10	SAVISALO TUUKKA	205 932	1,2
	OTHERS	5 729 567	33,4
	TOTAL	17 136 338	100,00

The members of the Board of Directors and the President and CEO, either directly or through companies under their control, held a total of 4,103,700 shares in the company on 31 December 2018, representing about 23.9 percent of the company's shares. Additionally, the members of the Board of Directors and the President and CEO held a total of 232,540 options connected to the stock option scheme 2015. At the end of the period likka Savisalo, Valoe's Managing Director, either directly or through companies under his control, held a total of 4,067,688 shares in the company and 81,620 options connected to the stock option scheme 2015.

The price of Valoe's share, calculated using the amount of the company's shares after the reduction of the quantity of the company's shares, varied between EUR 0.10 and 1.35 during the January – December period. The average price was EUR 0.53 and the closing price at the end of December EUR 0.14. A total of 7.6 million Valoe shares were traded at a value of EUR 4.1 million during the January – December period. The company's market capitalization at the end of December stood at EUR 2.3 million.

# SHARE ISSUE AUTHORIZATIONS IN FORCE

The Annual General Meeting 2018 resolved to authorize the Board of Directors ov Valoe to decide on a share issue with and/or without payment, either in one or in several occasions, including right to resolve on option rights and other rights entitling to shares pursuant to the Chapter 10, Section 1 of the Finnish Companies Act so that the number of new shares issued based on the authorization or number of shares issued based on option rights and other special rights entitling to the shares pursuant to the Chapter 10, Section 1 of the Finnish companies Act, would equal to the total maximum amount of 49,000,000 shares. The authorization may be used for important arrangements from the company's point of view e.g. to strengthen the capital structure, to finance investments, for acquisitions and business transactions or other business arrangements, or to expand ownership structure, or for incentive plans, or for other purposes resolved by the Board involving a weighty financial reason for issuing shares or option rights or special rights entitling to shares pursuant to the Chapter 10, Section 1 of the Finnish Companies Act. The share issue may be executed by deviating from the shareholders' pre-emptive subscription right provided the company has a weighty financial reason for that. The authorization is in force until 30 June 2019.

By the date of this Annual Report the Board of Directors has resolved on issues of a total of 48,094,615 shares based on the authorization.

# THE MAJOR EVENTS DURING THE FINANCIAL YEAR 2018 ACCORDING TO THE STOCK EXCHANGE RELEASES

16 January 2018: VALOE CORPORATION: RESULT OF THE OFFERING

The Board of Directors of Valoe Corporation (the "Company") resolved on 20 December 2018 on a directed share issue (the "Offering") in which the Company offered up to 10,000,000 new shares in the Company (the "New Shares") for subscription to all the creditors of the Company (including holders of the convertible loans I/2015 and I/2017) who at the time of subscription held indisputable receivable amounting to at least EUR 25,000 from the Company (each "Subscriber").

The Board of Directors of the Company has today resolved to approve the subscriptions made in the Offering. In total 8,721,077 New Shares were acceptably subscribed in the Offering.

According to the terms and conditions of the Offering, the subscription price for the New Shares was payable in cash or by set-off against, in the view of the Board of Directors of the Company, indisputable receivables the Subscriber had from the Company at the time of subscription. The subscription price for in total 876,326 of the New Shares subscribed was paid in cash and the subscription price for in total 7,844,751 of the New Shares subscribed was paid by way of set-off.

Thus, the Company collected in the Offering in total approximately EUR 859,000 new capital before fees and costs and the indebtedness of the Company decreased in total approximately by EUR 9,257,000. The subscription price for the New Shares shall be fully credited to the reserve for invested equity of the Company.

The Company expects the New Shares subscribed acceptably in the Offering to be registered with the Trade Register approximately on 19 January 2018. The New Shares shall be issued and recorded to the book-entry system maintained by Euroclear Finland Ltd first as interim shares representing the New Shares (the "Interim Shares"). The ISIN code of the Interim Shares is FI4000301056. The Interim Shares will not be applied to be admitted to trading on Nasdaq Helsinki Ltd. The Interim Shares will be combined with the Company's present class of shares (the ISIN code FI0009006951, trading symbol VALOE) when the New Shares have been registered to the Trade Register. Such combination is expected to occur approximately on 19 January 2018. The New Shares are applied to be admitted to trading on the stock exchange list of Nasdaq Helsinki Ltd approximately on 22 January 2018 together with the other shares of the Company.

After the registration of the New Shares subscribed in the Share Issue in the Trade Register, the total number of the shares in the Company is 13,990,513 shares of which 445,325 shares are held by the Company.

The Company shall publish separately around 18 January 2018 a prospectus pursuant to the Finnish Securities Markets Act for the application of in total 8,721,077 New Shares subscribed in the Share Issue and in total 117,586 shares not yet listed and subscribed by the Company in the share issue without consideration to the Company itself on 16 October 2017, to trading on Nasdaq Helsinki Ltd.

18 January 2018: VALOE CORPORATION: PROSPECTUS REGARDING ADMISSION TO TRADING OF IN TOTAL 8,838,663 NEW SHARES IN THE COMPANY APPROVED

The Financial Supervisory Authority has today approved the prospectus (the "Prospectus") of Valoe Corporation (the "Company") pursuant to the Finnish Securities Markets Act (746/2012, as amended) regarding admission to trading of in total 8,838,663 new shares in the Company. As set out in the stock exchange release published by the Company on 16 January 2018, the Prospectus covers admission to trading of in total 8,721,077 New Shares subscribed in the share Issue and in total 117,586 shares not yet listed and subscribed by the Company in the share issue without consideration to the Company itself on 16 October 2017.

In this release, the Company discloses certain information related to the financial situation and financing needs of the Company, as described in the Prospectus.

As described in the Prospectus, pursuant to the estimate of the Company, the amount of Company's working capital does not correspond to the need of the working capital of the Company (including the minimum investments described below) for the period of next 12 months. To the understanding of the Company, the current working capital of the Company will last until the end of March 2018.

The cumulative cash flow of the Company is estimated to be approximately EUR 1.0 million negative. The trade payables due on the date of the Prospectus amount to EUR 1.3 million. Other debts than equity instruments to other parties than to the related parties

of the Company amount to approximately EUR 0.6 million and other short-term debts amount to approximately EUR 0.7 million. The minimum investments to the product development pursuant to the investment plan of the Company amount to approximately EUR 3.6 million of which EUR 1.0 million is intended to be financed from existing financing commitments.

The Company has financing commitment in the amount of EUR 2.35 million from Bracknor Investment for the purposes of enhancing its cash position. The Company cannot withdraw new capital from the commitment at once but only during longer time period. The Company estimates to withdraw in total EUR 1.0 million from the commitment during the period of next 12 months.

To the understanding of the Company, the minimum financing needed to cover the working capital deficit and investments pursuant to the investment plan for the period of 12 months as of the date of the Prospectus amount to EUR 6.2 million.

As reported on 16 January 2018, the Company has, in the directed share issue to its significant creditors, collected in total EUR 0.86 million as new money and in total approximately EUR 9.3 million of debts of the Company were set-off, the total amount of the share issue thus being approximately EUR 10.1 million.

In order to cover its strategic investments and working capital deficit the Company contemplates to arrange a new share issue during the second quarter of 2018 in which the Company intends to collect in total EUR 6.2 million of new capital.

Additionally, the Company has a product development loan from Tekes in the amount of EUR 4.1 million of which EUR 3.3 million is not yet withdrawn. In case the Company manages to collect the intended amount of new capital in the arrangements described above, the Company is able to perform its investment plan and thus believes that it can withdraw approximately EUR 2.5 million of Tekes product development loan in late 2018.

The Company estimates its available cash funds to exceed EUR 3 million by the end of 2018, presuming that the above described arrangements are carried out as planned i.e. the Company is able to withdraw in total EUR 1.0 million of new financing from the arrangement agreed on with Bracknor Investment, all the shares offered for subscription in the share issues to be arranged during the second quarter of 2018 will be subscribed and the Company is able to withdraw approximately EUR 2.5 million of Tekes product development loan in late 2018.

Should the funds to be collected in the share issue contemplated to be arranged during the second quarter of 2018 be less than EUR 6.2 million, the Company needs additional financing for performing its strategic investments. The Company contemplates to acquire necessary additional financing, to the extent necessary, by means of equity or other debt financing.

The investors are requested to read entire contents of the Prospectus and particularly sections concerning description of the risks.

12 April 2018: VALOE CORPORATION RECEIVED A CA. EUR 0.45 MILLION ORDER FOR SOLAR POWER PLANTS. THE DELIVERY IS PART OF THE FRAMEWORK AGREEMENT WITH FORUS CAPITAL OY PUBLISHED ON 7 AUGUST 2017

On 7 August 2017 Valoe Corporation ("Valoe") disclosed that it has signed a framework agreement with ForUs Capital Oy on delivering solar power plants worth a total of ca. EUR 4 million to Finland. ForUs Capital sells electricity generated by the solar power plants to its own partners. Under the framework agreement Valoe has previously received orders for solar power plants totaling ca. EUR 1.15 million. The company has published releases on the orders in August and December 2017. Part of the solar power plants have already been delivered and the rest of the deliveries will be made by the end of August 2018.

Valoe has signed a new delivery contract under the framework agreement worth a total of ca. EUR 0.45 million. Pursuant to the new contract Valoe will deliver the solar power plants to the sites owned by the City of Hanko and a property investment company called VVT Kiinteistösijoitus Oy by the end of November 2018. In the property owned by VVT Kiinteistösijoitus Oy one of the electricity consumers is XXL Sports Oy.

Other deliveries under the framework agreement are subject to governmental investment aid and securing final financing.

#### 19 April 2018: VALOE ISSUES A CONVERTIBLE BOND

In order to strengthen Valoe Corporation's capital structure the company issues a convertible bond of MEUR 1.0 at the most. The convertible bond can be converted to max. 1,818,180 new shares of the company. The subscription price is EUR 0.55 per share.

The convertible bond is issued in deviation from the shareholders' pre-emptive subscription rights to the parties separately approved by the Board of Directors.

The minimum amount of subscription of the convertible bond shall be EUR 100,000.00 entitling the convertible bond holder to subscribe for 181,818 new shares of the company.

The loan period shall commence on the payment date and expire on 31 May 2021 on which date the convertible bond shall expire to be repayable in its entirety in accordance with the terms of the loan. The subscription period of the shares under the convertible bond shall begin from the subscription of the convertible bond and expire on 31 May 2021.

The subscription period of the convertible bond shall expire on 11 May 2018 at 6:00 p.m. The board of directors of the company has the right to approve the subscriptions at any time during the subscription period. In the event the convertible bond shall be oversubscribed, the board of directors of the company shall resolve on the allocation between the subscribers. The board of directors of the company has the right to discontinue the subscription period of the convertible bond at any time. The board of directors shall also have the right to decide on extending the subscription period.

The shareholders' pre-emptive subscription rights are deviated from in connection with the issue of convertible bond to secure financing required to strengthen the capital structure of the company cost effectively and considering the size of the financing. Thus, there is from the company's point of view a weighty financial reason to issue the special rights.

The company has one (1) class of shares. The terms of the convertible bond are attached to the release as Attachment 1.

20 April 2018: VALOE CORPORATION LAUNCHED A NEW SOLAR MODULE ON THE MARKET; INCREASES ITS PRODUCTION CAPACITY AND RECRUITS NEW PERSONNEL AT ITS FACTORY IN MIKKELI

Valoe Corporation introduced a new solar module, Chrome II, on the market. Valoe's objective to develop a module with a lifespan of more than 100 years has been one of the cornerstones of desinging the new module. Chrome II is a glass-glass module with Valoe's own MWT (Metal Wrap Through) cell.

During the last few months Valoe's development has been focused on developing the company's own polycrystalline cell and glass-glass module structure. The new MWT cell has higher efficiency compared to the cells Valoe previously used. In the current market environment the availability of back contact cells has been limited and there has been a lot of variation in the quality and prices of the cells. Having own cells Valoe can keep better control of their quality, availablity and pricing. The new cell technology is implemented in the Chrome II modules. Further, the new cell technology improves the economic efficiency of module production. Valoe's objective is to provide its customers with even more efficient and more economic solar systems.

Valoe views that the solar energy market is growing fast in Finland too. The advance sales of the new Chrome II module has been good. In order to meet the growing demand Valoe is going to recruit 14 persons to Mikkeli.

#### 20 April 2018: SUBSCRIPTION OF NEW SHARES IN VALOE CORPORATION

The Board of Directors of Valoe Corporation (the "Company") has resolved on 20 April 2018 to subscribe in total 1,500,000 new shares ("Subscribed Shares") in the share issue without consideration resolved by the Company on 16 October 2017.

The share subscription is conducted in order to implement a part of the financing arrangement between the Company and Bracknor Investment approved on 19 April 2017. The new shares may be used solely for the implementation of the financing arrangement so that the Company may issue the new shares held by it to Bracknor Investment when Bracknor investment subscribes shares on the basis of the convertible loans and warrants granted to it under the said financing arrangement. To the extent it is not necessary to issue new shares subscribed by the Company to Bracknor Investment, the Company shall annul the shares.

The new shares are of the same class as the Company's other shares and entitle to the same shareholder rights as the Company's old shares after their registration.

After the registration of the Subscribed Shares in the trade register, the total number of the shares in the Company is 15,490,513 shares of which 1,544,413 shares are held by the Company.

The Subscribed Shares are estimated to be registered in the trade register approximately on 25 April 2018 and the Company shall apply for the admission of the Subscribed Shares to public trading on the stock exchange list of Nasdaq Helsinki Ltd approximately on 26 April 2018.

23 April 2018: VALOE CORPORATION PURCHASES A SOLAR CELL PRODUCTION LINE. VALOE SIGNED A COOPERATION AGREEMENT WITH A LITHUANIAN COMPANY, SOLI TEK CELLS

Valoe purchases a solar cell production line from Italian Megacell S.r.l.; under liquidation.

Valoe's objective is to use the cell production line for developing a solar cell that would leverage the benefits and qualities of Valoe's own back contact module in the best possible way. The production line is designed for developing high-efficient N type silicon cells. Valoe is aiming at utilizing the production line for developing a next generation IBC (Interdigitated Back Contact) cell. An IBC cell's efficiency and other features related to electricity generation are remarkably better compared to polycrystalline and monocrystalline cells commonly available on the market at the moment. The acquisition of the cell production line complements and accelerates Valoe's solar cell development project funded by Business Finland (prev. Tekes).

Valoe has signed a cooperation agreement with Soli Tek Cells JSC ("SoliTek"). SoliTek is a solar cell manufacturer based in Lithuania. It belongs to the BOD Group which has both a solar cell plant and a module plant in Vilnius, Lithuania.

The cell production line Valoe purchased from Italy will be transferred to SoliTek's premises, next to SoliTek's cell production line. The development work can be started much sooner as the required infrastructure is ready. Part of Megacell's research and development equipment will be transferred to Valoe's factory in Mikkeli where the company runs its solar module production.

#### 3 May 2018: VALOE HAS SIGNED A DEVELOPMENT AND TECHNOLOGY TRANSFER AGREEMENT WITH ISC KONSTANZ

Valoe Corporation has signed a development and technology transfer agreement with International Solar Energy Research Center Konstanz e.V. based in Germany (ISC Konstanz).

The objective of the cooperation and technology transfer is to develop, for Valoe's modules, an IBC cell that is based on n-type silicon cell BiSoN and IBC technology ZEBRA developed by ISC Konstanz, and a bifacial cell also based on the same technology as well as a solar module structure where the features of these cells can be utilized in the best possible way.

Additionally, Valoe and ISC Konstanz have agreed on licensing the aforementioned cell types to Valoe and its future manufacturing partners.

Having an n-type silicon cell and especially an IBC cell enables us to manufacture a solar module with significantly better qualities in terms of electricity generation compared to polycrystalline and monocrystalline cells, commonly available on the market at the moment. For example, ZEBRA based IBC cells can reach efficiency of more than 23 % which can in cell module produce more electricity than conventional 400 kWp standard module.

The features of a next generation IBC cell can be best utilized in back contact modules Valoe has been developing for several years unlike other module manufacturers.

Dr. Radovan Kopecek, CTO at ISC Konstanz and Managing Director of Advanced Cell Concepts: "We are very pleased to continue assisting you in developing ZEBRA further. Together with Valoe's back contact module technology such a module using ZEBRA is very powerful at low costs. Valoe has, as one of the first companies in the world, developed a mass scale module manufacturing technology which makes the implementation of back contact solar cells into the module extremely simple, cost effective and with high yield. Further, Valoe's technology makes it possible to use thinner solar cells. The PV market is now ready for such modules build on IBC cell technology for many new applications."

On 23 April 2018 Valoe disclosed that it purchased a cell production line from Megacell S.r.l., under liquidation, and is going to transfer part of the line to Soli Tek Cells' premises in Lithuania. The cell production line design was modified by ISC Konstanz to produce n-PERT cells. The production line has been previously used for commercialising the very BiSoN and ZEBRA technologies. Together with Soli Tek Cells' existing production equipment and infrastructure one of the world's most advanced cell production plant is available for Valoe's use. Valoe believes it can provide the company's partners with one of the world's best module production recipe in terms of power and cost efficiency as the well acknowledged know-how and immaterial rights of ISC Konstanz are now available for Valoe.

Valoe's objective is to have new IBC cells based modules ready for production during 2019. According to Valoe's initial strategy the company's modules will be manufactured by its manufacturing partners as Valoe continues its research and development as well as its own production at the company's factory in Mikkeli at the capacity required to meet the demand in Finland.

#### 28 May 2018: THE RESULT OF THE CONVERTIBLE BOND I /2018 OF VALOE CORPORATION

Valoe Corporation's Convertible Bond I/2018 was fully subscribed and the company received subscriptions of EUR 1.00 million for the Convertible Bond I/2018. During the subscription period of the Convertible Bond new investments of EUR 0.9 million was paid in cash. Out of the subscriptions, a total of EUR 0.1 million was paid by setting the subscription price off against the subscribers' receivables from the company.

The Board of Directors of Valoe has approved all subscriptions for the Convertible Bond.

One loan share of EUR 50.000 pursuant to the Promissory Note entitles the Promissory Note Holder to subscribe for 90.909 new shares. Based on the subscriptions made pursuant to the loan shares Valoe shall issue a maximum amount of 1,818,180 new Valoe shares. The loan period and the conversion period expire on 31 May 2021.

The terms of the convertible bond are attached to the release as Attachment 1.

#### 8 June 2018: RESOLUTIONS AT VALOE'S ANNUAL GENERAL MEETING AND ORGANIZING OF THE BOARD OF DIRECTORS

Valoe Corporation's Annual General Meeting was held on 8 June 2018 in Mikkeli, Finland. The AGM approved the 2017 financial statements and discharged the members of the Board and the President and CEO from liability for the financial year 2017. According to the Board' proposal, it was resolved that no dividend for the financial year 2017 will be distributed. It was also resolved that the loss for the financial period that ended on 31 December 2017 will be entered in retained earnings.

It was decided that the Board of Directors will have three members. Industrial counsellor Hannu Savisalo, Ville Parpola and likka Savisalo continue as old Board members in the Board of Directors.

At its organizing meeting following the Annual General Meeting, Valoe's Board of Directors elected Hannu Savisalo as the Chairman and Ville Parpola as the Vice Chairman of the Board. The Board of Directors decided, due to the scope of the company's business, that it is not necessary to establish any separate Board committees.

The Annual General Meeting resolved that an annual remuneration of EUR 40,000 will be paid to the Chairman and to the Vice Chairman of the Board, and EUR 30,000 to the members of the Board of Directors. Further, travel costs will be paid to the Board members pursuant to the company's travel policy.

Auditus Tilintarkastus Oy was elected as the company's auditor and Heidi Pirttijoki, APA, as the responsible auditor.

The General Meeting resolved to authorize the Board of Directors to decide on a share issue with and/or without payment, either in one or in several occasions, including right to resolve on option rights and other rights entitling to shares pursuant to the Chapter 10, Section 1 of the Finnish Companies Act so that the number of new shares issued based on the authorization or number of shares issued based on option rights and other special rights entitling to the shares pursuant to the Chapter 10, Section 1 of the Finnish companies Act, would equal to the total maximum amount of 49,000,000 shares. The authorization may be used for important arrangements from the company's point of view e.g. to strengthen the capital structure, to finance investments, for acquisitions and business transactions or other business arrangements, or to expand ownership structure, or for incentive plans, or for other purposes resolved by the Board involving a weighty financial reason for issuing shares or option rights or special rights entitling to shares pursuant to the Chapter 10, Section 1 of the Finnish Companies Act. The share issue may be executed by deviating from the shareholders' pre-emptive subscription right provided the company has a weighty financial reason for that. The authorization is in force until 30 June 2019.

# 27 June 2018: VALOE CORPORATION NEGOTIATES WITH LITHUANIAN SOLITEK ON DEEPENING THE COOPERATION BETWEEN THE COMPANIES

Valoe has discovered that an article on Valoe's and Soli Tek Cells JSC's ("SoliTek") plans to deepen cooperation in solar module and solar cell production has been published on Verslo Pulsas, a Lithuanian business newspaper. According to the article SoliTek and Valoe are planning to invest up to EUR 15 million in order to build Europe's most advanced solar cell and module manufacturing plant in Lithuania. The plant's annual production capacity for bi-facial solar cells and modules would be approx. 100 megawatts. Based on the article the production would commence in early 2019.

On 23 April 2018 Valoe disclosed that it purchased a solar cell production line from Italian Megacell S.r.l.; under liquidation and signed a cooperation agreement with SoliTek. SoliTek belongs to the BOD Group which has both a solar cell plant and a module plant in Vilnius, Lithuania. The cell production line Valoe purchased from Italy will be transferred to SoliTek's premises, next to SoliTek's cell production line and the production lines will be integrated into one high-technology production line for n-type IBC cell production.

As Valoe has previously announced its objective is to develop a next generation IBC (Interdigitated Back Contact) cell. An IBC cell's efficiency and other features related to electricity generation are remarkably better compared to polycrystalline and monocrystalline cells commonly available on the market at the moment. The product development will be done in cooperation with ISC Konstanz. The better electricity generating features of an IBC cell can be best utilised in back contact modules. All Valoe modules are based on the back contact technology.

Valoe has ongoing negotiations with SoliTek on deepening the cooperation between the companies in relation to solar module and solar cell manufacturing. However, the negotiations have not yet been finished. The investments mentioned in the above-mentioned article are only estimations and include both SoliTek's own investments and Valoe's possible investments. The companies have not agreed on the division of the costs. Valoe emphasises that the negotiations are still ongoing and Valoe will commit to new investments only after the required financing has been secured.

#### 13 August 2018: VALOE CORPORATION NEGOTIATES ON REARRANGING THE OVERDUE CONVERTIBLE BOND 1/2015

The loan period of Valoe Corporation's ("Valoe") Convertible Bond 1/2015, a capital loan, has expired on 1 August 2018. Considering the company's current equity situation, the Convertible Loan cannot be repaid in accordance with the provisions regarding capital loans in the Finnish Companies Act. The overdue principal of the Convertible Bond 1/2015 totals ca. EUR 2.8 million out of which ca. 0.9 million is lent from the related parties and ca. EUR 1.9 million from other parties. Valoe negotiates on rearranging the Convertible Bond 1/2015 with the lenders.

#### 31 August 2018: SUBSCRIPTION OF NEW SHARES IN VALOE CORPORATION

The Board of Directors of Valoe Corporation (the "Company") has resolved on 31 August 2018 to subscribe in total 545,825 new shares ("Subscribed Shares") in the share issue without consideration resolved by the Company on 16 October 2017.

The share subscription is conducted in order to implement a part of the financing arrangement between the Company and Bracknor Investment approved on 19 April 2017. The new shares may be used solely for the implementation of the financing arrangement so that the Company may issue the new shares held by it to Bracknor Investment when Bracknor investment subscribes shares on the basis of the convertible loans and warrants granted to it under the said financing arrangement. To the extent it is not necessary to issue new shares subscribed by the Company to Bracknor Investment, the Company shall annul the shares.

The new shares are of the same class as the Company's other shares and entitle to the same shareholder rights as the Company's old shares after their registration.

After the registration of the Subscribed Shares in the trade register, the total number of the shares in the Company is 16,036,338 shares of which 1,059,336 shares are held by the Company.

The Subscribed Shares are estimated to be registered in the trade register approximately on 5 September 2018 and the Company shall apply for the admission of the Subscribed Shares to public trading on the stock exchange list of Nasdaq Helsinki Ltd approximately on 6 September 2018.

18 October 2018: VALOE CORPORATION HAS AGREED WITH ILMARINEN MUTUAL PENSION INSURANCE COMPANY ON CONVERTING THE CONVERTIBLE BOND 1/2015 INTO A NEW CONVERTIBLE BOND 2/2018

The loan period of Valoe Corporation's ("Valoe") Convertible Bond 1/2015, a capital loan, expired on 1 August 2018. On 13 August 2018 Valoe disclosed that considering the company's equity situation, the Convertible Loan cannot be repaid in accordance with the provisions regarding capital loans in the Finnish Companies Act and that the company negotiates on rearranging the Convertible Bond 1/2015 with the lenders.

Valoe has resolved to issue a Convertible Bond 2/2018 ("Convertible Bond") totalling EUR 2,195,289.10, in deviation from the shareholders' pre-emptive subscription rights, to Ilmarinen Mutual Pension Insurance Company.

Ilmarinen Mutual Pension Insurance Company has subscribed the Convertible Bond against the subscriber's loan receivable from Valoe by converting the loan capital and the interests of the Convertible Bond 1/2015 into the Convertible Bond, a capital loan, in accordance with the terms of this Convertible Bond.

The Promissory Note Holder is entitled to convert the Promissory Note into the shares of the Company in accordance with the terms of the Convertible Bond. If the Company's shares are listed on the main list of Nasdaq Helsinki Oy when the conversion right is being used, the subscription price of one (1) new share of the Company shall be the six-month volume weighted average stock trading price on the period ending on 15 October 2021 less 15 percent. If the Company's shares are not listed on the main list of Nasdaq Helsinki Oy when the conversion right is being used, one of the Big Four accounting companies shall provide, at the Company's cost, a fairness opinion and assess the fair value of the Company's share which, less 15 percent, shall be the subscription price of one (1) new share of the Company.

The loan period shall commence on the payment date and expire on 15 October 2021 on which date the Convertible Bond shall expire to be repayable in its entirety in accordance with these terms of the loan.

The conversion period of the Convertible Bond commences on 15 October 2021 and terminates on 31 December 2021.

The shareholders' pre-emptive subscription rights are deviated from as the Company's existing loans are being rearranged in an economical way. Thus, there is from the Company's point of view a weighty financial reason to issue the special rights.

The company has one (1) class of shares.

The terms of the Convertible Bond are, without the technical appendices, attached to this release as Attachment 1.

#### 12 December 2018: ISSUE OF NEW SHARES IN VALOE CORPORATION WITHOUT CONSIDERATION TO THE COMPANY ITSELF

The Board of Directors of Valoe Corporation (the "Company") has, in order to implement part of the financing arrangement between the Company and Bracknor Investment approved on 19 April 2017, resolved on the issuance of a maximum of 1,100,000 new shares to the Company itself without consideration based on the authorization granted to it by the Annual General Meeting held 8 June 2018.

The share issue without consideration to the Company itself is conducted in order to implement part of the financing arrangement referred to above. The new shares may be used solely to the implementation of the financing arrangement so that the Company may issue the new shares held by it to Bracknor Investment when Bracknor investment subscribes shares on the basis of the convertible loans and warranties granted to it under the said financing arrangement. To the extent it is not necessary to issue new shares subscribed by the Company to Bracknor Investment, the Company shall annul the shares.

The new shares are of the same class as the Company's other shares and entitle to the same shareholder rights as the Company's old shares after their registration.

The Company has on 12 December 2018 subscribed in total 1,100,000 new shares in the share issue ("Subscribed Shares").

After the registration of the Subscribed Shares in the trade register, the total number of the shares in the Company is 17,136,338 shares of which 1,372,659 shares are held by the Company.

The Subscribed Shares are estimated to be registered in the trade register approximately on 18 December 2018 and the Company shall apply for the admission of the Subscribed Shares to public trading on the stock exchange list of Nasdaq Helsinki Ltd approximately on 19 December 2018.

#### 20 December 2018: VALOE HAS AGREED ON AN EUR 2.000.000 FINANCIAL ARRANGEMENT WITH WINANCE

#### **Background of Financial Arrangement**

Valoe Oyj ("Valoe" or the "Company") has today entered into a convertible note facility agreement with Winance concerning a funding arrangement of up to EUR 2,000,000 in convertible loan notes (the "Convertible Notes") that will be accompanied by share

subscription warrants (the "Warrants") (the agreement, the Convertible Notes and the Warrants hereinafter referred to collectively as the "Arrangement").

Under the Arrangement, Valoe issues Convertible Notes to Winance. The Convertible Notes may be drawn down in maximum of 4 sequential tranches of EUR 500,000 each (the "Tranche") during a period of 24 months from the drawdown of the first Tranche provided that the preconditions for each Tranche are met. Winance has the right to convert each Tranche into the Company's newly issued or treasury shares. In addition, Winance will receive Warrants stripped from the Convertible Notes at the drawdown of each Tranche. The Warrants entitle Winance to subscribe to additional shares of the Company with a subscription price described below in this release.

The Company has an obligation to draw down a minimum of two (2) Tranches of the Convertible Notes, i.e. a total minimum of EUR 1,000,000. The remainder of the Convertible Notes, a total of 2 Tranches i.e. EUR 1,000,000, may be drawn down by the Company at its discretion.

#### **Purpose of Arrangement**

The purpose of the Arrangement is to strengthen the Company's working capital situation during the term of the Arrangement assuming that the Arrangement will be implemented as planned.

likka Savisalo, CEO of Valoe, commented: "We in Valoe are pleased to start working with a global investor like Winance. We believe this arrangement will secure the working capital Valoe needs for some time. Valoe is a growth company with its technology as the competitive edge in one of the quickest growing businesses: solar electricity generation. Valoe continues to invest more to start its IBC Cell manufacturing next year. The financing agreement with Winance is the first step to that goal. Valoe appreciates Winance's pick of the Valoe PV Module and Cell technology as an excellent investment opportunity."

Cristina Nine, Founder and CEO of Winance, declared: "Winance is very enthusiastic to announce this long-term cooperation agreement with Valoe. We are fully confident in the Company's strategy and the management's ability to generate sustainable growth drivers for the long-term while increasingly participating in the Finnish Renewable Portfolio Standard requirements. Based on the valuation of the Company's renewable energy production assets and initiatives taken by the management to ensure positive externalities, we are optimistic about the future prospects of the Company."

#### **Commercial Terms of Arrangement**

Pursuant to the Arrangement, Winance may be given in the maximum of 2,000 convertible loan notes against subscription price of EUR 1,000 per each convertible loan note. The Convertible Notes entitle their holder to subscribe to maximum of 14,000,000 shares of the Company in the aggregate.

A Tranche may be drawn down by the Company provided that all previously issued Convertible Notes within the Arrangement have been converted into the shares of the Company or that a cool down period agreed between the parties has lapsed. Winance has agreed to subscribe for the Convertible Notes issued by the Company with a conversion ratio calculated at the time the respective conversion is requested so that the conversion ratio is equal to 90 % of the lowest daily volume weighted average price observed over a period of fifteen (15) consecutive trading days prior to such conversion request.

The Convertible Notes bear a zero interest rate (except in certain default situations as specified in the terms and conditions of the Convertible Notes) and have a maturity of 12 months from the issuance of each Tranche. Each Tranche must be converted into the Company's shares upon maturity at the latest.

In connection with the drawdown of each Tranche, Winance will receive Warrants free of charge. Winance has the right, but no obligation, to subscribe for the Company's shares based on the Warrants. In connection with the Arrangement, Winance may be given maximum of 2,800,000 Warrants in the aggregate which entitle their holder to subscribe to maximum of 2,800,000 shares of the Company in the aggregate. The number of Warrants that shall be attached to the Convertible Notes of a Tranche shall be determined as follows: 20% of the nominal value of the Convertible Notes of a Tranche divided by the Exercise Price of Warrants, the resulting number of Warrants being rounded down to the nearest whole number. For the purposes of the aforesaid, the "Exercise Price of Warrants" shall be 115% of the lowest daily volume weighted average price in the 15 trading days immediately preceding the request to issue a new Tranche, except for the Warrants issued in connection with the first Tranche in respect of which the Exercise Price of the Warrants shall be 115% of the lowest of (i) the lowest daily volume weighted average price in the 15 trading days immediately preceding the date of signing the agreement on the Arrangement and (ii) the lowest daily volume weighted average price in the 15 trading days immediately preceding the request to issue the first Tranche.

The subscription period of the Company's shares pursuant to the Warrants is five (5) years from the issuance of each Warrant.

The exact number of the Company's shares to be issued based on the conversion of the Convertible Notes and the exercise of the Warrants depends, in the manner described above, on the conversion ratio applied to the Convertible Notes and Warrants and is thus not yet known. Depending on the exact number of the Company's shares to be issued based on the conversion of the Convertible Notes and the exercise of the Warrants, it may be necessary for the Board of Directors of the Company to apply for additional authorizations from the general meeting of shareholders in order to implement the entire Arrangement.

There is a weighty financial reason for the Company to issue the Convertible Notes and Warrants to Winance as the purpose of the Arrangement is to strengthen the tight working capital situation of the Company. The subscription price of the Convertible Notes and Warrants as well as the shares of the Company to be subscribed based on the Convertible Notes and Warrants is based on the agreement between the Company and Winance.

The drawdown of each Tranche requires that certain representations and warranties given by the Company and other customary conditions relating to financing arrangements of this nature are met.

Winance has the right to terminate the Arrangement if the Company's operations become subject to a material adverse effect, there has been a change of control in the Company or in the event of default which, if curable, is not cured within 30 business days.

Valoe will pay Winance on the Arrangement a commitment fee equal to EUR 30,000 in Convertible Notes.

The terms and conditions of the Convertible Notes and of the Warrants (without schedules) are included in all material respects in the Appendices 1 and 2 of the release.

# THE MAJOR EVENTS AFTER THE FINANCIAL YEAR 2018

The main events since the end of the financial year 2018 have been handled in this Annual Report's items: Financial Result, Financing, and Shares and Shareholders. The main events since the end of the financial year 2018 have been listed in the item Notes to the Consolidated Financial of this Annual Report starting from the page 62.

#### RISK MANAGEMENT, RISKS AND UNCERTAINTIES

Valoe's Board of Directors is responsible for the control of the company's accounts and finances. The Board is responsible for internal control, while the President and CEO handles the practical arrangement and monitors the efficiency of internal control. Business management and control are taken care of using a Group-wide reporting and forecasting system.

The purpose of risk management is to ensure that any significant business risks are identified and monitored appropriately. The company's business and financial risks are managed centrally by the Group's financial department, and reports on risks are presented to the Board of Directors as necessary.

Due to the small size of the company and its business operations, Valoe does not have an internal auditing organization or an audit committee.

Pursuant to the estimates available to the company, the company's financial situation and working capital situation continue to be tight in 2019. Considering the company's working capital need, available financing commitments as well as cashflow based on increased demand, the Board of Directors of Valoe views that the company has sufficient working capital at least for the next 12 months.

In order to materialize its investment plan Valoe has opened financing discussions with its major shareholders, capital investors and industrial companies. One option is to arrange public offering either together with or separately from a directed share issue. The outcome of the negotiations is not known. Further, it is not yet certain if a share issue will be arranged or not and what the outcome would be.

The company's most significant risks are lack of funding the company needs in order to achieve its strategic goals and sufficiency of working capital required for expanding operations. Pursuant to Valoe's strategy, the acquisition of a solar cell factory in Lithuania requires that the plant will be modified for IBC cell production. Addition, Valoe needs funding to finance its strategic investments in product development, especially to secure and improve the competitiveness of the IBC product, to develop IBC applications for new back contact modules, and as working capital for expanded operations.

Valoe has a product development loan from Tekes in the amount of EUR 4.1 million out of which the company has withdrawn a total of EUR 2.9 million as per 31 December 2018. In March 2018 the company withdrew a total of EUR 0.4 million. As per the date of this Annual Report there is a total of EUR 0.8 million to be withdrawn.

In January 2019 Valoe issued a convertible bond. The company received subscriptions of approximately EUR 2.8 million in total. New cash investments totaled EUR 0.7 million and a total of approximately EUR 2.1 million was paid by setting the subscription price off against the subscribers' receivables from the company.

Valoe's objective is to achieve a strong market position as a provider of, in various geographical areas, locally produced high-quality photovoltaic modules. Achievement of the objectives involves risks. Even though Valoe's strategy and objectives are based on market knowledge and technical surveys, the risks are significant and it is not certain if the company reaches all or part of the targets set for it. Valoe's future outlook will be highly dependent on the company's ability to reach the targeted market position in the global photovoltaic module market as well as on the company's financing.

Valoe's customer has ongoing negotiations on arranging financing for a factory delivery in Asia worth EUR 26.5 million. The realization of the project involves significant risks. The financing negotiations are ongoing and it is not yet certain if the project or even a part of it will be realized.

The module manufacturing plant order from Ethiopia involves business, financial, schedule and country risks that are typical of international equipment sales. The country risks include also slow decision process for financing arrangements. The payments relating to the project have not yet begun despite the binding financing agreements. However, Valoe's customer, LS Corp, has commenced to withdraw some loan in local currency based on the abovementioned financial agreements and is building premises for the module manufacturing plant. The company follows very closely how the situation develops in Ethiopia and tries to support the customer in its negotiations by being present as often as possible.

The Agreement signed with ForUs Capital involves risks out of which the most remarkable risk relates to securing financing for the projects involved.

The developing markets can be unpredictable and operation in the markets involves many risks. When assessing the company, one shall be aware of the fact that the major part of the company's operations take place in high-risk environment and consider carefully the effects of the risks on the investor's own investment strategy.

The certain statements in this Annual Report and especially the non-binding estimations in Valoe's strategy are targeted to the future and based on the management's current estimations. They involve risks and uncertainty by their nature and may be affected by changes in general financial situation or business environment.

#### MARKET OUTLOOK

Valoe will not disclose financial guidance for the financial year 2019.

#### CORPORATE GOVERNANCE STATEMENT

Valoe applies the Finnish Corporate Governance Code approved by the Securities Market Association effective as of 1 October 2010. Valoe's Corporate Governance Statement drawn in accordance with Recommendation 51 will be released on the week commencing on 22 April 2019 as a separate report.

#### THE BOARD OF DIRECTORS' PROPOSAL CONCERNING THE DISTRIBUTION OF PROFIT

The Board of Directors proposes to the Annual General Meeting that no dividend from the financial year 2018 will be paid.

	2018	2017	2016
EUR 1 000	12 months	12 months	12 months
Net sales	1 328	554	553
Operating profit	-2 468	-3 078	3 661
% of net sales	-185,8 %	-556,0 %	661,5 %
Result before taxes	-4 210	-5 794	1 384
% of net sales	-316,9 %	-1 046,6 %	250,0 %
Return on equity, %	n/a	n/a	n/a
Return on capital employed, %	n/a	n/a	n/a
Equity ratio, %	-61,5	-47,3	-91,8
Net gearing, %	neg.	neg.	neg.
Non-interest-bearing liabilities	4 414	4 074	5 716
Interest-bearing liabilities	13 774	9 878	14 354
Gross investments	3 286	272	481
% of net sales	247,4 %	49,1 %	86,9 %
Research and development costs	1 322	1 536	1 601
% of net sales	99,5 %	277,5 %	289,2 %
Order book, EUR million	15,9	16,9	15,9
includes Ethiopia	15,8	15,8	15,8
Personnel on average	21	17	21
Personnel at the end of the period	25	18	18
Share key indicators			
Earnings per share (basic)	-0,28	-1,23	0,30
Earnings per share (diluted)	-0,28	-1,23	0,22
Earnings per share (basic) -continuing operations	n/a	-1,23	0,32
Earnings per share (diluted) - continuing operations	n/a	-1,23	0,24
Equity / share, EUR	-0,47	-0,96	-2,23
Dividend / share, EUR	0,00	0,00	0,00
Effective dividend yield, %	0,00	0,00	0,00
P/E ratio (basic)	-0,5	-0,6	8,7
P/E ratio (diluted)	-0,5	-0,6	11,8
Share price at the end of the period	0,14	0,70	2,60
Market capitalization of shares at the end of the period, MEUR	2,3	3,7	11,2
	7 605 261	2 102 871	220 475 609
Share trading adjusted for share issue Portion of weighted average of shares, %	51,0 %	44,6 %	320 475 608 37,2 %
Weighted average number of shares adjusted for share	14 898 309	44,6 %	37,2 % 862 472 136
issue over the financial year	14 030 303	4 / 10 410	002 472 130
Number of shares adjusted for share issue at the end of the financial year	17 136 338	5 269 436	862 472 136
Average number of shares diluted by share option and adjusted for share issue over the financial year	23 288 620	7 432 107	1 739 558 970

Return on equity and net gearing has not been presented for the reportable years as the equity is negative.

The share key indicators for the corresponding periods are calculated using the amount of the company's shares after the reduction of the quantity of the company's shares ( the pre-split price multiplied with 200).

Return on investment (ROI), %:	Profit/loss + financial expenses x 100
	Shareholders' equity + interest-bearing financial liabilities
Equity ratio, %:	Total equity x 100
	Total assets - advances received
	Interest-bearing liabilities - cash and cash equivalents and
Net gearing, %:	marketable securities x 100
	Shareholders' equity + non-controlling interests
Earnings/share (EPS):	Profit/loss for the period to the owner of the parent company
	Average number of shares adjusted for share issue at the end of the
	financial year
Equity/share:	Equity attributable to shareholders of the parent company
	Undiluted number of shares on the balance sheet date
Dividend/share:	Dividend distribution for the financial period
	Undiluted number of shares on the balance sheet date
Dividend/profit, %:	Dividend per share x 100
	Earnings per share
Effective dividend yield, %:	Dividend / share x 100
	Price on the balance sheet date
P/E ratio:	Price on the balance sheet date
	Earnings per share

EUR 1 000	Liite	1 Jan – 31 Dec 2018		1 Jan – 31 Dec 2017	
Net sales	1	1 328	100 %	554	100 %
Cost of sales		-1 657	-125 %	-1 204	-217 %
Gross profit		-329	-25 %	-650	-117 %
Other operating income	3	562		398	
Product development expenses		-1 322		-1 536	
Sales and marketing expenses		-697		-498	
Administrative expenses		-682		-786	
Other operating expenses	4	-0		-5	
Operating profit / loss		-2 468	-186 %	-3 078	-556 %
Financial income	7	0		0	
Financial expenses	8	-1 743		-2 716	
Profit/loss before taxes from continuing of	perations	-4 210	-317%	-5 794	-1047 %
Income taxes	9	0		0	
Profit/loss for the period		-4 210	-317%	-5 794	-1047 %
Profit/loss for the financial year		-4 210	-317%	-5 794	-1047%
Profit/loss attributable to:					
Shareholders of the parent company		-4 210		-5 794	
Earnings/share (basic), EUR	11	-0,28		-1,23	
Earnings/share (diluted), EUR	11	-0,28		-1,23	
Profit/loss for the financial year		-4 210		-5 794	
Total comprehensive income for the financial year		-4 210	-317%	-5 794	-1047%
Total comprehensive income attributable shareholders of the parent company	to:	-4 210		-5 794	

EUR 1 000	Note	31 Dec 2018	31 Dec 201
ASSETS			
Non-current assets			
Property, plant and equipment	12	29	8
Consolidated goodwill	13	441	443
Other intangible assets	13	9 016	6 98
Available-for-sale ivestments	14	9	!
Total non-current assets		9 495	7 44
Current assets			
Inventories	16	659	58
Trade and other non-interest-bearing receivables	17	1 234	1 25
Cash and cash equivalents	18	22	35
Other financial assets	18	41	
Total current assets		1 955	2 18
Assets classified as held for sale	10	0	
Current assets		11 451	9 62
EQUITY AND LIABILITIES  Equity attributable to shareholders of the parent company			
Equity attributable to shareholders of the parent			
Equity attributable to shareholders of the parent company  Share capital	19	80	_
Equity attributable to shareholders of the parent company  Share capital The invested unrestricted equity fund	19	11 804	8 10 54
Equity attributable to shareholders of the parent company  Share capital		11 804 -18 927	10 54: -15 16
Equity attributable to shareholders of the parent company  Share capital The invested unrestricted equity fund	19	11 804	10 54 -15 16
Equity attributable to shareholders of the parent company  Share capital The invested unrestricted equity fund Retained earnings  Total equity  Non-current liabilities	19 19	11 804 -18 927 - <b>7 044</b>	10 54 -15 16 - <b>4 54</b>
Equity attributable to shareholders of the parent company  Share capital The invested unrestricted equity fund Retained earnings  Total equity  Non-current liabilities  Non-current loans	19	11 804 -18 927 - <b>7 044</b> 10 995	10 54 -15 16 - <b>4 54</b> 7 87
Equity attributable to shareholders of the parent company  Share capital The invested unrestricted equity fund Retained earnings  Total equity  Non-current liabilities  Non-current loans	19 19	11 804 -18 927 - <b>7 044</b>	10 54 -15 16 - <b>4 54</b> 7 87
Equity attributable to shareholders of the parent company  Share capital The invested unrestricted equity fund Retained earnings  Total equity  Non-current liabilities Non-current loans  Total non-current liabilities  Current liabilities	19 19	11 804 -18 927 - <b>7 044</b> 10 995 <b>10 995</b>	10 54 -15 16 -4 54 7 87 7 87
Equity attributable to shareholders of the parent company  Share capital The invested unrestricted equity fund Retained earnings  Total equity  Non-current liabilities Non-current loans  Total non-current liabilities  Current liabilities  Current interest-bearing liabilities	19 19 22	11 804 -18 927 -7 044 10 995 10 995	10 54 -15 16 -4 54 7 87 7 87
Equity attributable to shareholders of the parent company  Share capital The invested unrestricted equity fund Retained earnings Total equity  Non-current liabilities Non-current loans Total non-current liabilities  Current liabilities  Current interest-bearing liabilities  Trade and other payables	19 19 22 22 23	11 804 -18 927 -7 044 10 995 10 995 2 779 4 339	10 54: -15 16: -4 54: 7 87: 7 87: 2 00: 3 77:
Equity attributable to shareholders of the parent company  Share capital The invested unrestricted equity fund Retained earnings  Total equity  Non-current liabilities Non-current loans  Total non-current liabilities  Current liabilities  Current interest-bearing liabilities  Trade and other payables  Current provisions	19 19 22	11 804 -18 927 -7 044 10 995 10 995 2 779 4 339 307	10 54 -15 16 -4 54 7 87 7 87 2 00 3 77 21
Equity attributable to shareholders of the parent company  Share capital The invested unrestricted equity fund Retained earnings  Total equity  Non-current liabilities Non-current loans  Total non-current liabilities  Current liabilities  Current interest-bearing liabilities  Trade and other payables  Current provisions	19 19 22 22 23	11 804 -18 927 -7 044 10 995 10 995 2 779 4 339	10 54 -15 16 -4 54 7 87 7 87 2 00 3 77 21
Equity attributable to shareholders of the parent company  Share capital The invested unrestricted equity fund Retained earnings  Total equity  Non-current liabilities Non-current loans  Total non-current liabilities  Current liabilities  Current interest-bearing liabilities  Trade and other payables  Current provisions  Total current liabilities  Liabilities directly associated with assets classified	19 19 22 22 23	11 804 -18 927 -7 044 10 995 10 995 2 779 4 339 307	10 54 -15 16 -4 54 7 87 7 87 2 00 3 77 21 5 99
Equity attributable to shareholders of the parent company  Share capital The invested unrestricted equity fund Retained earnings  Total equity  Non-current liabilities Non-current loans  Total non-current liabilities  Current liabilities  Current interest-bearing liabilities	19 19 22 22 23 21	11 804 -18 927 -7 044 10 995 10 995 2 779 4 339 307 7 425	_

EUR 1 000		Jan-Dec 2018	Jan-Dec 2017
CASH FLOW FROM OPERATING ACTIVITIES			
Income statement profit/loss before taxes		- 4 210	-5 794
Non-monetary items adjusted on income statement			
Depreciation and impairment	+	1 232	1 333
Unrealized exchange rate gains (-) and losses (+)	+/-	5	-11
Other non-cash transactions	+/-	-526	-129
Change in provision	+/-	87	175
Financial income and expenses	+/-	1 737	2 728
Total cash flow before change in working capital		-1 676	-1 698
Change in working capital			
Increase (-) / decrease (+) in inventories		-78	-162
Increase (-) / decrease (+) in trade and other receivables		-12	-412
Increase (+) / decrease (-) in trade and other payables		59	-611
Change in working capital		-31	-1 184
Adjustment of financial items and taxes to cash-based accounting			
Interest paid	-	195	273
Other financial items	-	247	5
Financial items and taxes		-442	-278
NET CASH FLOW FROM BUSINESS OPERATIONS		-2 149	-3 160
CASH FLOW FROM INVESTING ACTIVITIES			
Investments in tangible and intangible assets	-	2 613	357
NET CASH FLOW FROM INVESTMENTS		-2 613	-357
CASH FLOW FROM FINANCING ACTIVITIES			
Proceeds from share issue	+	59	800
Financing arrangement with Bracknor Investment	+	918	650
Increase in non-current loans	+	2 421	1 803
Repayment of non-current loans	-	0	23
Increase in current loans	+	2 829	1 380
Repayment of current loans	-	1 751	741
NET CASH FLOW FROM FINANCING ACTIVITIES		4 476	3 869
INCREASE (+) OR DECREASE (-) IN CASH FLOW		-287	352
Cash and cash equivalents at the beginning of the financial year		350	3
Translation adjustment to cash and cash equivalents		-1	-5
Cash and cash equivalents at the end of the financial year		62	350
cash and cash equivalents at the end of the infancial year			
		-287	352

# Statement of Changes in Equity, 1 Jan – 31 Dec 2018

EUR 1 000	Share capital	Distributable non- restricted equity fund	Retained earnings	Total
31 Dec 2017	80	10 542	-15 166	-4 544
Profit/loss for the financial period			-4 210	-4 210
Transactions with owners:				
Own equity component of the convertible bond			416	416
Sale of own shares – Bracknor Investment		966		966
Share issue		295		295
Stock options to be executed and paid in shares			32	32
31 Dec 2018	80	11 804	-18 927	-7 044

# Statement of Changes in Equity, 1 Jan – 31 Dec 2017

Distributable non-						
EUR 1 000	Share capital	restricted equity fund	Retained earnings	Total		
31 Dec 2016	80	0	-9 708	-9 628		
Profit/loss for the financial period			-5 794	-5 794		
Translation difference, comprehensive income			1	1		
Transactions with owners:						
Own equity component of the convertible bond			300	300		
Sale of own shares – Bracknor Investment		722		722		
Share issue		9 820		9 820		
Share issue expenses			-98	-98		
Stock options to be executed and paid in shares			133	133		
31 Dec 2017	80	10 542	-15 166	-4 544		

#### GENERAL INFORMATION

Valoe Corporation specializes in the clean energy, especially in photovoltaic solutions. Valoe provides automated production technology for solar modules based on the company's own technology; production lines for modules, solar modules and special components for solar modules.

The Group's parent company is Valoe Corporation, a Finnish public limited company domiciled in Mikkeli. The company's registered address is Insinöörinkatu 5, FI-50150 Mikkeli.

A copy of the consolidated financial statements is available online at www.valoe.com or at the Group's headquarters at Insinöörinkatu 8, FI-50150 Mikkeli.

Valoe Corporation's Board of Directors approved the financial statements on 25 April 2019. According to the Limited Liability Companies Act, shareholders are entitled to approve or reject the financial statements at the Annual General Meeting held after their publication. The Annual General Meeting may also decide on amendments to the financial statements.

# **Accounting Principles**

# Basis of preparation

The consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS), following the IAS and IFRS standards, as well as the SIC and IFRIC interpretations, effective on 31 December 2017. International accounting standards refer to standards and interpretations approved for application in the European Union as provided for in the Finnish Accounting Act and regulations based on the procedure laid down in Regulation (EC) No 1606/2002 of the European Parliament and of the Council. The notes to the consolidated financial statements are also in accordance with the Finnish accounting and business legislation supplementing the IFRS regulations.

The consolidated financial statements have been prepared under the historical cost convention, with the exception of available-for-sale investments, which have been measured at fair value. The figures in the financial statements are given in thousands of euros.

#### Application of the going concern assumption

The financial statements have been prepared under the going concern assumption. In April 2018 the company issued a EUR 1.0 million convertible bond I/2018 that was fully subscribed. During the subscription period of the Convertible Bond new investments of EUR 0.9 million was paid in cash and a total of EUR 0.1 million was paid by setting the subscription price off against the subscribers' receivables from the company.

To secure the going concern assumption and to strengthen the Company's working capital situation Valoe signed an EUR 2 million equity-based financing facility agreement with Winance on 20 December 2018. By 31 December 2018 the company has withdrawn in total EUR 0.5 million from the Bracknor Investment's financing commitment.

Valoe Group has applied as from 1 January 2018 the following new and amended standards that have come into effect:

IFRS 9 *Financial Instruments*; Standard replaces the existing guidance in IAS 39. The new standard includes revised guidance on the classification and measurement of financial instruments, including a new expected credit loss model for calculating impairment on financial assets, and the new general hedge accounting requirements. It also carries forward the guidance on recognition and derecognition of financial instruments from IAS 39. The standard had no significant impact on Valoe's consolidated financial statements. The Group does not apply hedge accounting.

IFRS 15 Revenue from Contracts with Customers; The new standard replaces current IAS 18 and IAS 11 -standards and related interpretations. In IFRS 15 a five-step model is applied to determine when to recognise revenue, and at what amount. Revenue is recognised when (or as) a company transfers control of goods or services to a customer either over time or at a point in time. Valoe has adopted the standard partly retroactively on 1 January 2018, but there was no need to correct the balances for the comparison year 2017 or the opening balances for 1 January 2018. The standard had no significant impact on Valoe's consolidated financial statements.

Amendments to IFRS 2 Sharebased payments - Clarification and Measurement of Sharebased Payment Transactions; The amendments clarify the accounting for certain types of arrangements. Three accounting areas are covered: measurement of cash-settled share-based payments; classification of share-based payments settled net of tax withholdings; and accounting for a modification of a share-based payment from cash-settled to equity-settled. The amendments had no significant impact on Valoe's consolidated financial statements.

IFRIC 22 Interpretation Foreign Currency Transactions and Advance Consideration; When foreign currency consideration is paid or received in advance of the item it relates to – which may be an asset, an expense or income – IAS 21 The Effects of Changes in Foreign Exchange Rates is not clear on how to determine the transaction date for translating the related item. The interpretation clarifies that the transaction date is the date on which the company initially recognises the prepayment or deferred income arising from the advance consideration. For transactions involving multiple payments or receipts, each payment or receipt gives rise to a separate transaction date. The interpretation had significant impact on Valoe's consolidated financial statements.

# Accounting policies requiring consideration by management and crucial factors of uncertainty associated with estimates

Estimates and assumptions regarding the future have to be made during the preparation of the financial statements, and the outcome may differ from the estimates and assumptions. Furthermore, the application of accounting policies requires consideration.

#### Management consideration connected with accounting policies and their adoption

The Group's management uses discretion in the selection and application of accounting principles. When preparing the financial statements the major issues for which the management has used discretion are evaluation of the going concern assumption and in appreciation of goodwill and product development costs.

Uncertainties relating to financing and continuity of the company's business operations have been described above in the accounting principles as well as the arguments for going concern assumption.

The company has not recorded a EUR 0.3 million calculated tax liability nor EUR 0.02 million tax receivable originating from the temporary timing differences between book value and taxation value because of improbable realization. The company has a remarkable amount of confirmed tax losses of which tax receivables have not been recorded.

#### Uncertainties connected with estimates

Estimates made when compiling the financial statements are based on the management's best views on the closing date of the reporting period. The estimates are based on previous experience and assumptions about the future that are deemed the most likely on the balance sheet date. Management estimates are used especially in goodwill impairment testing and the capitalization of product development costs (Note 13.). When testing for the impairment of assets, estimates are made on the recoverable amount of assets. The key uncertainty factors in goodwill impairment testing are related to sales and sales margins. The company has performed the impairment testing on goodwill and development expenditure in accordance with IFRS.

When testing for the impairment of assets, estimates are made on the recoverable amount of assets. Further information on the estimates used in goodwill impairment testing, as well as the bases for the estimates, is available under "Depreciation and Impairment" and "Intangible Assets / Goodwill" in the notes to the consolidated financial statements.

#### Accounting principles for the consolidated financial statements

The consolidated financial statements include the parent company Valoe Corporation and all of its subsidiaries. Subsidiaries are entities in which the Group exercises control. A position of control arises when the Group, by being an investor, is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The information of subsidiaries is given in Related party transactions, Note 28. The Group has no subsidiaries with a significant proportion of noncontrolling interests.

Intra-group shareholding has been eliminated using the acquisition method. Acquired subsidiaries are consolidated in the financial statements from the date on which the Group has acquired control over the company, and disposed subsidiaries are deconsolidated from the date on which control ceases. All of the Group's internal operations, receivables, liabilities, unrealized gains and internal profit distribution are eliminated when preparing the consolidated financial statements. Unrealized losses are not eliminated if the losses result from impairment.

# Foreign currency translation

The figures representing the performance and financial standing of the Group's units are measured in the functional currency of each unit's main operating environment. The consolidated financial statements are presented in euros, which is the parent company's functional and presentation currency.

Foreign currency transactions have been recognized in euros using the exchange rate prevailing on the transaction date. In practice, the rate used is often one that approximately equals the rate on the transaction date. Monetary items denominated in foreign currency have been translated into euros at the closing rate. Non-monetary items in foreign currency, measured at fair value, have been translated into euros at the rates prevailing on the measurement date. Other non-monetary items have been measured at the rate prevailing on the transaction date. Gains and losses from foreign currency transactions and from the translation of monetary items have been recognized in the income statement. Exchange rate gains and losses from business activities are included in the corresponding items above operating profit.

The revenues and expenses in the income statements of foreign group undertakings have been translated into euros using the weighted average rate for the financial year, while the balance sheets have been translated using the closing rates. Using different rates to translate the period's result in the income statement and balance sheet results in a translation difference that needs to be recognized in the statement of comprehensive income. Translation differences resulting from the elimination of the acquisition cost of foreign subsidiaries are recognized in the income statement when the net investment is divested wholly or partly.

Unrealized exchange gains and losses are recognized through profit or loss. If the exchange gains and losses are recognized in the same item in the balance sheet, they are measured at net realizable value and then recognized through profit or loss.

Translation differences generated before 1 January 2004, the date at which the Group adopted IFRS, have been recognized under retained earnings in conjunction with the transition to IFRSs, in accordance with the exemptions permitted under IFRS 1, and will not be later recognized in the income statement in conjunction with the disposal of subsidiaries. As of the transition date, translation differences arising in the preparation of consolidated financial statements have been presented as a separate item under equity. Valoe Group adopted this practice retroactively in 2008, and the necessary adjustments were made to the comparative figures given for the previous year.

# Property, plant and equipment

Property, plant and equipment have been recognized at original cost less depreciation and impairment.

If an asset consists of several components, with useful lives of different lengths, each component is treated as a separate asset. In this case, the expenses related to the renewal of a component are capitalized and any remaining carrying amount is derecognized in conjunction with the renewal. Otherwise, expenses incurred at a later time are included in the carrying amount of an asset only if it is probable that any future economic benefit associated with the asset will flow to the Group and if the acquisition cost of the asset can be reliably determined. Other repair and maintenance expenses are recognized in the income statement after their realization.

Straight-line depreciations are made on assets over their estimated useful life. Land is not depreciated. The estimated useful lives are the following:

Buildings 25 years
Modernization of leased facilities 5 years
Machinery and equipment 2-7 years

The residual value and useful life of assets are assessed for every financial statement and, if needed, adjusted to reflect any changes in the expected economic benefit.

The depreciation of property, plant and equipment is terminated when the asset is classified as Held for Sale in accordance with IFRS 5 Non-current Assets Held for Sale and Discontinued Operations.

Gains and losses on disposals and transfers of property, plant and equipment are included in other operating income or expenses.

#### **Public Subsidies**

Public subsidies, such as government assistance for the acquisition of property, plant and equipment, are recognized as deductions from the carrying amount of property, plant and equipment or intangible assets when it is reasonably certain that the Group will receive the subsidies and that it complies with the conditions attached to them. Subsidies are recognized in the form of smaller depreciation over the useful life of the asset. Subsidies received as compensation for expenses already incurred are recognized in the income statement when the expenses related to the subsidized object are recognized as an expense. These types of subsidies are presented under other operating income. During previous financial years, the Group has received product development subsidies that involve both of the recognition methods explained above.

According to IAS 20 the benefit of a government loan at a below-market rate of interest is treated as a government grant. The loan is recognized and measured in accordance with IAS 39. The benefit of the below-market rate of interest is measured as the difference between the initial carrying value of the loan determined in accordance with IAS 39 and the proceeds received. The benefit is accounted for in accordance with this Standard.

# Investment property

Investment property includes real estate that the Group holds to earn rental income or appreciation in property value. Investment property is measured at fair value. The fair value is determined regularly based on an estimate prepared by an impartial real estate assessor and corresponds to the market value of active markets. Changes in the fair value of investment property are included in other operating income or expenses in the income statement. The Group had no investment property in 2018.

# Intangible assets

#### Goodwill

Goodwill arising in business combinations is recognized at the amount by which the consideration given, the share of the shareholders without control in the acquired business and the previously held share combined exceed the fair value of the acquired net assets. The goodwill of business combinations carried out prior to 2004 corresponds to the carrying amount that complies with previous accounting standards, which has been used as the default acquisition cost according to IFRS.

Goodwill and other intangible assets with indefinite useful life are not subject to depreciation but are tested annually for any impairment. For this purpose, goodwill has been allocated to cash-generating units. Goodwill is measured at original cost less impairment (Note 13)

#### Research and development costs

Research expenditure is recognized as an expense in the income statement. Development expenditure arising from the design of new or more advanced products is capitalized in the balance sheet under intangible assets as of the date the product is technically realizable and commercially viable and can be expected to generate future economic benefit. Capitalized development costs include the material, work and

testing expenses that result directly from completing an asset for the intended purpose. Development expenditure that has been recognized as an expense in previous periods cannot be capitalized later.

Depreciation of an intangible asset begins once the asset is ready for use. Capitalized development expenditure is reviewed annually for any indication of impairment. An intangible asset that is not ready for use is tested annually for impairment. After initial recognition, capitalized development expenditure is measured at cost less accumulated depreciation and impairment. The useful life of capitalized development expenditure is 5 to 10 years, during which time capitalized costs are amortized on a straight-line basis.

#### Other intangible assets

An intangible asset is recognized in the balance sheet at original cost if the cost can be reliably determined and it is likely that the expected economic benefit from the asset will flow to the company.

Intangible assets with a limited useful life are capitalized in the balance sheet at acquisition cost and amortized on a straight-line basis through profit or loss over their useful life.

Other intangible assets have the following depreciation periods:

Patents 10 years
Software licenses 5 years

#### **Inventories**

Inventories are measured at the lower of acquisition cost or net realizable value. The acquisition cost of material inventories is determined using the weighted average cost method and that of work in progress using the FIFO (first in, first out) method. The cost of finished products and work in progress includes raw materials, direct labor costs and other direct costs, and a systematically allocated share in the variable manufacturing overhead costs. The net realizable value is the estimated selling price in normal business operations, less the estimated costs of completion and estimated costs resulting from sales.

#### Leases

# Group as lessee

In accordance with IAS 17, leases are classified as finance leases or operating leases. Leases on tangible assets, which transfer substantially the risks and rewards of ownership to the Group, are classified as finance leases in accordance with IAS 17 Leases. Assets acquired on finance leases are recognized in the balance sheet at the beginning of the lease period at the fair value of the leased asset or, if lower, at the present value of minimum lease payments. An asset acquired on a finance lease is depreciated over the shorter of the asset's useful life or lease period. Lease payments are divided into a finance charge and a reduction of the outstanding liability over the lease period so that a constant periodic rate of interest is achieved on the outstanding liability. Lease obligations are included in interest-bearing liabilities. The Group has no assets leased by financial leasing during the financial year 2018 and 2017.

Leases where the lessor retains the risks and rewards of ownership are classified as operating leases. Other leases are recognized as rental expenses under other operating expenses. Payments made under operating leases are expensed in the income statement on a straight-line basis over the lease period. Received incentives are deducted from the paid leases in accordance with the duration of the benefit.

# Impairment of tangible and intangible assets

#### Tangible and intangible assets

On every closing date the Group tests assets for possible impairment. If any indication of impairment is found, the recoverable amount of the asset in question is assessed. The recoverable amount is also estimated annually for goodwill and product development projects, irrespective of whether indications of impairment are found. The need for impairment is assessed at the level of cash-generating units, that is, at the lowest unit level that is mainly independent of other units and has separately identifiable cash flows.

The recoverable amount of an asset is the higher of its fair value less expenses from disposal or its value in use. Value in use equals the net future cash flows expected to be recovered from the asset or cash-generating unit, discounted to present value.

An impairment loss is recognized if the carrying amount of an asset is higher than its recoverable amount. An impairment loss is recognized immediately in the income statement. If the impairment loss concerns a cash-generating unit it is first allocated to reduce the goodwill of the cash-generating unit and then to proportionately reduce the unit's other assets. An impairment loss is reversed if there is a change in the conditions under which the recoverable amount of the asset was measured and if the recoverable amount of the asset has changed since the recognition of the impairment loss. However, the reversal shall not exceed the carrying amount that would have been determined had no impairment loss been recognized. Goodwill impairment is not reversed under any circumstances.

# **Employee** benefits

#### **Pension obligations**

Pension plans are categorized into defined benefit and defined contribution schemes. In defined contribution schemes the Group pays fixed contributions to a separate entity. The Group has no legal or constructive obligation to pay further contributions if the entity does not hold sufficient assets to take care of all of the pension benefits. All other schemes that do not meet these conditions are defined benefit schemes. Contributions made into defined contribution payment schemes are recognized in the income statement in the financial period they are due. The Group has no pension arrangements considered to be defined benefit plans.

#### Share-based payments

During the financial year 1.1. – 31.12.2018 no options were given to the management. The company has an option scheme in force as per 31 December 2018.

The options given to Valoe Group's key employees are appreciated at their fair value as per the time of the transaction and recorded as an expense on a straight-line-basis over the issuance period. The expense of the granted options equivalent to the fair value is recorded in the personal expenses and the corresponding booking is made in the equity. The fair value is defined using the Black–Scholes-model where the market terms affecting the pricing of the options are considered. Further, the final amount and the period of validity are evaluated when the options are granted. The amount recorded as an expense will later be adjusted to equal the final amount of the options. When the option rights are used the payments, adjusted by possible transaction costs, will be recorded in the equity and the distributable non-restricted equity fund.

#### Other employee benefits

After a long period of employment, employees receive a reward or paid holiday. Long-term employee benefits are booked as deferred liability at the balance sheet at the present value at the reporting date. Actuarial gains and losses are recognized in profit or loss.

#### **Provisions**

A provision is recognized when the Group has a legal or constructive obligation as a result of a past event, it is probable that the payment obligation must be settled and the amount of the obligation can be reliably estimated. If there is a possibility to get compensation from a third party for part of the obligation, the compensation is recognized as a separate asset, but not until it is practically certain that the compensation will be received. Provisions are measured at the present value of expenditures required to settle the obligations. The discount rate used to calculate the present value is selected to reflect current market assessments of the time value of money and the risks specific to the obligation.

A warranty provision is recognized when the delivery of a product including a warranty clause has been approved. The amount of the warranty provision is based on experience about the realization of warranty expenses.

A restructuring provision is recognized when the Group has drawn up a detailed restructuring plan, initiated implementation of the plan or made the plan known. A restructuring plan includes at least the following information: the business targeted by restructuring; the main sites affected by the plan; the location, duties and estimated number of employees who will be compensated for termination of employment; the resulting expenses and the time of implementation of the plan. No provision is recognized for expenses related to the Group's ongoing operations.

A provision is recognized for an onerous contract if the expenses required to settle the obligations exceed the benefits from the contract.

A provision is recognized for obligations related to decommissioning and restoration if the Group has an obligation that is based on environmental legislation and the Group's environmental responsibility principles and that concerns the decommissioning of a production plant, repair of environmental damage or the transfer of equipment from one place to another.

#### Income taxes and deferred taxes

The taxes in the income statement include current tax and deferred tax. Tax expenses are recognized through profit or loss, with the exception of items recognized directly in equity, in which case the tax impact is recognized correspondingly as part of equity. Current tax is calculated from taxable income using the tax rate enacted in each country.

Deferred taxes are calculated on temporary differences between the carrying amount and taxable amount. Deferred tax liabilities are not recognized for an initially recognized asset or liability in a transaction other than a business combination if the recognition of the asset or liability does not affect accounting or the taxable income at the time of transaction. The largest temporary differences arise from measurement at fair value in connection with acquisitions.

Deferred tax is recognized in the case of investment in subsidiaries, except if the Group is able to determine the time the temporary difference was eliminated and the extent to which the difference will probably not be eliminated during the foreseeable future.

Deferred taxes are calculated using the tax rates enacted by the balance sheet date. A deferred tax asset is recognized to the extent that it is probable that taxable profit will be available in the future against which the temporary difference can be utilized. The company has not recognized deferred tax assets based on its deductible losses.

#### Revenue recognition principles

#### Sold goods and produced services

Revenue from the sales of goods is recognized when the significant risks and rewards of ownership have been transferred to the buyer. At this time, the Group no longer has control or regulatory power over the product. This usually coincides with the date on which the goods have been delivered to the customer according to the agreed delivery clause. Revenue from services is recognized at the time the service is carried out. Net sales consist of the revenue from the sales of products, services, raw materials and equipment, adjusted by indirect taxes, discounts and exchange rate differences from sales in foreign currencies.

Long-term contract revenue has been recognized as revenue on the basis of the percentage of completion. The company has defined as long-term contract work projects which have started and ended in different financial periods and where the recognition of income as revenue has a substantial impact on net sales and result. The stage of completion of long-term contracts has been determined as the proportion of costs incurred in relation to the estimated total contract costs and is dependent on the eventual total revenue and costs and a reliable way to measure the progress of the project. A loss for a project is recognized as soon as it is known and can be estimated.

#### Interest and dividend

Interest income is recognized using the effective interest method and dividend yield at the time of vesting.

#### Non-current assets classified as held for sale and discontinued operations

Non-current assets (or disposal group) and assets and liabilities related to discontinued operations are classified as held for sale if the amount of their book value will be recovered through the sale of them instead of continuous use. Conditions for classification as held for sale are fulfilled when the sale is highly probable and the asset (or disposal group) is available for immediate sale in its present condition on customary terms and conditions, and when the management is committed to the sale and the sale is expected to occur within one year of the classification.

From the moment of the classification as held for sale (or disposal group) the assets are valued at book value or fair value less costs to sell, depending on whichever is lower. Depreciation of these assets is discontinued at the time of classification.

A discontinued operation is a component of the Group, which has been disposed or is classified as held for sale and which meets one of the following conditions;

- 1. It represents a separate major business unit or geographical area
- 2. It is part of a coordinated plan to dispose a separate major business unit or geographical area
- 3. It is a subsidiary acquired exclusively with a view to resale

The profit or loss of discontinued operations is presented separately in the consolidated statement of comprehensive income. Assets held for sale, disposal groups, items recognized in other comprehensive income related to assets held for sale and liabilities included in the disposal group are presented in the balance sheet separately from other items.

Valoe has reported liabilities related to the discontinued operations (the electronics automation business sold to FTTK) during the financial years 2018 and 2017.

#### Financial assets and liabilities

#### **Financial assets**

The Group's financial assets are categorized into the following groups according to IAS 39 Financial Instruments, Recognition and Measurement: financial assets recognized at fair value through profit or loss, held-to-maturity investments, loans and receivables and available-for-sale financial assets. The categorization is carried out based on the purpose for which the financial assets were acquired and is done in conjunction with the original acquisition The Group has no financial assets recognized at fair value through profit or loss during the financial years 2018 and 2017.

Loans and other receivables are non-derivative assets that have fixed or measurable payments, are not quoted on active markets and not held for trading by the Group. They are measured on the basis of amortized cost. They are presented under trade and other receivables in the balance sheet depending on their nature: in non-current assets if they mature in more than 12 months and in current assets otherwise.

Financial assets available for sale are assets that are not included in derivatives and have been expressly allocated to this group or have not been classified into any other group. They are included in non-current assets except if they are to be held for less than 12 months from the closing date, in which case they are recorded under current assets. Available-for-sale financial assets consist of shares and interest-bearing investments. They are measured at fair value or, when the fair value cannot be reliably determined, at cost. Changes in the fair value of available-for-sale financial assets are recorded in equity in the fair value reserve taking into consideration the tax impact. Changes in fair value are transferred from equity to the income statement when the investment is sold or if it is subjected to impairment and an impairment loss must be recognized on the investment.

The Group had no derivative contracts during the financial years 2018 and 2017.

Cash and cash equivalents consist of cash, bank deposits that can be withdrawn if demanded and other current, highly liquid investments. Items in cash and cash equivalents have a maximum maturity of three months from the date of acquisition. Credit accounts related to Group accounts are included in current interest-bearing liabilities and reported as set off, as the Group has a contractual, legally recognized right to settle or otherwise eliminate all or a portion of an amount due to a creditor.

Transaction expenses are included in the original carrying amount of financial assets in the case of an item that is not measured at fair value through profit or loss. All of the purchases and sales of financial assets are recognized on the transaction date.

Financial assets are derecognized if the Group loses the contractual right to cash flows or if it transfers substantial risks and income outside the Group.

#### **Financial liabilities**

Financial liabilities are initially recognized at fair value. Transaction expenses are included in the original carrying amount of financial liabilities. All financial liabilities are later measured at amortized cost using the effective interest method. Financial liabilities are included in current and non-current liabilities and they can be either interest-bearing or non-interest-bearing. The fair value of the liability component of a convertible subordinated loan is determined using the prevailing market interest rate for a similar debt at the time of issue. The liability component is recognized at amortized cost. In calculating the convertible bond, the equity share has been recognized under equity.

The fair value measurement principles applied to all financial assets and liabilities are presented in Note 24

#### Impairment of financial assets

On each balance sheet date the Group assesses whether objective indication exists of impairment of an individual financial asset or a group of financial assets. A significant and long-lasting impairment of share investments, resulting in the fair value falling under the cost of acquisition, is an indication of impairment of available-for-sale shares.

The Group recognizes an impairment loss for trade receivables if objective indication exists that the receivable cannot be collected in full. Considerable financial difficulties of a debtor, likelihood of bankruptcy, default of payments or a payment delay of more than 90 days are indications of possible impairment of trade receivables. The amount of the impairment loss recognized in the income statement is determined as the difference between the carrying amount of the receivable and the present value of estimated future cash flows discounted using the effective interest rate. If the amount of the impairment loss decreases in a later period, and the decrease can be objectively related to an event subsequent to impairment recognition, the recognized loss is reversed through profit or loss.

# **Borrowing costs**

The Group also capitalizes the borrowing costs for the acquisition, construction or production of a qualifying asset that are directly attributable as part of the cost of the asset when it is probable that they will generate future economic benefits, and the costs can be measured reliably. The Group no longer capitalizes the costs when the asset is substantially ready for its intended use or sale. Other borrowing costs are recognized as an expense in the period in which they occur.

# Shareholder's equity

The Group classifies the instruments issued on the basis of their nature either as equity or as a liability (financial debt). Any contract that entitles to the assets of an entity after deducting all of its liabilities is an equity instrument. Expenses associated with the issuance or purchase of equity instruments are presented as an equity reduction item. If the company buys back its own equity instruments, the cost of these instruments is deducted from equity.

The Board of Directors of Valoe Corporation resolved on 20 December 2018 on a directed share issue in which the Company offered up to 10,000,000 new shares in the Company for subscription to all the creditors of the Company (including holders of the convertible loans I/2015 and I/2017) who at the time of subscription held indisputable receivable amounting to at least EUR 25,000 from the Company.

In total 8,721,077 New Shares were acceptably subscribed in the Offering. According to the terms and conditions of the Offering, the subscription price for the New Shares was payable in cash or by set-off against, in the view of the Board of Directors of the Company, indisputable receivables the Subscriber had from the Company at the time of subscription. The subscription price for in total 876,326 of the New Shares subscribed was paid in cash and the subscription price for in total 7,844,751 of the New Shares subscribed was paid by way of set-off. Thus, the Company collected in the Offering in total approximately EUR 859,000 new capital before fees and costs and the indebtedness of the Company decreased in total approximately by EUR 9,257,000. The New Shares were registered with the Trade Register on 19 January 2018 and the subscription price for the New Shares was fully credited to the reserve for invested equity of the Company.

Valoe issued a Convertible Bond 2/2018 totalling EUR 2,195,289.10, in deviation from the shareholders' pre-emptive subscription rights, to Ilmarinen Mutual Pension Insurance Company. Ilmarinen Mutual Pension Insurance Company has subscribed the Convertible Bond against the subscriber's loan receivable from Valoe by converting the loan capital and the interests of the Convertible Bond 1/2015 into the Convertible Bond, a capital loan, in accordance with the terms of this Convertible Bond. The Promissory Note Holder is entitled to convert the Promissory Note into the shares of the Company in accordance with the terms of the Convertible Bond. If the Company's shares are listed on the main list of Nasdaq Helsinki Oy when the conversion right is being used, the subscription price of one (1) new share of the Company shall be the six-month volume weighted average stock trading price on the period ending on 15 October 2021 less 15 percent. If the Company's shares are not listed on the main list of Nasdaq Helsinki Oy when the conversion right is being used, one of the Big Four accounting companies shall provide, at the Company's cost, a fairness opinion and assess the fair value of the Company's share which, less 15 percent, shall be the subscription price of one (1) new share of the Company. The loan period shall commence on the payment date and expire on 15 October 2021 on which date the Convertible Bond shall expire to be repayable in its entirety in accordance with these terms of the loan. The conversion period of the Convertible Bond commences on 15 October 2021 and terminates on 31 December 2021.

#### Dividend distribution

The dividend proposed by the Board of Directors to the Annual General Meeting is not deducted from distributable equity until the Annual General Meeting makes its decision.

# New IFRSs and interpretations

Valoe has not yet adopted the following new and amended standards and interpretations already issued by the IASB. The Group will adopt them as of the effective date or, if the date is other than the first day of the financial year, from the beginning of the subsequent financial year.

IFRS 16 Leases (effective for financial years beginning on or after 1 January 2019): The new standard replaces the current IAS 17 – standard and related interpretations. IFRS 16 requires the lessees to recognise the lease agreements on the balance sheet as a right-of-use assets and lease liabilities. The accounting model is similar to current finance lease accounting according to IAS 17. There are two exceptions available, these relate to either short term contacts in which the lease term is 12 months or less, or to low value items. The lessor accounting remains mostly similar to current IAS 17 accounting. The Group has one long-term lease. Other leases are valid until further notice and management has assessed their lease term and materiality. The Group will adopt the

exceptions, which relate to either short term contracts or contracts with low value. The introduction of the standard improves Valoe's consolidated EBITDA.

IFRIC 23 Interpretation *Uncertainty over income tax treatments* (effective for financial years beginning on or after 1 January 2019): The Interpretation addresses the determination of taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates, when there is uncertainty over income tax treatments. The interpretation is not assessed to have an impact on Valoe's consolidated financial statements.

Amendments to IAS 28 Long-term Interests in Associates and Joint Ventures (effective for annual periods beginning on or after January 1, 2019). The changes concern some long-term investments in associates and joint ventures. The amendments are not assessed to have an impact on Valoe's consolidated financial statements.

Amendments to IFRS 9 Prepayment Features with Negative Compensation (effective for annual periods beginning on or after January 1, 2019). The amendments will change the existing requirements in IFRS 9 and will relate to some prepayments classified as financial assets. The amendments will not have a significant impact on Valoe's consolidated financial statements.

# **Presentation of Figures**

Unless otherwise indicated, the figures in the following notes are given in thousands of euros.

# 1. Segment Information

From the financial year 2018, the Group no longer reports separately discontinued and discontinued operations in its income statement because the discontinued operations dod not exists in the reporting period or in the comparison period. Balance sheet items still include liabilities for discontinued operations.

Information regarding discontinued operations is given in attachment 10. Discontinued operations.

The Group has one customer whose revenues totalled to apr.72 per cent of the Group's revenue.

#### **Geographical information**

Finland, the rest of Europe, the Americas, Asia and Africa are reported under geographical information. Geographical information in terms of net sales is determined based on the customer's location and in terms of assets on the location of the assets.

	( Finland	Other European countries	America	Asia	Africa	Group
2018						·
External net sales	1 283	0	22	23	0	1 328
Non-current assets	8 020	1 475	0	0	0	9 495
2017						
External net sales	529	0	25	0	0	554
Non-current assets	7 441	0	0	0	0	7 441
Distribution of net sales Continuing operations					2018	2017
• .					07	66
Revenues from services	of goods				97 1 231	66 488
Revenues from the sale of <b>Total</b>	or goods				1 231 1 328	488 <b>554</b>
Total					1 328	554
2. Long-term contr percentage of com		recognized on	the basis of th	e		
Cumulative net sales					145	0
Recognized as revenue for	or the financial pe	riod			145	0
Amount not recognized a	is revenue				23	0
Advance payments receive	ved				0	0
Receivables from percentage-of-completion contracts					145	0

3. Other operating income	2018	2017
Other income items	562	398
Total	562	398
4. Other operating expenses		
Other expense items	0	5
Total	0	5
Authorized Public Accountants Auditus Tilintarkastus Ov		
Authorized Public Accountants Auditus Tilintarkastus Oy Auditors' fees	56	27
Certificates and Statements	5	4
Total	61	31
Authorized Public Accountants KPMG Oy Ab		
Auditors' fees	0	13
Other services Tatal	0	1
Total	0	14
The KPMG's auditors' fees during 2017 were related to the audit of 2016.		
Rental expenses		
Rental expenses	344	212
5. Employee benefits	2018	2017
3. Employee Benefits		
Salaries	1 281	1 194
Retirement expenses – defined contribution plans	233	253
Other indirect employee expenses	52	65
Stock option scheme 2015 (IFRS2)	32	133
Yhteensä	1 599	1 646
Information on the emoluments of the management is given in Note 28. Related party transaction	15.	
Employees by function were		
During the financial period on average		
Procurement and production	11	7
Product development	6	5
Sales and marketing	2	2
Administration	3	3
Total	21	17
At the end of the year		
Procurement and production	15	8
Product development	6	5
Sales and marketing Administration	2	2
Total	2 <b>5</b>	3 18
• • • • • • • • • • • • • • • • • • • •		20

6. Depreciation and impairment	2018	2017
Intangible assets		
Development cost	1 180	1 284
Patents	18	16
Intangible rights	5	5
Other intangible assets	20	22
Total	1 224	1 327
Property, plant and equipment		
Machinery and equipment	8	6
Total	8	6
No impaiments were booked during the financial year or the comparison year.		
7. Financial income		
Exchange rate gains	0	14
Total	0	14
The items above the operating profit don't include ecxhange rate gains or losses in 2018 or 2017.		
8. Financial expenses	2018	2017
Interest expenses	1 567	2 502
Exchange rate losses	10	0
Other financial expenses	166	228
Total	1 743	2 730
9. Income taxes		
J. Medilie taxes		
Tax based on the taxable income for the financial year	0	0
Taxes carried forward	0	0
Total	0	0
Statement on the differences between the tax expense in the income statement and the tax rate of the Group's home country, reconciliation of calculated taxes:		
Profit/loss before taxes	-4 210	-5 794
Taxes at the parent entity's statutory income tax rate of 20 % (2016: 20 %)	-842	-1 159
Different tax rates of subsidiaries	2	-2
Tax-free revenue / non-deductible expenses	35	100
Loss to be confirmed in taxation not recognized as deferred tax assets	805	1 061
Taxes carried forward	0	0
Taxes in the income statement	0	0

# 10. Discontinued operations

17 September Valoe announced that it has transferred the company's electronics automation business into Cencorp Automation Oy, a fully-owned subsidiary of Valoe. Further, in accordance to the agreement signed earlier, FTTK Company Limited has purchased 70 percent of the shares in Cencorp Automation Oy. Further FTTK has used its option to purchase the remaining 30 percent of the shares in Cencorp Automation Oy and the parties have signed an agreement on exercising the option in December 2014.

From the financial year 2018, the Group no longer reports separately discontinued and discontinued operations in its income statement because the discontinued operations did not exists in the reporting period or in the comparison period. Balance sheet items still include liabilities for discontinued operations.

#### The liabilities of electronics automation business, are as follows:

EUR 1 000	2018	2017
Liabilities		
Trade and other payables	75	301
Reserves	0	5
Liabilities directly associated with assets classified as held for sale	75	306
Net assets directly associated with disposal group	-75	-306

#### Net cash flow of electronic automation business:

EUR 1 000	Jan – Dec 2018	Jan – Dec 2017
Operating cash flow	-12	-186
Investing cash flow	0	0
Earnings/share (basic), from discontinued operations	0,00	0,00
Earnings/share (diluted) from discontinued operations	0,00	0,00

# 11. Earnings per share

Basic earnings per share are calculated by dividing the profit attributable to shareholders of the parent by the weighted average of the number of outstanding shares during the period.

	Jan – Dec 2018	Jan – Dec 2017
Loss attributable to shareholders of the parent (EUR 1,000)	-4 210	-5 794
Weighted average number of shares during the period (1,000)	14 898	4 716
Basic earnings per share (EUR/share) Diluted earnings per share (EUR/share)	-0,28 -0,28	-1,23 -1,23

The dilutive potential of ordinary shares has not been taken into account in 2018 or in 2017 as required by IAS 33, paragraph 41, because it would reduce the loss per share.

# 12. Property, plant and equipment

2018	Machinery and equipment	Other tangible assets	Advance payments and construction in progress	Total
Acquisition cost, 1 Jan 2018	143	0	0	143
Additions	28	0	0	28
Acquisition cost, 31 Dec 2018	172	0	0	172
Accumulated depreciation and				
impairment, 1 Jan 2018	-135	0	0	-135
Depreciation for the period	-8	0	0	-8
Accumulated depreciation and				
impairment, 31 Dec 2018	-143	0	0	-143
Carrying amount, 1 Jan 2018	8	0	0	8
Carrying amount, 31 Dec 2018	29	0	0	29

2017	Machinery and equipment	Other tangible assets	Advance payments and construction in progress	Total
Acquisition cost, 1 Jan 2017	142	0	0	142
Additions	1	0	0	1
Acquisition cost, 31 Dec 2017	143	0	0	143
Accumulated depreciation and				
impairment, 1 Jan 2017	-129	0	0	-129
Depreciation for the period	-6	0	0	-6
Accumulated depreciation and				
impairment, 31 Dec 2017	-135	0	0	-135
Carrying amount, 1 Jan 2017	13	0	0	13
Carrying amount, 31 Dec 2017	8	0	0	8

# Finance leas agreements

Property, plant and equipment did not include any property obtained on finance lease agreements in 2018 or 2017.

# 13. Intangible assets

	Consolidated	Development		Other intangible	
2018	goodwill	costs	Patents	assets	Total
Acquisition cost, 1 Jan 2018	743	10 899	151	255	12 049
Additions	0	3 258	0	0	3 258
Acquisition cost, 31 Dec 2018	743	14 157	151	255	15 306
Accumulated depreciation and					
impairment, 1 Jan 2018	-302	-4 068	-51	-205	-4 626
Depreciation for the period	0	-1 180	-18	-25	-1 224
Accumulated depreciation and					
impairment, 31 Dec 2018	-302	-5 248	-69	-230	-5 849
Carrying amount, 1 Jan 2018	441	6 831	100	51	7 423
Carrying amount, 31 Dec 2018	441	8 908	82	25	9 457

	Consolidated	Development		Other intangible	
2017	goodwill	costs	Patents	assets	Total
Acquisition cost, 1 Jan 2017	743	10 651	128	225	11 778
Additions	0	248	23	0	271
Acquisition cost, 31 Dec 2017	743	10 899	151	255	12 049
Accumulated depreciation and					
impairment, 1 Jan 2017	-302	-2 784	-35	-178	-3 298
Depreciation for the period	0	-1 284	-16	-27	-1 327
Accumulated depreciation and					
impairment, 31 Dec 2017	-302	-4 068	-51	-205	-4 626
Carrying amount, 1 Jan 2017	441	7 868	96	78	8 480
Carrying amount, 31 Dec 2017	441	6 831	100	51	7 423

# INTANGIBLE ASSETS AND GOODWILL

Valoe's other intangible assets include capitalized development costs for EUR 8.9 million, of which EUR 4.8 million is related to R&D projects, where amortizations will be started during 2019 – 2020 after the development is compelete. The useful lifetime of the capitalized development expenditure is 5 to 10 years, during which capitalized costs are recognized on straight-line basis as an expense during the financial year.

Goodwill arising in business combinations is recognized at the amount by which the consideration given, the share of the shareholders without control in the acquired business and the previously held share combined exceed the fair value of the acquired net assets. The goodwill of business combinations carried out prior to 2004 corresponds to the carrying amount that complies with previous accounting standards, which has been used as the default acquisition cost according to IFRS.

Goodwill and unfinished capitalized R&D expenditure are not subject to depreciation but are tested annually for any impairment. For this purpose, goodwill has been allocated to cash-generating units. Goodwill is measured at cost less impairment losses.

At the end of the financial year the consolidated goodwill totaled EUR 0.44 million, no additions or disposals were booked in 2015. In the acquisition of Face (Telecom) business carried out on 30.11.2010 the entities controlled by the same party were merged. Valoe uses book values in the consolidation of the acquired and merged businesses. The difference between the acquired assets and the liabilities of the acquired entities, at the time of the acquisition, were booked in the retained earnings. No goodwill was booked in the transaction.

The impairment testing included the cash flow generated by the Group's continuing operations. The impairment was tested on goodwill and other intangible assets. The consolidated goodwill of EUR 0.4 million and other intangible assets of EUR 9,0 million were entirely allocated to continuing operations in the impairment testing.

An impairment loss is recognized if the carrying amount of an asset is higher than its recoverable amount. An impairment loss is recognized immediately in the income statement. If the impairment loss concerns a cash-generating unit it is first allocated to reduce the goodwill of the cash-generating unit and then to proportionately reduce the unit's other assets. An impairment loss is reversed if there is a change in the conditions under which the recoverable amount of the asset was measured and if the recoverable amount of the asset has changed since the recognition of the impairment loss. However, the reversal shall not exceed the carrying amount that would have been determined had no impairment loss been recognized. Goodwill impairment is not reversed under any circumstances.

In impairment testing, the recoverable amount has been determined on the basis of the value in use, compared to the consolidated balance sheet of 31 December 2018. The estimated recoverable cash flows are based on projections approved by the management, which cover a period of three years. The discount interest rate is 6.8 % after taxes (11.2 % in 2017).

Company has previously used terminal value method (Gordon method) for valuation of current value of intangible assets. Since the fiscal year 2017 the company has used net present value as method for the valuation. This change has been made since net present value method is more suitable considering company's current state of business.

Company is using Net present value method when estimating current value of intangible assets. Estimated cash flows are discounted to present values from next 10 years by using discount rate of 6.8% which reflects interest rates of monetary instruments used by the company.

In valuation calculation current year turnover is based in committed orderbook added with the number of offers already accepted by the customer. Gross margin level is based on budgeted gross margin for 2019. Gross profit is expected to increase from 2018 level together with increase of turnover. Overhead cost structure is based on 2018 actual with budgeted changes reflected. Company has significant amount of unused tax credits. Therefore no tax payment is expected within period in consideration. Capital employed has been estimated to be 15% of the growth of the company which reflects actual amount of tied up capital as company grows. However, a business development involves naturally considerable risks. Should the company fail in its business plan implementation, it could generate a need for a write-off in goodwill and other intangible assets.

#### 14. Available-for-sale financial assets

Level 1 Level 2 Level 3
Financial assets available for sale, 31 Dec 2018 9

Financial assets available for sale consist of shares for which the purchase price is considered to correspond to the fair value. No events affecting financial assets available for sale took place in 2018.

#### 15. Deferred tax assets and liabilities

The parent company has confirmed deductible losses, totalling EUR 32.6 million, out of which 10.9 million is due within the next three years. The group has not recognized deferred tax assets based on its deductible losses as their utilization is uncertain.

16. Inventories	2018	2017
Materials and supplies	148	151
Work in progress	388	382
Finished products	123	49
Total	659	582
No write-downs were recognized for inventories in 2018 or 2017.		
17. Trade and other non-interest-bearing receivables		
Trade receivables	29	18
Percentage of conpletion receivables	145	0
Loan receivable form Ethiopia	672	672
Prepayments and accrued income	43	7
Other receivables	345	559
Total continuing operations	1 234	1 256
Age distribution of trade receivables and recognized impairment losses		
Undue	14	0
Due 0–30 days	5	0
Due 30–60 days	0	0
Due 61–90 days	8	0
Due over 90 days	2	18
Total	29	18
18. Cash and cash equivalents		
Cash on hand and deposits	22	350
Other financial assets	41	0
Total	62	350

Cash and cash equivalents in the cash flow statement consist of cash on hand, bank deposits and a pledged account.

# 19. Notes to shareholders' equity

	Number of				Distributable non-restricted
	shares (1,000)	Share capital	Premium fund	Reserve fund	equity fund
31.12.2013	346 161	3 425	4 695	213	39 661
Share issue	508 151	0	0	0	4 912
Direct share issue	8 160	0	0	0	204
Decrease from share issue	0	0	0	0	-194
Value of the options of convertible bond					
acknowledge	0	0	0	0	-30
31.12.2014	862 472	3 425	4 695	213	44 552
The share capital reduction					
to cover losses	0	-3 345	-4 695	-213	-44 032
Transfer to retained earnings	0	0	0	0	-520
31.12.2015	862 472	80	0	0	0
31.12.2016	862 472	80	0	0	0
Issue of new Shares to					
Company itself	86 000	0	0	0	0
Share Issue free of charge					
redemption ratio 200/1	415	0	0	0	0
Reducing the quantity					
of Shares	-944 143	0	0	0	0
Issue of new Shares					
to Company itself	525	0	0	0	0
Financing Arrangement					
with Bracknor Investment	0	0	0	0	722
Directed Share Issue	0	0	0	0	9 820
31.12.2017	5 269	80	0	0	10 542
Direct Share Issue (2017)	8 721	0	0	0	295
Issues of new Shares to					
Company itself (3 pcs)	3 145	0	0	0	0
Financing arrangement					
with Bracknor Investment	0	0	0	0	966
31.12.2018	17 136	80	0	0	11 804

All shares issued have been paid in full. The shares have no nominal value.

#### **Premium fund**

The items indicated in the old Companies Act (1978/734), Chapter 12, Section 3, are recognized in the share premium account. General meeting of Valoe Oyj decided on 28th of May 2015 to reduce the entire premium fund to cover accumulated losses.

#### Reserve fund

The provisions concerning the reserve fund were laid down in Chapter 12, Section 3 of the old Companies Act. The reserve fund is treated as restricted capital. General meeting of Valoe Oyj decided on 28th of May 2015 to reduce the entire reserve fund to cover accumulated losses.

#### Distributable non-restricted equity fund

The distributable non-restricted equity fund contains other quasi-equity investment instruments and the subscription price of shares when this is not separately recorded in share capital. General meeting of Valoe Oyj decided on 28th of May 2015 to reduce the entire distributable non-restricted equity fund to cover accumulated losses. Furthermore, the presenting of the equity component of the convertible bond was clarified. It will be presented in the retained earnings, not in distributable non-restricted equity fund. This way the distributable non-restricted equity fund reset also in the corporation level. During the year 2017 EUR 0.7 million and during the year 2018 EUR 0.9 million related to the financing arrangement between Valoe and Bracknor Investment was credited to the distributable non-restricted equity fund. As a result of the directed share issue in December 2017 EUR 9.8 million was credited to the distributable non-restricted equity fund during the year 2017 and EUR 0.3 million in January 2018. The Company collected EUR 0.8 million new capital and the indebtedness of the Company decreased by EUR 9.0 million in the year 2017. In January 2018 EUR 0.1 million new capital was collected and the indebtness of the Company decreased by EUR 0.2 million.

# 20. Share-based payments and convertible bonds

During the financial year, the Group had in place options related to bond I/2015 (original nominal value EUR 7.7 million, on 31.12.2018 after setting off the share issue payments and conversions to new Convertible Bonds EUR 1.0 million and book value on 31.12.2018 EUR 1.0 million), to bond I/2017 (original nominal value EUR 1.5 million, on 31.12.2018 EUR 0.65 million and book value on 31.12.2018 EUR 0.65 million), to bond 1/2018 (nominal value EUR 1.0 million and book value on 31.12.2018 EUR 0.8 million) and to bond 2/2018 (nominal value EUR 2.2 million and book value on 31.12.2018 EUR 1.6 million).

The Board of Directors of Valoe Corporation resolved the terms and conditions of an stock option scheme during 2015. The maximum total number of stock options issued is 650,000 and they entitle their owners to subscribe for a maximum total of 650,000 new shares in the Company. The Board of Directors shall annually decide upon the distribution of the stock options to the key employees of the Group. Of the stock options, 250,000 are marked with the symbol 2015A, 200,000 are marked with the symbol 2015B and 200,000 are marked with the symbol 2015C. All options have been given during the financial year 2016. The share subscription period of stock options marked with the symbol 2015A ended on December 31, 2018.

In Convertible Bond I/2015 one loan share of EUR 2.0 pursuant to the Promissory Note entitles the Promissory Note Holder to subscribe for one new share. Based on the subscriptions made pursuant to the loan shares Valoe shall issue a maximum amount of 500,000 new Valoe shares. The loan period and the conversion period expired on 1 August 2018.

In Convertible Bond 1/2017 one loan share of EUR 2.0 pursuant to the Promissory Note entitles the Promissory Note Holder to subscribe for one new share. Based on the subscriptions made pursuant to the loan shares Valoe shall issue a maximum amount of 325,000 new Valoe shares. The loan period and the conversion period expire on 1 February 2019. Each convertible bond loan amount valued at EUR 2.0 shall entitle the lender to subscribe one (1) warrant. Each warrant entitles the lender to subscribe one (1) new share of the company. The maximum amount of share subscriptions that are based on the warrants shall be in total 325,000 new shares of the company. The subscription period for the shares subscribed based on the warrants shall begin on 1 July 2017 and expire on 1 February 2019.

In order to strengthen Valoe Corporation's capital structure the company decided to issue Convertible Bond 1/2018 of EUR 1,000,000 at the most in April 2018. The Convertible Bond was fully subcribed. One loan share of EUR 50,000 pursuant to the Promissory Note entitles the Promissory Note Holder to subscribe for 90,909 new shares. Based on the subscriptions made pursuant to the loan shares Valoe shall issue a maximum amount of 1,818,180 new Valoe shares. The loan period and the conversion period expire on 31 May 2021.

In October 2018 Valoe issued a Convertible Bond 2/2018 totalling EUR 2,195,289.10, in deviation from the shareholders' preemptive subscription rights, to Ilmarinen Mutual Pension Insurance Company because the Convertible Bond 1/2015, a capital loan, expired on 1 August 2018 and considering the company's equity situation, it cannot be repaid in accordance with the provisions regarding capital loans in the Finnish Companies Act. Ilmarinen Mutual Pension Insurance Company has subscribed the Convertible Bond against the subscriber's loan receivable from Valoe by converting the loan capital and the interests of the Convertible Bond 1/2015 into the Convertible Bond, a capital loan, in accordance with the terms of this Convertible Bond. The Promissory Note Holder is entitled to convert the Promissory Note into the shares of the Company in accordance with the terms of the Convertible Bond. If the Company's shares are listed on the main list of Nasdaq Helsinki Oy when the conversion right is being used, the subscription price of one (1) new share of the Company shall be the six-month volume weighted average stock trading price on the period ending on 15 October 2021 less 15 percent. If the Company's shares are not listed on the main list of Nasdaq Helsinki Oy when the conversion right is being used, one of the Big Four accounting companies shall provide, at the Company's cost, a fairness opinion and assess the fair value of the Company's share which, less 15 percent, shall be the subscription price of one (1) new share of the Company. The loan period shall commence on the payment date and expire on 15 October 2021 on which date the Convertible Bond shall expire to be repayable in its entirety in accordance with these terms of the loan. The conversion period of the Convertible Bond commences on 15 October 2021 and terminates on 31 December 2021.

Outstanding optios		2018		2017	
As the beginning of	Option scheme	Weighted average exercise price EUR/share	Number of options (1,000)	Weighted average exercise price EUR/share	Number of options (1,000)
At the beginning of the financial year	Ontions 201EA	2.40	250	2.40	250
the illiancial year	Options 2015A	_		_	
	Options 2015B	3.80	200	3.80	200
	Options 2015C	2.18	200	2.18	200
Options expired	Options 2015A	2.40	250		
At the end of the financial year	Optiot 2015B-C		400		650
Exercisable share options financial year	at the end of the		400		

The numbers of options and the exercise prices are calculated using the amount of the company's shares after the reduction of the quantity of the company's shares (the original amount divided by 200 and the pre-split price multiplied with 200). No options were exercised during 2018 or 2017.

Exercise price fluctuation and weighted average vesting period for share options outstanding at year-end.

Number of	Vesting period		
shares	(years)	Exercise price	
400	1.5	2.18 - 3.80	2018
650	1.9	2.18 - 3.80	2017

# 21. Provisions

	2018	2017
Provisions at the beginning of the financial year	220	45
Additions to provisions	149	215
Provisions exercised	-63	-40
Provisions at the end of the financial year	307	220
Long-term provisions	0	0
Current provisions	307	220
Total	307	220

In the end of the period, 31.12.2018, there are no provisions related to the discontinued operations (31.12.2017 EUR 5,000 were related to the discontinued provisions).

Revenue from the sales of goods is recognized when the significant risks and rewards of purchasing have been transferred to the buyer. A provision is made for estimated warranty expenses. On 31 Dec 2018, warranty provisions totalled EUR 307,000 (31 Dec 2017: EUR 220,000). Guarantee provision is based on previous years' experience on products that are faulty or required additional installations. During the financial year the company made a gurantee provision of EUR 149,000 that is higher than average due to lack of experience in the field of operations.

22. Financial liabilities	Balance sheet values	Balance sheet values
Non-current financial liabilities at amortized cost	2018	2017
R&D loan	4 860	3 160
Convertible bond 1/2012	364	364
Convertible bond 1/2015	999	2 336
Convertible bond 1/2017	398	474
Convertible bond 1/2018	762	0
Convertible bond 2/2018	1 602	0
Other subordinated loans	2 011	1 511
Total	10 995	7 874
Current financial liabilities at amortized cost		
Convertible bond 1/2017	246	0
Loans from financial institutions	1 107	648
Other current liabilities	1 427	1 356
Total	2 779	2 004

The non-current financial liabilities include a EUR 1.0 million convertible subordinated loan (the original value of the loan was EUR 7.7 million). The liability component (book value 31.12.2018: 1.0 million) is recognized at amortized cost and the equity share (2.6 million) is recognized under equity. The equity share is measured at fair value on the issue date of the convertible bond. In addition to earlier added accrued interests and loan capital conversions to new Share of the Company, accrued interest totaling EUR 0.03 million was added in the loan capital and after that EUR 0.2 million of the loan capital was converted to new shares of the Company in Share Issue II in January 2018. In October 2018 EUR 1.8 million of the loan added with accrued interest of EUR 0.4 million was converted into a new Convertible bond 2/2018.

The non-current financial liabilities include a EUR 0.4 million convertible subordinated loan. The liability component (book value 31.12.2018: 0.4 million) is recognized at amortized cost and the equity share (0.3 million, which is booked based on the original amount of the convertible bond, EUR 1.5 million) is recognized under equity.

The non-current financial liabilities include a EUR 0.4 million convertible subordinated loan (the original value of the loan was EUR 1.5 million). The liability component (book value 31.12.2018: 0.4 million) is recognized at amortized cost and the equity share (0.3 million) is recognized under equity. The equity share is measured at fair value on the issue date of the convertible bond.

The non-current financial liabilities include a EUR 1.0 million convertible subordinated loan. The liability component (book value 31.12.2018: 0.8 million) is recognized at amortized cost and the equity share (0.3 million) is recognized under equity. The equity share is measured at fair value on the issue date of the convertible bond. The key assumptions in the calculation were: Share price EUR 0.55; option's subscription price in conversion EUR 0.55; company's imputed market interest rate 12% and subscription period and due date based on the main terms of the convertible bond.

The non-current financial liabilities include a EUR 2.2 million convertible subordinated loan. The liability component (book value 31.12.2018: 1.6 million) is recognized at amortized cost and the equity share (0.6 million) is recognized under equity. The equity share is measured at fair value on the issue date of the convertible bond. The key assumptions in the calculation were; Share price EUR 0.33, company's imputed market interest rate 12% and subscription period and due date based on the main terms of the convertible bond. The Promissory Note Holder is entitled to convert the Promissory Note into the shares of the Company in accordance with the terms of the Convertible Bond. If the Company's shares are listed on the main list of Nasdaq Helsinki Oy when the conversion right is being used, the subscription price of one (1) new share of the Company shall be the six-month volume weighted average stock trading price on the period ending on 15 October 2021 less 15 percent. If the Company's shares are not listed on the main list of Nasdaq Helsinki Oy when the conversion right is being used, one of the Big Four accounting companies shall provide, at the Company's cost, a fairness opinion and assess the fair value of the Company's share which, less 15 percent, shall be the subscription price of one (1) new share of the Company.

The Finnish Funding Agency for Technology and Innovation - Tekes gives Valoe a loan, of ca. EUR 3 million, to develop business and production model relating to the design and production of cost effective photovoltaic modules as well as to the development of components. The loan can amount maximum to 50 percent of the project's total costs which are estimated to be ca. EUR 6 million. The loan was withdrawn in the course of the years 2013 and 2017, as the duration of the project was extended. The loan period was extended by two years and is now twelve years. The interest of the loan is 1 %. In accordance with IAS 39 the grant component has been deducted and the amortized 8% interest expense added to the loan amount in consolidated accounts.

The Finnish Funding Agency for Technology and Innovation - Tekes gives Valoe a loan, of ca. EUR 4.1 million, to further develop Valoe's solar modules and back contact based cells. The loan can amount maximum to 70 percent of the project's total costs which are estimated to be ca. EUR 5.8 million. The loan will be withdrawn in the course of the years 2016 and 2019 and the loan period is seven years. The nominal value of the withdrawn amount till December 31, 2018 is EUR 2.9 million. The interest of the loan is 1 %. In accordance with IAS 39 the grant component has been deducted and the amortized 8% interest expense added to the loan amount in consolidated accounts.

#### Maturity analysis of interest-bearing liabilities

					2023 and
31.12.2018	2019	2020	2021	2022	later
R&D loan	79	1 664	1 648	1 481	1 206
Convertible bonds	0	521	3 441	2 134	0
Other liabilities	1 788	2 532	0	0	0
Total interest-bearing					
liabilities	1 867	4 717	5 089	3 615	1 206
					2022 and
31.12.2017	2018	2019	2020	2021	2022 and later
<b>31.12.2017</b> R&D loan	<b>2018</b> 73	<b>2019</b> 632	<b>2020</b> 1 446	<b>2021</b> 612	
				_	later
R&D loan	73	632	1 446	612	later 1 206
R&D loan Convertible bonds	73 0	632 2 259	1 446 0	612 0	later 1 206 0

# 23. Trade payables and other short-term non-interest-bearing liabilities

	2018	2017
Trade payables	1 556	1 285
Accruals and deferred income	2 659	2 407
Other liabilities	124	81
Total for continued operations	4 339	3 773
Other liabilities	75	301
Total for discontinued operations	75	301

EUR 1.2 million out of trade payables of EUR 1.6 million above (including both continuing and discontinued operations) was overdue at the year end 2018. EUR 0,9 million out of other short-term non-interest bearing liabilities, accruals and deferred income as well as tax liabilities (total EUR 2.9 million above) was overdue at the year end 2018. Significant items in accrued liabilities consist of personnel expenses, accrued intrest and other accrued expenses.

## 24. Fair values of financial assets and liabilities

The carrying amount of the financial assets equals with the fair value of the financial assets in 2018 and 2017.

The financial assets available-for-sale are investments that belong to categorie 3.

The fair value of trade and other receivables is expected to correspond to the carrying amount due to their short maturity.

The carrying amount of financial liabilities equals with the fair value of the financial liabilities in 2018 and 2017.

The fair value of non-current liabilities is expected to correspond to the carrying amount as the loans were recognized to their fair value when recorded. There has been no significant change in genereal interest level since withdrawals.

At the year end, other short-term interest bearing liabilities included EUR 0.3 million of overdue liabilities.

The hierarchy level for fair values is 2.

Average interest rates on interest-bearing liabilities	2018	2017
Loans from financial institutions	5,72 %	6,12 %

The fair value of short-term liabilities is expected to correspond to the carrying amount due to their short maturity.

#### 25. Non-cash transactions

	2018	2017
Depreciation	1 232	1 333
Exchange rate differences	5	-11
Stock option scheme 2015	32	133
Other items	559	-262
Total	1 828	1 193

#### 26. Leases

Minimum lease payments payable on the basis of other non-terminable leases:

Within one year	216	62
Within 2 to 5 years	514	0

# 27. Other contingent liabilities

Assets pledged for the company

Loans from financial institutions	525	600
Other liabilities	281	281
Promissory notes secured by pledge	3 355	12 691

# 28. Related party transactions

Valoe complies with the Finnish Companies Act and International Financial Reporting Standards (IAS 24) obligations for monitoring of related party transactions. The Group's related parties include parent company Valoe Oyj and Group subsidiaries. Key members of the Board of Directors and Management Team, also CEO and the persons, who have a significant influence over the Group, are included with their families to the related parties. Also those communities which are controlled or influenced by, or is under common control or influence over the persons, who are included to the related parties, are included to the related parties. The Group's related parties also include those companies that have a significant control over the Group.

The relations and shares between the parent company and subsidiaries are as follows:

Company	Business area	Domicile	Group's holding
Parent company Valoe Oyj	Development, manufacture and sales of clean energy solutions	Mikkeli, Finland	100,0 %
PMJ Testline Oy	Sale of industrial machinery	Lohja, Finland	100,0 %
Valo Clean Energy USA Inc	Development, manufacture and sales of clean energy solutions	Canton MI, USA	100,0 %

The Group has sold and purchased goods and services from companies in which the majority holding and/or power of decision granting control of the company is held by members of the Group's related parties. Sales of goods and services carried out with related parties are based on market prices.

The Group entered into the following transactions with related parties:

Sales of goods and services	2018	2017
Savcor Oy - financial management and production services	0	38
Savcor Face Ltd - solar modules / production services	22	25
Savcor Oy (former Savcor Tempo Oy) – production services	12	0
Total	35	62
Purchases of goods and services		
Dunsit Oy - rent	0	14
SCI Invest Oy – rent	24	0
Savcor Oy - financial management and IT services	0	-2
Savcor Face Ltd – marketing services	8	3
SCI-Finance Oy - marketing and administration services	66	43
Savcor Technologies Oy - marketing and administration services	88	52
Savcor Oy (former Savcor Tempo Oy) – administration services	10	5
Oy Marville Ab – legal services	4	43
Total	199	157
Interest expenses and other financial expenses		
Savcor Invest B.V.	0	105
SCI-Finance Oy	55	24
Savcor Technologies Oy	283	268
Savcor Communications Pty Ltd	0	93
Savcor Oy (former Savcor Tempo Oy)	24	30
Others	119	93
Total	483	613
Non current convertible cuberdinated loan from related parties	4.000	4 222
Non-current convertible subordinated loan from related parties  Non-current other subordinated from related parties	1 882	1 282
Non-current convertible loan from related parties	2 011	1 511
	114	114
Other current liabilities to related parties	630	659
Current interest liabilities to related parties	820	331
Trade payables and other non-interest-bearing liabilities to related parties	547	687
Trade receivables from related parties	22	18

Savcor Invest B.V., the subsidiary of Savcor Group Oy, is regarded as companies under control of likka Savisalo and/or Hannu Savisalo, as they are members of the Board in the company.

Savcor Face Ltd, Savcor Technologies Oy, Savcor Communications Pty Ltd and Savcor Oy (ent. Savcor Tempo Oy) are companies under control of likka Savisalo, Valoe's CEO and Hannu Savisalo, Valoe's Chairman of the Board.

Since March 2017 Savcor Oy is no longer a company under control of likka Savisalo, Valoe's CEO and Hannu Savisalo, Valoe's Chairman of the Board.

SCI Invest Oy is a company under control of likka Savisalo, Valoe's CEO.

SCI-Finance Oy is a company under control of Hannu Savisalo, Valoe's Chairman of the Board.

Oy Marville Ab is a company under control of Ville Parpola, Valoe's Vice Chairman of the Board.

Employment benefits of the management	2018	2017
Wages and other short-term employment benefits	410	457
Stock option scheme 2015 (IFRS 2)	40	40
Total	420	498
The management does not have defined-benefit pension plans.		
Wages and remuneration		
Salaries of the CEO and his deputies (incl. in management wages)	168	168
Stock option scheme 2015 (IFRS 2)	4	17
Total	172	185
Board members and deputies		
Parpola Ville - remuneration	40	40
Parpola Ville – stock option scheme 2015	5	20
Savisalo Hannu - remunerations	40	40
Savisalo Hannu - stock option scheme 2015	7	30
Savisalo likka – stock option 2015	2	10
Total	95	140

The CEO has a six-month term of notice. The CEO's pension is determined in accordance with the Employees Pensions Act.

During the financial year 1.1.-31.12.2018 the company gave options to the management. The company has an option scheme in force as per 31 December 2018. More information on the option scheme in Section 20 "Share-based Payments and Convertible Bonds on the page 51.

# 29. Financial risk management

#### Financial risks

Valoe's normal business activities expose the company to financial risks: interest rate risks, credit risks, currency risks and funding risks. Risk management aims to minimize the adverse effects that changes in the financial market may have on the Group's financial performance and balance sheet. The Group's general risk management policy is approved by the Board of Directors, and its implementation is the joint responsibility of the Group's centralized finance department and the business groups. The finance department identifies, assesses and acquires the instruments needed to hedge the company against risks in close cooperation with the operational units. Hedging transactions are carried out in compliance with the risk management policy approved by Group management. The Group has not hedged itself against currency or interest rate risks.

Valoe's objective is to achieve a strong market position as a provider of, in various geographical areas, locally produced high-quality photovoltaic modules. Achievement of the objectives involves risks. Even though Valoe's strategy and objectives are based on market knowledge and technical surveys, the risks are significant and it is not certain if the company reaches all or part of the targets set for it. Valoe's future outlook will be highly dependent on the company's ability to reach the targeted market position in the global photovoltaic module market as well as on the company's financing.

#### Liquidity risks

The financial statements have been prepared under the going concern assumption. In February 2017 the company issued a EUR 1.5 million convertible bond I/2017 that was fully subscribed. During the subscription period of the Convertible Bond new investments of EUR 1.05 million was paid in cash and a total of EUR 0.45 million was paid by setting the subscription price off against the subscribers' receivables from the company.

Pursuant to the estimates available to the company, the company's financing situation and working capital situation continue to be tight in 2018. Considering the company's minimum investment needs, available financing commitments as well as cashflow based on increased demand, the Board of Directors of Valoe views that the company has sufficient working capital at least for the next 12 months.

On 31 December 2017 the company had financing commitment in the amount of EUR 2.35 million from Bracknor Investment for the purposes of enhancing its cash position. Valoe cannot withdraw new capital from the commitment at once but only during longer time period. In order to meet the company's financing needs Valoe estimates to withdraw in total EUR 2.0 million from the Bracknor Investment's financing facility during 2018 out of which the company has withdrawn EUR 0.5 million during the first months of 2018.

On 19 April 2018 the company issued a convertible bond 1/2018 of EUR 1.0 million. The company trusts the convertible bond will be fully subscribed.

In order to cover its strategic investments, the company contemplates to arrange a new share issue during 2018.

Valoe has a product development loan from Tekes in the amount of EUR 4.1 million out of which the company had withdrawn a total of EUR 0.8 million by the end of the financial year. In April 2018 the company withdraw another EUR 0.6 million. As per the date of this Annual Report there is still a total of EUR 2.7 million to be withdrawn. In case the Company manages to collect the intended amount of new capital in the arrangements described above, the company is able to perform its investment plan and thus believes that it can withdraw approximately EUR 1.0 million of Tekes product development loan in late 2018.

The Group continuously assesses and monitors the financing needed for business in cooperation with the management of different business functions to ensure that it has enough liquid assets at its disposal to finance operations and repay loans falling due. The Group's financing policy determines the optimum size of the liquidity reserve. The maturity and amortization of loans are planned so as to optimize liquidity. The availability and flexibility of financing are ensured through sufficient credit limits.

At year end 2017 Valoe Corporation has unbooked and unpaid interests in the amount of EUR 0.1 million relating to a bond issued in 2012 and EUR 0.5 million relating to a bond issued in 2015. The interest can only be repaid annually to the extent that the amount of Valoe Corporation's unrestricted equity and all subordinated loans exceeds the amount of loss confirmed for the most recently ended financial year or included in the balance sheet of more recent financial statements. 8% interest is calculated on the bonds issued in 2012 and 2015. Regarding the bond issued in 2015 the interst shall be added in the loan capital annually once a year on 30 July (if the eqyity allows) and paid in shares at the end of the loan period so that an interest amount of EUR 2.0 shall be converted to one new share of the company. An interest shall not be paid to capitalized interest. The company has no non-restricted equity at the end of the financial year. In addition to above mentioned unbooked interests totaling EUR 0.6 million, Valoe Corporation has unbooked interests of EUR 0.1 million for other equity based loans at the year end 2017. The Group has booked the interest expense according to IFRS.

The sufficiency of the shareholders' equity of Valoe Group's parent company may involve risks if the company's financial situation does not develop as estimated by the company's management.

#### **Currency risks**

The Group's international operations expose it to transaction risks caused by foreign exchange positions and to risks arising from the translation of foreign-currency investments into the parent company's functional currency. Currency risks arise from purchases and sales carried out in currencies other than the Group's functional currency, from trade receivables and payables denominated in foreign currencies, as well as from net investments in foreign subsidiaries.

Valoe has no foreign investments in its subsidiaries after the sale of Savcor Pacific's shares, and therefor the risks arising from the translation of its investments denominated in foreign currencies in its foreign subsidiaries into Valoe Group's parent company's functional currency, the euro, is minor. The company has not hedged its foreign exchange position or net debts in foreign subsidiaries.

#### Interest rate risk

The Group's revenue and operational cash flows are mostly independent of interest rate fluctuations. During 2015, the Group was exposed to fair value interest rate risk (fixed-rate liabilities) and cash flow interest rate risk (floating-rate liabilities), mainly due to interest on liabilities. In compliance with the principles for risk management, at least 10% of the credit portfolio must be fixed-rate and the loan portfolio shall have an average duration of 3–6 years. Fixed-rate loans account for 94,6 % of the company's interest-bearing liabilities.

#### Credit risk

The company's business involves the normal cross-border trade-related credit risks to which the company aims to manage with advance payments and by monitoring the customers payment behavior and the credit information. The balance sheet values of the financial assets correspond best the maximum amount of the group's credit risk, excluding the fair value of the guarantees, in such a case where the parties in question cannot fullfil the obligations related to the financial instruments.

#### Capital management

Capital management aims at ensuring the continuity of the company's operations and the increase of shareholder value. Capital structure management is based on decisions concerning share issues, the use of equity-settled instruments and distribution of dividends. Capital structure indicators include equity ratio and net gearing.

Exposure to financial risks	2018	2017
Impact of fluctuation in short-term interest rate +/-2%	+/-7	+/-4
The Group had credit limits at 31 Dec 2018 consisting of the following:		
Check account limit	0,5 milj. eur	0,6 milj. eur

# Exposure to currency risks

In 2018, the Group's minor currency risks consisted of ETB and USD denominated financial assets and liabilities. The following sensitivity analysis is based on existing financial assets and liabilities denominated in foreign currencies on 31 December 2018.

Financial assets denominated in foreign currency	2018	2017
USD	59	29
ETB	672	672
Financial liabilities denominated in foreign currency		
USD	26	59
Net	705	643
Impact on result		
EUR/USD +/-10%	+/-3	+/-2
EUR/ETB +/-10%	+/-54	+/- 54

# Materials management risks

The most significant risks related to material prices and availability are those related to the copper and silicon and the general price risk related to components. The objective is to pass the price increases on to the sales prices and to improve price competitiveness through product development.

# 30. The Major Events After the End of The Reporting Period

#### 18 January 2019: VALOE ISSUES A CONVERTIBLE BOND

In order to strengthen Valoe Corporation's capital structure the company issues a convertible bond of EUR 3.8 million at the most. The Convertible Bond is a capital loan. The convertible bond can be converted to max. 25,333,333 new shares of the company. The subscription price is EUR 0.15 per share.

The convertible bond is issued in deviation from the shareholders' pre-emptive subscription rights to the parties separately approved by the Board of Directors.

The minimum amount of subscription of the convertible bond shall be EUR 50,000.00 entitling the convertible bond holder to subscribe for 333,333 new shares of the company. The Convertible Bond can also be subscribed against indisputable loan receivable the Subscriber has from the Company at the time of subscription by converting the loan capital and/or interest receivable into the Convertible Bond in accordance with the terms of this Convertible Bond if the Subscriber simultaneously subscribes the Convertible Bond with a cash payment of minimum EUR 50,000.00 too.

The loan period shall commence on the payment date and expire on 31 May 2022 on which date the convertible bond shall expire to be repayable in its entirety in accordance with the terms of the loan. The subscription period of the shares under the convertible bond shall begin on 15 March 2019 and expire on 31 May 2022.

The subscription period of the convertible bond shall expire on 15 February 2019 at 6:00 p.m. The board of directors of the company has the right to approve the subscriptions at any time during the subscription period. In the event the convertible bond shall be oversubscribed, the board of directors of the company shall resolve on the allocation between the subscribers. The board of directors of the company has the right to discontinue the subscription period of the convertible bond at any time. The board of directors shall also have the right to decide on extending the subscription period.

For the moment, the company has received subscription commitments of approx. EUR 2.2 million for the Convertible Bond. Out of the subscription commitments a total of EUR 0.6 million shall be paid in cash and approx. EUR 1.6 million shall be subscribed by setting off loans.

The shareholders' pre-emptive subscription rights are deviated from in connection with the issue of convertible bond to secure financing required to strengthen the capital structure of the company cost effectively and considering the size of the financing and to rearrange the Company's existing loans in an economical way from the Company's point of view. Thus, there is from the company's point of view a weighty financial reason to issue the special rights.

The company has one (1) class of shares.

The terms of the convertible bond are attached to the release as Attachment 1.

# 18 February 2019: THE RESULT OF THE CONVERTIBLE BOND I /2019 OF VALOE CORPORATION

Valoe Corporation has during the subscription period received subscriptions of approx. EUR 2.8 million in total for the Convertible Bond I/2019 disclosed on 18 January 2019. During the subscription period of the Convertible Bond new investments of EUR 0.7 million was paid in cash. Out of the subscriptions, a total of approx. EUR 2.1 million was paid by setting the subscription price off against the subscribers' receivables from the company.

The Board of Directors of Valoe has approved all subscriptions for the Convertible Bond.

One loan share of EUR 50.000 pursuant to the Promissory Note entitles the Promissory Note Holder to subscribe for 333.333 new shares. Based on the subscriptions made pursuant to the loan shares Valoe shall issue a maximum amount of 18,894,615 new Valoe shares. The loan period and the conversion period expire on 31 May 2022.

The terms of the convertible bond are attached to stock exchange release Valoe disclosed on 18 January 2019.

19 February 2019: VALOE STARTS ITS OWN IBC SOLAR CELL PRODUCTION IN LITHUANIA. THE COMPANY ACQUIRED SOLITEK'S SOLAR CELL PRODUCTION BUSINESS FROM GLOBAL BOD GROUP

Valoe Corporation ("Valoe") has agreed to acquire from Lithuanian Global BOD Group SIA ("BOD") the solar cell production business of JCS SoliTek R&D ("SoliTek"), a fully owned subsidiary of BOD. Valoe's objective is to modify a plant, located in Vilnius, Lithuania, for production of Interdigitated Back Contact ("IBC") cells. The first production cells are estimated to be manufactured in the second half of 2019 provided Valoe will be able to arrange financing of approx. EUR 5 million required to finish the project. The sum includes the remaining part of the purchase price of the business acquired from SoliTek i.e. approx. EUR 3.2 million.

According to Valoe's view, the company's solar cell plant will be one of the few production plants in the world where IBC or similar cells can be manufactured. Valoe estimates that the annual capacity at the company's new solar cell plant will be approx. 60 MW at the first stage and the capacity can be doubled to approx. 120 MW with minor investments.

Already approx. 20 MW of the new plant's annual production capacity has been sold for the next two years from the start of the production. Considering the current world market price, the value of the order with defined quality requirements is EUR 8 – 12 million depending on the cell type concerned and development of the world market prices. Valoe commences modification of the solar cell plant together with International Solar Energy Research Center Konstanz e.V. ("ISC Konstanz") immediately. In the technology transfer agreement signed in May 2018 ISC Konstanz commits to certain quality requirements for the IBC cells which e.g. the above-mentioned order is subject to.

Part of the plant's capacity will be used to produce cells for Valoe's own Chrystal modules. Valoe estimates that the capacity of the company's 60 IBC cell module will be approx. 320-340 Wpe and of a bifacial IBC module over 400 Wpe. The efficiency of Valoe's current modules with monocrystalline cells is approx. 300 Wpe and the efficiency of the most common polycrystalline modules available on the Finnish market is approx. 260 – 280 Wpe.

Considering the above-mentioned order, the ongoing negotiations with other potential IBC cell buyers and Valoe's own need for the cells as well as the estimated market price level of the IBC cells, Valoe trusts that the cell production plant will be profitable right from the start and the operative cashflow is positive.

likka Savisalo, Valoe's CEO:" Our own solar cell production and especially production of the IBC cells is an achievement that we could only dream about couple of years ago. So far, this deal is the most important step for Valoe to meet its strategic goals. Now, Valoe has a chance to get to the same technology level with LG, Sunpower and Panasonic. We trust that we are able to compete in terms of both quality and price. Valoe's back contact module, having a glass-glass structure and IBC cells that have longer economic lifetime, is expected to last more than 40 years. We are now one step closer to our goal to provide technology for generating solar energy with the lowest cost over its lifetime, Levelized Cost of Energy (LCOE)."

Before the completion of the deal, SoliTek's solar cell production business will be demerged into a new Lithuanian company that Valoe's new subsidiary to be established in Lithuania will acquire at the completion of the deal. SoliTek will transfer all the assets, knowhow and the key personnel related to its current solar cell production business to the new company to be established through the demerger.

The purchase price shall be EUR 3.5 million provided that the net debt and the net working capital of the new company to be established through the demerger are EUR 0 at the completion of the demerger.

Valoe has paid an initial purchase price of EUR 0.3 million. Further, Valoe has agreed to pay another tranche of the purchase price of EUR 0.5 million after SoliTek's solar cell production business has been transferred into the new company to be established through the demerger, which is estimated to take place in April 2019. The remaining part of the purchase price shall be paid at the completion of the deal which is estimated to take place in May 2019. The deal is subject to normal conditions of a business acquisition.

Should Valoe fail to pay the remaining part of the purchase price or should the deal be cancelled for any other reason, Valoe and BOD are together committed to sell the modified cell production plant for which the assets concerned in the aforesaid transaction as well as the solar cell production line Valoe bought from Italian Megacell S.r.l.; under liquidation, in May 2018, and was then transferred to SoliTek's premises in Lithuania are used. Out of the sale price, Valoe shall first receive such amount which corresponds to the amount of the initial payments Valoe has actually paid prior to the cancellation, added by the amount of new investments Valoe may have made for the new cell production line. The remaining part of the sale price shall be distributed among BOD and Valoe with shares of 3.5 (BOD)/2.5 (Valoe).

For about one year, Valoe has cooperated closely with SoliTek in relation to the development of own polycrystalline MWT cell.

In May 2018 Valoe disclosed that it has signed a development and technology transfer agreement with German ISC Konstanz. The objective of the cooperation is to develop, for Valoe's modules, an IBC cell as well as to modify Valoe's current module structure in a way where the features of an n-type IBC cell with better energy generating capabilities compared to a conventional p-type solar cell can be utilized in the best possible way.

Additionally, Valoe and ISC Konstanz have agreed on licensing the abovementioned cell types to Valoe and its future manufacturing partners.

#### 27 March 2019: Valoe Takes Part in a EUR 15 Million EU Horizon 2020 Research Project

Valoe Corporation ("Valoe") has today been informed that a research project of a consortium which Valoe belongs to has been selected for the European Union's Horizon 2020 funding. The objective of the research project is to substantially improve the competitiveness of the EU PV manufacturing industry by developing manufacturing solutions for high-performance and low-cost modules with excellent environmental profiles. The project duration is 36 months and the project's budget totals approximately EUR 15 million. The partners in the consortium include Europe's leading research institutes specialising in solar energy and related solutions as well as the leading materials technology companies. Valoe is the only solar cell manufacturer in the project. Valoe's share in the project is approximately EUR two million for which the EU would provide a grant of EUR 1.4 million.

At the project's preparation phase the parties agree on practical measures such as final roles and responsibilities between the parties. The preparation phase is expected to be completed during the last quarter of 2019 when the final project agreement will be signed.

likka Savisalo, CEO of Valoe: "This project is very important for Valoe and the EU funding supports the company's strategy. Valoe's long-term development work and its results have been acknowledged by Europe's leading specialists and other operators within the industry, which is even more important for us. We do our best to leverage the project and the new partnerships within the consortium in order to accelerate Valoe's commercial success!"

EUR	Note	1 Jan – 31 Dec 2018		1 Jan – 31 Dec 2017	
Net sales	1-2	1 328 447,46	100 %	553 631,29	100 %
Cost of sales		-2 983 379,84	-225 %	-3 608 757,01	-652 %
Gross profit/loss		-1 654 932,38	-125 %	-3 055 125,72	-552 %
Sales and marketing costs		-690 558,67		-483 136,79	
Administrative expenses		-655 226,78		-693 222,99	
Other operating income	3	795 709,98		397 795,68	
Other operating expenses	9	-0,00		-3 162,57	
Operating loss		-2 205 007,85	-166 %	-3 836 852,39	-693 %
Financial expenses	11	130,63		9 253,67	
Financial expenses	11	-911 475,88		-1 583 499,86	
Profit/loss before extraordinary items,					
appropriations and taxes		-3 116 353,10	-235 %	-5 411 098,58	-977 %
Profit/loss for the financial year		-3 116 353,10	-235 %	-5 411 098,58	-977 %

EUR	Note	31 Dec 2018	31 Dec 2017
ASSETS			
Non-current assets			
Intangible assets	12	10 129 899,12	7 422 939,29
Tangible assets	13	28 933,13	8 335,25
Investments	14	13 004,60	13 004,60
		10 171 836,85	7 444 279,15
Vaihtuvat vastaavat			
Inventories	15	659 388,38	581 715,23
Short-term receivables	16	1 233 789,16	1 255 654,22
Cash and cash equivalents		56 981,46	350 115,83
		1 950 159,00	2 187 485,22
TOTAL ASSETS		12 121 995,85	9 631 764,43
Shareholders' equity			
Share capital	17	80 000,00	80 000,00
Distributable non-restricted equity fund Profit/loss carried forward	17 17	11 803 611,25 -15 692 476,16	10 542 120,84
Profit/loss for the financial year	17		-10 281 377,58
Profit/foss for the infalicial year	17	-3 116 353,10 -6 925 218,01	-5 411 098,58 - <b>5 070 355,32</b>
Obligatory provisions			
Other obligatory provisions	18	306 930,00	220 397,22
Liabilities			
Non-current liabilities	19	12 852 749,78	9 318 915,99
Current liabilities	20	5 887 534,08	5 162 806,54
		18 740 283,86	14 481 722,53
TOTAL LIASBILITIES		12 121 995,85	9 631 764,43
TO THE BIADDIETTED		12 121 999,09	3 031 704,43

EUR 1 000		1-12/2018	1-12/2017
Cash flow from operating activities			
Income statement profit/loss before extraordinary items		-3 116	-5 411
Non-monetary items adjusted on income statement			
Depreciation and impairment	+	1 232	2 121
Unrealized exchange rate gains (-) and losses (+)	+/-	4	-9
Other non-cash transactions	+/-	-792	-262
Financial income and expenses	+	908	1 583
Total cash flow before change in working capital		-1 765	-1 978
Change in working capital			
Increase (-) / decrease (+) in inventories		-78	-162
Change in reserves		87	175
Increase (-) / decrease (+) in short-term trade and other receivables		-12	-412
Increase (+) / decrease (-) in short term trade and other payables		55	-507
Change in working capital		52	-905
Cash flow from business operations before financial items and taxes		-1 713	-2 883
Adjustment of financial items and taxes to cash-based accounting			
Interest paid and payments for other financial expenses	-	442	280
Financial items and taxes		-442	-280
NET CASH FLOW FROM BUSINESS OPERATIONS		-2 155	-3 163
Cash flow from investments			
Investments in tangible and intangible assets	-	3 286	541
NET CASH FLOW FROM INVESTMENTS		-3 286	-541
Cash flow from financing			
Payments from share issue	+	59	800
Financing arrangement with Bracknor Investment	+	918	602
Increase in non-current loans	+	3 094	1 987
Repayment of non-current loans	-	0	23
Increase in current loans	+	2 829	1 428
Repayment of current loans	-	1 751	741
NET CASH FLOW FROM FINANCING ACTIVITIES		5 148	4 053
INCREASE (+) OR DECREASE (-) IN CASH FLOW		-293	349
Cash and cash equivalents at the beginning of the financial year		350	1
Cash and cash equivalents at the end of the financial year		57	350
		-293	349

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## Accounting, measurement and accrual principles

Valoe Oyj's financial statements have been prepared in accordance with the Finnish Accounting Act in force and with other regulations and provisions concerning the preparation of financial statements. The consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS), as have the parent company's financial statements, where possible.

#### Use of estimates in the financial statements

When preparing financial statements according to good accounting practice, the company management has to make estimates and assumptions that affect the amounts of the reported assets and liabilities on the balance sheet date and the amounts of income and expenses reported for the financial year. The estimates and assumptions have been made following the precautionary principle. The final figures may differ from these estimates.

#### Measurement of non-current assets

Tangible and intangible assets have been recorded on the balance sheet at original cost of acquisition less planned depreciation. Planned depreciation has been calculated from the original cost of acquisition with amortization on a straight-line basis according to the estimated useful life. Depreciations of new property, plant and equipment have been calculated as of the month of commissioning. The depreciations have been booked by function.

#### The planned depreciation periods are:

Intangible rights5-10 vuottaDevelopment costs5-10 vuottaGoodwill5 vuottaOther expenses with long-term effects5 vuottaMachinery and equipment2-7 vuotta

Gains and losses from the disposal of fixed assets are presented in the income statement.

## Maintenance and repairs

Maintenance and repair costs are recognized as expenses for the financial year. Significant basic improvement costs are included in the carrying amount of the tangible fixed assets and depreciated over the remaining useful life of the asset.

#### Research and product development costs

Research and product development have primarily been recognized as annual costs in the year in which they have been incurred. Development costs that accrue revenues for three or more years have been capitalized and are depreciated over 5 to 10 years.

Development costs in the balance sheet include EUR 6.0 million capitalized costs where amortizations will be started during 2019 – 2020 after the development is compelete. The depreciation of development costs currently capitalized in the balance sheet is expected to end during the financial year 2025.

#### Other intangible assets

Acquisition costs for patents, trademarks and licences are capitalized and depreciated on a straight-line basis over the useful life, as a general rule over 10 years. Acquisition costs for software licences are included in intangible rights and depreciated over 5 years.

#### Measurement of inventories

Inventories are presented in compliance with the principle of weighted average price at the lower of acquisition cost or replacement price or likely sales price.

#### Items denominated in foreign currencies

Receivables and liabilities denominated in foreign currencies have been translated into euros using the average rate quoted by the Bank of Finland on the balance sheet date.

#### Revenue recognition principles

When calculating net sales, indirect taxes, discounts and exchange rate differences related to sales are deducted from the sales revenue. Income from the sale of goods and services are recognized as revenue when they have been carried out.

Long-term contract revenue has been recognized as revenue on the basis of the stage of completion. The company has defined as long-term contract work projects which have started and ended in different financial periods and where the recognition of income as revenue has a substantial impact on net sales and result. The stage of completion of long-term contracts has been determined as the proportion of costs incurred in relation to the estimated total contract costs and is dependent on the eventual total revenue and costs and a reliable way to measure the progress of the project. A loss for a project is recognized as soon as it is known and can be estimated.

The Ethiopian factory project has been divided into sub-projects. Their percentage of completion is estimated on monthly basis. A project manager is responsible for the estimation. Typically, status reports from subcontractors are used for the estimation. Further, a project manager reviews status reports from each section and compares the results with predetermined checklists/checkpoints. The company has not recognized the revenue from the project as the performance oblications are not yet satisfied.

#### **Provisions**

A provision is recognized in the balance sheet when the company has a legal or constructive obligation that is likely to require the outflow of economic benefits or cause a financial loss and the amount of the obligation can be estimated in a reliable manner. The amount of the provision to be recognized corresponds to the best estimate of the company's management concerning the expenses required to settle the obligation on the balance sheet date. Provisions may relate to restructuring of operations, onerous contracts, legal cases or tax risks.

A warranty provision is recognized when the delivery of a product including a warranty clause has been approved. The amount of the warranty provision is based on experience concerning the realization of warranty expenses.

A provision is recognized for an onerous contract if the expenses required to settle the obligations exceed the benefits from the contract.

# NOTES TO THE INCOME STATEMENT

1. Distribution of net sales by market area	2018	2017
Europe	1 283	529
Americas	22	25
Asia and Australia	23	0
Total	1 328	554

# 2. Long-term contract revenues recognized on the basis of the percentage of completion

Proportion of net sales recognized under percentage of ccompletion -method		
of the financial year's total sales	10,9 %	0,0 %
Revenue recognized on percentage of completion basis during the financial		
year	145	0
Revenue recognized on percentage of completion basis during previous		
financial years	0	0
Amount not recognized as revenue based on the stage of completion	23	0

Valoe had no projects, where the revenues are recognized on the basis of the percentage of completion, at the year end of 2017.

3. Other operating income	2018	2017
Other income	796	398
Total	398	398
4. Materials and services		
Materials and supplies		
Purchases during the financial year	547	694
Change in inventories	20	-98
	567	596
Third-party services	272	42
Total	839	638
5. Number of personnel		
During the financial period on average		
Procurement and production	11	7
Product development	6	5
Sales and Marketing	2	2
Administration	3	3
Total	21	17

At the end of the year	2018	2017
Procurement and production	15	8
Product development	6	5
Sales and Marketing	2	2
Administration	3	3
Total	25	18
6. Personnel expenses		
Wages and remuneration	1 274	1 260
Retirement expenses	233	253
Other indirect employee expenses	52	55
Total	1 559	1 568
7. Management's salaries and remuneration		
CEO and his deputy	168	168
Board members	80	80
Total	248	248
8. Depreciation and impairment		
Depreciation on cost of sales	4	4
Depreciation on development costs	1 226	2 116
Depreciation on sales and marketing	2	1
Depreciation on administration	0	0
Total	1 232	2 121
9. Operating expenses		
Other operating expenses	0	3
Total	0	3
10. Auditors' fees		
Auditus Tilintarkastus Oy		
Auditors' fees	56	27
Certificates and Statements	5	4
Total	61	31
KPMG Oy	_	
Auditors' fees	0	13
Other services	0	1
Total  The KDMC/s fees during 2017 were related to the audit of 2016	0	14
The KPMG's fees during 2017 were related to the audit of 2016.		

11. Financial income and expenses	2018	2017
Other interest and financial income		
Exchange rate gains	0	9
Total financial income	0	9
Interest expenses and other financial expenses		
Interest expenses	738	1 257
Other financial expenses	166	326
Exchange rate losses	8	0
Total financial expenses	911	1 583
Total financial income and expenses	-911	-1 574

At the end of the financial year 2018 EUR 1.0 million of equity based loan interests were not booked as an expense (EUR 0.5 million for 2018 and 0.5 million for previous years).

### NOTES TO THE BALANCE SHEET

# 12. Intangible assets

	Development	Intangible	Other long-term	
EUR 1 000	costs	rights	expenses	Total
Acquisition cost, 1 Jan 2018	12 127	299	108	12 534
Additions	3 931	0	0	3 931
Acquisition cost, 31 Dec 2018	16 058	299	108	16 465
Accumulated depreciation				
and impairment, 1 Jan 2018	-4 855	-168	-88	-5 111
Depreciation for the period	-1 180	-23	-20	-1 224
Accumul. depr., 31 Dec. 2018	-6 036	-191	-108	-6 335
Carrying amount, 1 Jan 2018	7 272	131	21	7 423
Carrying amount, 31 Dec 2018	10 022	107	1	10 130

Should the company fail in its business plan implementation, it could generate a need for a write-off in intangible assets.

# 13. Tangible assets

		Machinery		
	and		Other tangible	
EUR 1 000	Buildings	eguipment	assets	Total
Acquisition cost, 1 Jan 2018	0	143	0	143
Additions	0	28	0	28
Acquisition cost, 31 Dec 2018	0	172	0	172
Accumulated depreciation				
and impairment, 1 Jan 2018	0	-135	0	-135
Depreciation for the period	0	-8	0	-8
Accumul. depr., 31 Dec. 2018	0	-143	0	-143
Carrying amount, 1 Jan 2018	0	8	0	8
Carrying amount, 31 Dec 2018	0	29	0	29

### 14. Investments

Shares and equity interest in Group companies		Parent company's	Group's
	Domicile	holding	holding
PMJ testline Oy	Lohja,Finland	100,0 %	
Valo Clean Energy USA Inc.	Canton MI, USA	100,0 %	
Investments in Group companies		2018	2017
PMJ Testline Oy, investment in Distributable non-restricted equity fund		1	1
Other shares and participations			
Kiinteistö Oy Musko II one-week share		3	3
Helsinki Halli Oy B shares, 2 shares		6	6
Total		9	9

The fair value of Kiinteistö Oy Musko II shares is expected to correspond to the carrying amount. Helsinki Halli Oy B shares were written-off at fair value in 2012.

15. Inventories	2018	2017
15. Inventories		
Materials and supplies	151	151
Work in progress	386	382
Finished products/goods	123	49
Total	659	582
16.61		
16. Short-term receivables		
Trade receivables	29	18
Loan receivable Ethiopia	672	672
Adances paid	272	472
Other receivables	73	87
Accrued income	188	7
Total	1 234	1 256
Relevant items of accrued income		
Rents in advance	37	0
Accrual of indirect employee costs	4	4
Percentage of completion -receivables	145	0
Other accrued income	2	2
Total	188	7

17. Shareholders' equity	2018	2017
Share capital on 1 Jan	80	80
Share capital on 31 Dec	80	80
Total restricted equity	80	80
Distributable non-restricted equity fund on 1 Jan	10 542	0
Sale of own shares – Bracknor Investment	966	722
Share issue	295	9 820
Distributable non-restricted equity fund on 31 Dec	11 804	10 542
Retained earnings on 1 Jan	-15 692	-10 281
Profit/loss for the financial year	-3 116	-5 411
Retained earnings on 31 Dec	-18 809	-15 692
Total non-restricted equity	-7 005	-5 150
Total equity	-6 925	-5 070
Subordinated loans	6 969	5 279
Total equity and subordinated loans	44	209
Calculation of distributable non-restricted equity on 31 Dec 2018		45.000
Retained earnings on 31 Dec.	-18 809	-15 692
Distributable non-restricted equity fund	11 804	10 542
Unbooked interests on subordinated loans  Total	-1 009 - <b>8 014</b>	-622 - <b>5 812</b>
Total	-8 014	-5 612
18. Obligatory provisions		
Warranty provisions	307	220
Total	307	220
19. Non-current liabilities		
Liabilities maturing in one to five years		
Subordinated loans	6 969	5 279
Loans from financial institutions	5 290	3 196
Other non-current loans	0	250
Total	12 259	8 725
Liabilities maturing later than in five years		
Loans from financial institutions	594	594
Total	594	594
Total non-current liabilities	12 853	9 319

20. Current liabilities	2018	2017
Liabilities to Group undertakings		
Loans from Group undertakings	2	2
Trade payables	0	20
Total	2	21
Liabilities to others		
Loans from financial institutions	1 107	648
Other loans	1 531	1 356
Trade payables	1 569	1 284
Other liabilities	186	382
Accrued expenses	1 493	1 471
Total	5 886	5 141
Total current liabilities	5 888	5 163
Material items of accrued expenses		
Subsidies received from the EU for product development projects	67	67
Accrued interest	480	451
Accrued personnel expenses	612	587
Accrued remuneration to Board members	97	127
Other accrued expenses	170	164
Other accrued liabilities	67	75
Total	1 493	1 471
21. Notes concerning collateral and contingent liabilities		
Liabilities secured by mortgages		
Loans from financial institutions	525	600
Other liabilities	281	281
Business mortgages	3 355	12 691
Rental liabilities		
Maturing the following year	216	62
Maturing later	514	0

### 22. Related party transactions

No borrowings were made to persons within related party and no guarantees or other securities were given for their debts.

# 23. Notes concerning an accountable entity belonging to the Group

Valoe Oyj is the parent company of Valoe Group.

The consolidated financial statements can be obtained from the following address: Insinöörinkatu 5, 50150 Mikkeli or **www.valoe.com** 

Mikkell 25 April 2019

Hannu Savisalo Chairman Ville Parpola Vice Chairman

likka Savisalo Member of the board CEO

# Auditor's Note

A report has been issued today on the audit that has been conducted.

Tampere 25 April 2019

Auditus Tilintarkastus Oy Authorized Public Accountants

Heidi Pirttijoki Authorized Public Accountant This document is an English translation of the Finnish auditor's report. Only the Finnish version of the report is legally binding.

# Auditor's Report

To the Annual General Meeting of Valoe Oyi

### Report on the Audit of the Financial Statements Opinion

We have audited the financial statements of Valoe Oyj (business identity code 0749606-1) for the year ended 31 December, 2018. The financial statements comprise the consolidated balance sheet, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes, including a summary of significant accounting policies, as well as the parent company's balance sheet, income statement, statement of cash flows and notes.

### In our opinion

- the consolidated financial statements give a true and fair view of the group's financial performance, financial position and cash flows in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU
- the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

### **Emphasis of Matter – Measurement of Development Costs**

We would like to draw attention to the development costs totaling EUR 10,022,050.39 that have been capitalized in the non-current assets. The company's management has, pursuant to the IAS 36, run impairment testing where the recoverable amounts have been determined on the basis of the value in use. Those calculations use discounted future cash flow forecasts in which management make judgments over certain key inputs, for example net sales growth rate, discount rate and rate of borrowed capital.

The measurement of development costs may include uncertainty, which will have a significant impact on the company's financial position. Our opinion has not been adapted due to this fact.

### **Basis for Opinion**

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report.

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

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

We have not performed any other services than auditing to the parent company or to any Group companies.

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

### Materiality

The scope of our audit was influenced by our application of materiality. The materiality is determined based on our professional judgement and is used to determine the nature, timing and extent of our audit procedures and to evaluate the effect of identified misstatements on the financial statements as a whole. The level of materiality we set is based on our assessment of the magnitude of misstatements that, individually or in aggregate, could reasonably be expected to have influence on the economic decisions of the users of the financial statements. We have also taken into account misstatements and/or possible misstatements that in our opinion are material for qualitative reasons for the users of the financial statements.

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### **Key Audit Matters**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have also addressed the risk of management override of internal controls. This includes consideration of whether there was evidence of management bias that represented a risk of material misstatement due to fraud.

### THE KEY AUDIT MATTER

# HOW THE MATTER WAS ADDRESSED IN THE

### Net Sales - revenue recognition criteria

The company has solar module manufacturing plant and back contact technology projects.

Our audit procedures comprised an evaluation of revenue recognition criteria. We have noted that the company will not start recognizing revenue from the delivery projects before special financing for the projects has been secured pursuant to the delivery contracts.

The company has not recognized revenue based on completion percentage from projects under IAS 11 Construction Contracts.

### **Going Concern**

During the financial year 2018 and at the year- end the company's financial situation was very tight and its liquidity was low.

the Group's overdue debts totaled EUR 2.2 million at balance sheet date. The consolidated cash flow from operating activities was negative in the financial years 2017 and 2018.

Based on the assessment presented in the Directors' Report, management of the company and the Board of Directors believe that the going concern basis is appropriate in preparing the financial statements. The assessment is based on the following: the company has been able to improve its financing situation by drawing new borrowings in 2018, by converting convertible bonds to shares in a share issue and rearranging its current debts. Furthermore, the company has resolved it will not launch delivery projects in full until project funding pursuant to a delivery agreement is available to the company. Additionally, investments will not be made unless required financing and going concern is secured

Our audit procedures comprised evaluation of the company's cash flow forecast, order book and sufficiency of the financing. In addition, we discussed with company representatives about the future development and outlook of the company's operations.

The company's ability to continue as a going concern is dependent on the development of its operations and cash flows, as well as on the company's efforts to settle the borrowings and other liabilities fallen due with its creditors.

# Capitalised development costs, EUR 8.9 million (refer to Accounting Principles for consolidated financial statements and notes 6 and 13) (refer to Accounting, measurement and accrual principles for the parent company financial statements and note 15)

At the balance sheet date 31 December 2018 the capitalised development costs were carried at EUR 8.9 million, which accounted for 78 per cent of the consolidated total assets. The capitalized development costs of the parent company totaled EUR 10.0 million, representing 83 per cent of the parent company's total assets.

Accounting for development costs requires management use judgement and make assumptions that affect carrying values and amortisation methods. The consolidated financial statements include development costs amounting to EUR 4.8 million for which the amortisation has not begun.

Development costs have been tested for impairment. Valoe determines recoverable amounts based on value in use. Those calculations use discounted future cash flow forecasts in which management make judgments over certain key inputs, for example net sales growth rate, discount rate and rate of borrowed capital.

Given the high level of management judgement related to the forecasts used, estimation uncertainty and the significant carrying amounts involved, capitalized development costs is considered a key audit matter.

We assessed the composition of development costs and the capitalization criteria applied, original project plans and discussed the changes in plans with the company representatives.

Our audit procedures also included agreeing the non- current asset register to the general ledger, assessing the appropriateness of the amortisation methods and testing amortisation accounting.

In addition, we discussed with company representatives how development costs are monitored and accounted for, assessed amortization and how stages in a project when amortization is begun is defined.

We analysed management estimates and assumptions, upon which future cash flow forecasts are based. We involved our own valuation specialists when assessing the appropriateness of the assumptions used, such as discount rates. We performed audit procedures to examine the technical accuracy of the calculations.

Furthermore, we considered the appropriateness of the disclosures provided in respect of developments costs and impairment testing.

### Responsibilities of the Board of Directors and the Managing Director for the Financial Statements

The Board of Directors and the Managing Director are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error

In preparing the financial statements, the Board of Directors and the Managing Director are responsible for assessing the parent company's and the group's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or cease operations, or there is no realistic alternative but to do so.

### Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance on whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with good auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. Wealso:

— Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

With respect to the report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed on the report of the Board of Directors and in the Annual Report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

### **Other Reporting Requirements**

We have been the company's auditor elected by the general meeting as from 14 June 2017.

### Other Information

The Board of Directors and the Managing Director are responsible for the other information. The other information comprises information included in the report of the Board of Directors and in the Annual Report, but does not include the financial statements and our auditor's report thereon. We have received the report of the Board of Directors before the date of this Auditor's Report and we expect to receive the Annual Report after this date. Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to the report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed on the other information received prior the date of the Auditor's Report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

In Tampere, 25 April 2019

**AUDITUS TILINTARKASTUS OY** 

Heidi Pirttijoki Authorised Public Accountant, KHT

### **ADMINISTRATION**

Valoe Corporation and its subsidiaries are governed in accordance with the law, the company's Articles of Association, and the Finnish Corporate Governance Code effective as of 2015. The company also complies with the applicable standards issued by the Financial Supervisory Authority, and the rules and regulations of NASDAQ OMX Helsinki Ltd.

Valoe's Corporate Governance Statement has been prepared in accordance with Recommendation 54 of the Finnish Corporate Governance Code approved by the Securities Market Association and Chapter 2, Section 6, Subsection 3 of the Securities Markets Act. An unofficial English translation of the Finnish Corporate Governance Code is available on the website of the Securities Market Association at www. cgfinland.fi. Valoe's Corporate Governance Statement is presented as a report separate from the Report of the Board of Directors. The Board of Directors handled the Corporate Governance Statement in its meeting in April 2019.

Valoe abides by the Finnish Corporate Governance Code with the following exceptions:

- Recommendation 9 The composition of Valoe's Board of Directors does not comply with the recommendation of having both genders represented at the Board of Directors. The 2018 annual general meeting did not elect any woman to the Board of Directors.
- Recommendation 14 The composition of Valoe's Board of Directors does not comply with the recommendation concerning the independence of directors specified in the Finnish Corporate Governance Code, according to which the majority of the directors shall be independent of the company and, in addition, at least two of the directors representing this majority shall be independent of significant shareholders of the company. In 2018, one of Valoe's three directors was independent of the company and significant shareholders. The non-compliance is justified by the fact that major part of Valoe's shares are owned by the Savisalo family or Companies owned by the Savisalo family. Therefore, the General Meeting of Valoe has deemed it appro- priate to ensure strong owner representation in its Board composition.
- Recommendation 24 The company's Board of Directors has not set up a separate audit committee because the scope of the company's business does not require matters related to financial reporting and supervision to be prepared by a group smaller than the entire Board of Directors. The Board of Directors handles the tasks of the audit committee.

### **GROUP STRUCTURE**

Valoe's head office is located in Mikkeli. Responsibility for Valoe Group's corporate governance and operations is divided between the Board of Directors, which is appointed by the General Meeting, and the President and CEO.

### **GENERAL MEETING**

The Annual General Meeting shall be held each year on a day decided by the Board of Directors, by the end of June. An Extraordinary General Meeting shall be held when deemed necessary by the Board of Directors or when legally required. The General Meeting shall be held at the Company's domicile, Mikkeli, or when the Board of Directors so decides, in Helsinki.

The invitation to the General Meeting shall be published, through a stock exchange release and on the Company's website, at the earliest three calendar months prior to the record date of the General Meeting and at the latest three weeks prior to the General Meeting, however, always at least nine days prior to the record date of the General Meeting. The Board of Directors may also decide to publish the invitation to the meeting in a national newspaper.

At the Annual General Meeting, the following shall be presented:

- Financial Statements
- Auditor's Report

At the Annual General Meeting, the following shall be decided upon:

- the approval and adoption of the Financial Statements
- the measures to be taken on the basis of the profit shown in the approved balance sheet,
- the discharge from liability of the members of the Board of Directors and the President and CEO
- the number of members on the Board of Directors
- · the remuneration payable to the members of the Board of Directors and the principles for indemnifying travel expenses

At the Annual General Meeting, the following shall be elected:

- the members of the Board of Directors and, when necessary, deputy members
- the auditor and, when necessary, deputy auditor

### **BOARD OF DIRECTORS**

The Board of Directors is responsible for the company's governance and the appropriate organisation of the company's operations. The Board comprises at least three and up to seven members. The Board members are elected by the General Meeting for one year at a time. The Board elects a chairman from among its members. The Board of the parent company of Valoe Group determines the composition of the Boards of its subsidiaries.

### MAIN TASKS OF THE BOARD OF DIRECTORS

Under the Limited Liability Companies Act, the Board of Directors is responsible for the administration of the company and the appropriate organization of its operations. The Board of Directors is responsible for the appropriate arrangement of the control of the company accounts and finances. The Board is responsible for controlling and supervising the company's management; appointing and dismissing the President and CEO; approving the company's strategic goals, budget, total investments and their allocation, and bonus schemes; deciding on long-term contracts and the principles of risk management; ensuring the operation of the management system; approving the company's vision, values and organization model; approving and publishing interim reports, stock exchange releases, annual report and financial statements; determining the company's dividend policy; and summoning the General Meeting. It is the Board's duty to promote the best interest of the company and all its shareholders.

The Board of Directors convened 64 times in 2018. The attendance rate of the Board members was 100 percent. The attendance rate of each Board member is mentioned below in the item Composition of the Board of Directors.

### **BOARD COMMITTEES**

In 2008, the Company's Board of Directors decided to discontinue the nomination and remuneration committee, as the addressing of these issues does not require preparation of matters by a group smaller than the entire Board of Directors. The same procedure was followed in 2018.

The company's Board of Directors has not set up a separate audit committee because the scope of the company's business does not require matters related to financial reporting and supervision to be prepared by a group smaller than the entire Board of Directors. The Board of Directors handles the tasks of the audit committee.

### COMPOSITION OF THE BOARD OF DIRECTORS

The Annual General Meeting held in 2018 elected four members to the Board of Directors.

### Hannu Savisalo

- Chairman of the Board since 2009
- b. 1946, M.Sc. (Eng.), Industrial Counsellor (a Finnish honorary title)
- Chairman of the Board of Savcor Technologies Oy, Member of the Board of Directors of Savcor Communications Pty Ltd and Savcor Invest B.V.
- 4,067,688 shares in Valoe Corporation through Savcor Communications Pty Ltd, Savcor Invest B.V. and Savcor Technologies Oy. 90,860 options connected to the option scheme 2015.
- The attendance rate at the Board meetings in 2018 was 100 percent.

### likka Savisalo

- member of the Board since 2009
- b. 1972, BBA(Accounting)
- CEO of Valoe Corporation
- 4,067,688 shares in Valoe Corporation through Savcor Communications Pty Ltd, Savcor Invest B.V. and Savcor Technologies
   Oy. 81,620 options connected to the option scheme 2015.
- The attendance rate at the Board meetings in 2018 was 100 percent.

### Ville Parpola

- Vice Chairman and Independent member of the Board since 2015
- h 1972 II M
- Chairman of Board of Directors of Tonfisk Design Oy, Oy Marville Ab and Lumonator Oy
- Ville Parpola is an entrepreneur and works as a lawyer at his own company. He has a long experience in Valoe Corporation. He worked as Vice President, Legal Affairs, also in Valoe's predecessors in PMJ Automec Oy and Cencorp Corporation in 1999 2010
- Parpola owns directly 12,494 shares and through Oy Marville Ab 23,518 shares in Valoe Corporation. He has 60,060 options
  connected to the option scheme 2015.
- The attendance rate at the Board meetings in 2018 was 100 percent.

### EVALUATION OF THE INDEPENDENCE OF BOARD MEMBERS

The Board of Directors evaluates its members' independence of the company and major shareholders. Based on the evaluation of independence carried out in 2018, the composition of Valoe's Board of Directors does not comply with the recommendation concerning the independence of directors specified in the Finnish Corporate Governance Code.

- The Board member independent of the company and major shareholders was Ville Parpola.
- likka Savisalo and Hannu Savisalo exercise control in the Savcor companies and act in their governing bodies.

The non-compliance is justified by the fact that major part of Valoe's shares are owned by the Savisalo Family members or companies owned by the Savisalo family. Thus, the General Meeting of Valoe has deemed it appropriate to ensure strong owner representation in its Board composition.

### PRESIDENT AND CEO

Under the Limited Liability Companies Act, the President and CEO shall attend to the company's day-to-day management in compliance with the instructions and orders given by the Board of Directors. The President and CEO shall see to it that the accounts of the company are in compliance with the law and that its financial affairs have been arranged in a reliable manner. The President and CEO shall supply the Board of Directors and its members with the information necessary for the performance of the duties of the Board of Directors. The President and CEO may undertake measures that are unusual or extensive in view of the scope and nature of the activities of the company only if so authorized by the Board of Directors or if it is not possible to wait for a decision of the Board of Directors without causing essential harm to the business operations of the company. In the latter case, the Board of Directors shall be notified of the measures as soon as possible. The President and CEO is responsible for the day-to-day operations, budget compliance, the performance of Valoe Group, and the performance of those reporting directly to the President and CEO.

### MANAGEMENT TEAM

The Group's Management Team assists the President and CEO in the operative management of the company, prepares matters to be dealt with by the Board of Directors and the President and CEO and plans and oversees the operations of the business units. The Group's Management Team convenes when needed, however, at least twice a month. The Management Team is chaired by the President and CEO.

### COMPOSITION OF THE MANAGEMENT TEAM

### likka Savisalo

- CEO of Valoe Corporation since 2012
- member of the Board since 2009
- b. 1972, BBA(Accounting)
- 4,067,688 shares in Valoe Corporation through Savcor Communications Pty Ltd, Savcor Invest B.V. and Savcor Technologies
   Oy. 81,620 options connected to the option scheme 2015.

### Sami Lindfors

- Senior Vice President, member of the Management Team since 2010
- b. 1975, MBA
- Sami Lindfors joined the Savcor Group in 1996. In 2001, he transferred to Guangzhou, China, as President of Chinese operations and, since 2004, has served as President of Savcor Face China.
- In 2013 he was nominated as CEO of Valoe Clean Energy.
- 35.420 options connected to the stock option scheme 2015.

### Seija Kurki

- Chief Financial Officer, member of the Management Team since 2012
- s. 1963, BBA(Accounting)
- Seija Kurki has held different financial management positions at Savcor Companies since 1984.
- 1,500 shares in Valoe Corporation
- 35.420 options connected to the stock option scheme 2015.

### REMUNERATION

The General Meeting decides on the remuneration of the Board members and auditors. The Board of Directors decides on and approves the President and CEO's terms of employment with a written contract. The Board of Directors decides on the principles of remuneration for senior management. The Board of Directors annually approves, if appropriate, an incentive system for the Company's employees.

The Board of Directors has decided not to set up separate committees since the scope of the Company's business and the size of the Board of Directors do not require matters to be prepared by a group smaller than the Board of Directors. Therefore, the task of preparing the remuneration of the Board of Directors has not been assigned to the nomination committee and the task of preparing the remuneration of other executives has not been assigned to the remuneration committee.

### RENUMERATION OF THE BOARD OF DIRECTORS

The Annual General Meeting held in spring 2018 decided that an annual remuneration of EUR 40,000 be paid to both the Chairman and the Vice Chairman of the Board of Directors and an annual remuneration of EUR 30,000 be paid to the Board members. In addition, travel expenses are indemnified in accordance with Valoe Corporation's travel policy. The Board members do not have fringe benefits or other benefits outside their remuneration.

### REMUNERATION OF THE PRESIDENT AND CEO AND OTHER MANAGEMENT TEAM MEMBERS

The Company's President and CEO is likka Savisalo. The period of notice on the President and CEO agreement is six months, both for the Company and for likka Savisalo. Should likka Savisalo terminate the President and CEO agreement for a reason not attributable to the Company, the Company shall not be liable to pay likka Savisalo any other compensation than the notice period pay. If the Company cancels the President and CEO agreement, the Company shall not be liable to pay likka Savisalo the abovementioned severance pay or any other compensation.

The Board of Directors decides on the principles of remuneration of the members of the Management Team. The remuneration system consists of a monthly salary, options and an annual bonus.

The salaries, fees and fringe benefits to President and CEO likka Savisalo in 2018 totalled EUR 168,000.00. In 2018, the salaries, fees and fringe benefits to the Management Team members totalled EUR 242,332.00. No remuneration was paid to the members of the Management Team under the bonus scheme in 2018.

### BONUS SCHEMES FOR EMPLOYEES

Valoe has in place a salary-based bonus scheme for management and other employees based in Finland. The Board of Directors decides on the application of the bonus scheme annually. Depending on the job, the maximum amount payable under the bonus scheme 2019 can vary between 8 and 12 percent of the person's regular annual salary. The amount payable to the President and CEO and other executives under the bonus scheme can be up to 15 percent of their regular annual salary.

The payment of the amount under the bonus scheme is linked to the realization of the company's business targets and those set for the person's field of responsibility. In addition, indicators related to processes, personal goals and projects are used.

In 2015 the Board of Directors of Valoe resolved the terms and conditions of a stock option scheme. The maximum total number of stock options issued is 650,000 and they entitle their owners to subscribe for a maximum total of 650,000 new shares in the company. The stock options will be issued for free. The Board of Directors shall annually decide upon the distribution of the stock options to the key employees of the Group. Of the stock options, 250,000 were marked with the symbol 2015A, however, their marking term expired 31 December 2018, 200,000 are marked with the symbol 2015B and 200,000 are marked with the symbol 2015C.

### INSIDERS AND INSIDER ADMINISTRATION

Valoe has in place insider rules complying with the guidelines for insiders approved by NASDAQ OMX Helsinki Ltd. According to the insider rules, insiders, persons under their guardianship and corporations under their control are not permitted to trade in the Company's shares and options during a period of 30 days prior to the publication of its financial results (closed window period).

The Company's statutory insiders include the members of the Board of Directors, the President and CEO, the auditors and the accounting firm's auditor with principal responsibility. In addition, the Company's permanent insiders include, as specified insiders, the members of the Management team and specified persons from the Group's financial and other administration. Persons involved in corporate transactions or other projects that affect the value of the Company's shares are included in the Company's project-specific insiders and are subject to a temporary prohibition of trading.

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

### **CONTROL ENVIRONMENT**

### Valoe's business idea

Valoe Corporation specializes in the clean energy, especially in photovoltaic solutions. Valoe provides automated production technology for solar modules based on the company's own technology; production lines for modules; solar modules and special components for solar modules.

### **Environmental Policy**

The company complies with the environmental legislation in force. The company aims to take environmental issues into consideration in management systems and decision-making.

### Planning and monitoring processes

The Group's operations are planned and reviewed annually using a strategic planning process and a budgeting process. The implementation of plans and the development of the business environment are monitoring in connection with monthly reports, quarterly reports and financial statements. At Valoe Group, risk analysis and risk management are part of the annual strategic planning process and day-to-day operations. The purpose of internal control and risk management is to ensure the effective and profitable operations of the company, reliable information and compliance with the relevant regulations and operating principles.

### Internal Control Activities

Authority and responsibility are assigned to persons responsible for budget compliance and to line organization supervisors, in accordance with their roles and duties. Compliance with laws and regulations is ensured using internal guidelines. The objectives of internal control include operational targets, financial reporting and compliance with laws and regulations.

### **Board of Directors**

- Defining the operating principles of internal control
- Monitoring the performance of internal control
- Approving the company's risk management principles
- Reviewing auditors' reports
- · Determining the company's bonus scheme

### President and CEO

- Monitoring the existence and performance of internal control in practice
- Ensuring that operations are in compliance with the company's values
- Adjusting operating principles and policies
- Ensuring the appropriate and efficient use of resources
- Determining control mechanisms (approval processes, balancing and reporting)
- Determining risk management principles andmethods

### **Chief Financial Officer**

- Management accounting: monitoring and analysis of performance
- Financial accounting andreporting
- Maintenance and development of planning processes
- Ensuring liquidity

### **Auditor**

- Statutory audit
- Expanded audit at the Board's separate request
- Reporting to the Board

### Internal control and risk management

Valoe's Board of Directors is responsible for the control of the Company's accounts and finances. The Board is responsible for internal control, while the President and CEO handles the practical arrangement and monitors the efficiency of internal control. Business management and control are taken care of using a Group-wide reporting and forecasting system. Due to the small size of the company and the limited scope of its business operations, Valoe does not have an internal auditing organization or an audit committee. The Board aims to evaluate and continuously develop the company's risk management, internal control and

management processes, also by using the interim audits and internal control reports prepared by external auditors in connection with interim reports.

The purpose of risk management is to ensure that any significant business risks are identified and monitored appropriately. The Company's business and financial risks are managed centrally by the Group's financial department, and reports on risks are presented to the Board of Directors as necessary.

### Reporting System

Valoe prepares its consolidated financial statements and interim reports in compliance with the International Financial Reporting Standards (IFRS) adopted in the EU. The report of the Board of Directors and the parent company's financial statements have been prepared in accordance with the Accounting Act and the guidelines and published opinions of the Accounting Board.

In accordance with the reporting system, the CEO reports to the Board of Directors monthly on the operations, performance and deviations from the budget and adjusted forecasts (monthly report) of the Group and its business units; quarterly on the operating result based on the interim report/financial statements; and immediately on any significant changes in the business environment. The President and CEO reports to the Board of Directors regularly on the implementation of the company's strategy and long-term plans.

The CFO is responsible for Group reporting. Accounting for the Finnish Group companies and consolidated financial statements is carried out in the financial department of Valoe. Accounting and reporting for foreign subsidiaries are carried out using local, qualified accounting firms or other external experts.

The accuracy of reporting is ensured by using financial reporting guidelines, maintaining the professional skills of employees, ensuring the reliability of information systems, using normal internal control mechanisms and an expanded audit. Any deviations from the budget or plans detected in reports are investigated.

The CFO and external auditors are responsible for verifying the accuracy of the financial reporting.

### Communications

The Board of Directors and the President and CEO are together responsible for the Group's communications. The President and CEO is responsible for communications within the company.

### Monitoring

The performance of internal control is evaluated regularly in connection with management and control measures, and separately upon the completion of audit reports. Monitoring measures carried out continuously include comparing the actual and targeted figures in financial reports, various balancing measures, and the monitoring of the regularity of operational reports. The Board's annual plan includes planning and monitoring meetings. Information systems are, for the most part, established, and their reliability is regularly assessed by an external expert

### **Auditing**

The auditor is elected for one term at a time by the Annual General Meeting. The term ends at the end of the following Annual General Meeting. Auditus Tilintarkastus Oy, with Heidi Pirttijoki, Authorized Public Accountant, acted as the company's auditor during 2018. In 2018 the fees to the auditors totalled EUR 60,804.86.

# Corporate Directory

### **VALOE CORPORATION**

Corporate Identity Number 0749606-1 Incorporated in Mikkeli, Finland www.valoe.com

### CONTACT

Insinöörinkatu 5 FI-50150 Mikkeli Puhelin: +358 20 7747 788

### **DIRECTORS**

Hannu Savisalo (Chairman) Ville Parpola (Vice Chairman and Independent Board Member) Iikka Savisalo (Board Member)

### CEO

Iikka Savisalo

### **SECURITIES EXCHANGE LISTING**

NASDAQ OMX Helsinki Oy Listing Identity VALOE

### **AUDITOR**

Auditus Tilintarkastus Oy Tehtaankatu 13 FI-11170 RIIHIMÄKI Tel: +358 010 328 4800

# VALO

# **VALOE OYJ**

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