Annual Report 2019

Fiscal Year 2019 at a Glance

Group sales
€ million

2019 **56.6**

-15.4 %

2018 66.9

EBITDA
€ million

2019	2018
-14.4	9.6
margin -25.4 %	margin 14.3 %

EBIT
€ million

2019	2018
-107.6	5.6
margin -190.0 %	margin 8.4 %

One-time balance sheet effects
€ million

100.6

due to intensified refocusing and restructuring measures

Revenue 2020
Expectation

<50 % – 80 %

of previous year's revenue expected in 2020 (absolute: € 25–45 million) due to the effects of the COVID-19 pandemic – with an EBITDA margin of -6 % at most

Group Key Figures at a Glance (IFRS)

€ '000	**Jan. 1 to Dec. 31, 2019**	Jan. 1 to Dec. 31, 2018	Change	**Oct. 1 to Dec. 31, 2019**	Oct. 1 to Dec. 31, 2018	Change
Revenue	**56,617**	66,909	-15.4 %	**18,752**	33,445	-43.9 %
EBITDA	**-14,388**	9,593	n. a.	**-8,975**	4,644	n. a.
EBITDA margin in %	**-25.4**	14.3	n. a.	**-47.9**	13.9	n. a.
Adj. EBITDA [1]	**-2,183**	9,593	-93.9 %	**5,413**	4,644	16.6 %
Adj. EBITDA margin in %	**-3.9**	14.3	n. a.	**28.9**	13.9	n. a.
EBIT	**-107,592**	5,611	n. a.	**-96,221**	3,264	n. a.
EBIT margin in %	**-190.0**	8.4	n. a.	**-513.12**	9.8	n. a.
Adj. EBIT	**-8,486**	5,611	n. a.	**-84,016**	3,264	n. a.
Adj. EBIT margin in %	**-15.0**	8.4	n. a.	**-448.0**	9.8	n. a.
Consolidated net income	**-101,924**	2,579	n. a.	**-91,981**	788	n. a.
Earnings per share in €	**-6.44**	0.16	n. a.	**-5.81**	0.05	n. a.
Investments (CAPEX) [2]	**15,438**	13,563	13.8 %	**2,872**	5,932	-51.6 %
Operating cash flow	**-10,866**	-54,823	80.2 %	**1,485**	-24,736	n. a.
Free cash flow [3]	**-26,304**	-68,386	61.5 %	**-1,387**	-30,668	95.5 %

€ '000	**Dec. 31, 2019**	Dec. 31, 2018	Change	**Dec. 31, 2019**	Sep. 31, 2019	Change
Total assets	**89,141**	181,516	-50.9 %	**89,142**	192,036	-53.58 %
Equity	**51,824**	154,484	-66.5 %	**51,824**	143,779	-64.0 %
Equity ratio in %	**58.1**	85.1	n. a.	**58.1**	74.9	n. a.
Cash and cash equivalents	**5,036**	28,234	-82.2 %	**5,036**	10,869	-53.7 %
Net debt/EBITDA	**-0.7**	-2.6	n. a.	**-0.7**	-1.5	n. a.
Net debt [4]	**9,685**	-24,512	n. a.	**9,685**	7,999	21.1 %
Employees [5]	**191**	235	-18.7 %	**191**	232	-17.7 %

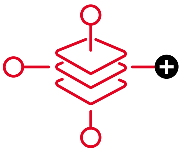
Share

	Dec. 31, 2019	Dec. 31, 2018	Change	**Dec. 31, 2019**	Sep. 31, 2019	Change
Closing price in Xetra in €	**5.76**	12.25	-53.0 %	**5.76**	6.72	-14.3 %
Number of shares issued	**15,825,000**	15,825,000	0.0 %	**15,825,000**	15,825,000	0.0 %
Market capitalization in € millions	**91.2**	193.9	-102.7	**91.2**	106.3	-15.1

[1] Adjusted by one-time impairment effects from the refocusing in 2019 of € 100,606 thousand (Note (40))
[2] CAPEX = investments in property, plant and equipment + investment in intangible assets.
[3] Free cash flow = operating cash flow – investments (CAPEX).
[4] Net debt = interest-bearing liabilities – available liquidity
[5] Plus 0 temporary workers as of December 31, 2019 (December 31, 2018: 42; September 30, 2019: 0).

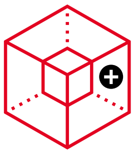
Voltabox – sustainable and efficient mobility

Modular system



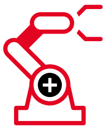
Short time-to-market
Minimum initial costs for customers

Application specialist



Tailored systems for any application
Maximizing customer benefits

High level of automation



Consistent quality standards
Efficiently controlled series production

Development edge

„First Mover-Advantage“ due to early market entrance and electronic expertise adopted from paragon

Li-ion based battery systems are the innovative technology which can change the future. Being a reliable and experienced partner in modern electromobility Voltabox develops and manufactures system-specific solutions – for industrial use in demanding and fast-growing market segments, efficient and flexible, perfectly designed for the given applications from the Voltabox modular systems.

Table of Contents

Letter From the Management Board

Dear Shareholders, Customers, Business Partners and Employees,

I had hoped that it would be under more cheerful circumstances that I would be writing to you on the occasion of our Annual Report for 2019. The world we live in has transformed overnight. Our lives as we know them are now subject to massive, temporary restrictions that have affected us more deeply than we ever could have imagined. At the same time, however, I also feel that this new reality offers us an opportunity for a change of perspective in certain areas of our lives, for corrections and for a new start. The transition from 2019 to fiscal year 2020 thus represents an opportunity for Voltabox to hit the ground running once again.

The epidemic which emerged at the beginning of the year has now come to encompass the entire globe, and has also thrown the business prospects of Voltabox AG into turmoil. With this and other factors in mind, we have subjected our goals and expectations for the new future to critical review. The result is a comprehensive balance sheet adjustment for the Voltabox Group.

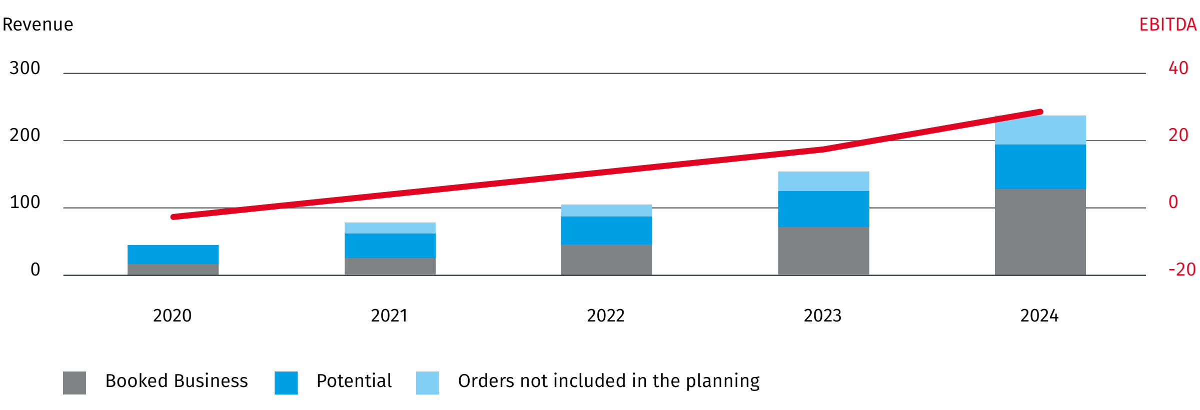
The company was founded with the aim of establishing Voltabox internationally as a quality leader in various markets. Along the way, we realized that individual decisions aimed at achieving extraordinary growth had proven insufficiently sustainable.

In individual sectors, we are experiencing weakened performance in the face of increased competition resulting from new cooperations within the market. Under current circumstances, market entries into new sectors can additionally only be realized subject to noticeable delays; as a result, it became necessary to make corrections to the planned sales figures. In some areas, this development had emerged even before the coronavirus crisis, ultimately becoming even more pronounced in conjunction with the outbreak of the pandemic. For this reason, we made precise corrections to our strategy during fiscal year 2019 which encompassed a diligent focus on profitable projects as well as a revision of our product portfolio. In addition, the Aachen site was sold off and the Markgröningen site was recently incorporated into our headquarters.

The developments in 2019 have made us more cautious in many ways. The result is reduced expectations on our part in regard to the future growth rates of the Voltabox

Revenue and Earnings Planning 2020-2024 Voltabox Group

€ million



Jürgen Pampel
CEO

Group. We hope to consistently make the most of our strong market position and technological advantages while simultaneously ensuring that our organization develops in a healthy and sustainable manner. We are assessing the short and medium-term opportunities in several sectors more conservatively than before as a result, which is directly shown by the annual impairment test of our assets. The resulting valuation allowance represents the conclusion of the reorientation process. These consistent actions have created the conditions for us to hit the ground running and continue the sustainable development of Voltabox after we overcome the current global recession. This is because the establishment of a profitable company in the market remains our firm objective. I am confident that the corrections we have made – to the balance sheet, to our processes and to the structure of the Group – have found their mark. Voltabox AG will be more reliable than ever in the future, particularly for capital markets.

We intend to tackle this future with a changed shareholder structure. On March 3, paragon GmbH & Co. KGaA, our parent company and majority shareholder, announced the start of a process for the partial or complete sale of its stake in Voltabox. As someone who has helped to build the Electromobility operating segment in the paragon Group from the very beginning, I certain--ly appreciate the support that Voltabox received in our early years. At the same time, I agree with paragon's management that now the time has come for both companies to be better positioned in a new constellation to take advantage of their opportunities and potential.

The revenue of the Voltabox Group came to € 56.6 million in the past fiscal year. The failure to achieve the forecast of € 70 to 80 million stems from the reversal of the sale of IP rights for products we developed in the area of drive trains and power electronics as a result of the coronavirus crisis. The preliminary earnings before interest and taxes (EBIT), adjusted for special effects, come to

€ -8.5 million. This corresponds to an EBIT margin of -15%. Unadjusted, the EBIT stands at -187.8%. The forecast of -8 to -9% has thus not been reached. Despite the significant valuation allowances, the equity ratio as of December 31, 2019, is around 58% with equity of around € 58 million.

Against the backdrop of the current year's great uncertainty regarding further restrictions as a result of the pandemic, we are initially applying a correspondingly broad range for the 2020 forecast. Over the further course of the fiscal year, this range will be progressively narrowed as planning certainty increases. On the basis of the effects of the COVID-19 pandemic on our sales planning for the current fiscal year, we expect revenue in the current financial year to fall by between one fourth and more than half compared with the previous year and therefore set the range between € 25 million and € 45 million. The Voltabox Group cannot yet be profitable in the current year with revenue at this scale. We anticipate an EBITDA margin of -6% at the highest. Investments are planned to amount to € 10.5 million, roughly 70% of which will be attributable to capitalized development costs.

It is important to me that our newly concluded framework contracts and recent sales successes are not left out of these reports. This is because we also have positive news to announce that proves that Voltabox has a future and that we are on course. Our efforts to enter the automotive business, for example, have finally succeeded. We are currently in final contract award negotiations with various high-profile manufacturers for the supply of lithium-ion starter batteries. We feel that our position in this market is better than ever and that we can score with our combination of technology and experience. Thanks to a comprehensive revision of the structure of our starter batteries, we will benefit from an optimized margin structure in this area in the future. As is well known, we are also actively pushing forward in the area of commercial vehicle conversions. In this area as well, we find a market that we have known well for years.

At the end of May, Dr. Burkhard Leifhelm and Patrick Zabel moved up to the Management Board of Voltabox AG. Both played a decisive role in shaping the strategic orientation of the Group in their previous functions as divisional directors. I am very much looking forward to continuing this excellent cooperation.

To conclude, I would also like to express our extraordinary gratitude to our employees for their dedication to the Group despite the challenging conditions in the current and previous year. In addition, I wish to express my thanks to all customers and business partners for their trust. To our shareholders who have held firm in the face of the recent capital market upheavals, thank you for your encouragement in the form of direct contact or your investment. It is with great eagerness that I invite you to join us in an ongoing dialog over the course of the year on the basis of our transparent planning.

Jürgen Pampel
CEO

2019 –
Realigning the Organization to Secure Sustainable Growth

Jürgen Pampel, Dr. Burkhard Leifhelm, Patrick Zabel, Manfred Schmidt (left to right)

Jürgen Pampel
CEO

"I have absolute confidence in the value of Voltabox as a company"

Dear Mr. Pampel, this has been an eventful year for Voltabox. How would you personally describe fiscal year 2019 and the current situation of the Group, including in regard to the global developments that have emerged in the meantime?

We were already quite shaken up by the middle of last year, and found ourselves in stormy and uncertain seas. However, it is my view that we successfully escaped without foundering. In light of the global economic situation in the wake of the coronavirus pandemic, it was however unfortunately necessary for us to then conclude that the odds of achieving our goals in the current year have worsened significantly. The current situation presents us with a daunting task – for our free and democratic society as well as for a number of companies. Voltabox has a number of firmly scheduled series launches upcoming; new customers are initially exercising elevated caution in regard to investments, understandably so, and we have pursued a transformation from project business to a stronger volume production business.

At the same time, we have successfully positioned ourselves for the future through the decision in favor of a comprehensive adjustment of our assets. Voltabox has settled all balance sheet risks to the best of our current knowledge, which is extremely helpful for all parties involved in the ongoing sales process. Some may view the scope of this measure as a potential step backwards. I believe, however, that it was a valuable move in every respect. It is also my opinion that this step is even more important than reaching our original growth expectations.

What was the rationale for the decision?

The primary cause is our more conservative sales and earnings planning for our operating activities. The decisive factors here included postponed projects and extensive temporary margin effects from the transformation to a new generation of cells as well as the dim business prospects in the wake of the COVID-19 pandemic.

There were also effects from the reversal of the sale of IP rights to our Voltamotion product segment. Spinning off this segment was a scenario that we prepared during the refocusing last year due to the forecast adjustment. The objective was to concentrate on our core business.

However, the sale of property rights was reversed in early 2020 due to the fact that the buyer sees no opportunity to make commercial use of these for the foreseeable future as a result of the pandemic. We took this situation as the occasion to completely remove these assets from our balance sheet. Together with the loss of the revenue planned for 2019, this measure is thus also having an effect on our earnings.

In the forecast adjustment, you emphasized that the business model of Voltabox remains unchanged. So have there been any fundamental changes to the growth prospects for the Group?

Of course, Voltabox still has outstanding technology, a high level of innovative strength and an excellent team across all operating segments. We are likewise continuing to record very high demand for our expertise and our solutions in the area of electrification. Our goal is to continuously increase the visibility of Voltabox in the industries we cover. In any event, we will approach our future growth with greater caution and manage internal and external expectations with conservative planning. In doing so, we are also taking the increased uncertainty in regard to short and medium-term global economic development into account.

At this point, I would like to emphasize once more that we are conscious of the fact that expectations have been disappointed. We have been unable to fulfill our high aspirations. We also know that we can only win back lost trust through reliable performance and solid management. The goals we set in the past only allowed for sustainable growth to a limited extent. Our future strategy will differ dramatically.

Earlier, you mentioned the refocusing launched in 2019. What is Voltabox focusing on?

The other members of management and I have agreed that we need precisely delineated areas of application to focus our high-performance battery systems on. It needs to be clear and comprehensible what our solutions are for. For example, we can now benefit far more effectively from our ability to devise variants. At the same time, we are also seeking to underscore our aspirations as a leader in technology even more clearly.

Our focus is still on intralogistics and mining applications. We are rapidly expanding our activities in the area of transportation applications for people and goods, primarily by entering the market for electrifying diesel buses. In addition, we will also be increasingly active in the large market for mobile and stationary energy storage with an extremely broad range of potential applications.

Voltabox also optimized its cost base in 2019. What areas did you and your team focus on? Have these measures been concluded?

We adapted our resources in line with the new circumstances promptly and very systematically. These measures were as painful as they were necessary during this time. I would have preferred to avoid this step. At the same time, we temporarily introduced reduced working hours throughout the company in step with our lower capacity utilization. This measure has expired.

In addition, however, we also managed to achieve significant savings on material costs that will help us not only in the near and medium term but in the long run as well.

We have observed the effectiveness of these measures very closely and have also made several adjustments in the current year, particularly due to the current economic situation. After the experiences of the past we are sensitized in any case.

A USP of Voltabox has always been its high level of expertise and strong team of developers, from cell characterization and software to design and validation. Is anything changing about the role or significance of Voltabox development and its all-round understanding of the vehicle?

To put it clearly, the restructuring measures are not going to water down our DNA. Only in this way can our designers, electronics developers and programmers succeed in their mission to marry our high-performance battery system solutions with our customers' highly complex vehicle architectures in the best possible way. At the same time, however, a specialist knowledge of battery cell chemistry is also becoming ever more crucial, of course. Recently, we have not only strengthened our hardware and software development team in a targeted manner but have also been able to expand our team of cell characterization and application experts with the addition of some highly qualified employees.

In terms of public perception, 2019 was also dominated by social movements seeking to raise awareness of climate action and environmental protection. Sustainability is increasingly becoming a key issue for politicians, business leaders and civil society – and thus sustainable mobility is too. To what extent is Voltabox noticing this trend?

In industry, the attention for e-mobility is less strongly determined by image positioning and regulation than is the case in the automotive industry, for example. Our industrial customers typically opt for modern lithium-ion systems mainly due to their benefits and cost advantages.

In the last year, it has become clear to everyone that our society is concerned about the future and intensively taking on the challenges that lie ahead. With our technology and our solutions, I believe Voltabox has the potential to become one of the key building blocks that are forming the foundations for this transformation. This is precisely why I believe that, now more than ever before, the Voltabox business model has a genuine right to exist.

Voltabox AG's share price rose only rarely during the past year – the biggest impact undoubtedly came from the profit warning on August 12. How would you like to make investors even more confident in the Voltabox share?

Over the past weeks and months, I have made a point of emphasizing that we have learned from what happened in 2019. We also instigated our change of course ourselves without giving the job to someone from outside. Among other things, we are building off of our solid, robust medium-term planning, our existing customer base and our recent sales successes. Giving Voltabox AG this new "face" is designed to win over the capital markets once again and meet our shareholders' expectations as best we can.

Dr. Burkhard Leifhelm
CTO, CTO, Vice President of Purchasing, Development and Manufacturing

“Standardization, flexibilization and digitalization – these are the ways we hope to optimize our processes”

Dr. Leifhelm, many areas of manufacturing at Voltabox AG have been automated. You assumed responsibility for the Operations division in 2019 and you have been appointed CTO in the current year.

Shortly after I took up my role with the company, we found ourselves in a situation that required us to rapidly develop measures and take action accordingly. In the area of manufacturing, we radically adjusted our production capacities in line with the new conditions we faced. In purchasing, our entire supplier structure was optimized. In all our activities, the focus was not only on keeping an eye on short-term challenges but also on being prepared for when production volume returned to normal levels. As such, we placed an emphasis on retaining key skills in-house and keeping the supply chain prepared for the various possible scenarios.

In your role, you are also responsible for the Purchasing division. Earlier, you discussed the interruption to production following a temporary suspension of deliveries from an important cell supplier. What has the Voltabox Group learned from this situation?

It was made extremely clear to us that Voltabox AG cannot be dependent on individual suppliers. Our immediate response was to amend our purchasing guidelines accordingly. We are systematically implementing a "second source" strategy for procuring components, and cells are undoubtedly among the most important ones. Due to the fast-paced nature of cell technology development, it is important that components and suppliers be selected by development, purchasing and production working closely together across divisional boundaries.

You took over as Vice-Chairman of the Management Board and have since been responsible for development in addition to purchasing and manufacturing. What will you personally be focusing on in your work for the current year, 2020?

As you know, in 2019 Voltabox completed the value-analytical revision of significant parts of its product portfolio. Therefore, this year's focus is on continuing to optimize workflows and processes. Voltabox needs to be more mature in this area: Standardization, flexibilization and digitalization are the key words here. Standardization means having uniformity in workflows and components that are repeated in many different products. This creates potential savings as well as opportunities for flexibilization, which will let us respond to changing customer requirements – in regard to both the product and supply – even more rapidly. Our customers appreciate this flexibility. But you cannot achieve this just with measures in production and purchasing. For this reason, expanding cross-divisional collaboration is another point of focus for us in 2020. We have identified bottlenecks in the product creation process and are implementing measures to resolve these on the production side that will cut both costs and time-to-market. Our goal is to perfect simultaneous engineering and the agility of new series projects. Supplying, recording and analyzing information such as production data by digital means enables us to quickly get an overview of key figures for managing workflows and make use of it. This is another crucial way to ensure productivity in our fast-paced business.

Patrick Zabel
CFO, CFO, Vice President of Finance & Human Resources

"We are aiming for healthy and sustainable growth"

Mr. Zabel, you'd agree that the year just gone was a particularly eventful one. No sooner had you joined the Group in late 2018 than you had first been promoted to divisional director within what seemed like no time at all and were then required to secure the result for 2019 in the wake of the revenue postponements. You were only recently appointed to the Management Board. How would you sum up the past year?

In fiscal year 2019, I dealt with a broad range of different financial subjects. We took the FREP proceedings, for example, as an occasion to formulate improvement measures for our processes and structures that have strengthened our accounting. At the same time, I also began revising our controlling instruments. After testing these tools out, we have now carried them over into our corporate planning. My overarching goal is to make the business of Voltabox more reliable and transparent, step by step.

We decided to carry out a balance sheet adjustment at the end of the reporting year. It is entirely understandable that the total comprehensive income would be difficult for the financial market to understand. We are confident, however, that the adjustments were necessary in order to lead Voltabox into the future in a sound and sustainable manner.

In 2020, we will continue to focus our consistent actions on achieving the profitability of Voltabox in the medium term. I am very positive here about our current project completions and progress in the area of restructuring. As a result of the far-reaching extraordinary factors in the fiscal year 2020, as things stand now we will not be able to achieve positive EBITDA until the following year. After another year, we will finally be able to achieve a positive EBIT.

The new level of transparency can also be seen from the fact that you disclose the target figures for coming years. From this, it can be seen that you will work to improve the consolidated net income continuously. This suggests that Voltabox does not have a systemic earnings problem. Do you agree?

The main thing that our planning shows is that we intend to manage the company in a sound and sustainable manner. The business plan of Voltabox AG underscores that we will achieve profitability in the not-too-distant future – on the basis of conservative planning. With our improved cost efficiency, we have laid the foundations for achieving sustainable, profitable growth for Voltabox.

Before the coronavirus crisis, our best case scenario for fiscal year 2020 assumed that we would generate a positive operating cash flow that we could use to refinance our investments in development. The primary reason for this is the continuous return flows from inventories and receivables. We need to develop sustainable profitability step by step through organic growth effects. We are optimistic that this will strengthen bankers' and investors' trust in us, and thus secure the growth refinancing as well.

The new Voltabox planning methodology is designed to promise greater reliability and certainty. In concrete terms, what improvements have you made?

Our planning model is based on the individual customer projects and their individual price costings. We are now adopting a more conservative approach to the probabilities of adverse events and delays occurring, marking down nominal revenue figures. This model produces a range for our potential revenue.

In the context of the forecast, we are currently still working with a relatively wide range in regard to revenue planning. Furthermore, large portions of our business are volatile in relation to individual projects. We are working intensively to expand series deliveries for our customers in order to be less vulnerable to external influences and to thus increase the reliability of orders.

Mr. Schmidt, your aim for 2019 was to reduce your dependency on the intralogistics market segment and broaden your customer base accordingly. How would you assess the progress made on this task?

First, we consolidated all of our sales activities at the beginning of last year and applied a very narrow focus in each market segment. This meant, logically, that we did not pursue a number of opportunities that we felt lacked sufficient commercial potential. We have placed our business relationships on a broader footing in every market segment so that we can work more closely with our partners on a sustainable basis. However, this new focus does not mean that we intend to pull back from the high level of visibility we have achieved in the field of intralogistics. In fact, we have made very encouraging progress in realigning our activities in this market with new strategic customer relationships.

Manfred Schmidt
Divisional Director for Sales

“We have placed our business relationships on a broader footing in every market segment”

In this context, supplying e-troFit for the conversion of diesel buses undoubtedly represents a particularly exciting business and one likely to promise high volumes going forward. How did you get to this point?

The cooperation with e-troFit can be seen as a kind of blueprint for our strategy and the sustainability of the Voltabox business model. We first made contact in spring 2018. Starting with a concept for electrifying buses currently being used in local public transportation, we developed a concept for e-troFit for how the lithium-ion battery system could be designed. At that time, our ideas for how the overall system would need to function were still some way apart. After about a year of ongoing discussions, the first prototype was completed – and we were actually very close to the proposal we had drafted. This meant that both the technical implementation and e-troFit's business model would deliver profitability. A typical procedure for us, this means immediate positive effects for end customers in regard to the costs and possible applications of the battery solutions.

Let's take a look at the U.S. business. What is your focus in this area, and how effectively is the local sales structure operating?

In this area, we cooperated with colleagues on-site to introduce a pilot project for a new CRM system, which is now being rolled out to the entire Voltabox Group. We chose to launch it at our U.S. subsidiary because it gave us a precise view and stricter control over sales. We also adjusted the sales process involving the U.S. sales employees who work locally. Growth in the U.S. is significantly lower we had anticipated. For this reason, we have placed a particular emphasis on developing our market share. Our focus here in North America remains on the development of medium-sized volume production business

How are margins developing in the markets you cover? From a sales perspective, what are the key challenges for Voltabox with regard to becoming established and achieving sustainable growth in both the industrial submarkets you already occupy and those you are targeting as well as your business involving mass market applications?

In particular, we have focused recently on standardizing and thus on increasing the scalability of our products, which means expanding our presence in these markets. This has made it possible for us to develop one-off deals and individual orders into framework contracts and longer-term supply contracts for our customers. This has also ultimately enabled intermediate products to be standardized in series production.

In fiscal year 2019 as well as the first quarter of 2020, our margins faced pressure from the intensified use of old cell technology. Our material input ratios initially slightly increased accordingly. We are countering this with the help of a broader base of cells and suppliers as well as through revision from a value analysis perspective, particularly for our intermediates such as modules. The effects are becoming increasingly visible over time.

I believe that one of the biggest challenges lies in aligning our sales activities closely with the resources and growth trajectory of the Group as a whole. This is also why we are continuing to focus systematically on cooperation arrangements and partnerships. At the same time, this prevents us from relying too heavily on the resources of individual specialists in a particular trade.

Voltabox Investor Relations

Capital Market Environment

The first several weeks of 2019 were marked by persistently cautious attitudes in the capital market. Market participants showed a high degree of risk aversion over the winter, a trend which was most pronounced among institutional investors. Medium-term investors declined to take advantage of low price levels at the beginning of February to enter into or close short positions, and increasing prices at the beginning of April had little effect on the generally skeptical mood. Instead, this phase was used for profit-taking. According to a Bank of America Merrill Lynch survey in the first half of June, international fund managers were the most bearish they had been since the 2008 financial crisis. Only at the end of the second quarter did sentiment begin to improve, primarily as a consequence of the G20 summit.

In the third quarter, purchasing managers' indices dropped below critical thresholds in a number of countries as the economic slowdown became increasingly pronounced. This had a corresponding effect on investor sentiment in stock markets. At the beginning of the quarter, the focus was on profit-taking and increasing risk aversion. After an intervening boost from favorable entry prices, investor sentiment deteriorated in late July following a decline in the leading indices. Private investors were particularly pessimistic and expanded their previously established short positions.

Favorable entry prices were identified mainly by institutional investors in early August, despite the negative policy signs that followed the reduction of the key interest rate by the U.S. Federal Reserve and the serious escalation of the trade war between the USA and China with the announcement of additional punitive tariffs. Global political developments ultimately resulted in nervousness in markets over the further course of August, however, and motivated traders of institutional investors in the second half of the month.

The mood among private investors lightened as the month drew to a close, even though the trade war remained the dominant subject in the markets. At the end of the quarter, however, professional investor sentiment as measured by the Frankfurt Sentiment Index dropped to its lowest level since 2010. This complex, bearish situation was influenced particularly by leading financial institutions' revisions of their outlooks for the near and medium-term future of the economy at the national and global levels.

Low prices at the beginning of October were taken advantage of primarily by professional investors in order to buy at favorable entry prices. Private investors remained true to the trend from the preceding weeks and avoided risk. The sudden upswing of the DAX to a new high for the year was largely borne by commitments from international investors, which also served to brighten the market sentiment of German investors. This development was largely driven by expectations of positive outcomes for latent conflicts such as Brexit and customs disputes.

Nevertheless, the growth trajectory of the DAX was met with skepticism among a number of professional investors, some of whom opted to sell or to establish short positions. Supporting news such as the interest rate cut by the U.S. Federal Reserve, new hopes for progress in the trade conflict between the U.S. and China and additional substantial price gains had little effect on this. Private investors, on the other hand, met this development with unwavering optimism. The DAX Sentiment Index collected by the Frankfurt Stock Exchange increased to +32 points, the highest level since the beginning of 2018.

The German Stock Index consistently ranked among the most bullish international stock markets in the fourth quarter. Ultimately, it was primarily international fund managers who expressed extremely positive attitudes towards global growth in the coming 12 months in the most recent BofA Merrill Lynch survey and thus heralded a turnaround in the prevailing fears of recession.

Domestic institutional market participants only followed these international capital flows to a very limited extent. Market sentiment once again darkened slightly after the DAX rally which began on October 4 evened out at a high level in mid-November. Private investors in particular demonstrated their high degree of flexibility in assessing market development during this phase, exhibiting a large degree of optimism at the end of November but distancing themselves from supposedly high expectations soon afterwards.

Institutional investors mainly reinforced their high degree of confidence at the beginning of December with a view to the end of the year. In this context, several investors with bearish leanings even closed their net short positions. Private investors, on the other hand, largely settled for profit-taking; combined with the thinning of the bulls' ranks, this meant that institutional investors were now showing a comparatively greater level of confidence for the first time in three months. The partial agreement between the U.S. and China on the trade dispute and the increased certainty following the decisive election result in the United Kingdom served to raise market participants' spirits. U.S. markets and the DAX achieved new record levels and annual highs, respectively. This served to ring in a dynamic close to the year with high share prices and support from the "window-dressing", or cosmetic optimization, by a number of fund managers.

Share: Price Performance and Trading Volumes

The price performance of the Voltabox share faced above-average levels of pressure in the past fiscal year. With a Xetra closing price of € 5.76 as of the reporting date (prior year: € 12.25), the share showed a price loss of 53.0 %. This corresponds to a loss in stock market value for the company of about € 102.7 million. During the same period, the TecDAX increased by 23.0 % and the SDAX, DAX and the companies encompassed by the Prime Technology Index increased by 31.6 %, 25.5 % and 25.4 %, respectively.

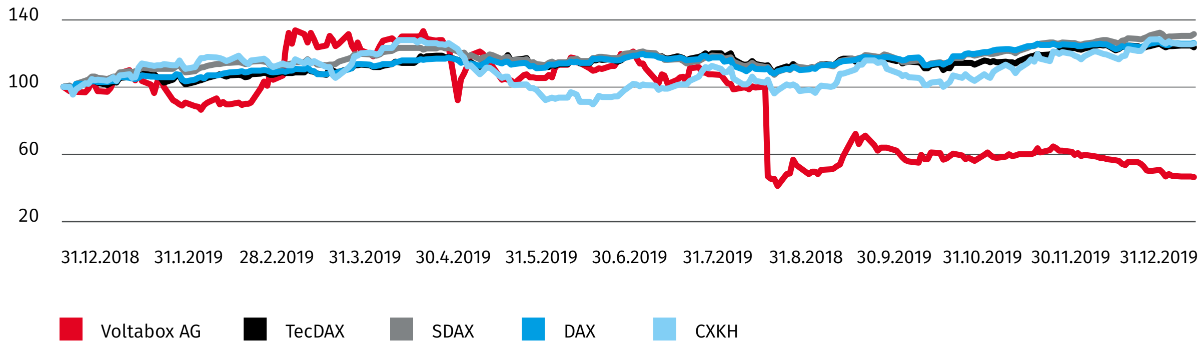
Most German stock indices concluded the first quarter with gains (DAX 9.2 %, SDAX 15.0 %, TecDAX 9.0 %). The Voltabox share outperformed this positive market environment, and achieved a 25.7 % increase in its share price in the first three months of 2019. Starting from an opening price of € 12.16 with initially slightly upward movements, the lowest price was posted in mid-February at € 10.65. With above-average trading volumes, the share price subsequently increased, particularly during March, to reach a high of € 16.25 on March 15. With a closing price of € 15.40, the stock market value came to € 243.7 million as of the reporting date. The stock market value increase thus amounted to € 49.8 million over the previous quarter.

The second quarter saw a mixed picture among the most important German stock indices. While the broad DAX was up substantially by 6.8 % and the TecDAX by 6.5 %, the SDAX ultimately recorded a positive result as well with an increase of 2.8 %. Both the Prime Technology Index (CXKH) and the Voltabox share posted a decline of 13.7 % in the second quarter. Starting from an initial price of € 16.14, the Voltabox share initially performed relatively weakly at the beginning of April. By the end of the month, however, it had achieved a high of € 16.36. Soon thereafter, on May 6, the share reached its lowest price of € 11.30 following the announcement of an examination procedure by the Financial Reporting Enforcement Panel (FREP) without comment from the company. Although the stock managed to recover in the subsequent trading days, it remained consistently burdened afterwards. Only at the beginning of June did the price once again find increased support, but it was only able to achieve a limited degree of visibility in regard to trading and ultimately quoted at a closing price of € 14.46, corresponding to a stock market value of roughly € 228.8 million. The decrease in the stock market value for the second quarter thus amounted to € 14.9 million. The decrease in market capitalization for the first half of the year as a whole amounted to € 29.4 million.

All in all, the key German stock indices experienced slightly negative movement in the third quarter. The performance of the DAX was slightly negative at -0.9 %, while the SDAX and TecDAX offered a somewhat worse performance of -4.6 % and -4.2 %, respectively. The Voltabox share suffered a severe decline of -66.4 %

Performance of Voltabox share

in %



in this quarter, mainly due to the forecast adjustment in August. The initial price of € 14.86 thus simultaneously represented the high for the third quarter. The share subsequently remained under pressure throughout July, however, and also failed to gain any upward momentum in the first half of August. As a result of the profit warning on August 12, the share dropped from € 12.28 to € 5.72 on the following day. The annual low of € 5.02 was reached several days later, accompanied by higher-than-average trading activity. Starting from this low level, the stock managed to record an increase in price in the following weeks which now amounts to more than 50 %, but has yet to return to the level of the beginning of the quarter. The closing price was ultimately € 6.72. This corresponds to a stock market value for the company of around € 106.3 million as of this reporting date and a decrease in the company's stock market value in the third quarter of around € 122.5 million.

The fourth quarter was the strongest quarter by far for all of the key indices (TecDAX 23.0 %, SDAX 31.6 % and DAX 25.5 %). The Voltabox share was unable to benefit from this positive market environment, and was clearly affected to a particular degree by the measures by fund managers to smooth out their portfolios at the end of the year. Starting from an initial price of € 7.30, the share recorded sideways movement with low trading volumes until the end of November. In the first half of December, the price faced a downward trend which reached its quarterly low of € 5.76 in the final days of the year. This corresponds to a stock market value for the company of around € 91.2 million as of this reporting date, or a decrease in the company's stock market value in the fourth quarter of around € 15.1 million.

Trading volumes varied over the course of the year. Over the year as a whole, the volume traded each month averaged around 1.485 million shares (prior year: 927 thousand shares). Deutsche Börse AG's trading platforms accounted for around 59.5 % of this volume (prior year: 86.4 %). Trading via dark pools (i.e., internal bank and stock exchange trading) thus significantly increased in the past fiscal year in comparison with the prior year.

In the first quarter, the monthly trading volume remained significantly lower than the annual average at an average of roughly 1.103 million shares. In the second quarter, trading activity slightly increased to roughly 1.150 million shares per month. The third quarter, with monthly trading volumes of roughly 2.681 million shares, was marked by above-average trading activity in August following the profit warning and the publication of the half-year financial statements. Monthly trading volumes significantly decreased once again to 1.007 million shares in the fourth quarter, which represents the lowest quarterly value for the year as a whole.

As of the balance sheet date, the German Federal Gazette had been notified of a net short position held by Ennismore Fund Management Limited for the

Voltabox share in the amount of 2.00 % of the company's share capital.

Financial Communications

Voltabox AG regularly and simultaneously informed all capital market participants about the economic situation of the company. The continuous reporting included the annual report for fiscal year 2018 (published on April 01, 2019), the interim report as of March 31, 2019 – 1st quarter (published on May 13, 2019), the interim report as of June 30, 2019 – 1st half-year (published on August 21, 2019) and the interim report as of September 30, 2019 – 9 months (published on November 13, 2019), among others. Parallel to these dates, Voltabox AG published corresponding financial notifications, which also included the Management Board's assessment of further business development among other things.

The Management Board's revenue and earnings forecast for fiscal year 2019 from March 7, 2019, was explained in the combined Group management report published on April 1, 2019, as an interval forecast including the key assumptions on which the forecasts are based. On August 12, 2019, the company published a profit warning in consideration of postponed projects and associated revenue delays which resulted in a reduction of the forecast with regard to revenue and EBIT margin.

In the past fiscal year, the Investor Relations department was initially supported in the context of a limited service arrangement by the parent company paragon GmbH & Co. KGaA and supplemented by its own internal resources. Over the further course of the fiscal year, IR activities were then performed fully independently. Ongoing communications with institutional and private investors were successfully solidified during the period since the company's IPO. The company is distinguished by the fact that it offers direct dialog to all shareholders. Under this framework, institutional investors regularly make use of the opportunity to hold discussions with the Management Board on current developments in regard to strategy and business operations. The persistently high frequency of discussions with familiar investor contacts as well as a number of new contacts at regularly-scheduled capital market conferences serves as a satisfactory indicator of the level of interest in Voltabox as an investment.

More than 250 individual meetings were held with institutional investors from Germany, the U.K., France, Finland, Sweden, Denmark, Luxembourg, the Netherlands, Switzerland, Austria, Italy, Spain, Poland, the USA and Canada as well as with private investors. In the course of the year, seven (prior year: three) research institutions have published a total of 35 (prior year: 27) studies on Voltabox AG.

The company sees effective financial communication as the targeted reduction in the asymmetric flow of information between management and shareholders on the current economic situation and specific future potential of Voltabox AG. Accordingly, the ongoing dialog with professional capital market participants is given a high priority. Furthermore, the company aims to provide the broader public with up-to-date and relevant information via various media channels and to be available as a personal contact for private investors.

Supervisory Board Report

Monitoring and Consulting in Continuous Dialogue with the Management Board

The Management Board and Supervisory Board of Voltabox AG uphold the obligation highlighted in the German Corporate Governance Code (GCGC) of ensuring the continued viability of the company and its sustained value creation (corporate interests) in conformity with the principles of the "social market economy." There were no conflicts of interest among the Management Board or Supervisory Board members in fiscal year 2019. The mandates of the Supervisory Board members are listed in the notes (Note (1)).

The Supervisory Board of Voltabox AG fulfilled the consulting and monitoring obligations incumbent upon it according to law, the Articles of Association, German Corporate Governance Code and rules of procedure with great care in fiscal year 2019. Here, the Supervisory Board supervised the Management Board on an ongoing basis and made sure of its legal and regulatory compliance, appropriateness and effectiveness. Furthermore, the Supervisory Board was available to the Management Board for consultation and was involved in discussions and decisions regarding issues of material importance. Thanks to the good cooperation between the Supervisory Board members, even time-sensitive decisions were resolved quickly.

In February 2020, the Management Board and Supervisory Board updated the company's Declaration of Compliance according to Section 161 of the German Stock Corporation Act (AktG) and made it publicly available on the Investor Relations page of the Voltabox AG website. The deviations from the recommendations of the GCGC and additional information on corporate governance at Voltabox AG are also provided here.

The Management Board comprehensively informed the Supervisory Board in written and oral form in the Supervisory Board meetings on all proceedings of material importance, the Company's general performance and its current situation. Here, it gave particular priority to the topics of strategy, planning, business development, risk situation and risk management. The Supervisory Board intensively reviewed the Management Board's reports and discussed them at its meetings. In addition to the Supervisory Board meetings and conference calls involving all members of the Management Board and Supervisory Board, the Supervisory Board Chairman and the Management Board discussed important matters when necessary. The Supervisory Board was fully informed about exceptional instances that were of material importance for assessing the year's results.

Composition of the Supervisory Board

The Supervisory Board of Voltabox AG consisted of three members in fiscal year 2019: From January 1, 2019, to December 31, 2019, they were Klaus Dieter Frers (Chairman), Prof. Dr. Martin Winter (Vice-Chairman) and Hermann-Josef Börnemeier.

Prof. Dr. Martin Winter resigned from his role as Vice-Chairman and as a member of the Supervisory Board at the end of the fiscal year. As the responsible registry court, the district court of Paderborn appointed Walter Schäfers, attorney, as the new Supervisory Board member on January 14, 2020, at the company's request.


Klaus Dieter Frers, Chairman of the Supervisory Board

Supervisory Board Meetings

In fiscal year 2019, the Supervisory Board convened for four ordinary plenary meetings, two extraordinary conference calls and once for the purpose of a written resolution. The Supervisory Board was fully present at all meetings.

On 2/15/2019, the resolution on the merger of Accurate – SMART BATTERY SYSTEMS – GmbH and Voltabox AG was adopted through an extraordinary written resolution. The resolutions were submitted to the Supervisory Board Chairman by February 19, 2019.

In the first ordinary plenary meeting on March 20, 2019, the Supervisory Board was informed by the Management Board about the course of business in fiscal year 2018. At this meeting, the company's auditor reported on the examination procedure by the Financial Reporting Enforcement Panel (FREP) and explained the effects on the prior year comparative figures for 2017. The Supervisory Board was also provided with information on the procedure for the audit of the 2018 annual financial statements. The Management Board of Voltabox AG summarized the company's growth dynamics in recent years and presented the forecast for fiscal year 2019. In addition, the audit firm Baker Tilly GmbH & Co. KG was proposed as the auditor for the 2019 annual financial statements at the meeting. This proposal was unanimously adopted.

In the context of an extraordinary Supervisory Board meeting via conference call on March 27, 2019, the review and assessment of the 2018 annual financial statements and the review and approval of the 2018 consolidated financial statements were carried out following a report by the Supervisory Board. The auditor described his unqualified audit certificate for the financial statements. The Supervisory Board also resolved to propose the distribution of a dividend of € 0.03 per share, € 474,750.00 in total, from the balance sheet profit to the Annual General Meeting. During this meeting, the

Supervisory Board also discussed the agenda of the Annual General Meeting and approved the invitation proposed by the Management Board.

In the second ordinary plenary meeting on May 15, 2019, the Supervisory Board was presented with information from the Management Board on the ompany's business development, order situation and financial performance in the first quarter of 2019. Further preparations for the Annual General Meeting were also on the agenda.

On June 29, 2019, an extraordinary Supervisory Board meeting via conference call was held on the amicable termination of the contract of employment with Management Board member Jörg Dorbandt. On July 2, 2019, Jörg Dorbandt was dismissed from the Management Board on the basis of the resolution adopted.

In the third ordinary plenary meeting on September 5, 2019, the Management Board presented the company's business development, order situation and financial performance in the second quarter of 2019 to the Supervisory Board. The Management Board informed the Supervisory Board of the details of the forecast adjustment for 2019 as a whole and the adopted and desired measures on cost adjustment.

In the fourth ordinary plenary meeting on December 17, 2019, the Supervisory Board received information from the Management Board on the company's business development, order situation and financial performance in the third quarter of 2019. During this meeting, the Management Board presented the plan for fiscal year 2020, which was approved by the Supervisory Board. The Management Board also reported on the stake acquired in the fleet management start-up ForkOn GmbH.

Forming Committees

As in the past, the three-member Supervisory Board did not form any committees in fiscal year 2019 and dealt with all issues as a single body.

Audit of the Annual Financial Statements and Consolidated Financial Statements for Fiscal Year 2019

Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Düsseldorf, was appointed by resolution of the Annual General Meeting on May 16, 2019, as auditor for the fiscal year from January 1 to December 31, 2019, and accordingly commissioned by the Supervisory Board Chairman. The Supervisory Board was provided a statement of independence from the auditor pursuant to No. 7.2.1 of the German Corporate Governance Code.

The scope of the audit included the Voltabox AG annual financial statements prepared by the Management Board pursuant to the provisions of the German Commercial Code (HGB) for the fiscal year from January 1 to December 31, 2019, the consolidated financial statements prepared by the Management Board pursuant to Section 315a HGB and on the basis of the International Financial Reporting Standards (IFRS) for the fiscal year from January 1 to December 31, 2019, the summarized management report for the Voltabox Group and for Voltabox AG and the dependency report.

Upon completion of the audit, Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Düsseldorf, provided an unqualified audit certificate for the annual financial statements, the consolidated financial statements and the summarized management report for the Voltabox Group and for Voltabox AG.

The auditor also determined that the information and monitoring system established by the Management Board meets the statutory requirements and is suitable for recognizing developments that could endanger the continued existence of the company at an early stage.

The auditor made the documents submitted for auditing the annual financial statements, the consolidated financial statements, the summarized management report for the Voltabox Group and for Voltabox AG, the proposal on the appropriation of the net income for the year and the report on the audit available to every member of the Supervisory Board. The audit was reported on and discussed at the Supervisory Board meeting on August 20,

2020. The auditors participated in the discussions on the annual and consolidated financial statements. They reported on the key audit results and were available to the Supervisory Board to answer any questions and provide additional information. Based on the final outcome of its examinations, the Supervisory Board approved the annual and consolidated financial statements. The annual financial statements are thereby approved.

In a meeting on August 20, 2020, the Supervisory Board also followed the Management Board's proposal to refrain from distributing a dividend in light of the negative earnings in the separate financial statements in accordance with the HGB.

The Supervisory Board was presented with a dependency report for fiscal year 2019. This report was prepared by the Management Board of Voltabox AG. The auditor issued an audit certificate for this report and reported the main results of the audit to the Supervisory Board. The Supervisory Board has the report and will tell about it at the Annual General Meeting and declare that there are no objections to the report from the Management Board.

The Supervisory Board did not exercise its right to inspect the company's accounts and correspondence in the past fiscal year.

The Supervisory Board expresses its gratitude and appreciation to the members of the Management Board and all of the Group's employees for their hard work and personal commitment in 2019 and in 2020 so far.

Delbrück, Germany, August 20, 2020

For the Supervisory Board,

Klaus Dieter Frers
Supervisory Board Chairman

Combined Management Report

Key Facts About the Group

Business Model

According to its Articles of Association, the business purpose of Voltabox AG (hereinafter also “the company” or “Voltabox”) is the development, manufacture and sale of e-mobility solutions, particularly Li-ion battery systems, as well as the management of patents, licenses and utility models. The company can purchase other companies domestically or abroad, hold interests in companies, establish branches, take over the management or representation of other companies and conclude intercompany agreements, as well as implementing all other measures and legal transactions that appear appropriate toward achieving or promoting the company’s aims provided no separate authorization is required.

The business model of the Voltabox Group (hereinafter also “Voltabox”) is based on the modular development, manufacture and sale of advanced battery systems for use in industrial sub-markets as well as in select high-margin mass markets. As such, Voltabox particularly benefits from the consistent modularization and scalability of the individual components, including the software for battery management. The modular nature of Voltabox battery systems and the extensive automation of manufacturing facilitate rapid market launch for systems which are also highly tailored to meet customer needs.

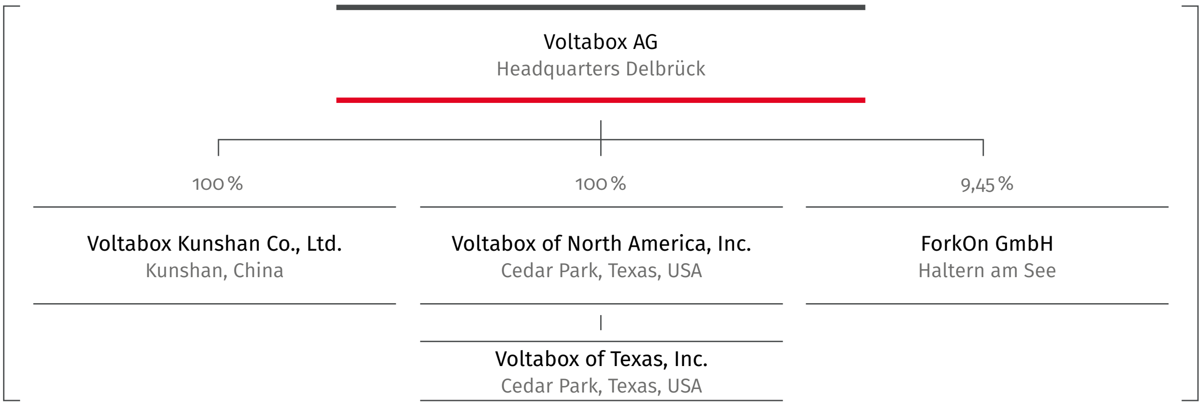
Hardware and software for the modules as well as the battery systems are constantly being refined and coordinated to ensure the efficiency, performance and safety of the products and thus their technological advantage. The self-developed, modular battery management system plays a special role in this context because it is essential for the performance of the entire battery system.

In addition to its core business, which consists mainly of industrial applications, Voltabox is also developing and manufacturing high-performance lithium-ion batteries for select segments of the mass market. On the one hand, the focus here is on starter batteries for high-performance motorcycles and sports cars. The Voltabox batteries replace conventional lead-acid batteries. Voltabox also develops, produces and sells standardized battery systems known as “battery packs” which are mainly used in pedelecs and e-bikes.

The level of automation in series production is constantly being increased to thereby improve the cost structure over the life cycle of the individual product series. In this respect, the serial production of the various battery modules with different cell formats and different cell chemistries represents an independent area of innovation within the company. At the end of the prior fiscal year, Voltabox installed a total of eight line-integrated industrial robots for manufacturing.

Group Structure

Voltabox Aktiengesellschaft (hereinafter “Voltabox AG”) is a joint stock corporation incorporated under German law. The company’s headquarters are at Artegastrasse 1, 33129 Delbrück, Germany. Voltabox AG’s shares are traded on the Frankfurt Stock Exchange in the Prime Standard segment. Around 58 % of the subscribed capital is currently owned by paragon GmbH & Co. KGaA, which is



also listed on the Frankfurt Stock Exchange in the Prime Standard segment. As such, Voltabox AG is a subgroup of its parent, paragon GmbH & Co. KGaA. On March 3, 2020, paragon GmbH & Co. KGaA announced that it had launched a process with the goal of selling its subsidiary Voltabox. Under this process, the spectrum of options ranges from a partial sale to a complete sale. Voltabox AG has its administrative headquarters in Delbrück.

The Voltabox Group's scope of consolidation includes the wholly owned subsidiaries Voltabox of Texas, Inc. (Cedar Park, Texas, U.S.), Voltabox of North America, Inc. (Cedar Park, Texas, U.S.) and Voltabox Kunshan Co., Ltd. (Kunshan, China). Voltabox AG holds a 9.45 % stake in ForkOn GmbH (Haltern am See, Germany).

ACCURATE – SMART BATTERY SYSTEMS – GmbH (Korntal-Münchingen) was merged with Voltabox AG during fiscal year 2019. In addition, Concurrent Design, Inc. (Texas) was merged with Voltabox of Texas, Inc. in fiscal year 2019.

In the second quarter of 2020, the Markgröningen development center was relocated to the headquarters of Voltabox AG. The Aachen site was divested as part of the sale of protective rights of the Voltamotion product segment, which has since been reversed.

Corporate Strategy

The strategic focus of Voltabox AG is on winning strategically significant customers and market share in specific fast-growing industrial sub-markets of e-mobility within the capital goods market. In addition to local public transportation (trolleybuses and the conversion of diesel buses to electric powertrains), intralogistics (forklifts and automated guided vehicles) and mining applications (underground mining vehicles), these sub-markets also include vehicles in the agricultural and construction sectors (compact-, wheel- and telel-oaders). On this basis, the consumer market also stands to be developed for individual applications in a targeted manner in the future. Voltabox is already active in select mass markets including starter batteries (especially for motorcycles) as well as standardized battery systems and battery packs (especially for pedelecs and e-bikes). Voltabox is addressing individual niches in order to enter the global car mass market, and is starting by supplying selected projects and models with tailor-made battery systems.

The industrial sub-markets are characterized by the substitution of lead-acid batteries and diesel backup generators with modern lithium-ion battery systems, as well as by the conversion of conventional combustion engines to electric powertrains in the case of the local public transportation market segment. Voltabox benefits directly from these continuing substitution effects resulting from users' overall cost consideration (including the ecological advantages) as well as from the increase in regulatory drivers. Global market access is generally achieved through cooperation with leaders in the respective sub-markets.

In the future, Voltabox will also deal with other sub-markets such as the electrification of rail vehicle applications (locomotives), EV buses and car and automotive applications.

Voltabox has strategically positioned itself as a pioneer in the e-mobility sector for high-performance battery systems. Its market position rests on four major strengths:

- Technology: technological edge over the competition
- Modularization: quick and cost-efficient development thanks to its modular design approach
- Specialist applications and comprehensive vehicle expertise: optimum system configuration for the application relevant to the customer
- Automation: cost-effective and scalable serial production

The competitive strategy of Voltabox can therefore largely be described as a niche strategy. In the medium term, the niche strategy of diversification also offers large sales opportunities in other sub-markets in which similar substitution effects are to be expected or introduced. The complex requirements regarding the performance, safety and reliability of the lithium-ion battery systems developed by Voltabox often play a decisive role here.

The company has defined two levels contributing to its future growth:

- Expanding the market position in already-occupied end markets (market penetration) as well as developing new end markets (market development) in the Voltapower core area as well as the Voltaforce product segment
- Expanding the existing product portfolio with standardized battery systems to tap into select segments of the mass market (horizontal diversification)

Control System

Alongside a high level of innovation, the organizational structure at Voltabox is characterized by flat hierarchies and fast decision-making. The company also has the character of a medium-sized company while combining a long-term strategic orientation with the integration abilities of a publicly traded company.

The Management Board of Voltabox AG regularly compares its strategy with the actual results achieved by the company. In review meetings, follow-up activities and optimization measures are determined at the management level as well as fundamental changes in direction when necessary.

To provide the Group with a better overview of the economic situation as well as improved planning and management of operational processes, the ERP system Microsoft Dynamics AX is used throughout the Group.

Voltabox AG has a comprehensive planning and control system for the operational implementation of strategic planning. This includes constant monitoring of monthly and annual plans. Both the Management Board and the Supervisory Board of Voltabox AG receive a detailed report as part of a regular review on business development. These reports document possible deviations from the planned figures in a target/actual comparison and provide the basis for business decisions. Another important control instrument is the regular manager meetings, where current developments and medium to long-term outlooks are discussed in addition to regular project status meetings.

Financial Performance Indicators

The Management Board regularly uses key figures to measure the economic success of the operative implementation of its corporate strategy. The control system takes into account the type and/or amount of one-time or extraordinary effects on the performance indicators, which are based on the development of the business. Due to the dynamic business development, the internal targets are generally set as bandwidths for measuring and managing operative performance, depending on the respective planning horizon.

At the beginning of fiscal year 2020, the Voltabox Group made a change in regard to financial performance indicators. The original performance indicators were Group revenue, EBIT margin, investments and lastly free cash flow as well. Against the backdrop of factors including the sale process initiated by the majority shareholder, the Voltabox Group is basing its internal management more heavily on market value-oriented figures. For this reason, the EBIT margin performance indicator has been replaced with EBITDA margin. Investments are no longer a financial performance indicator in the current corporate situation. For Voltabox AG, revenue and EBITDA margin are also considered financial performance indicators.

Group Revenue

The revenue contribution of individual product series generally varies during the various phases of its product life cycle. The generally new sub-markets of e-mobility are growing at different speeds. The future annual growth rates of revenue depend on the mix of the respective application areas. As such, Group revenue is subject to various influencing factors, a fact which is accounted for with the provision of a target corridor (range) when providing forecasts.

EBITDA Margin

The EBITDA margin is an indicator of the operative profitability of Voltabox AG and also takes the current focus on developing the company's cash flow into consideration. The amount of capitalized development services according to IAS 38 (as an investment in intangible assets) remains a key factor in corporate management. The EBITDA margin is shown as a relative key figure when providing forecasts.

Free Cash Flow

Free cash flow (FCF) reflects the internal financing capability of the Voltabox Group, and thus constitutes a decisive performance indicator for the company's success due to the existing expansion goals. In consideration of the parallel development of dynamic customer projects and constant optimizations of the product portfolio in this context in the form of investments in intangible assets, the Management Board employs qualitative indicators in the forecast in regard to the desired level of cash flow.

Nonfinancial Performance Indicators

As the company is strategically positioned as an innovative provider of technologically sophisticated and high-quality e-mobility solutions, the Management Board also uses nonfinancial performance indicators as part of its corporate management. These are not relevant for the management of the Voltabox Group.

Employees

For the Voltabox Group, positioned in the middle of the e-mobility megatrend, the high demand for specialists from the dynamically growing industry means that it is necessary to win over not only well-trained developers, but also employees who can manage projects, sales and customer proximity.

In fiscal year 2019, a total of 86 positions were removed (prior year: 145 new positions). Of these, 31 were attributed to the subsidiary Voltabox of Texas (prior year: 51 new hires). Against the backdrop of the HR measures, the fluctuation rate increased to 31.0 % (prior year: 6.9 %). The share of female employees at Voltabox has increased to 17.3 % (prior year: 14.1 %). At 50.8 %, the number of employees with university degrees also increased slightly (prior year: 45.5 %). The share of severely disabled employees was 0 % (prior year: 0 %). The average age remained virtually unchanged at 38.5 years (prior year: 38.3) and the average length of employment increased to 1.6 years (prior year: 0.9).

Employee Development in the Voltabox Group

	Dec. 31, 2019	Dec. 31, 2018	Change
Number of employees	**191**	235	-18.7 %
Number of those engaged in development	**71**	81	-12.3 %
Number of temporary employees	**0**	42	-100.0 %
Number of those engaged in development	**0**	0	0.0 %

Personnel expenses totaled € 15.9 million in the reporting period (prior year: € 13.6 million). Of this, € 13.1 million was attributable to wage and salary costs (prior year: € 12.0 million), € 2.0 million to social contributions and pensions (prior year: € 1.6 million) and € 0.8 million to expenses for temporary workers (prior year: € 1.7 million).

Distribution of permanent employees at Group sites:

	Dec. 31, 2019	Dec. 31, 2018	Change
Delbrück (corporate headquarters, North Rhine-Westphalia)	**134**	139	-3.6 %
Aachen (North Rhine-Westphalia); until Dec. 31, 2019	**10**	10	0.0 %
Markgröningen (Baden-Württemberg)	**7**	16	-56.3 %
Total in Germany	**151**	165	-8.5 %
Cedar Park (Texas, USA)	**39**	70	-44.3 %
Kunshan (China)	**1**	0	100.0 %
Total abroad	**40**	70	-42.9 %

Quality and the Environment

Voltabox AG has established a management system according to IATF 16949 and ISO 9001 standards both at its German sites and at Voltabox of Texas. The Delbrück location has been certified since 2018. Establishing an interactive and process-oriented management system guarantees the Group-wide knowledge management at all levels of product development and realization.

We have integrated environmental protection and occupational health and safety requirements into our management system, making them an integral part of our corporate mission statement. The efficacy of this process is confirmed via an annual audit according to DIN EN ISO 14001.

Other Control Benchmarks

In addition to the most important financial and non-financial performance indicators, further control benchmarks are used to manage Voltabox. These other control benchmarks are of subordinate importance compared to the performance indicators. The Management Board pays particular attention to activities in research and development, materials management and free liquidity as indicators for control and further development.

Research and Development

In fiscal year 2019, Voltabox capitalized a total of € 7.8 million (prior year: € 3.0 million) for development costs. This corresponds to 13.7 % of revenue (prior year: 4.5 %). The ratio of capitalized development costs was approximately 75.5 % (prior year: 37.9 %) of overall research and development costs. Across the period from 2011 to 2019, the ratio of cumulative capitalized development costs to total development costs was 81.5 %. The Management Board views the corresponding capitalization of this internal work as appropriate compared to others in the industry.

The number of employees in research and development decreased during the reporting year by 12.3 % to 71 (prior year: 81). The increased fluctuation due to the focusing strategy contributed to this. This corresponds to a ratio of around 37.2 % (prior year: 29.3 %) of all Group employees as of the balance sheet date.

Materials Management

Materials management plays a special role at Voltabox with its increasingly automated series production and a broad portfolio of battery modules and systems. In the reporting year, the material input ratio (calculated from the ratio of cost of materials to revenue and inventory changes) was 82.1 % (prior year: 56.4 %).

Battery cells bought up in great quantities by world-leading cell manufacturers represent the majority of our material costs as intermediates for battery modules. Factors particularly including smaller series deliveries resulted in a high material input ratio due to the fact that scaling effects could not be used to the necessary extent.

Liquidity

In addition to the organic expansion of the product portfolio and the relevant production capacities, the Voltabox AG growth strategy also comprises the acquisition of companies and/or complementary technology. The business model of Voltabox AG requires the ongoing availability of sufficient liquid funds. Finally, the company's liquidity planning contributes to the internal management of the balance sheet structure.

Cash and cash equivalents developed as of the reporting date as follows:

€ '000	**2019**	2018
Cash and cash equivalents	**5,036**	28,234

Financial Management

The financial management of the company does not include an independent target system. Rather, the Management Board uses internal financial management to plan and monitor the implementation of its growth strategy. In this context, comprehensive financial planning is carried out on the basis of revolving sales planning, from which investment and liquidity plans are then derived for the Voltapower and Voltaforce product segments. Additionally, the subsidiaries are consolidated at a Group level on a monthly basis.

Dividend Policy

The Management Board has formulated a dividend policy that is designed to meet the company's strategic goal of profitable growth. On the one hand, this is intend-ed to enable Voltabox shareholders to increase the value of their shares over the medium term through dividend payments to provide an additional incentive for long-term investment decisions. On the other hand, the company's available liquidity should be invested as profitably as possible during its capital-intensive growth phase. Future corporate profits should therefore be reinvested. In the long term, however, the Management Board considers as appropriate a disbursement ratio in the range of 20 to 40 % of Voltabox AG's balance sheet profit (as reported in the financial statements according to the German Commercial Code).

In light of the negative earnings according to the separate financial statements of Voltabox AG pursuant to the HGB, the Management Board and Supervisory Board are refraining from paying a dividend for fiscal year 2019. Dividend distribution will resume as soon as the relevant conditions have been met.

Remuneration Report of the Management Board and Supervisory Board

The company is committed to a high degree of transparency in its reporting. This also applies to the remuneration of the Management Board, which is disclosed and explained in full in the remuneration report, together with all its components and on an individualized basis. The Management Board and Supervisory Board have therefore decided to use the Management Board remuneration sample tables provided by the German Corporate Governance Code (GCGC) in the remuneration report.

Management Board Remuneration

The remuneration of the members of the Management Board consists of an annual fixed remuneration, ancillary benefits and a one-year variable remuneration component. In addition to the fixed remuneration and ancillary benefits paid to a former member of the Management Board in the fiscal year, remuneration was paid out for post-employee benefits and was partially accrued in the past fiscal year. A cap (minimum/maximum) is not provided for the variable compensation component. A variable compensation component for multiple years has not been specified. Finally, the total remuneration still includes a service cost under IAS 19. This is recognized pursuant to the GCGC as part of total remuneration, even though this is not a newly granted contribution in the narrower sense, but a past decision of the Supervisory Board that continues to be effective.

The total remuneration of the Management Board contains salaries and short-term benefits of € 488 thousand (prior year: € 596 thousand) and includes fixed components of € 488 thousand (prior year: € 486 thousand) and variable components of € 0 thousand (prior year: € 110 thousand). The main variable remuneration components are oriented on EBIT as defined by IFRS and the positive economic growth of the company's share price, both as compared with the balance sheet date.

The following table shows the contributions granted to the members of the Management Board in the reporting year:

Contributions granted	**Jürgen Pampel** Chief Executive Officer, CEO Entry date: Aug. 9, 2017		**Jörg Dorbandt** Management Board, COO Entry date: Dec. 1, 2018 Leaving date: Jul. 1, 2019		**Andres Klasing** Management Board, CFO Entry date: Aug. 9, 2017 Leaving date: Nov. 29, 2018	
€	**2019**	2018	**2019**	2018	**2019**	2018
Fixed remuneration	**210,000**	168,000	**85,000**	17,000	**0**	135,667
Post-employee benefits	**0**	0	**135,000**	928	**0**	136,333
Ancillary benefits	**52,068**	21,307	**5,800**	17,928	**0**	6,488
Total	**262,068**	189,307	**225,800**		**0**	278,488
Annual amount to be included in the multi-year variable remuneration*	**0**	38,000		0	**0**	72,333
Total remuneration	**262,068**	227,307	**225,800**	37,874	**0**	350,821

* Capped (maximum) and divided as a variable compensation component for multiple years, which takes into account positive and negative development.

The following table shows the contributions paid to the members of the Management Board in the reporting year:

Contributions paid	Jürgen Pampel Chief Executive Officer, CEO Entry date: Aug. 9, 2017		Jörg Dorbandt Management Board, COO Entry date: Dec. 1, 2018 Leaving date: Jul. 1, 2019		Andres Klasing Management Board, CFO Entry date: Aug. 9, 2017 Leaving date: Nov. 29, 2018	
€	**2019**	2018	**2019**	2018	**2019**	2018
Fixed remuneration	**210,000**	168,000	**85,000**	17,000	**0**	135,667
Post-employee benefits	**0**	0	**135,000**	928	**0**	136,333
Ancillary benefits	**52,068**	21,307	**5,800**	17,928	**0**	6,488
Total	**262,068**	189,307	**225,800**		**0**	278,488
Annual amount to be included in the multi-year variable remuneration*	**0**	38,000		0	**0**	72,333
Total remuneration	**262,068**	227,307	**225,800**	37,874	**0**	350,821

* Capped (maximum) and divided as a variable compensation component for multiple years, which takes into account positive and negative development.

Supervisory Board Remuneration

In accordance with the Articles of Association, the re-mun-eration of members of the first Supervisory Board is established by the Annual General Meeting, which decides on the discharge of the members of the first Supervisory Board.

The members of the Supervisory Board receive a fixed remuneration of € 10 thousand, in line with the Articles of Association. The Supervisory Board Chairman receives € 20 thousand, while the Vice-Chairman of the Supervisory Board receives € 15 thousand per fiscal year. If a member is only appointed to the Supervisory Board for part of the fiscal year, the remuneration is recognized pro rata temporis. If the remuneration is subject to withholding tax, the sum of the remuneration is paid minus the withholding tax due.

The company has included the members of the Supervisory Board in a directors' and officers' liability insurance policy to the benefit of the members of the Management Board and Supervisory Board at market conditions.

In addition, the members of the Supervisory Board receive compensation for any reasonable, proven expenses associated with the fulfillment of their duties, as well as for any sales tax allocated to the remuneration received as Supervisory Board members, provided they are authorized to invoice the company separately for sales tax and to exercise this right.

The members of the Supervisory Board received fixed remuneration totaling € 45 thousand in the year under review.

The following table shows the remuneration of the Supervisory Board members:

EUR	Klaus Dieter Frers Supervisory Board Chairman		Prof. Dr. Martin Winter Supervisory Board Vice-Chairman		Hermann Börnemeier Supervisory Board Member	
	2019	2018	**2019**	2018	**2019**	2018
Fixed remuneration	**20,000**	20,000	**15,000**	15,000	**10,000**	10,000
Total remuneration	**20,000**	20,000	**15,000**	15,000	**10,000**	10,000

Economic Report

Global Economic Conditions

In its global economic outlook in[1] October 2019, the International Monetary Fund (IMF) indicated that global economic growth, which had slowed substantially in the last three quarters of 2018, had only stabilized to a limited extent in the first half of 2019. Economic performance for this year was marked particularly by flagging momentum in production activities. IMF economists emphasized that the outlook remains precarious against the backdrop of increasing trade disputes and geopolitical tensions. The business climate and global trust in governments and markets have been impaired.

Global economic growth was estimated at 3.0 % for 2019, the lowest level since the crisis years of 2008 and 2009 as well as a significant decline relative to the growth from 2017 to 2018. Global growth of 3.3 % had been expected for 2019 in April. The uneven distribution of economic growth between developed economies (1.7 %) and emerging markets (3.9 %) remained unchanged, and the adjustment of the expected economic growth had a roughly equivalent impact on both categories. In particular, economic growth in 2019 was estimated to have amounted to 2.9 % in the U.S. (prior year: 2.9 %), 1.2 % in the eurozone (prior year: 1.9 %), 0.5 % in Germany (prior year: 1.5 %) and 6.1 % in China (prior year: 6.6 %).

In this still good global economic environment, the German economy grew for the ninth consecutive year in the past fiscal year, but the growth has lost momentum once again and stands significantly below the average level for developed economies.

According to data from the German Federal Statistical Office ("Destatis")[2], following price, seasonal and calendar adjustment, gross domestic product (GDP) saw no change in the fourth quarter of 2019 (prior year: +0.9 %). This follows an increase of 0.1 % in the third quarter (prior year: 1.1 %), a decrease of 0.1 % in the second quarter (prior year: 2.3 %) and an increase of 0.4 % in the first quarter (prior year: 1.4 %). With an adjusted growth rate of 1.2 % (prior year: 1.0 %), private consumer spending, which is important for the automotive industry, supported not only government spending but also GDP in the fourth quarter, after 0.4 % (prior year: 0.2 %) in the third quarter, 0.1 % (prior year: 1.0 %) in the second quarter and 1.2 % (prior year: 1.7 %) in the first quarter.

As a manufacturer of battery systems for industrial applications, Voltabox generated the majority of its revenues in fiscal year 2019 in the intralogistics market segment (especially forklifts and automated guided vehicles). In addition, revenue was also realized mainly from customers in the fields of trolleybuses, pedelecs and e-bikes, applications in agriculture and construction and mining vehicles. Voltabox's activities focus on business partners in Germany, the European Union, and the USA. These, in turn, sell the vehicles and systems they produce worldwide. Overall economic development is therefore important for Voltabox in that it affects the sales opportunities for the vehicle and system manufacturers it supplies, and thus also indirectly affects the development of end user demand for Voltabox products.

Market Development 2019

Despite persistently adverse economic conditions over the course of the year, the reporting year was marked by sustained momentum in the industrial sub-markets relevant to Voltabox as well as in the addressed mass markets in particular. In addition to the persistent substitution effects in industry, where diesel emergency power generators and lead-acid batteries being are being replaced by modern lithium-ion battery systems, this development was also based on the increasingly socially-driven trend towards e-mobility in the market for consumer goods.

1 https://www.imf.org/en/Publications/WEO/Issues/2019/10/01/world-economic-outlook-october-2019
2 Federal Office of Statistics, press release from January 15, 2020 – 018/2020

In its report entitled "Industrial and Commercial Electric Vehicles on Land 2017 – 2027,"[3] the market research institute IDTechEx estimates growth in the market segments currently occupied by Voltabox (trolleybuses, forklifts and AGVs, mining vehicles, construction and agricultural vehicles, pedelecs and e-bikes, golf carts and motorcycles) at 11 % for 2019.

Trolleybuses represent a subsegment of the market for electric buses, with a total of approximately 40,000 vehicles in 370 cities and 47 countries worldwide[4]. As a result of the increasing electrification of buses, trolleybuses are also benefiting increasingly from the rapid development in drive technology, electrical energy storage and charging infrastructure.

The materials handling and intralogistics specialist association of the German Association of Machinery and Plant Engineering Companies (VDMA) expects stagnation in the German intralogistics sector for 2019. After initially indicating growth of 3 %, the forecast was adjusted due to a weakened order situation. Asia remains the largest sales market for intralogistics applications, especially for forklifts.[5] However, the trend toward electrification has made the most progress in Western industrialized countries, with Europe as the largest individual market for electric forklifts (with lead-acid batteries). In 2019, a number of leading OEMs of intralogistics applications such as forklifts recorded declining sales figures[6]. In the replacement business, on the other hand, which refers to the equipment of industrial trucks already in the field and in which Voltabox is nearly exclusively active, no significant changes in the market dynamic were observed.

According to estimations by experts[7], there are currently around 33,000 vehicles and drilling machines in use in underground mining. Of these, load haul dumps make up the largest vehicle group with around 13,500 units, followed by mining vehicles with an estimated 8,400 units and drilling machines with around 11,100 units. Komatsu Mining Corp., an exclusively supplied customer in this market segment, expects a temporary decline in demand of between 10 % and 20 % for the fiscal year 2019 ending on March 31, 2020 due to current challenges in the Indonesian market.

The customer BMW Motorrad, for which Voltabox exclusively manufactures modern and light lithium-ion starter batteries, achieved a sales record in 2019 with more than 175,000 models sold. The corporation is currently gradually equipping its model portfolio with the option of Li-ion starter batteries from Voltabox.

Based on results from the first half of 2019, the German Two-Wheeled Vehicle Industry Association (ZIV)[8] anticipates that a new sales record for e-bikes and pedelecs will be reached in 2019. E-bikes currently account for roughly 4.5 million of the 75 million bicycles in Germany. At the same time, the share of bicycles with electrical support engines is growing significantly faster than the overall market for two-wheeled vehicles. ZIV anticipates growth of 12 % for 2019 as a whole.

Business Performance

The Voltabox Group did not achieve any company growth in fiscal year 2019. Sales volumes in the area of intralogistics with primary customer Triathlon declined over the year as a whole. The company was also unable to realize a major project order in the U.S. that had been scheduled for fiscal year 2019.

---

3 IDTechEx, study "Industrial and commercial electric vehicles on land 2017-2027": https://www.idtechex.com/de/research-report/industrial-and-commercial-electric-vehicles-on-land-2017-2027/505

4 www.trolleymotion.eu

5 IDTechEx, study "Industrial and commercial electric vehicles on land 2017-2027": https://www.idtechex.com/de/research-report/industrial-and-commercial-electric-vehicles-on-land-2017-2027/505

6 https://www.wallstreet-online.de/nachricht/12071492-kion-jungheinrich-kion-faellt-prognose-2020-aus/all

7 Mining Report 153, 2017, no. 2

8 German Two-Wheeled Vehicle Industry Association (ZIV), press release from September 3, 2019: Bicycle and e-bike industry off to a successful start to the season

As a consequence of these substantial and partially project-related uncertainties in regard to revenue generation, Voltabox AG revised its business planning for subsequent years with significantly more conservative assumptions. This resulted in a significant need for value adjustments for individual assets. In the context of this adjustment, the Group also reviewed the future benefits from all assets. This resulted in a need for impairment for fiscal year 2019 of € 86.9 million. In addition, earnings are also burdened by a € 3.0 million impending loss provision for a project that will result in heavy losses in the future. Voltabox AG sold intangible assets together with the Aachen site as part of the spin-off of the Voltamotion product segment in fiscal year 2019. Due to the COVID-19 pandemic, however, the use of these rights by the buyers is only possible subject to a delay; as a result, the contract structure has been revised. This has resulted in a retroactive EBIT/EBITDA effect of € 9.2 million. The corresponding revenue has been eliminated.

Revenue of € 56.6 million (prior year: € 66.9 million) was generated entirely with third parties. With a change of 15.4 %, Voltabox recorded a decline in revenue development. The largest contribution to revenue generation came from series production and inventory sales of battery modules for intralogistics applications, particularly forklifts. Other revenue drivers included battery systems for use in trolleybuses, mining vehicles and agricultural vehicles. Voltabox also collected revenue from the sale of battery packs for pedelecs and e-bikes as well as starter batteries for motorcycles.

The EBIT for the Voltabox Group was € -107.6 million (prior year: € 5.6 million), which corresponds to an EBIT margin of -190.0 % without taking adjustment effects into consideration (prior year: 8.4 %).

The EBITDA of the Voltabox Group was € -14.4 million (prior year: € 9.6 million). This corresponds to an EBITDA margin of -25.4 % (prior year: 14.3 %).

Key Factors of Business Performance

The business performance of the Voltabox Group in the past fiscal year was significantly marked by a comprehensive refocusing. This was triggered by project postponements and delivery interruptions in cell procurement, which has in turn led to significant delays in project development workflows and a significant postponement of revenue recognition. Fixed costs built up in line with the originally planned revenue growth had to be adjusted significantly in the current fiscal year. In the course of this, it was also planned to sell the Voltamotion product segment.

At the same time, extensive developments were made to prepare for the series production orders for the fiscal year 2020. In fiscal year 2019, the Voltabox Group essentially focused on the areas of cost reduction and efficiency enhancement, optimization of product management and securing market share. The milestones achieved include, in particular, the value-analytical revision of modular components, the development of new innovative product solutions, the expansion of spatial capacities at the U.S. site, the development of further market segments and the acquisition of new customers.

Business performance in the reporting year was dominated by the automated series production of ready-to-use battery modules and systems and the sale of preproduced products of this type for intralogistics. Furthermore, the production of battery systems for trolleybuses for use in various public transport networks worldwide, including in Dayton, Ohio (order won 2018), has been a focus. Business performance was also influenced by the development of power electronics components in the Voltamotion product segment.

The postponement of a project in the U.S. for equipping telecommunications radio masts with back-up batteries due to changed customer requirements, which necessitated a redesign of the system, had a significant impact on business performance. In addition, Voltabox was confronted with a supply interruption by an important cell manufacturer, which suspended deliveries for a period of more than three months due to a technology conversion for one type of cell. The cell in question was intended for the production of battery modules for the intralogistics market segment. During the period of production interruption caused by the postponed delivery, Voltabox was only able to generate revenue to a much lesser extent.

The development of the subsidiary Voltabox of Texas, Inc. was characterized by the postponement of a major order and, subsequently, a lack of revenue in the reporting year. As a result, the share of revenue of the U.S. subsidiary Voltabox of Texas, Inc. in the reporting year was only 10.9 % (prior year: 17.7 %).

Due to revenue postponements in the reporting year, the Group's cost base could no longer be adequately covered. As a result, the management has set up a cost adjustment program. The level of receivables was reduced later in the year than planned, but essentially reached the agreed and planned amount by the end of the year. Inventories were also reduced during the reporting year.

As part of the revenue postponements and the associated adjustment of the forecast, the Management has drawn up various scenarios for divestments and balance sheet contractions as part of the restructuring measures and repositioning in order to ensure the value-preserving use of inventories of finished and unfinished products, in particular of old-generation cells, in 2019. The results have confirmed that the market demand for modules and systems with first-generation cells will continue beyond 2019. For high-volume sales, however, significant price reductions are currently necessary, e.g. due to the changed pricing structure in the market for lithium-ion battery modules. For this reason, inventories have been written down to a significant extent and an impending loss provision has been recognized. The value of raw materials and goods for resale was reduced by € 48.0 million. Intangible assets were also written down. A more detailed explanation of this can be found in the section "Earnings of the Voltabox Group".

Assets, Financial Position and Earnings

Earnings of the Voltabox Group

With a decline in revenue of 15.4 % to around € 56.6 million (prior year: € 66.9 million), the Voltabox Group was not able to continue the previous growth dynamics in fiscal year 2019 due to revenue postponements. The revenue forecast of € 70 to 80 million as adjusted on August 12, 2019, was subsequently not achieved.

Other operating income decreased to € 1.8 million (prior year: € 2.1 million), this mainly includes the sale of fixed assets and foreign currency effects. The inventory of finished goods and work in progress decreased by € 11.6 million, following an increase in the prior year of € 8.0 million. Capitalized development costs increased by 158.8 % to € 7.8 million (prior year: € 3.0 million) due to new projects in the area of supplying battery systems for public transport. The cost of materials developed particularly strongly, increasing by 6.7% to € 45.0 million (prior year: € 42.2 million). Due to medium-term contractual commitments with a major cell supplier in the year under review, it was not possible to realise noticeable price reductions in cell purchasing. The material input ratio (calculated from the ratio of cost of materials to revenue and inventory changes) increased to 82.1 % (prior year: 56.4 %), primarily as a result of in-creased part prices for pre-series systems. This results in a gross profit for fiscal year 2019 of € 19.4 million (prior year: € 37.8 million), which constitutes a gross profit margin of 34.3 % (prior year: 56.5 %).

Personnel expenses rose by 16.8 % to € 15.9 million (prior year: € 13.6 million), mainly due to new hires at the beginning of the fiscal year. As a result of the omitted revenue growth, the personnel expense ratio increased to 28.1 % (prior year: 20.3 %). Other operating expenses increased to € 17.9 million (prior year: € 14.6 million). Earnings are substantially burdened by impairments of € 86.9 million (prior year: € 0.3 million). These consist of value adjustments to intangible assets and property, plant and equipment of € 21.8 million, impairment losses on goodwill of € 9.8 million and the write-down of current assets of € 55.4 million.

The adjustment of intangible assets results from the devaluation of capitalized development costs according to IAS 38 and of an investment grant to Triathlon Batterien GmbH. The impairment of goodwill results from the value adjustments of ACCURATE – Smart Battery Systems – GmbH, Concurrent Design, Inc. and the goodwill of Voltabox of Texas, Inc. The adjustment to current assets is mainly due to inventory adjustments of € 48.0 million and an impairment loss of € 7.3 million in respect of IFRS 15. Earnings before interest, taxes, depreciation and amortization (EBITDA) thus decreased to € -14.4 million (prior year: € 9.6 million), which corresponds to an EBITDA margin of -25,4 % (prior year: 14.3 %). The adjusted EBITDA of € -2.2 million (prior year: € 9.6 million) results from the adjustment of the accrued provision for impending losses and the sale of IP rights.

After increased depreciation and amortization of property, plant and equipment and intangible assets of € 6.3 million (prior year: € 3.6 million), earnings before interest and taxes (EBIT) decreased to € -107.6 million (prior year: € 5.6 million). The EBIT margin therefore decreased significantly to -190.0 % (prior year: 8.4 %). Due to the one-off impairments in the course of the refocusing in 2019, the earnings forecast could therefore not be achieved. Adjusted for these impairments, the EBIT margin is -15.0 %. The EBIT adjusted for the valuation allowance without regular ECL, the provision for impending losses and the sale of IP rights amounts to € -8.5 million (prior year: € 5.6 million).

As a result of higher financing costs, the financial result fell to € -0.2 million (prior year: € -0.1 million). This results in a substantial reduction in earnings before taxes (EBT) to € -107.8 million (prior year: € 5.5 million). Taking into account income taxes of € 5.9 million (prior year: € 2.9 million) due to deferred taxes, the Voltabox Group generated a consolidated net income of € -101.9 million (prior year: € 2.6 million) in the year under review. This corresponds to earnings per share of € -6.44.

Segment revenues for Europe amount to € 65.2 million (prior year: € 56.9 million) and segment revenues for North America amount to € 6.2 million (prior year: € 11.8 million). EBIT for the Europe operating segment amounted to € -82.0 million (prior year: € 7.4 million). The North America operating segment reported EBIT of € -25.0 million (prior year: € -2.0 million).

Net Assets of the Voltabox Group

The assets of the Voltabox Group decreased to € 89.1 million as of the reporting date mainly due to impairments of current and intangible assets (December 31, 2018: € 181.5 million).

Noncurrent assets decreased to € 31.3 million (December 31, 2018: € 51.9 million). The primary reasons for the decrease were the reduced intangible assets of € 10.7 million (December 31, 2018: € 28.0 million). Other assets also declined to € 2.1 million as of the reporting date (December 31, 2018: € 5.0 million) due to the reduction of contract assets and a reclassification of a receivable (previously treated as a rental payment). Property, plant and equipment increased to € 17.0 million (December 31, 2018: € 9.2 million) due to effects resulting from IFRS 16, and new financial assets worth € 1.4 million have been added.

Current assets decreased to € 57.9 million (December 31, 2018: € 129.7 million). This is mainly due to the decline in cash and cash equivalents and the reduction in receivables. At the end of the fiscal year, cash and cash equivalents amounted to € 5.0 million (December 31, 2018: € 28.2 million). Inventories were reduced to € 15.7 million (December 31, 2018: € 27.2 million). The value of inventories also declined due to the write-downs made. These mainly result from the fact that modules, parts and components of an old cell generation can no longer be used commercially. Trade receivables decreased by € 24.9 million to € 31.1 million (December 31, 2018: € 56.0 million) as a result of repayment by a customer. Receivables due from related companies also decreased to € 5.3 million (December 31, 2018: € 11.7 million). Other assets decreased to € 0.7 million (December 31, 2018: € 6.5 million).

Noncurrent provisions and liabilities increased significantly to € 15.4 million (December 31, 2018: € 7.8 million), which is due in particular to the increase in noncurrent leasing liabilities to € 12.6 million (December 31, 2018: € 0.0 million) against the background of initial recognition in accordance with IFRS 16. While long-term loans increased to € 0.3 million (December 31, 2018: € 0.1 million), deferred taxes decrease to € 2.5 million (December 31, 2018: € 7.7 million).

Current provisions and liabilities increased to € 22,0 million (December 31, 2018: € 19.2 million). The primary cause of this is the recognition of an impending loss provision of € 3.0 million (December 31, 2019: € 0.0 million). Income tax liabilities were fully derecognized as of the reporting date through a loss carryback, while other current liabilities decreased to € 3.4 million (December 31, 2018: € 4.8 million). Current loan liabilities also decreased to € 0.3 million (December 31, 2018: € 3.5 million).

Voltabox Group's equity decreased to € 51.8 million (December 31, 2018: € 154.5 million), which resulted from the consolidated net income of the 2019 reporting year.

Financial Position of the Voltabox Group

Cash flow from operating activities improved in the period under review to € -10.9 million (prior year: € -54.8 million). The main reason is the significant reduction in trade receivables due to the repayment following temporarily extended payment terms for an important customer in intralogistics in the third and fourth quarters of 2018 and a purchase of goods that has been offset against outstanding trade receivables. In addition, a significant share is attributable to the cash value adjustment of inventories in the amount of € 48.0 million.

Cash flow from investment activity improved to € -8.5 million (prior year: € -19.1 million). The cash outflows for property, plant and equipment of € 6.3 million (prior year: € 1.6 million) and for intangible assets of € 9.1 million (prior year: € 11.9 million) reflect the CAPEX investments of € 15.4 million (prior year: € 13.6 million), which therefore deviate slightly from the target figures of around € 14 million forecast by the Management Board. The investment cash flow is positively influenced by proceeds from disposals of property, plant and equipment of € 7.3 million (prior year: € 0.0 million) and proceeds from disposals of intangible assets of € 1.1 million (prior year: € 1.8 million).

Cash flow from financing activities decreased to € -3.9 million (prior year: € -0.5 million).

Cash and cash equivalents decreased to € 5.0 million as of the end of the reporting period (prior year: € 28.2 million), mainly as a result of the loss situation in operating activities. The Voltabox Group was solvent at all times during the reporting year.

General Statement on the Net Assets, Financial Position and Earnings of the Voltabox Group

In the past fiscal year, the assets, financial position and earnings of the Voltabox Group were marked by significant shifts in revenue and the associated negative impact on earnings due to the undercoverage of fixed costs. Impairment effects also burdened the consolidated net income. For this reason, earnings were mainly influenced by the significant cost adjustments and structural adjustments within the organization. Here, the increase in personnel and material costs were a major factor. The countermeasures that were instituted could not yet fully compensate for the high cost burden in fiscal year 2019. In the reporting year, the net assets were characterized in particular by significant movements in current assets, especially the reduction in receivables together with the reduction of inventories. The equity ratio decreased to 58.1 % (December 31, 2018: 85.1 %). Thanks to the relatively high equity ratio, Voltabox AG's financial position remains firm. As of the end of the fiscal year, outstanding receivables resulted in the liquidity situation continuing to put a strain on the Voltabox Group's balance sheet.

Earnings of Voltabox AG (Individual Financial Statements)

The Voltabox Group continued its growth dynamics in fiscal year 2019 with revenue growth in the separate financial statements of 21.5 % to around € 63.3 million (prior year: € 52.1 million). This includes revenues that were realized by Voltabox AG for the first time due to the merger with Accurate – Smart Battery Systems – GmbH in fiscal year 2019. Due to new projects in the field of supplying battery systems for local public transport, capitalised development costs increased to € 1.1 million (prior year: € 0.1 million). Other operating income increased to € 2.6 million (prior year: € 1.5 million), primarily due to the sale of fixed assets. The EBIT margin deteriorated considerably to -173.3 % (prior year: 6.4 %), influenced mainly by depreciation of receivables and loans from Voltabox of Texas, Inc. There is also a significant decline in the EBITDA margin from 9.6 % in 2018 to -133.2 % in 2019.

The cost of materials increased by 141,4 % to € 93.0 million (prior year: € 38.5 million). Influenced by the increase in revenue and higher parts prices for pre-series deliveries, as well as the significant reduction of margins, the material input ratio (calculated from the cost of materials in relation to revenue and the change in inventory) increased to 151.5 % (prior year: 64.4 %). This results in a gross profit for fiscal year 2019 of € -27.9 million (prior year: € 22.9 million), which constitutes a gross profit margin of -44.0 % (prior year: 43.9 %).

Personnel expenses rose by 42.2 % to € 10.7 million (prior year: € 7.5 million), mainly due to the increase in personnel in the fiscal year in proportion to the increase in revenue. The personnel expense ratio was kept nearly stable at 16.9 % (prior year: 14.5 %). Other operating expenses increased significantly to € 45.8 million (prior year: € 10.3 million), as receivables and loans from Voltabox of Texas, Inc. were recorded.

Earnings before interest, taxes, depreciation and amortization (EBITDA) thus decreased to € -84.4 million (prior year: € 5.0 million), which corresponds to an EBITDA margin of -133.2 % (prior year: 9.6 %).

With increased depreciation and amortization totaling € 7.8 million (prior year: € 1.7 million) due to an impairment on the investment grant to Triathlon in intangible assets and planned amortization of tangible assets, earnings before interest and taxes (EBIT) deteriorated considerably to € -109.7 million (prior year: € 3.4 million). The EBIT margin accordingly decreased to -173.3 % (prior year: 6.5 %).

Owing to repayments, the financial result improved to € 0.3 million (prior year: € -0.1 million), while earnings before taxes (EBT) decreased to € -109.4 million (prior year: € 3.3 million). In the period under review, Voltabox AG generated a net loss for the year of € -107.8 million (prior year: € 2.6 million).

Net Assets of Voltabox AG

Voltabox AG's assets decreased by € 104.0 million to € 61.8 million as of the balance sheet date mainly due to a reduction in receivables and a derecognition of receivables (December 31, 2018: € 165.8 million).

Noncurrent assets decreased by € 30.8 million to € 17.0 million (December 31, 2018: € 47.8 million). Financial assets decreased by € 24.6 million to € 13.0 million (prior year: € 37.6 million), mainly due to impairments on loans and investments. This decline is mainly attributable to the impairment of the Texas loan, which is not considered to be recoverable. The decrease in intangible assets to € 1.4 million (December 31, 2018: € 7.9 million) can be mainly attributed especially to the impairment of the investment grant to Triathlon.

Current assets decreased by € 73.3 million to € 44.7 million (December 31, 2018: € 118.0 million). This is mainly attributable to the reduction of trade receivables. Cash and cash equivalents now amount to € 1.4 million (December 31, 2018: € 26.8 million). Trade receivables decreased by 48.4 % to € 26.1 million (December 31, 2018: € 50.5 million), in particular due to the scheduled repayment following a temporary extension of payment terms for a customer in 2018.

Deferred income totaled € 0.1 million as of the end of the reporting period (December 31, 2018: € 3.7 million). The decline results from the complete reversal of an advance rental payment.

On the liabilities side, provisions increased to € 4.2 million (December 31, 2018: € 1.7 million) due to the formation of a provision for anticipated losses. Likewise, liabilities increased to € 14.3 million (December 31, 2018: € 11.5 million). Trade payables in particular rose by € 3.9 million to € 11.4 million (December 31, 2018: € 7.5 million), which is primarily attributable to the targeted management of working capital. Other liabilities decreased to € 1.7 million (December 31, 2018: € 3.1 million) due to the decrease in liabilities from other taxes.

Voltabox AG's equity decreased to € 43.3 million (December 31, 2018: 152.5 million). Against this backdrop, the equity ratio decreased to 70.0 % as of the reporting date (December 31, 2018: 92.0 %).

Financial Position of Voltabox AG

Cash flow from operating activities slightly improved in the period under review to € -22.8 million (prior year: € -47.0 million). The primary cause for this is the reduction of receivables by € 24.8 million.

Cash flow from investing activities decreased by € 31.3 million to € -2.9 million in the period under review (prior year: € 28.4 million). This development is mainly due to reduced investments and reduced M&A activities.

Cash and cash equivalents fell to € 1.4 million as of the reporting date (prior year: € 26.8 million), which is mainly attributable to the considerable pressure on working capital and the loss financing of the current fiscal year. Cash flow from financing activities in the reporting year amounted to € 0.3 million (prior year: € 0.4 million).

General Statement on the Net Assets, Financial Position and Earnings of Voltabox AG

The net assets, financial position and results of operations in the past fiscal year were marked by a comprehensive refocusing and various individual issues, some of which had a considerable impact. The results of operations deteriorated significantly, mainly due to the increased cost of materials and valuation allowances. In addition, the financial position is influenced in particular by impairment effects, and the financial position as of the reporting date changed significantly as a result of short-term capital commitment.

Opportunity and Risk Report

Voltabox has established a comprehensive automated risk management system to identify opportunities and risks in corporate development. The risk management system described below refers both to Voltabox AG and the Voltabox Group. All the operating segments regularly issue risk reports, from which management is informed about the probability of occurrence and possible damages resulting from the risks identified. The risk reports contain an assessment of the risks as well as suggestions for appropriate countermeasures. For information on the risk management objectives and methods with regard to the use of derivative financial instruments, please refer to the notes (note (35)).

Opportunity Report

Opportunities

In its current global economic outlook, the International Monetary Fund expects to see global growth of up to 3.3 %, with 1.1 % expected for Germany and 2.0 % for the U.S. There are opportunities associated with this for Voltabox in the Voltapower and Voltaforce product segments. For years now, the Management Board has been pursuing the aim of securing and building on revenue and market share in its defined core markets by seeking orders with market leaders and significant market participants in a targeted manner. With application-oriented, customer-specific systems developed based on a modular concept and manufactured in large series, we are able to realize exceptional customer benefit and solid economic advantages for the customer in the course of cost-effective manufacturing. E-mobility gained further interest in the public perception of private households. The megatrend is also increasingly gaining importance in the industrial sector. Voltabox benefits from this in individual target markets for capital goods, such as trolleybuses for public transport, forklifts used in intralogistics and automated guided vehicles in networked production, starter batteries for the motorcycle market and underground mining vehicles. The other target markets include the markets for agricultural and construction machinery as well as pedelecs and e-bikes.

In 2020, the market research institute IDTechEx expects a market growth of about 7 % for battery systems in the sub-markets currently occupied by Voltabox as well as the newly addressed industrial sub-markets and mass markets. The average annual growth rate until 2024 is estimated at around 6 % in these sub-markets (reference year: 2019). The decreased values relative to the prior year are the result of entry into markets like buses and cars which feature large volumes but are growing more slowly than the industrial sub-markets.

A result, the following opportunities which the company deems significant, as in the prior year, exist for Voltabox's product segments, especially in the medium-term:

- Voltapower
  In individual capital goods sub-markets, such as trolleybuses and e-buses used in local public transportation, forklifts used in intralogistics, automated guided vehicles used in networked production and underground mining vehicles, sales activities have been intensified further and new customers have been acquired. With the help of strong cooperation partners, Voltabox is able to benefit from substitution effects here that result from the economic and ecological advantages its battery technologies offer compared to the lead-acid batteries or diesel engines used to date. In these fast-growing sub-markets, Voltabox has the opportunity to significantly increase its relative market share within a short period of time and thus occupy a leading market position (market penetration and market development).

- Voltaforce
  The niche strategy of horizontal and vertical diversification offers large sales opportunities in further sub-markets in the medium term. For example, these include the completed expansion of the existing market position in starter batteries for motorcycles and starter and traction batteries for cars. The complex requirements regarding the performance, safety and reliability of the lithium-ion battery systems developed by Voltabox often play a decisive role.

At the beginning of fiscal year 2020, the Management Board of the parent company paragon GmbH & Co. KGaA resolved to fully or partially sell its shares in Voltabox AG. This could potentially result in opportunities for Voltabox. The Management Board of Voltabox AG cannot verify these opportunities until the conclusion of the sale process.

Overall Assessment of Opportunities

Through the regular and structured monitoring of opportunities within the Voltabox Group and the relevant sales markets as well as the internal, barrier-free communication at the various levels of management, the Management Board is in a good position to identify opportunities for the Group. At the end of fiscal year 2019, both external and internal opportunities were identified. External and internal opportunities from the prior year remain basically unchanged.

The significance of the listed opportunities as well as the resulting positive effects on the financial performance indicators projected for fiscal year 2020 – and thus on the short-term development of the Voltabox Group as a whole – is classified as low. The Management Board therefore expects the development of business described in the forecast.

Risk Report

Risk Management

Voltabox uses a comprehensive risk management system as part of its risk-oriented corporate governance.

Risks are defined in the Voltabox Group not only as activities, events and developments endangering the company's existence, but also those affecting its business success. Particular attention is paid to risk concentrations, e.g. dependencies on individual customers, suppliers, products or countries. In the case of material risks, mutual dependencies and impacts are taken into account, since individual risks can mutually reinforce each other or cause compensation effects between them. In addition, opportunities are also subsumed under the risk concept. We understand business success in terms of measurable values, e.g. revenue, EBITDA and free cash flow. Risks are therefore represented in these figures in the evaluations from the respective process owners. Risk assessment is always based on the risk outcome. A risk is the possibility that a threat exposes a vulnerability and causes damage to or the loss of an object and thereby directly or indirectly results in a negative impact. The aim is also to identify and evaluate these risks in order to be able to select suitable and appropriate countermeasures on this basis.

Strategic Governance and Risk Management

The aim of risk management is to secure the company's continued existence, i.e., securing its future development and profitability as well as reducing the risks of breaching the confidentiality, integrity and availability of the information or data used or contained in the performance of activities. The task of risk management is also to report deviations from the corporate objectives at an early stage and thereby enable timely countermeasures. Risk guidelines are defined in the risk manual.

Group-wide responsibility for risk management lies with the Management Board. Risk management at the respective sites is adequately covered and secured in regular (roundtable, video and telephone) meetings with the respective senior management. This means that the Management Board is directly informed of the situation and the corresponding risks are continuously monitored and managed by the Management Board. In risk fields where quantification is not possible or useful, work is also done to identify risk factors.

Central Risk Management

An important role in the risk management and control process belongs to central risk management. Within its responsibility for the risk situation of the company, the Management Board transfers the task of implementing permanent risk management activities to the central risk management team. Responsibility for central risk management lies directly with the divisional director for Finance of Voltabox AG. Voltabox's central risk management team is responsible for coordinating all decentralized risk management functions, evaluating risk analyses and consolidating them into risk reporting as well as improving and enhancing the risk management system. Working with the Management Board the central risk management team determines the reporting cycles and defines the thresholds for the risks which, when exceeded, require a risk control report to be prepared outside the obligatory reporting requirements. Both the threshold values and the reporting cycles are based on the relevance of the risks.

Central risk management supports the decentralized risk managers in the preparation of risk analyses and checks their returns and plausibility. It summarizes the individual risk profiles in a joint document. This means that interactions between the risks can be analyzed and the overall risk situation at Voltabox can be recorded, evaluated and commented on. This summary is referred to as risk reporting. This task is of particular importance because the objective of an integrated risk management system is the holistic consideration of a company's risk situation. Risk reporting acts as the basis for the statements on Voltabox AG's risk situation in the combined management report.

The decentralized risk managers are consulted whenever new risk management measures are established or existing measures are adapted.

Decentralized Risk Management

Decentralized risk management at Voltabox is located within the company's individual segments and sites. The area and process managers are responsible for risk management in their respective areas of work as decentralized risk managers. The decentralized risk management team reports on the development of risks in these areas as part of risk control measures. For each quarterly reporting cycle, the decentralized risk managers write up a report on the risks for which they are responsible. The focus here is on the description of the expected development of the risk. With this, measures for future risk management or the improvement of existing measures are developed and included in the risk control report as proposed measures for implementation. The decision on implementation is the responsibility of the Management Board. In addition, the Management Board must be informed without delay of any risks incurred during the entire year (ad-hoc risk reporting).

Risk Monitoring

Risk monitoring is the task of both decentralized and central risk management. The decentralized risk manager defines early warning indicators for critical success factors, which are monitored by central risk management. As soon as the defined thresholds are reached, a risk report is prepared by the decentralized risk manager, i.e. a forecast of the expected effects of the risk event for Voltabox. These forecasts are to be supplemented by scenario analyses, which take into account different data constellations.

Based on this information and the recommendations made by the decentralized risk managers and central risk management, the Management Board decides whether and to what extent measures are to be implemented or whether an adjustment of the company's objectives is necessary.

Risk Reporting

The quarterly report to the Management Board contains all new risks identified in the reporting month as well as those risks that have changed by a degree greater than or equal to 50 % from the prior report.

Central risk management is required to provide an ad hoc report to the Management Board in the case of risks with a change of 100 % or more as compared to the previous month. The Management Board, in turn, is then obliged to provide a report to the Supervisory Board within 24 hours of being informed about the risk.

The risks continually analyzed by Voltabox as part of risk monitoring can be assigned to the following risk categories, each of which is divided into individual risks:

- Strategic and Environmental Risks
- Market Risks
- Operating Risks
- Financial Risks
- Management and Organizational Risks
- At the end of the reporting year, 15 individual risks were recorded in the Voltabox Group. In the opinion of Voltabox AG, one of these individual risks endangered the company's continued existence.

Risks

Strategic and Environmental Risks

Overall economic development is observed in the risk management system due to its possible influence on patterns of demand in Voltabox AG's major markets (such as local public transport, intralogistics and mining), particularly in Germany and Europe, but also within the U.S. market owing to its strategic significance. This can lead to fundamental changes to supply and demand behavior in the procurement and sales markets for Voltabox. As the Voltabox Group has its own production facility in the U.S., and as it has a specific customer/product structure, the Management Board views the overall risk of protectionist influence on earnings as low.

The outbreak of the coronavirus (SARS-CoV-2) and the associated COVID-19 illnesses represents a relatively new macroeconomic risk. The resulting measures to contain the virus and avert a pandemic could lead to a significant drop in global economic growth. In this event, there may be an impact on the willingness of Voltabox customers to invest. Depending on the development of the pandemic and the associated effects on the productivity of supplier companies, there may be a risk for the procurement of essential materials such as cells in the future. In the event that a pandemic proliferates, the production output of Voltabox could face a risk from a long-term interruption of operations, e.g. as the result of official measure. This risk caused by the COVID-19 pandemic is classified as a risk to the continued existence of the company.

The parent company's announcement of its intention to sell all or part of its shares in Voltabox AG could lead to risks in the area of the strategic environment. However, the Management Board cannot quantitatively assess these risks until the conclusion of the sale process.

Market Risks

For years now, Voltabox has been building on its growing market position as a well-established and innovative supplier of battery systems for industrial use, increasingly also for major clients in e-mobility. The two biggest sales markets of Western Europe and the U.S. continued to grow as expected in 2019. According to the market research institute IDTechEx, the growth dynamic of the sub-markets occupied by Voltabox is likely to be maintained in fiscal year 2020, and thus also the growth rate of the global sales market.

Due to the relatively high concentration on just a few customers in fiscal year 2019, the loss of an important customer could have a significant impact on the assets, financial position and earnings in the medium-term. This risk is counteracted by comprehensive development work on product innovations as well as detailed permanent order backlog analyses focusing on early risk identification, as well as by expanding the customer base with extensive marketing activities in our defined core markets.

Voltabox develops its own, innovative solutions, which are implemented in cooperation with pilot customers and subsequently offered to a wider customer base in carefully selected target markets. However, it cannot be ruled out that a product development may not achieve its expected quantities or that its economic success may be lower or later than originally planned. This could have a negative impact on the Group's revenue and earnings. The Management board estimates the risk as moderate overall.

Operating Risks

In terms of operating risks, Voltabox is currently focusing on its research and development, materials management, production and information technology activities.

The future economic success of Voltabox will depend on the ability to continuously develop new and innovative products on time and successfully introduce them to the market. Recognizing new technological developments at an early stage and implementing them in partnership with customers is key here. Should Voltabox not be able to, or not quickly enough, recognize and implement new trends, changing customer requirements or future technological advances or to develop new products and adapt existing products in accordance with business principles, this may have a detrimental effect on the company's assets, financial position and earnings.

In addition, development costs may not be recoverable if Voltabox's customers do not subsequently issue serial production orders or if the quantities Voltabox sells are significantly lower than expected. Given the high proportion of capitalized development activities on the balance sheet, a corresponding valuation allowance for intangible assets could have a negative impact on the company's assets, financial position and earnings.

The regular purchasing currency is the euro, whereby the share of purchases made in U.S. dollars was around 64% in the reporting year. The volume of purchases in U.S. dollars will continue to increase as a result of the expected revenue growth Currency risks arise primarily for purchases in U.S. dollars that are intended for the European currency area, as well as for loans issued in euros to the subsidiary in the U.S. Voltabox AG currently estimates the currency risk as moderate.Voltabox outsourced major commercial functions from the parent company paragon and took them on itself. One function is still currently covered by paragon and is being sold to Voltabox at standard market prices. IT, particularly with regard to the network and its management, is managed by the central IT department of paragon. The relevant service agreements have already been concluded.

With the rapid spread of information technology (IT) and the ubiquitous connectivity provided by the internet, IT risks, such as system failures and unauthorized access to company data and information, are also on the rise. As a service provider for Voltabox AG, paragon has – in cooperation with specialized service companies – established modern security solutions that protect its data and IT infrastructure in order to avert possible dangers.

In the wake of the announced intention of paragon GmbH & Co. KGaA to partially or completely sell its stake in Voltabox AG, the Voltabox Group has decided to advance its efforts to establish independent IT. To this end, concepts are being prepared for hardware and software infrastructure and the continuous management thereof in the first stage of the process. This risk caused by the COVID-19 pandemic is classified as a risk to the continued existence of the company.

The parent company's announcement of its intention to sell all or part of its shares in Voltabox AG could additionally lead to operational risks in regard to cooperation with suppliers and customers. The Management Board is not aware of any indices that would make it possible to conclude that the sale process constitutes a concrete operational risk.

Financial Risks

In addition to interest rate, liquidity and currency risks, Voltabox also monitors risks associated with the loss of receivables, balance sheet risks and tax risks in the financial risks category. No risks have been estimated at more than € 0.5 million by the company.

Interest rate risks are only of trivial relevance to Voltabox, as only fixed interest rate agreements without financial covenants are in place.

As a general principle, comparatively young and dynamically growing companies face a risk from the coronavirus pandemic in regard to the willingness of lenders to provide growth financing.

The company's ability to pay is generally ensured by comprehensive planning and monitoring of liquidity. These plans are prepared on a short, medium and long-term basis. In addition, Voltabox has a rigorous receivables management system to ensure timely cash inflows. A growing portion of the receivables is also hedged by means of a commercial credit insurance. An additional possibility for short-term financing exists in the form of factoring agreements. Elevated relevance of default risk due to extended payment terms for a customer was significantly reduced in 2019.

The spread of the coronavirus and the impact of the pandemic on the global economy have significantly changed the overall risk situation of Voltabox AG in comparison with the prior year. Revenue risk has increased due to global risk factors and potential disruptions of production. The Group is working to counteract this by reducing expenses to the minimum level necessary to operate and by increasing the flexibility of costs. Nevertheless, a conclusive risk assessment is only possible to a limited extent at the current time. The Management Board remains generally confident in the effectiveness of its risk and opportunity management as well as the measures adopted.

The liquidity situation in fiscal year 2020 is strained by reduced revenue and by significant insecurity about the future economic development as a result of the effects of the COVID-19 pandemic. Investment projects cannot be realized at the moment, current development projects have been halted by customers in some cases. Generally, the procurement of preliminary products is only possible against advance payments. The macroeconomic uncertainty is having significant effects on the company's ability to plan revenue generation. These effects could jeopardize the existence of the company and therefore represent a risk to the company's continued existence. For this reason, Voltabox AG has announced reduced working hours in large sections of the organization, closed one location and placed its focus on the safest possible revenue projects with the goal of securing the cost base for fiscal year 2020. The company monitors possible currency risks on the procurement and sales side by continuously tracking foreign currency exchange rates. At present, Voltabox does not use financial instruments to hedge currency risks.

Management and Organizational Risks

In this risk category, Voltabox is primarily observing risk factors resulting from the dynamic growth strategy. This includes primarily personnel and organizational risks, as well as management and communication risks. Clear assignments and demarcations in the respective areas of responsibility within the system of corporate governance have been laid out in order to prevent cases of lacking interfaces and functional overlaps. Currently, the Management Board does not consider there to be any material risks to Voltabox in this area.

However, the company is fundamentally dependent on attracting and retaining qualified personnel and persons in key positions in the long-term. The future economic success of Voltabox depends to a considerable extent on the continued involvement of its executives, senior employees and employees in key positions.

The company cannot guarantee that it will be able to hold key executives, senior executives and employees in key positions or attract new executives and employees with appropriate qualifications.

If Voltabox is unable to obtain sufficient personnel in the future, the strategic and economic objectives of the company may not be achievable or only achievable at a later date. This could have a detrimental impact on the company's assets, financial position and earnings.

Overall Assessment of the Risk Situation

Voltabox will also hedge itself against general market risks in e-mobility in the future, too. In fiscal year 2019, two customers exceeded the threshold of 10 % of revenue in accordance with IFRS 8.34. These customers accounted for revenue of € 27.3 million (38.4 %) and € 11.0 million (15.5 %), respectively. Both are attributable to the Voltapower product segment.

Against the backdrop of the COVID-19 pandemic, the depiction of the risks for the Voltabox Group must be adjusted substantially. After December 31, 2019, the spread of the coronavirus advanced rapidly. This has had an extensive effect on the Voltabox Group. At first, only suppliers from China, the assumed country of origin of the virus, were affected; shortly afterwards, an increasing number of regions and entire countries in Europe were affected by its impact as well. For the Voltabox Group, this has meant that necessary deliveries have not been made. In addition, customers who have also been affected by the crisis have been accepting fewer goods or none at all. Exports across national borders and work that takes place in groups have been substantially restricted or forbidden. As a result, Voltabox AG has announced reduced working hours for large sections of the company. The Management Board adopted these measures with the goal of protecting existing jobs in the long term. The potential consequences of the coronavirus crisis may include suppliers and customers completely abandoning their business activities because continuing their company is no longer possible for reasons of insufficient liquidity, insufficient orders etc. For Voltabox AG, this means that it is necessary to establish new procurement channels and sales opportunities.

Voltabox AG will record revenue losses due to the pandemic, meaning that the original company goals and those announced in the previous fiscal year cannot be achieved. An exact determination of the quantitative consequences is impossible due to the high level of uncertainty regarding the further course of the COVID-19 pandemic. It is impossible to predict how long the global economy will be impaired by the coronavirus. The Corona Pandemic continues to have unforeseeable consequences for the Company, which expects to be able to assess the specific effects more precisely in the further course of the year.

Voltabox AG will continue to focus heavily on liquidity planning in order to ensure the continued existence of the company. As of the time of publication of this report, the risks from the current pandemic and its effects are extensive enough to jeopardize the continued existence of the company.

As of the publication date of this report, apart from the financial risks described in the previous section and the strained liquidity situation, no other risks have been identified that could jeopardize the company's continued existence. A differentiated view on the development of the e-mobility industry shows that the company is positioned in forward-looking market segments or sub-markets, has promising customer relationships and offers a product portfolio that is only offered in this form by a few or no other competitors.

The potential impact from the various risks on the overall future performance of the Voltabox Group, as well as its financial and nonfinancial performance indicators for fiscal year 2020, are regarded as jeopardizing the existence of the company by the Management Board as a whole. Accordingly, the Management Board expects that the business development described in the forecast will be significantly impacted by the disclosed risks.

Voltabox AG classifies the risks within the Group as equivalent.

Description of the Key Characteristics of the Internal Control and Risk Management System

with Regard to Group Accounting Process (Section 315 (4) HGB)

Since the internal control and risk management system is not legally defined, Voltabox bases its definition on that of the Institut der Wirtschaftsprüfer in Deutschland e.V., Düsseldorf, Germany, regarding accounting-related internal control systems (IDW PS 261).

An internal control system is therefore understood as the principles, procedures and measures enacted by management that are aimed at the organizational implementation of management's decisions. The objectives are as follows:

a) Ensure the effectiveness and profitability of the business (including the protection of assets and the detection and prevention of asset damages)
b) Ensure the regularity and reliability of internal and external accounting
c) Comply with the legal and statutory regulations applicable to the company

The Group's risk management system includes all organizational regulations and measures for risk identification and handling risks related to entrepreneurial activity.

The Management Board of Voltabox AG bears the overall responsibility for the internal control and risk management system with regard to the accounting process. The principles, procedural instructions, procedural organization and processes of the accounting-related internal control and risk management system are laid down in organizational instructions that are adapted at regular intervals to current external and internal developments.

In view of the size and complexity of the accounting process, management has determined the scope and design of the control activities and implemented them in this process. Independent controls have also been established. The control activities address those control risks which, in terms of their probability of occurrence and their impact, could have a significant influence on the accounting and overall statement of the consolidated financial statements, including the combined Group management report. Key principles, procedures, measures and control activities include:

- Identification of the key control risks relevant to the accounting process
- Process-independent controls for monitoring the accounting process and its results at the level of the Management Board of Voltabox AG
- Control activities in the finance department of Voltabox AG, which provide essential information for the preparation of the annual financial statements and combined management report, including the required separation of functions and approval procedures
- Measures that ensure the proper computerized processing of accounting-related information

Risk Reporting in Relation to the Use of Financial Instruments (Section 315 (2) No. 1 of the German Commercial Code)

The following risks arise from the Voltabox Group's use of financial instruments:

Interest rate risks are only of trivial relevance to Voltabox, as only fixed interest rate agreements without financial covenants are in place.

The company's ability to pay is generally ensured by comprehensive planning and monitoring of liquidity. These plans are prepared on a short, medium and long-term basis. In addition, Voltabox has a rigorous receivables management system to ensure timely cash inflows.

A growing portion of the receivables is also hedged by means of a commercial credit insurance. An additional possibility for short-term financing exists in the form of factoring agreements. Elevated relevance of default risk due to extended payment terms for a customer was significantly reduced in 2019.

The company monitors possible currency risks on the procurement and sales side by continuously tracking foreign currency exchange rates. At present, Voltabox does not use financial instruments to hedge currency risks.

A factoring agreement was concluded in fiscal year 2018. It was used for the first time in 2019. In the context of this dormant factoring, the counterparty risk remains with Voltabox AG.

Forecast

Market Development 2020

The International Monetary Fund (IMF) published its outlook for the global economy during 2020 in October 2019.[9] In this context, the IMF described the anticipated improvement of economic performance in a number of emerging markets in Latin America, the Middle East and in emerging and developing markets in Europe. Economic growth was expected to remain at a low level overall, but hopes exist for momentum for a slight upturn despite difficult conditions.

Conditions changed entirely as a result of the rapid spread of the new coronavirus (SARS-CoV-2) and the associated COVID-19 illnesses from approximately the second half of January onwards. Over a period of two months, the focus of infection shifted from the presumed country of origin of the epidemic to Central Europe and Germany. At that time, the World Health Organization changed its classification of the epidemic, designating it as a pandemic due to its worldwide spread. With the aim of containing the spread of SARS-CoV-2, individual countries reacted successively with drastic measures to protect the population. These had a serious impact on the countries' economic performance. As a result, on April 6 the IMF reduced its forecast for global economic growth in 2020 to -3 %.[10] This would mean a much sharper decline in the global economy than during the 2008/2009 financial crisis. The growth forecast has thus been revised downwards by more than 6 percentage points compared with the forecasts in the October 2019 World Economic Outlook and the January 2020 update, which represents an exceptional correction in such a short period of time. According to a baseline scenario that assumes a mitigation of the pandemic in the second half of the year, the IMF expects the global economy to grow by 5.8 % in 2021. The prerequisite for this is that economic activity returns to normal even if the risks for an even more serious outbreak of the virus continue to exist and are significant due to their likelihood. In view of this, the report concludes there is extreme uncertainty about the global growth forecasts.

The IMF also continues to expect an uneven distribution of economic growth between developed economies (-6.1 % in 2020 and 4.5 % in 2021) and emerging markets (-1.0 % in 2020 and 6.6 % in 2021). Based on the calculations to determine the World Economic Outlook published in April 2020, the IMF specifically assumed that the development of the economy in the U.S. would amount to -5.9 % in 2020 and 4.7 % in 2021, in the eurozone to -7.5 % in 2020 and 4.7 % in 2021, in Germany to -7.0 % in 2020 and 5.2 % in 2021 and in China to 1.2 % in 2020 and 9.2 % in 2021.

Voltabox is mainly active in industrial sub-markets and select mass markets. These primarily include:

- Trolley buses and the conversion of conventional diesel buses from the local public transportation sector

9 https://www.imf.org/en/Publications/WEO/Issues/2019/10/01/world-economic-outlook-october-2019
10 https://www.imf.org/en/Publications/WEO/Issues/2020/04/14/weo-april-2020

- Forklifts and automated industrial trucks in intralogistics and networked production environments
- Underground mining vehicles
- Agricultural and construction vehicles
- Starter batteries for motorcycles
- Pedelecs and e-bikes

The development in these sub-markets is essentially characterized by a substitution process for lead-acid batteries, or diesel generators in the case of trolleybuses and the entire powertrain in the case of diesel buses, with lithium-ion batteries – from which Voltabox benefits with its modular product portfolio. These are trends that have a period of several years and typically show a saturation curve with increasing market penetration. In addition, individual industrial and mass markets are driven by the general trend towards electrification.

In 2020, the market research institute IDTechEx[11] originally expected a market growth of about 7% for battery systems in the industrial sub-markets and mass markets currently occupied or newly addressed by Voltabox. The average annual growth rate until 2024 is estimated at around 6% in these sub-markets (reference year: 2019). The decreased values relative to the prior year are the result of entry into markets like buses and cars which feature large volumes but are growing more slowly than the industrial sub-markets. As a matter of course, the estimates by IDTechEx do not take any economic influence factors into consideration, and thus none of the corresponding effects of the spread of the coronavirus.

As a result, the following assumptions are particularly important for establishing the Voltabox Group's forecast:

- Extraordinary, temporary influence of the COVID-19 pandemic on the maintenance of the value chains at Voltabox and within the industrial sub-markets as well as on the demand situation and willingness of customers to invest
- Continuing trend towards e-mobility, primarily through the replacement of lead-acid batteries and diesel backup generators with lithium-ion batteries in the sub-markets currently occupied
- Increase in regulatory drivers for sustainable mobility, particularly in the area of local public transport

The Voltabox Group

The Group's corporate planning is based on detailed sales and revenue planning and is broken down by customer to the product level and planned according to a bottom-up principle. The main cost components are planned via individual planning models for a period of several years and are then updated in proportion to the development of revenue.

Significant parameters, such as price changes in purchasing or sales as well as possible cost increases in personnel or changes in the tax base, are integrated into the planning. The constantly updated risk management system allows the company to identify risks at an early stage and, if necessary, counter them accordingly.

In fiscal year 2019, the Group adapted its planning methodology according to the specific Voltabox business model with under the influence of revenue postponements in the same year. Planning now gives significantly greater consideration to the project character of a number of customer relationships. In line with the originally positive order situation for 2020, the Management Board expected Voltabox to grow sustainably compared to the prior year, thereby taking an major step along the road back to the desired level of profitability. Due to the COVID-19 pandemic, however, the business prospects for the Voltabox Group for the current year have deteriorated significantly. Furthermore, no positive margin effects could be achieved in the course of the fiscal year to date due to the low output volumes. This has resulted in an increasing burden on free liquidity. The forecast of Voltabox AG in the individual and consolidated financial statements is dependent on the further development of the available free liquidity.

In the event that free liquidity does not improve during the rest of the year, the Company expects to reach the lower end of the range. With expected Group revenues of between € 25 million and € 45 million, which corre-

11 IDTechEx, study "Electric Vehicles 2020–2030": https://www.idtechex.com/de/research-report/electric-vehicles-2020-2030/670

sponds to a decline of between almost one fourth and more than half of the previous year's level, and a Group EBITDA margin of -6 % at most, the company views the current fiscal year as extraordinary and as a transitional year for the return to sustainable growth with corresponding profitability in the years to come.

In addition to intralogistics, a particular level of focus will be placed on the existing local public transportation market segment (trolleybuses and the conversion of diesel buses). In addition, the new market segments of mobile and stationary energy storage will contribute to revenue for the first time. In general, Voltabox has given particular attention to diversifying its customer base and thus the distribution of revenue in the past fiscal year.

The Management Board expects a balanced free cash flow in the current year.

The Management Board is continuing to plan for a slight increase in headcount – in moderation – in the event of above-average business development.

Development of Key Performance Indicators:

€ '000 / as indicated	2018	2019	Change in %	2020 Forecast
Financial Performance Indicators				
Group Revenue	66,909	56,617	-15.4	€ 25 – 45 million
EBIT Margin	8.4 %	-190.0 %	n. a.	n. a.
EBITDA Margin	14.3 %	-25.4 %	n. a.	-6 % at most
Free cash flow	-68,386	-26,304	61.5	slightly negative

Voltabox AG

The Management Board of Voltabox AG expects a significant reduction in annual revenue and a negative annual result in fiscal year 2020 at the level of separate financial statements.

The expected net loss for the year is to be financed by the profit carried forward and the capital reserve. Liquidity is to be secured by a positive development of working capital through the reduction of receivables and the use of inventories.

In view of the continuing limited visibility in the industrial sub-markets occupied by Voltabox as a result of the COVID-19 pandemic and its impacts, it is not possible to give an exact forecast at this report's time of printing.

Development of Key Performance Indicators:

€ '000 / as indicated	2018	2019	Change in %	2020 Forecast
Financial Performance Indicators				
Revenue	52,136	63,335	21.5	€ 15 – 35 million
EBIT Margin	6.5 %	-173.3%	n. a.	n. a.
EBITDA Margin	9.6 %	-161.0 %	n. a.	-6 % at most

General Statement on the Company's Expected Development

The Management Board of Voltabox AG expects a positive strategic development of the Voltabox Group apart from the financial performance indicators such as revenue and EBITDA, which deviate significantly from the original plans for fiscal year 2020 due to the drastic impacts of the COVID-19 pandemic. This is based on the product portfolio having been optimized in accordance with market requirements, the measures introduced to streamline the cost structure and a promising course in the realignment of sales activities. Voltabox will rely on its proven battery systems and develop powerful new systems when tapping into new markets and penetrating existing market segments with the help of the existing modular kit principle in order to further expand its excellent strategic starting position in the rapidly growing market for Li-ion battery systems. The vertical range of manufacture will be further optimized for all Voltabox products, particularly via a high level of automation in manufacturing, in order to increase the operative profitability of the Voltabox Group over the long term. Securing and expanding sustainable profitability are at the core of this business orientation. In addition, the further organic and inorganic development of additional fields for action with regard to portfolio expansion is being pursued – with close proximity to the core business and under tight profitability and investment requirements.

The Management Board has not incorporated the potential effects of the sale process pursued by the parent company into its planning.

Disclosures required under takeover law pursuant to sections 289a (1) and 315a (1) HGB

Composition of the Subscribed Capital

Voltabox AG's subscribed capital amounts to € 15,825,000.00 and is divided into 15,825,000 no-par-value shares with a nominal value of € 1.00 each. All shares are entitled to dividends. Each share grants one vote at the Annual General Meeting.

Stock Voting Right and Transfer Restrictions

The Management Board is not aware of any limitations affecting voting rights or the transfer of shares.

Holdings That Exceed 10 Percent of the Voting Rights

As of December 31, 2019, paragon GmbH & Co. KGaA, Delbrück, held 9,500,000 shares in the company, corresponding to around 60 % of the company's subscribed capital.

Shares With Special Rights of Control

There are no shares that confer special rights of control.

Voting Right Controls for Employees Participating in the Capital

Insofar as employees participate in the capital as shareholders, they cannot derive any special rights from them.

Appointment and Dismissal of Members of the Management Board and Amendments to the Articles of Association

Regarding the rules for appointing and dismissing the members of the Management Board, reference is made to the statutory provisions of Sections 84 and 85 of the German Stock Corporation Act (AktG).

Regarding the rules for amending the Articles of Association, please refer to the statutory provisions of Sections 133 and 179 AktG.

Authorization of the Management Board to Issue Shares

With the resolution of the Annual General Meeting on September 22, 2017, the Management Board is authorized, with the consent of the Supervisory Board, to increase the company's share capital once or several times by up to € 6,675,000.00 until September 21, 2022, via the issue of up to 6,675,000 new no-par-value shares against contribution in cash and/or in kind (Authorized Capital 2017).

Shareholders are entitled to a subscription right. The new shares can also be purchased by one or more banks or any equivalent institution or enterprise pursuant to Section 186 (5) of the German Stock Corporation Act (AktG) under the obligation to offer them to shareholders for subscription. The Management Board is however authorized, with the consent of the Supervisory Board, to exclude the subscription rights of shareholders in the cases specified in Item 4.5 of the Articles of Association as updated in October 2017.

A resolution at the Annual General Meeting on September 22, 2017, approved the conditional increase in the subscribed capital by up to € 5,000,000.00, divided into 5,000,000 no-par-value shares (Conditional Capital 2017).

The conditional capital increase will only take place to the extent that the holders or creditors of the respective options or conversion rights or holders of warrant or conversion obligations arising from warrants or convertible bonds issued or guaranteed on the basis of the authorization granted to the Management Board by the Annual General Meeting on September 22, 2017, exercise their option or conversion rights, to the extent that they fulfill their conversion obligations if they are obliged to exercise conversion, and to the extent that no other forms of fulfillment are used to service these rights. As of the start of the fiscal year, the new shares will carry dividend rights for all fiscal years for which no resolution has yet been made by the Annual General Meeting on the distribution of profits. The Management Board is authorized, with the consent of the Supervisory Board, to determine the further details regarding the implementation of the conditional capital increase.

Change of Control and Compensation Agreements

There are no special provisions for a change of control nor are there any compensation agreements for possible takeover offers.

Declaration on Dependency Reporting Pursuant to Section 312 (3) HGB

Pursuant to section 312 (3) AktG, the Management Board declares that Voltabox AG was granted appropriate consideration in accordance with the circumstances known to the Management Board at the time at which the legal transactions were carried out. Voltabox AG has not suffered any unbalanced disadvantage on account of measures which have or have not been implemented.

The Management Board of Voltabox AG has submitted this report to the auditor. The auditor issued an audit certificate. The report was subsequently presented to the Supervisory Board for review. The Supervisory Board will report to the Annual General Meeting on the results of its review of the dependent company report.

Sustainability Reporting

Voltabox AG made a sustainability report for fiscal year 2019. The report is not part of the combined management report. The Management Board made this report separately and published it on the company's website (https://ir.voltabox.ag/websites/voltabox/English/0/investor-relations.html).

Voltabox AG includes the legally required components in the report an extends them to further explain as far as it is helpful to understanding. Voltabox AG uses the framework of the German Sustainability Code (DNK) for sustainability reporting.

Corporate Governance Statement Pursuant to Sections 315d in Conjunction With Section 289f (1) of the German Commercial Code (HGB)

The Management Board and the Supervisory Board of Voltabox AG are committed to the principles of a transparent and responsible corporate governance and control structure. They ascribe a high priority to the standards of good and proper corporate governance. Against the backdrop of the status of the Chairman of the Supervisory Board, Klaus Dieter Frers, as the majority shareholder of the parent company paragon GmbH & Co. KGaA and the resulting indirect controlling influence on Voltabox AG, the working methods of the Management Board strongly conform with the principles of the "honorable merchant" in terms of its entrepreneurial responsibilities. This includes the obligation to ensure the continued viability of the company and its sustained value creation (corporate interests) in conformity with the legal framework conditions and the principles of the "social market economy."

The Corporate Governance Statement pursuant to Section 315d in conjunction with Section 289f (1) of the German Commercial Code (HGB) can be accessed at any time on the Voltabox website at https://ir.voltabox.ag. It contains the corporate governance declaration pursuant to Section 161 of the German Stock Corporation Act and the corporate governance report pursuant to No. 3.10 of the German Corporate Governance Code.

The management of Voltabox AG as a German joint stock corporation is specified by the German Stock Corporation Act, the company's Articles of Association, the voluntary commitment to the provisions of the German Corporate Governance Code (GCGC) in their respective current versions and the respective current rules of procedure for the Management Board and Supervisory Board.

Pursuant to the statutory provisions, Voltabox AG has what is known as a dual management system. This is characterized by a strict separation of personnel between the Management Board as the management body and the Supervisory Board as the supervisory body. The Management Board and the Supervisory Board work together closely in the interests of the Company. The Management Board is directly responsible for leading the Company according to the laws, the Articles of Association and its rules of procedure. The rules of procedure include regulations on the allocation of responsibilities, the decision-making authority of the entire Management Board, the rights and responsibilities of the Chief Executive Officer, as well as on resolutions and meetings, among other things. The Management Board of Voltabox AG currently consists of one person, Jürgen Pampel. Effective December 1, 2018, Jörg Dorbandt (Chief Operations and Finance Officer) was dismissed as a member of the Management Board at his own personal request. At the same time, Voltabox expanded and strengthened the management team at the divisional director level in order to promote the agile strategic and operational development of the company.

The Supervisory Board oversees the Management Board in leading the company and provides advice. It appoints and discharges the members of the Management Board, determines the transactions requiring approval, decides the remuneration system for the Management Board and sets its respective total remuneration. It is involved in all decisions of fundamental importance for Voltabox AG, which are provided for in the German Stock Corporation Act and the rules of procedure. The Supervisory Board comprises three members. The rules of procedure for the Supervisory Board govern the principles for the cooperation of the Supervisory Board. In particular, they specify decision-making and confidentiality procedures. According to its own assessment, the Supervisory Board works efficiently with three members. Due to the small size of the Supervisory Board, it was decided not to form committees.

The Supervisory Board of Voltabox AG fulfilled the consulting and monitoring obligations incumbent upon it according to law, the Articles of Association, German Corporate Governance Code and rules of procedure with great care in fiscal year 2019. Here, the Supervisory Board supervised the Management Board on an ongoing basis and made sure of its legal and regulatory compliance, appropriateness and effectiveness. Furthermore, the Supervisory Board was available to the Management Board for consultation and was involved in discussions and decisions regarding issues of material importance. Thanks to the good cooperation between the Supervisory Board members, even time-sensitive decisions were discussed adequately and resolved quickly.

The Management Board comprehensively informed the Supervisory Board in written and oral form in the Supervisory Board meetings on all proceedings of material importance, the Company's general performance and its current situation. Here, it gave particular priority to the topics of strategy, planning, business development, risk situation and risk management. The Supervisory Board intensively reviewed the Management Board's reports and discussed them at its meetings. In addition to the Supervisory Board meetings and conference calls involving the Management Board and Supervisory Board in their entirety, the Supervisory Board Chairman and the Chief Executive Officer discussed important matters when necessary. The Supervisory Board was fully informed about exceptional instances that were of material importance for assessing the year's results.

With regard to Section 76 (4) and Section 111 (5) of the German Stock Corporation Act as well as points 4.1.5 and 5.1.2 of the Corporate Government Code in the version dated February 07, 2017 on the topic of diversity, the Management Board and Supervisory Board jointly determined the current proportion of women in 2018 and the target figures. The current proportion of women for Voltabox is zero for both bodies. The targets for both bodies were also set at zero. A possible enlargement of the Management Board is not planned at present. For the downstream management levels in the company, the current female quota is 23.8 % (prior year: 17.9 %). The current target for the proportion of women is 25 %.

At Voltabox AG, entrepreneurial activity is closely linked with responsibility towards employees, customers, the environment and society. Values such as taking responsibility, team spirit, integrity, tolerance, passion and a respectful, appreciative approach to daily interaction play a decisive role for Voltabox AG and form the core of its corporate culture. The members of the Management Board are aware of their own function as role models and pay particular attention to ensuring that all company executives exemplify the aforementioned values.

Delbrück, Germany, August 2020

The Management Board

Corporate Governance Report

German Corporate Governance Code

The recommendations of the German Corporate Governance Code (GCGC) promote transparency and thereby strengthen the trust of international and national investors, business partners and company employees. The Management Board and Supervisory Board of Voltabox AG uphold the obligation highlighted in the German Corporate Governance Code (GCGC) of ensuring the continued viability of the company and its sustained value creation (corporate interests) in conformity with the principles of the "social market economy."

Annual General Meeting

The shareholders exercise their rights in the company's affairs in the Annual General Meeting, unless the law stipulates otherwise. The Annual General Meeting passes resolutions on issues expressly specified in the law and in the Articles of Association. Only those shareholders who have registered in good time and proven their right to participate in the Annual General Meeting and to exercise their voting right are entitled to take part in the Annual General Meeting and exercise voting rights. Registration must be done in writing (Section 126b of the German Civil Code [BGB]) and must be in German or English. The right to participate in the Annual General Meeting and to exercise voting rights is demonstrated by means of a written proof of share ownership from the custodial institution.

At the Annual General Meeting, the Management Board shall, upon request, provide each shareholder or shareholder representative with information on the company's affairs, including the company's legal and business relationships with affiliated companies, as well as on the Group's position and that of the companies included in the consolidated financial statements, insofar as the disclosure is necessary for the proper assessment of an item on the agenda and there is no right to withhold the information.

In 2019, the parent company paragon GmbH & Co. KGaA held roughly 60 % of Voltabox AG, while the remaining share capital is in free float.

At the Annual General Meeting on May 16, 2019, the (former) Management Board submitted to the shareholders the company's adopted annual financial statements, the approved consolidated financial statements and the summarized management report for the company and the Group for fiscal year 2018, the explanatory Management Board report on the information required in accordance with Sections 289a (1), 315a (1) HGB as well as the respective Supervisory Board report for fiscal year 2018.

In addition, the following resolutions were passed with the required majority of voting capital in each case:

- Resolution on the appropriation of the balance sheet profits from fiscal year 2018
- Resolution on the discharge of the Management Board for fiscal year 2018
- Resolution on the discharge of the Supervisory Board for fiscal year 2018
- Determination of the remuneration of the Supervisory Board for fiscal year 2018
- Selection of the auditor for fiscal year 2019 as well as of the auditor for a possible audit review of the half-year financial report for fiscal year 2019

Supervisory Board

The Supervisory Board of Voltabox AG consisted of three members in fiscal year 2019: Klaus Dieter Frers (Chairman), Prof. Dr. Martin Winter (Vice-Chairman) and Hermann Börnemeier. In December, Prof. Dr. Winter informed the Management Board and the Chairman of the Supervisory Board of his wish to leave the board in order to take his responsibilities in the context of ongoing major projects into account. As the responsible registry court, the district court of Paderborn appointed Walter Schäfers, attorney, as the new Supervisory Board member on January 14, 2020, at the company's request.

The Supervisory Board oversaw the work of the Management Board during the fiscal year and provided them with advice. In fiscal year 2019, there were no conflicts of interest among the members that would have to have been disclosed to the Supervisory Board. The Supervisory Board regularly assesses the efficiency of its work through self-evaluation.

Please refer to the notes in the consolidated financial statement and the combined management report for Voltabox AG and the Voltabox Group with regard to the services provided personally by members of the Supervisory Board for the company in fiscal year 2019.

Management Board

The Management Board of Voltabox AG comprised two people in fiscal year 2019 until July 2. From January 1, 2019 to July 2, 2019, the Management Board consisted of Jürgen Pampel (CEO) and Jörg Dorbandt (Chief Operations and Finance Officer). Following the dismissal of Jörg Dorbandt by mutual agreement, Jürgen Pampel acted as sole executive officer of the company in the reporting year.

The remuneration of the members of the Management Board is based on the sustainable growth of the company, comprising a fixed annual salary, ancillary benefits and a variable remuneration component. Both an annual cap (maximum) and a variable compensation component for multiple years, which takes into account positive and negative development, have been specified for the variable remuneration component.

The company is committed to a high degree of transparency in its reporting. This also applies to the remuneration of the Management Board, which is disclosed and explained in full in the remuneration report, together with all its components and on an individualized basis. The Management Board and Supervisory Board have therefore decided to use the Management Board remuneration sample tables provided by the GCGC in the remuneration report, which is included in the combined Group management report for fiscal year 2019.

Cooperation Between the Management Board and the Supervisory Board

The dialog between the Management Board and the Supervisory Board in fiscal year 2019 was characterized by trustworthy cooperation. The Management Board comprehensively informed the Supervisory Board in written and oral form in the Supervisory Board meetings on all proceedings of material importance, the Company's general performance and its current situation. Here, it gave particular priority to the topics of strategy, planning, business development, M&A, risk situation and risk management. The Supervisory Board intensively reviewed the Management Board's reports and discussed them at its meetings. In addition to the Supervisory Board meetings and conference calls involving all members of the Management Board and Supervisory Board, the Supervisory Board Chairman and the Chief Executive Officer discussed important matters when necessary. The Supervisory Board was fully informed about exceptional instances that were of material importance for assessing the year's results.

Financial Communications

Voltabox AG regularly and simultaneously informed all capital market participants about the economic situation of the company. The continuous reporting included the annual report for fiscal year 2018 (published on April 01, 2019), the interim report as of March 31, 2019 – 1st quarter (published on May 13, 2019), the interim report as of June 30, 2019 – 1st half-year (published on

August 21, 2019) and the interim report as of September 30, 2019 – 9 months (published on November 13, 2019), among others. Parallel to these dates, Voltabox AG published corresponding financial notifications, which also included the Management Board's assessment of further business development among other things.

The Management Board's revenue and earnings forecast for fiscal year 2019 from March 7, 2019, was explained in the combined Group management report published on April 1, 2019, as an interval forecast including the key assumptions on which the forecasts are based. On August 12, 2019, the company published a profit warning in consideration of postponed projects and associated revenue delays which resulted in a reduction of the forecast with regard to revenue and EBIT margin.

In the past fiscal year, the Investor Relations department was initially supported in the context of a limited service arrangement by the parent company paragon GmbH & Co. KGaA and supplemented by its own internal resources. Over the further course of the fiscal year, IR activities were then performed fully independently. Ongoing communications with institutional and private investors were successfully solidified during the period since the company's IPO. The company is distinguished by the fact that it offers direct dialog to all shareholders. Under this framework, institutional investors regularly make use of the opportunity to hold discussions with the Management Board on current developments in regard to strategy and business operations. The persistently high frequency of discussions with familiar investor contacts as well as a number of new contacts at regularly-scheduled capital market conferences serves as a satisfactory indicator of the level of interest in Voltabox as an investment.

More than 250 individual meetings were held by the Management Board and IR department with institutional investors from Germany, the U.K., France, Finland, Sweden, Denmark, Luxembourg, the Netherlands, Switzerland, Austria, Italy, Spain, Poland, the USA and Canada as well as with private investors. In the course of the year, seven (prior year: three) research institutions have published a total of 35 (prior year: 27) studies on Voltabox AG.

The company sees effective financial communication as the targeted reduction in the asymmetric flow of information between management and shareholders on the current economic situation and specific future potential of Voltabox AG. Accordingly, the ongoing dialog with professional capital market participants is given a high priority. Furthermore, the company aims to provide the broader public with up-to-date and relevant information via various media channels and to be available as a personal contact for private investors.

Directors' Holdings

The largest shareholder of the company in 2019 was paragon GmbH & Co. KGaA with 9,500,000 shares. This corresponds to around 60 % of the share capital. As far as the company is aware, members of the Supervisory Board and Management Board of Voltabox AG did not hold any shares in the company as of the balance sheet date of December 31, 2019. However, the Supervisory Board Chairman Klaus Dieter Frers holds or controls 2,263,134 shares of paragon GmbH & Co. KGaA, which represents 50 % of the share capital plus one share, and thus indirectly also has a controlling influence on Voltabox AG in consideration of the current ownership structure.

Accounting

Voltabox AG prepared the consolidated financial statements as of December 31, 2019 in accordance with the International Financial Reporting Standards (IFRS) and the International Accounting Standards (IAS) as adopted by the EU. The Annual General Meeting on May 16, 2019 selected Baker Tilly GmbH & Co. KG Wirtschaftsprüfungsgesellschaft, Düsseldorf, to be the auditor for the fiscal year from January 01, 2019 to December 31, 2019, and the company was subsequently commissioned accordingly by the Supervisory Board.

Declaration from Voltabox AG on the German Corporate Governance Code

Pursuant to Section 161 AktG, the Management Board and Supervisory Board of Voltabox AG make the following declaration of compliance with the recommendations of the Government Commission on the German Corporate Government Code in the version from February 7, 2017, that was published on April 24, 2017, in the German Federal Gazette:

The Management Board and Supervisory Board of Voltabox AG welcome the suggestions and rules of the German Corporate Governance Code. They are committed to transparent, responsible and value-oriented management and governance. Voltabox AG complied and complies with the recommendations of the German Corporate Governance Code with following deviations:

- Currently, the company does not yet have a complete compliance management system. The implementation of a compliance management system in accordance with ISO 19600 is scheduled to be carried out in 2020 in the course of process optimization (No. 4.1.3).
- No provision for a severance cap has been agreed with the Management Board (No. 4.2.3).
- When appointing its current Management Board, the Supervisory Board was not governed by the issue of diversity (No. 5.1.2).
- The Supervisory Board has not formed any committees as this is considered inefficient by the three members due to the small size of the Supervisory Board (Nos. 5.3.1 to 5.3.3).
- No age limit has been set for the members of the Supervisory Board or Management Board since the expertise of the members is given priority (Nos. 5.1.2 and 5.4.1).
- Voltabox AG publishes the annual financial statements and the interim reports in accordance with legal requirements and also strives to comply with the periods recommended by the Code (90 days for annual financial statements, 45 days for interim financial statements). However, these periods may be exceeded for organizational reasons (No. 7.1.2).

Delbrück, Germany, August 2020

The Management Board The Supervisory Board

Consolidated Financial Statement 2019

Consolidated income statement

€ '000	Notes	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Revenue	11, 40	**56,617**	66,909
Other operating income	12	**1,808**	2,139
Increase or decrease in inventory of finished goods and work in progress		**-1,764**	8,016
Other own work capitalized	13	**7,778**	3,005
Total operating performance		**64,439**	80,069
Cost of materials	14	**-45,020**	-42,247
Gross profit		**19,419**	37,822
Personnel expenses	15	**-15,917**	-13,622
Depreciation of property, plant and equipment and amortization of intangible assets	17	**-6,271**	-3,608
Impairment of current assets		**-55,409**	-374
Impairment of goodwill		**-9,757**	0
Impairment of property, plant and equipment and intangible assets		**-21,767**	0
Other operating expenses	16	**-17,890**	-14,607
Earnings before interest and taxes (EBIT)		**-107,592**	5,611
Financial income	18	**9**	2
Financial expenses	18	**-224**	-149
Financial result		**-215**	-147
Earnings before taxes (EBT)		**-107,807**	5,464
Income taxes	19	**5,883**	-2,885
Consolidated net income		**-101,924**	2,579
Earnings per share in € (basic)	20	**-6.44**	0.16
Earnings per share in € (diluted)	20	**-6.44**	0.16
Average number of shares outstanding (basic)	20	**15,825,000**	15,825,000
Average number of shares outstanding (diluted)	20	**15,825,000**	15,825,000

Consolidated statement of comprehensive income

€ '000	Notes	**Jan. 1 to Dec. 31, 2019**	Jan. 1 to Dec. 31, 2018
Consolidated net income		**-101,924**	2,579
Currency translation reserve	30	**-260**	-296
Total comprehensive income		**-102,184**	2,283

Consolidated balance sheet

€ '000	Notes	**Dec. 31, 2019**	Dec. 31, 2018
ASSETS			
Noncurrent Assets			
Intangible Assets	21, 38	**10,725**	27,992
Goodwill	22, 38	**0**	9,706
Property, Plant and Equipment	23, 24	**16,956**	9,179
Financial Assets	38	**1,400**	0
Other assets	25	**2,051**	4,986
Deferred taxes	19	**146**	0
		31,278	51,863
Current assets			
Inventories	26	**15,674**	27,228
Trade receivables	27	**31,085**	56,025
Receivables from related parties	35, 42	**5,327**	11,683
Income tax assets	19	**0**	0
Other assets	28	**741**	6,483
Cash and cash equivalents	29	**5,036**	28,234
		57,863	129,653
Total assets		**89,141**	181,516

€ '000	Notes	**Dec. 31, 2019**	Dec. 31, 2018
LIABILITIES AND EQUITY			
Equity			
Subscribed capital	30	**15,825**	15,825
Capital reserve	30	**20,229**	127,992
Revaluation reserve	30	**0**	0
Profit/loss carried forward	30	**117,481**	7,614
Consolidated net income	30	**-101,925**	2,579
Currency translation differences	30	**214**	474
		51,824	154,484
Noncurrent provisions and liabilities			
Noncurrent leasing liabilities	31	**12,553**	17
Noncurrent loans	32	**274**	141
Deferred taxes	19	**2,531**	7,650
		15,358	7,808
Current provisions and liabilities			
Current leasing liabilities	31	**1,625**	25
Current loans and current portion of noncurrent loans	32	**269**	3,539
Trade payables		**12,418**	9,257
Liabilities to related parties		**472**	557
Other provisions	34	**3,796**	467
Income tax liabilities	19	**0**	618
Other current liabilities	33	**3,379**	4,761
		21,959	19,224
Total equity and liabilities		**89,141**	181,516

Consolidated cash flow statement

€ '000	Notes	**Jan. 1 to Dec. 31, 2019**	Jan. 1 to Dec. 31, 2018
Earnings before taxes (EBT)		**-107.807**	5,464
Depreciation/amortization of noncurrent assets		**6,271**	3,392
Financial result		**215**	146
Gains (-) / losses (+) from the disposal of property, plant and equipment and financial assets		**2,394**	44
Increase (+) / decrease (-) in other provisions		**3,329**	303
Other non-cash income and expenses		**211**	-345
Increase (-) / decrease (+) in trade receivables, other receivables, and other assets		**39,973**	-45,275
Impairments of goodwill and intangible assets		**31,523**	374
Increase (-) / decrease (+) in inventories		**47,689**	-22,532
Non-cash expenses from amortization		**-36,135**	0
Increase (+) / decrease (-) in trade payables and other liabilities		**1,694**	3,718
Interest paid		**-224**	-149
Income taxes paid		**0**	35
Cash flow from operating activities	39	**-10,866**	-54,823
Cash receipts from disposals of property, plant and equipment		**7,275**	0
Cash receipts from the sale of intangible assets		**1,092**	1,788
Cash payments for investments in property, plant and equipment		**-6,336**	-1,620
Cash payments for investments in intangible assets		**-9,102**	-11,943
Cash payments for investments in financial assets		**-1,400**	0
Cash payments for the acquisition of subsidiaries, less acquired cash and cash equivalents		**0**	-7,311
Interest received		**9**	2
Cash flow from investing activities	39	**-8,462**	-19,083
Distributions to shareholders		**-475**	0
Cash payments for loan repayments		**-3,737**	-526
Amounts paid on insolvency ratio		**0**	0
Proceeds from loans		**964**	3
Cash payments for finance lease liabilities		**-621**	-16
Cash flow from financing activities	39	**-3,869**	-539
Changes in cash and cash equivalents		**-23,198**	-74,446
Cash and cash equivalents at beginning of period		**28,234**	102,679
Cash and cash equivalents at end of period	39, 29	**5,036**	28,234

Statement of changes in equity

€ '000	Sub-scribed capital	Capital reserve	Re-valuation reserve	Currency translation reserve	Retained profit: Profit carried forward	Retained profit: Consoli-dated net income	Total
January 1, 2019	**15,825**	**127,992**	**0**	**474**	**10,193**	**0**	**154,484**
Effects from first-time application of IFRS 16	0	0	0	0	0	0	0
Consolidated net income	0	0	0	0	0	-101,925	-101,925
Currency Translation	0	0	0	-260	0	0	-260
Other comprehensive income	0	0	0	-260	0	0	-260
Total comprehensive income	0	0	0	-260	0	-101,925	-102,185
Capital increase	0	0	0	0	0	0	0
Release of capital reserves	0	-107,763	0	0	-107,763	0	0
Distribution	0	0	0	0	-475	0	-475
December 31, 2019	**15,825**	**20,229**	**0**	**214**	**117,481**	**-101,925**	**51,824**

The adjustment effects from new accounting standards can be found in section (4).

Due to the negative net income for the year, a prorated release of the capital reserves was carried out in accordance with Section 150 (4)(1)(1) AktG in fiscal year 2019 in the context of the preparation of the annual financial statements, in the amount of the net income for the year less the existing profit carried forward. The release in the context of the preparation of the annual financial statements amounts to € 107,762,884.69.

€ '000	Sub-scribed capital	Capital reserve	Re-valuation reserve	Currency translation reserve	Retained profit: Profit carried forward	Retained profit: Consoli-dated net income	Total
January 1, 2018	**15,825**	**127,992**	**0**	**770**	**7,524**	**0**	**152,111**
Effects from first-time application of IFRS 15 and IFRS 9	0	0	0	0	89	0	89
Consolidated net income	0	0	0	0	0	2,579	2,579
Currency translation	0	0	0	-296	0	0	-296
Other comprehensive income	0	0	0	-296	0	0	-296
Total comprehensive income	0	0	0	-296	0	2,579	2,583
Capital increase	0	0	0	0	0	0	0
Distribution	0	0	0	0	0	0	0
Profit/loss assumption	0	0	0	0	0	0	0
December 31, 2018	**15,825**	**127,992**	**0**	**474**	**7,614**	**2,579**	**154,484**

Notes to the Consolidated Financial Statements 2019

1 General Information

Voltabox Aktiengesellschaft (hereafter "Voltabox AG" or "Voltabox") is a joint stock corporation incorporated under German law. The company's headquarters are at Artegastrasse 1, Delbrück, Germany. Voltabox AG is entered in the commercial register of the district court of Paderborn (HRB 12895). Voltabox develops and produces battery systems for use in the field of electromobility.

The Management Board of Voltabox AG authorized the consolidated financial statements as of December 31, 2019, and the combined management report for the period from January 1 to December 31, 2019, for submission to the Supervisory Board on August 17, 2020.

The consolidated financial statements and the combined management report of Voltabox AG for the period from January 01 to December 31, 2019, are published in the electronic Federal Gazette and are available as part of the Annual Report on the company's website (www.voltabox.ag).

The parent company of the Group is paragon GmbH & Co. KGaA, Delbrück, Germany. paragon GmbH & Co. KGaA, as the Group parent company, prepares the consolidated financial statements for the largest group of consolidated companies. These financial statements are submitted to the electronic Federal Gazette and are available on the Company's website (www.paragon.ag) as part of the annual report.

2 Application of International Financial Reporting Standards (IFRS)

The consolidated financial statements of Voltabox AG as of December 31, 2019, have been prepared in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB), London, as adopted by the European Union (EU) and applicable on the reporting date, and in accordance with the interpretations of the International Financial Reporting Standards Interpretations Committee (IFRSIC).

3 Accounting Principles Due to New Standards

The effects of new accounting principles whose scope is relevant to the activities of Voltabox AG are listed below. For reasons of materiality, Voltabox AG refrains from presenting changes in accounting policies that have no effect on the company.

FRS 16 – Leases

Since January 1, 2019, Voltabox AG has applied the new accounting standard IFRS 16. IFRS 16 essentially changes accounting by lessees and leads to the recognition of almost all leasing relationships in the statement of financial position. The new standard replaces IAS 17 and the associated interpretations. The previous distinction between finance and operating leases no longer applies. In addition, IFRS 16 includes a number of additional rules on disclosure, including in the Notes, as well as on sale and leaseback transactions. According to IFRS 16, a leasing arrangement is deemed to exist if the lessor contractually grants the lessee the right to control the use of an identified asset for a specified period of time for a fee. For all leases, the lessee recognizes a lease liability in the statement of financial position and simultaneously capitalizes a right of use in the amount of the present value of the lease payments. Subsequently, the right of use is generally amortized on a straight-line basis and the lease liability is measured using the effective interest method. This generally leads to higher expenses at the beginning of the lease term. An option exists to waive the recognition of contracts involving short-term leasing and low-value leasing.

Voltabox AG is introducing IFRS 16 using the modified retrospective method. The impact of the initial retrospective application of the accounting standard is presented in section (4) and an explanation of the accounting and measurement methods applied is presented in section (9).

IFRIC 23 – Uncertainty over Income Tax Treatments

This interpretation clarifies the recognition of deferred taxes in relation to taxable profits (tax losses), the tax base, unused tax losses, unused tax credits and tax rates in case of uncertainty about the income tax treatment under IAS 12.

Tax risks must be recognized if it is probable that the opinion and assessment of the tax authorities with regard to a specific tax-relevant matter will differ from that of the company preparing the financial statements.

Discovery risk is not relevant for the recognition and measurement of tax risks. It is assumed that the tax administration is fully informed. The measurement shall be based on the most probable value or expected value, depending on the value that best reflects the existing risk. IFRIC 23 is effective for reporting periods beginning on or after January 1, 2019. There has been no significant impact on Voltabox AG from the interpretation.

Amendment to IFRS 9

This amendment changes the existing rules in IFRS 9 on termination rights so as to enable measurement at amortized cost (or, depending on the business model, at fair value directly in equity) even in the case of negative compensation. On the basis of this amendment, whether the compensatory payment is positive or negative is not relevant, i.e. a payment for the benefit of the party bringing about the early repayment may be possible, depending on the interest rate at the time of termination. The calculation of this compensatory payment must be the same both in the case of an early repayment fee and in the case of an early repayment profit. The amendment to IFRS 9 had no effect on Voltabox AG.

In addition, a clarification on the restructuring of financial liabilities that do not lead or have not led to their derecognition. Accordingly, following restructuring the carrying amount of a financial liability is adjusted directly in profit or loss. Retrospective adjustments may therefore be required if the effective interest rate rather than the amortized cost has been adjusted to date. From the 2019 reporting year, the amendment to IFRS 9 must be applied in relation to prepayment features with negative compensation. There has been no significant impact on Voltabox AG from the interpretation.

Amendment to IAS 28

The amendment to IAS 28 clarifies that an enterprise applies IFRS 9 including the impairment provisions to long-term investments in an associate or joint venture which constitute part of the net investment in this associate or joint venture but which are not accounted for using the equity method. As of the 2019 reporting year, the amendment to IAS 28 must be applied with regard to long-term investments in associates and joint ventures. There has been no significant impact on Voltabox AG from the interpretation.

Annual IFRS Improvements (2015–2017 Cycle)

The project covers amendments to IFRS 3, IFRS 11, IAS 12 and IAS 23. However, these will not have any impact on the reporting of Voltabox AG. The amendments are effective from January 1, 2019.

IFRS 3 is being amended as part of the “Annual IFRS improvements, 2015 – 2017 cycle” process of making minor improvements to standards. The amendment to the definition of a business clarifies that, to be considered an enterprise, an acquired set of activities and assets must include at least one input and one substantive process that together contribute significantly to the ability to generate outputs. The definition of the term “outputs” will be narrower and will only cover goods and services provided to customers, the generation of investment income and other income. Returns in the form of cost savings and other economic benefits will thereby be excluded in future. The amended definition applies to acquisitions for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after January 1, 2020. There will likely be no effect on the accounting policies of Voltabox AG.

The amendments to IFR S11 clarify that when an enterprise obtains joint control of a business that is a joint venture, it does not revalue its previously held interests in the business.

The amendment to IAS 12 clarifies that the income tax consequences of dividend payments on financial instruments classified as equity should be treated in accordance with the treatment of the transaction(s) giving rise to the tax effect.

The amendment to IAS 23 relating to the “Annual Improvements to the IFRS, 2015–2017 Cycle” now explicitly states that borrowings that are still outstanding and were originally made for the purpose of obtaining a qualifying asset are to be taken into account from when this qualifying asset is essentially ready for its intended use or sale in determining the general borrowing cost for other qualifying assets not involving the acquisition of special assets. The regulation is effective from January 1, 2019. There will likely be no effect on the accounting of Voltabox AG.

IFRS 17 – Insurance Contracts

The new standard for insurance contracts is applicable for the first time on January 1, 2021 (which is expected to be changed to January 1, 2022). Voltabox AG does not expect any impact as a result of the introduction of the new standard.

Amendments to IAS 1 and IAS 8

The amendment harmonizes the definition of materiality in all IFRS and the IFRS conceptual framework. It clarifies that the question of whether information is material depends on the nature of the information and/or the scope of the impact of the underlying facts. The materiality of information shall be assessed in the context of the financial statements as a whole. The term "concealment" was also introduced. This is always considered to be the case if the resulting impact is comparable to the omission or misrepresentation of this information. The amendment is effective from January 1, 2020. Voltabox AG does not expect any significant effects from the initial application.

Revised IFRS Conceptual Framework

The IASB has published a revision of its conceptual framework for accounting and this is directly applied in the preparation of new standards and interpretations. These amendments are effective as of January 1, 2020. The major changes are:

- Increase in the importance of management accountability and responsibility for the objectives of financial reporting.
- Emphasis on the principle of prudence, defined as exercising caution in making discretionary decisions in an uncertain environment, as a contribution to neutrality.
- Definition of a reporting entity, which may be a legal person or part of a legal person.
- Revision of the definition of an asset as a current economic resource controlled by the enterprise as a result of past events.
- Revision of the definition of a liability as an enterprise's present obligation to transfer an economic resource as a result of past events.
- Removal of probability thresholds in recognition and inclusion of additional guidelines on the disposal of assets and liabilities.
- Inclusion of additional explanations on different evaluation concepts and factors to be considered in their selection.
- Establishment of profit or loss as the primary performance indicator and stating that income and expenses recognized in other comprehensive income should generally be reclassified to profit or loss if this increases the relevance or credibility of the financial statements.

The revision of the conceptual framework does not amend the existing IFRS. However, enterprises that develop their own accounting policies with reference to the conceptual framework in the absence of IFRS regulations will have to apply the revised conceptual framework from January 1, 2020 and evaluate whether their existing accounting policies are still applicable.

Amendment to IAS 1

The IASB has published an amendment to IAS 1 on the classification of liabilities. Accordingly, a liability is classified as noncurrent if, as of the reporting date, the enterprise has a right to defer settlement of the liability for at least 12 months after the reporting date. The mere existence of a right is sufficient; there does not have to be any intention on the part of the enterprise to exercise it. In the case of rights that are dependent on the existence of certain conditions, the focus is on whether the conditions are met on the reporting date.

4 Effects of IFRS 16 Using Modified Retrospective Accounting

Voltabox AG applied the new accounting standard IFRS 16 for the first time in 2019. IFRS 16 deals with the accounting treatment of leases. The necessity for the accounting change has been discussed in section (3).

As of January 1, 2019, Voltabox AG applied IFRS 16 for the first time. The standard eliminates the previous classification of leases as operating and finance leases for lessees. Instead, IFRS 16 introduces a single accounting model under which lessees are required to recognize an asset for the right of use for all leases and a lease liability for the outstanding rental payments. As a result, all leases must be recorded in the consolidated statement of financial position in the future.

Leases that existed prior to January 1, 2019 were not reviewed again to determine whether they were finance or operating leases. Contracts previously classified as operating leases were recorded with a right of use at the carrying amount as of January 1, 2019, as if IFRS 16 had been applied at the beginning of the leasing relationship. Discounting was calculated on the basis of the incremental borrowing rate as of initial application. The right of use to be recorded was tested for impairment at the time of conversion. The leasing liability was carried in the amount of the right of use. If a finance lease had previously existed, there was no change in the carrying amount of the assets and liabilities. Voltabox AG only makes an adjustment for reasons of materiality, provided that the remaining contract period on January 1, 2019, is more than 12 months and the outstanding leasing or rental payments exceed a threshold of € 5 thousand.

A statement of financial position extension results from the initial recognition of a lease previously defined as operating along with the associated lease liability.

In line with the modified retrospective approach, the prior year’s figures have not been adjusted for first-time adoption. The transition effects are shown cumulatively in the retained earnings. Using the modified retrospective first-time application, the following change in items in the statement of financial position is effective from the beginning of the fiscal year:

€ ’000	Dec. 31, 2018	IFRS 16 adjustment	Jan. 1, 2019
Property, plant and equipment	9,179	14,799	23,978
Assets	181,516	14,799	196,315
Current leasing liability	25	1,045	1,070
Noncurrent leasing liability	17	13,754	13,771
Liabilities and equity	181,516	14,799	196,315

Voltabox AG applies the following lessee concessions granted by IFRS 16 on transition to the new standard:

- For leases previously classified as operating leases under IAS 17, the lease liability is recognized at the present value of the outstanding lease payments, discounted at the incremental borrowing rate as of January 1, 2019. The associated right of use is generally recorded in the amount of the lease liability. If leasing contracts had the same characteristics, these were combined for discounting purposes. The weighted average incremental borrowing rate was 4.1 %.

- An impairment test was not performed. Instead, for reasons of simplification, the right of use was reduced at the time of first-time application by the amount recognized as a provision for onerous leases as of December 31, 2018.
- Leases expiring on December 31, 2019 at the latest are accounted for as current leases, irrespective of the original term of the lease.
- The initial direct costs are not taken into account when measuring the right of use at the time of initial application.
- Current recognitions are taken into account when determining the term of contracts with extension or termination options.

The leased object is shown on the assets side of the statement of financial position under property, plant and equipment. In section (23), rights of use and other property, plant and equipment are shown separately. The individual rights of use are allocated to the various categories of property, plant and equipment as follows:

€ ’000	Right of use	Current leasing liability	Noncurrent leasing liability
Property	10,861	22	10,839
Technical equipment and machinery	3,658	941	2,717
Other operating and office equipment	280	82	198

Based on the other financial obligations from rental, tenancy and lease agreements as of December 31, 2018, the following reconciliation to the opening statement of financial position value of the leasing obligations as of January 1, 2019 resulted in:

€ ’000	
Recognized lease liabilities as of December 31, 2018	42
Outstanding lease installments for previously unrecognized financial obligations from rental, tenancy and leasing agreements as of December 31, 2018	21,142
Financial obligations from rental, tenancy and lease agreements as of December 31, 2018	21,184
Facilitation of application for current leases	385
Facilitation of application for leases of low-value assets	4
Effect of discounting	5,954
Carrying amount of leasing liabilities according to IFRS 16 as of January 1, 2019	14,841

In previous fiscal years, leasing expenses were recorded as operating rental expenses under other operating expenses. Under the new regulation, the recording of expenses is divided into the depreciation of the right of use and the interest portion of the lease payment. Depreciation of the right of use is based on the shorter period of the lease term or the useful economic life. The leasing liability is reduced by the repayment portion of the leasing installments paid. The interest expense is thus calculated by multiplying the current residual debt by the interest rate underlying the lease. If this cannot be determined, the lessee’s incremental borrowing rate is used.

The division of expenses into an interest and a depreciation portion therefore results in a higher expense burden in the first few years compared with expenses distributed on a straight-line basis; however, this burden decreases in subsequent years.

IFRS 16 has an impact on the structural recognition of cash flows compared to IAS 17. IFRS 16 results in a cash flow shift in the cash flow statement. According to IAS 17, the lessee’s leasing payments are recorded as operating cash flow. According to IFRS 16, the repayment and interest portion of the lease payment is recognized as financing cash flow. As a result, cash outflows in the operating area will decrease, operating cash flow will increase and free cash flow will rise. At the same time, however, the financing cash flow is reduced due to the recognition of the repayment portion in accordance with IFRS 16.

5 Going Concern

The financial statements for the reporting period from January 1 to December 31, 2019, have been prepared under the going concern assumption. The carrying amounts of assets and liabilities were therefore determined on the basis of going concern values. At the time of preparing the financial statements, there is a financial risk that could jeopardize the company’s continued existence due to the unclear further development of business. At the time of preparing the financial statements, there is considerable insecurity about the future economic development and the continuation of the company’s activities due to the COVID-19 pandemic and a tight liquidity situation. Further details can be found in the section “Financial Risks” in the combined management report.

6 Events After the Reporting Period

The consolidated financial statements are prepared on the basis of the circumstances existing as of the reporting date. In accordance with IAS 10.7, events after the reporting period include all events up to the date the consolidated financial statements are authorized for issue. The consolidated financial statements as of December 31, 2019, were authorized by the Management Board and submitted to the Supervisory Board for approval on August 17, 2020. All information available up to that date with regard to the circumstances applying on the reporting date must be taken into account.

The spread of the coronavirus advanced between the reporting date and the date on which the financial statements were authorized for publication. The effects of the coronavirus are considered non-adjusting events in regard to the balance sheet and the income statement, as they only occurred after the reporting date. Nevertheless, initial findings and effects of the pandemic have been included in the financial statements. These must be taken into consideration as adjusting events for financial statements following December 31, 2019. The pandemic has extensive consequences for Voltabox AG. Further information can be found in the management report. Suppliers are unable to make deliveries, orders from customers have decreased and employees' situations have worsened due to reduced working hours and similar limitations. As the situation is evolving on a daily basis, the financial impact cannot yet be concretely quantified.

7 Scope of Consolidation

In addition to the parent company Voltabox AG, Delbrück, the subsidiaries Voltabox of Texas, Inc., Voltabox of North America, Inc. and Voltabox Kunshan Co., Ltd. are fully consolidated. The reporting date for all companies is December 31. The consolidated financial statements are based on the separate financial statements of the companies included in the Group, which were prepared using uniform accounting policies under IFRS as of December 31, 2019. In addition, debt consolidation was carried out, as was consolidation of income and expenses. The differences arising from consolidation were offset through profit or loss. Assets arising from intercompany deliveries that are recognized in non-current assets and inventories are adjusted for interim profit and loss.

As of December 31, 2019, the scope of consolidation is as follows:

Company name and location	Shareholdings	**Consolidation**	Currency	Sales in local currency (before consolidation)
Voltabox of Texas, Inc. (Texas)	100 %	Consolidated subsidiary	USD	6,928,096
Voltabox of North America, Inc. (Texas)	100 %	Consolidated subsidiary	USD	0
Voltabox Kunshan Co., Ltd. (Kunshan)	100 %	Consolidated subsidiary	RMB	0

ACCURATE – SMART BATTERY SYSTEMS – GmbH (Korntal-Münchingen) was merged with Voltabox AG in fiscal year 2019. The merger resulted in a merger loss of € 5,579 thousand. This loss results from the offsetting of expenses and income of the merger. The expenses result from the investment of € 5,000 thousand, the loan of € 1,488 thousand and the resulting interest of € 2 thousand. The income consists of the profit carried forward of the merging company of € 1,023 thousand, the loans of PA Invest AG of € 1,479 thousand and of ProVenCon AG of € 456 thousand. The overall result is reported in other operating expenses. The acquired assets amount to € 70 thousand and the assumed liabilities amount to € 1,351 thousand. 2019 revenues, which would have been attributable to Accurate - SMART BATTERY SYSTEMS - GmbH, amount to € 4,536 thousand. Concurrent Design, Inc. (Texas) was merged with Voltabox of Texas, Inc. in fiscal year 2019. The mergers had no effect on the statement of financial position recognition in the consolidated financial statements.

Voltabox AG has a direct 100 % interest in each of the listed subsidiaries.

The initial consolidation of ACCURATE – SMART BATTERY SYSTEMS – GmbH (Korntal-Münchingen) and Concurrent Design, Inc. (Texas) in fiscal year 2018 did not result in any changes for fiscal year 2019.

Voltabox AG acquired a 9.45 % stake in ForkOn GmbH (Haltern am See, Germany) in fiscal year 2019. The goal of the investment is to expand the potential sales area of Voltabox AG. The investment will enable Voltabox AG to achieve a greater range for the distribution of its lithium-ion battery systems. This company is managed as a long-term equity investment. There is no control under IFRS 10.

On the reporting date, the Group held the following other long-term equity investments:

Name and registered office of the company	Shareholdings	**Consolidation**	Investment amount in € '000
ForkOn GmbH (Haltern)	9.45 %	Investment	1,400

The investment is recognized at fair value through profit or loss. The fair value at the end of fiscal year 2019 was € 1,400 thousand.

8 Currency Translation

In Voltabox AG's consolidated financial statements, receivables and liabilities denominated in foreign currencies are measured at the transaction rate in effect at the date they are initially recognized, and subsequently adjusted to the exchange rate applicable as of the reporting date. Exchange rate gains and losses are recognized in profit and loss within other operating income or other operating expenses.

Exchange rate losses arising on operating activities of € 333 thousand (prior year: € 228 thousand) and exchange rate gains of € 701 thousand (prior year: € 1,368 thousand) are recognized in the consolidated statement of comprehensive income. These exchange rate differences are reported within other operating expenses and other operating income, respectively.

The exchange rates of the currencies of significance to Voltabox AG developed as follows:

Foreign currency for € 1	**Balance sheet average exchange rate on Dec. 31, 2019**	**Income statement average price 2019**	Balance sheet average exchange rate on Dec. 31, 2018	Income statement average price 2018
US-Dollar (USD)	**1.1216**	**1.1108**	1.1445	1.1376
Chinesischer Renminbi Yuan (RMB)	**7.8151**	**7.1438**	7.8713	7.8405

Voltabox AG has classified a loan to Voltabox of Texas, Inc. as a net investment in a foreign operation and presents the unrealized currency movements directly in equity under the item currency translation differences.

The functional currency of the American subsidiaries is the USD, since the companies primarily generate and expend cash in this currency.

The currency translation reserve amounted to € 214 thousand (prior year: € 474 thousand) on the reporting date of December 31, 2019.

9 Description of Accounting Policies and Measurement Methods

The consolidated financial statements were prepared in euros (€). The reporting currency is the euro. Unless stated otherwise, all amounts are stated in thousands of euros (€ thousand). The reporting period for Voltabox AG in these financial statements extends from January 1 to December 31, 2019. Individual items in the consolidated statement of financial position and the consolidated statement of comprehensive income have been combined in order to provide better clarity and transparency. Where this has occurred, the items are explained individually in the notes to the financial statements. The consolidated statement of comprehensive income is presented using the nature of expense method, as in previous periods. Assets and liabilities are classified into noncurrent and current assets and liabilities in the statement of financial position; further details on their maturity are presented in the notes. Assets and liabilities are recognized as current if they mature within twelve months.

The consolidated financial statements comprise the consolidated statement of financial position, the consolidated statement of comprehensive income, the notes to the consolidated financial statements, the consolidated cash flow statement and the consolidated statement of changes in equity. A combined Group management report has been prepared as a supplement to the above statements.

Recognition of Acquisitions

Goodwill is recognized in the Group's statement of financial position as a result of acquisitions. When an acquisition is initially consolidated, all identifiable assets, liabilities and contingent liabilities are recognized at fair value as of the acquisition date. One of the most significant estimates relates to determining the fair values of these assets and liabilities as of the acquisition date. Property, buildings and office equipment are generally valued on the basis of independent expert opinions, while marketable securities are valued at the stock exchange price. If intangible assets are identified, the fair value is determined internally using an appropriate measurement technique, which is usually based on the estimate of total expected future cash flows. These valuations are closely linked to the assumptions made by management regarding the future performance of the respective assets and to the assumed changes in the discount rate to be applied.

Intangible Assets

Intangible assets acquired for monetary consideration are recognized in the statement of financial position at their acquisition cost, taking into account ancillary costs and any purchase price reductions.

Research costs are recognized as expenses in the period in which they are incurred. Costs incurred in connection with the development of patents and customer-specific solutions are only recognized as intangible assets at their production cost when the costs are clearly attributable to the asset as required by IAS 38, the technical feasibility and marketability or use is assured, and when the anticipated realization of future economic benefits has been demonstrated. The costs of production comprise all costs that are directly or indirectly attributable to the development process, as well as a proportionate share of necessary project-related overhead costs. If the asset recognition requirements are not fulfilled, development costs are directly expensed in profit or loss within other operating expenses in the year in which they are incurred. Subsequent to initial recognition, development costs are reported in the statement of financial position at cost less cumulative amortization and cumulative impairment losses. With regard to the realization of revenue, IAS 38.3 (i) has priority.

Intangible assets that have limited useful lives are amortized on a straight-line basis over their useful economic lifetimes. Amortization starts as soon as the asset is available for use, i.e., when it is at the location and condition necessary for it to be capable of operating in the manner intended by management. Intangible assets with indefinite useful lives are subject to annual impairment tests. As of each reporting date, the carrying amounts of such intangible assets are examined in order to determine whether there are indications that the value of the asset may be impaired. An impairment test pursuant to IAS 36 was performed where there were such indicators. The residual values, useful lives and amortization methods are reviewed at the end of each fiscal year and amended as necessary.

The useful lives for internal development costs correspond to the expected product life cycles and are regularly between four and seven years. Voltabox AG makes an individual assessment of the product life and reviews the useful life annually. The useful lives for licenses, patents and software range from three to ten years.

Goodwill is carried at acquisition cost and tested for impairment each year and, additionally, at other dates when there are any indications of potential impairment. Impairment losses are recognized under impairments of property, plant and equipment and intangible assets.

Property, Plant and Equipment

Additions to property, plant and equipment are measured at cost plus incidental acquisition costs and less any purchase price reductions received. If the cost of individual components of an item of property, plant and equipment is significant when measured against the item’s total purchase cost, then such components are recorded as separate assets and depreciated individually. Depreciation is generally recorded on a straight-line basis. The useful life for depreciation purposes ranges from 20 to 33 years for buildings, five to ten years for technical plants, and three to ten years for other plants, operating and office equipment.

Fully depreciated noncurrent assets are presented under cost and accumulated depreciation until the asset is retired. Amortized cost and accumulated depreciation are deducted from the sales proceeds generated on disposal. Gains and losses generated on disposal (disposal proceeds less residual carrying amounts) are shown in the consolidated statement of comprehensive income within other operating income or other operating expenses. All residual values, useful lives and depreciation methods are reviewed annually and amended as necessary.

At each reporting date, the carrying amounts of property, plant and equipment (which are depreciated in accordance with their useful lives) are examined in order to determine whether there are indications that the value of the asset may be impaired. If such indicators exist, an impairment test is performed.

Leases

Voltabox AG assesses at the beginning of each lease whether the contract creates or contains a lease. This is the case when the contract gives the right to control the use of an identified asset for a specified period of time in return for the payment of a fee. In the event of contract amendments, Voltabox AG reassesses whether a contract constitutes a lease.

The Group has decided to make use of the right to vote and not to recognize leases if the lease agreement has a term of up to 12 months or the determined right of use does not exceed a value of € 5,000. In these cases, the expense from the lease is recognized on a straight-line basis over its specific term.

The individual leasing components and non-leasing components are accounted for separately. If a lease exists, the contract is allocated to the individual leasing components on the basis of the contractually agreed relative individual selling prices of the leasing components and the aggregated individual selling prices of the non-leasing components. In doing so, Voltabox AG determines the relative individual selling price with reference to the price that a lessor or similar supplier of Voltabox AG would charge separately for these or similar components. Where no observable market exists, Voltabox AG makes use of estimates.

When determining the term of the lease, Voltabox AG takes the non-terminable basic term and an optional extension period as a basis, insofar as the company is sufficiently certain that it will exercise this option. If there is a termination option, this is taken into account accordingly when determining the term, provided that the exercise of the option is sufficiently certain. Voltabox AG regularly checks whether the use of an option is reasonably certain.

On the provision date, Voltabox AG recognizes an asset for the right of use and a lease liability. On the provision date, the right of use is valued at the acquisition costs. The acquisition costs comprise:

- Present value of lease payments not yet made on the provision dat
- Lease payments made on or before provision
- Initial direct costs
- Estimated costs for dismantling and removal

The lease liability comprises the lease payments not yet made as of the provision date. Discounting is calculated on the basis of the underlying constant interest rate. If this is not available, Voltabox AG uses an incremental borrowing rate of interest that is used as a basis for comparable lease financing. Lease payments not yet made comprise

- all fixed payments less lease incentives received,
- variable lease payments,
- amounts expected to be paid at the end of the lease term under residual value guarantees,
- the exercise price of a call option, provided that the exercise is sufficiently certain and
- penalties for termination, provided that it is reasonably certain that they will be exercised.

The right of use is amortized on a straight-line basis and adjusted for revaluation of the lease liability. Voltabox AG records an impairment loss in accordance with IAS 36.

The carrying amount of the leasing liability is increased by the interest expense and reduced by the payments made after provision on the reporting date. A remeasurement of the leasing liability is immediately taken into account.

Rights of use are not shown as separate items in the statement of financial position of Voltabox AG. For this reason, a separate listing is provided in the notes. Leasing liabilities are shown as separate items in the statement of financial position.

The effects of the first-time adoption of IFRS 16 are presented in section (4).

If sale and leaseback transactions exist, Voltabox AG assesses whether the transaction of the asset subsequently leased back meets the criteria of a sale under IFRS 15. The Group bases this on the transfer of control of the underlying asset. If the transaction enables the lessor to determine the use of the underlying asset and derive all the remaining economic benefits from it substantially, the transaction is a sale under IFRS 15. In this case, Voltabox AG recognizes the disposal of the underlying asset and realizes the sales profit to the extent that it relates to rights to use the asset actually transferred to the lessor. A right of use is recorded for the remaining share. If there is no sale under IFRS 15, the transaction is recorded as a loan.

Borrowing Costs

Borrowing costs are recognized as an expense in the period in which they are incurred. They are capitalized if they fulfill the requirements of a qualifying asset in accordance with IAS 23 Borrowing Costs. The capitalization of borrowing costs is based on a weighted average of the borrowing costs for such company loans.

Impairment of Nonfinancial Assets

At each balance sheet date, an assessment takes place to ascertain whether there are any indications that the value of nonfinancial assets (in particular intangible assets with definite useful lives) are impaired. If there are indications of impairment, an determination of the recoverable amount of the relevant asset is made. In accordance with IAS 36.6, the recoverable amount reflects the higher of fair value less cost to sell and value in use of the asset or an identifiable group of assets that represent a cash-generating unit (CGU). If the carrying amount of an asset or a CGU exceeds the recoverable amount, the asset is impaired and written down to its recoverable amount.

For property, plant and equipment and intangible assets other than goodwill, an assessment is made at each balance sheet date to establish whether there is any indication that a previously recognized impairment loss no longer exists or has decreased. If there are such indications, an estimate of the recoverable amount of the asset or the CGU is made. A previously recognized impairment loss is reversed only if the assumptions used in determining the recoverable amount have changed since the last impairment loss was recognized. The reversal of the impairment loss is limited in that the carrying amount of an asset may not exceed its recoverable amount or the carrying amount that would have resulted after taking depreciation and amortization into account if no impairment loss had been recorded for the asset in earlier years.

Financial Instruments

Financial instruments are contracts which generate a financial asset for one party and a financial liability or an equity instrument for the other party. Voltabox AG's primary financial instruments include, in particular, trade receivables, lending, cash and cash equivalents, financial liabilities and trade payables. Its other financial assets and other financial liabilities likewise exclusively comprise financial instruments.

Primary financial instruments are recognized as of the settlement date in case of a regular way purchase or sale. Receivables and liabilities denominated in foreign currency are measured at their reporting date exchange rates.

Financial assets and financial liabilities are reported gross at Voltabox AG. They will only be offset in case of an enforceable netting option in respect of the respective amounts at the present moment in time and an intention to settle on a net basis.

Financial assets are classified in terms of the following categories for accounting and measurement purposes:

- measured at amortized cost (AC),
- measured at fair value through profit or loss (FVTPL),
- fair value through other comprehensive income (FVOCI).

The following categories were established for the accounting and measurement of financial liabilities:

- measured at amortized cost (AC),
- measured at fair value through profit or loss (FVTPL).

Voltabox AG allocates financial assets and financial liabilities to these categories as of the date of their addition and regularly reviews whether the criteria for their classification are complied with.

Voltabox AG derecognizes financial assets where the contractual rights to the cash flows from an asset expire or it transfers the rights to receive these cash flows in a transaction through which all material risks and opportunities associated with the ownership of this financial asset are likewise transferred. Derecognition also occurs in cases where Voltabox AG has neither transferred nor retained all of the material risks and opportunities associated with ownership and it does not retain the power of disposal over the transferred asset. Any portion of such transferred financial assets that accrue or remain with Voltabox AG is accounted for as a separate asset or separate liability.

Financial liabilities are derecognized if the contractual obligations have been fulfilled or canceled or have expired.

Valuation allowances for financial assets which are measured at amortized cost and for contractual assets resulting from agreements with customers are implemented on the basis of a future-oriented model, taking expected loan losses into consideration.

Allowances for trade receivables, contractual assets, and lease receivables are determined using the simplified approach with lifetime expected credit loss.

With the exception of financial assets measured at fair value through profit or loss, financial assets are tested for possible indications of impairment on each reporting date. Financial assets are considered to be impaired if there is an objective indication of a negative change in the expected future cash flows for financial instruments due to one or more events occurring following the initial recognition of the asset in question. Various facts such as defaults over a specific period of time, the initiation of coercive measures, the risk of insolvency or overindebtedness, the application for or the initiation of insolvency proceedings or the failure of restructuring measures may constitute objective indications of impairment.

Financial assets are measured at amortized cost where the business model envisages the holding of a financial asset for the collection of the contractual cash flows and the contractual terms of the instrument will exclusively result in cash flows which comprise interest and principal repayments.

Upon initial recognition, financial instruments in the AC category are recognized at fair value plus directly attributable transaction costs.

As part of the subsequent measurement, financial assets measured at amortized cost are measured using the effective interest method. Where the effective interest method is used, all directly allocable fees, charges paid or received, transaction costs and other premiums or discounts included in the calculation of the effective interest rate are amortized over the expected term of the financial instrument.

Interest revenue and expenses resulting from application of the effective interest method are recognized through profit or loss under interest revenue or interest expenses from financial instruments.

Non-interest bearing and low-interest receivables with a term of more than twelve months are discounted at the interest rate which is appropriate for the respective term.

Cash and cash equivalents comprise cash on hand as well as current account balances with banks and other financial institutions. They are only reported under cash and cash equivalents if they may be converted at any time into cash amounts which may be determined in advance, are only subject to slight fluctuation risks, and have a remaining term of not more than three months from the date of acquisition.

Where the business model envisages the holding and sale of the financial asset and the contractual terms for the instrument will exclusively result in cash flows which comprise interest and principal repayments, the financial asset is reported at fair value, with value adjustments recognized in other comprehensive income (FVOCI).

Financial assets which are exclusively held for trading purposes are recognized at fair value through profit or loss, with changes in value reported through profit or loss (FVTPL). Derivatives are included in this category. There is also an option to measure financial instruments recognized at amortized cost at fair value through profit or loss by means of the fair value option if this will significantly reduce or prevent inconsistency in their measurement or recognition. Voltabox AG does not make use of the fair value option.

Voltabox AG has been using factoring for a certain portion of its trade receivables since fiscal year 2019. Significant portions of trade receivables from third parties are sold. The del credere risk is transferred to the factor. As a result, the receivables no longer have to be reported in the balance sheet.

Equity instruments are always measured at fair value. At initial recognition, there is an irrevocable option to report realized and non-realized changes in value in the statement of comprehensive income instead of the income statement, provided that the equity instrument is not held for trading purposes. Amounts recognized in comprehensive income may not be reclassified to the income statement at a later point in time.

Current and noncurrent financial liabilities to banks, trade payables and other liabilities are measured as financial liabilities at amortized cost, with the exception of derivative financial instruments. Noncurrent liabilities are measured on the basis of the effective interest method less directly attributable transaction costs.

They are initially recognized at fair value less the directly attributable transaction costs.

Interest revenue and expenses resulting from application of the effective interest method are recognized through profit or loss under interest revenue or interest expenses from financial instruments.

A financial liability is measured at fair value through profit or loss where it is held for trading purposes or is thus designated upon initial recognition. Financial liabilities are classified as held for trading purposes where they are acquired for the purpose of disposal in the near future. Directly attributable transaction costs are recognized in profit or loss as soon as they are incurred.

Fair Value Valuation

The measurement at fair value is based upon a three-level hierarchy, in accordance with the proximity of the measurement factors used to an active market. A market is said to be "active" if the quoted prices are easily and regularly available and these prices are based on actual, regularly occurring market transactions at arm's length.

Level 1: prices for identical assets and liabilities quoted on active markets (which are used unchanged).

Level 2: input data observable either directly or indirectly for the asset or liability not considered Level 1 quoted prices. The fair values of the Level 2 financial instruments are calculated on the basis of the terms in effect on the balance sheet date using recognized models, e.g. the discounted cash flow model.

Level 3: input data used for the measurement of the asset and the liability which is not based upon observable market data (non-observable input data).

The fair values were determined based on the market conditions available on the reporting date by means of financial mathematics valuation methods. They correspond to the prices received between independent market participants for the sale of an asset or for the transfer of a liability.

Reclassifications between the levels of the fair value hierarchy are taken into consideration as of the respective reporting dates. In fiscal years 2019 and 2018, no reclassifications were implemented between Level 1, Level 2 or Level 3.

Income Taxes

Income taxes contain both taxes that are payable on income and deferred taxes.

Income taxes payable for current and earlier periods are measured at the amount at which a refund from or payment to fiscal authorities is anticipated. The calculation of that amount is based on the current status of tax legislation and therefore on the tax rates that are in effect or that have been announced as of the reporting date.

Deferred taxes are recognized using the statement of financial position liability method in accordance with IAS 12. Deferred tax assets and liabilities are recognized to reflect temporary differences between the carrying amount of a specific item in the statement of financial position in the IFRS consolidated financial statements and its tax base (temporary concept). Deferred taxes are also recognized for future tax refund claims.

Deferred tax assets on deductible temporary differences and tax refund claims are recognized to the extent it can be assumed that they can be expected to be used in future periods, based on the availability of adequate taxable income.

The calculation of current and deferred taxes is based on judgments and estimates. If actual events deviate from these estimates, this could have a positive or negative impact on assets, financial position and earnings. A deciding factor for the recoverability of deferred tax assets is the estimate of the probability of reversal of measurement differences or the usability of the tax loss carryforwards or tax benefits that led to recognition of the deferred tax assets. This is in turn dependent on the generation of future taxable profits during the period in which the tax loss carryforwards can be used. Deferred taxes are measured using the tax rates applicable at the time of realization based on the current legal situation as of the reporting date.

Current income tax assets and liabilities and deferred income tax assets and liabilities are only offset if it is legally permissible to do so and the deferred tax assets and liabilities relate to income taxes that have been levied by the same tax authority and if there is a legally enforceable right to offset current tax refund claims against current tax liabilities. Deferred taxes are reported as non-current in accordance with IAS 1.70.

Inventories

Inventories are measured at cost or at lower net realizable value. In accordance with IAS 2, the costs of conversion include all costs directly related to the units of production as well as a systematic allocation of fixed and variable production overheads. In addition to direct materials and direct labor, they therefore also contain proportional indirect materials and overheads. Administration and social welfare expenses are taken into account provided they can be attributed to production. Financing costs are not recognized as part of the cost of acquisition or conversion because the assets do not meet qualification criteria. Inventory risks resulting from the storage period and reduced usability are taken into account during the calculation of the net realizable value by applying appropriate write-downs. Lower values at year-end resulting from reduced selling prices are also taken into account. Raw materials, consumables and supplies as well as merchandise are primarily measured using the moving average method.

Trade Receivables and Other Current Assets

Trade receivables are classified as loans and receivables and measured at amortized cost less any necessary write-downs. Write-downs in the form of specific valuation allowances take sufficient account of the expected default risks. Specific defaults lead to the derecognition of the receivables concerned. The calculation of write-downs for doubtful receivables is primarily based on estimates and evaluations of the creditworthiness and solvency of the respective customer.

Other current assets are measured at amortized cost, taking into account necessary write-downs sufficient to cover the expected default risks. If recourse to the courts is made for the collection of these receivables, Voltabox AG firmly expects that the amounts recognized in the statement of financial position will be fully enforceable. Where these represent financial assets (financial instruments), they are classified as loans and receivables.

Cash and Cash Equivalents

Cash and cash equivalents include cash and bank balances with original maturities of up to three months. They are measured at nominal value. The total of cash and cash equivalents reported in the cash flow statement corresponds to the cash and cash equivalents stated in the statement of financial position (cash and bank balances). The Group does not engage in cash pooling.

Other Provisions

Other provisions are recognized in accordance with IAS 37 when Voltabox has a legal or constructive present obligation to third parties as a result of a past event that is likely to lead to an outflow of resources. Provisions are measured based on a best estimate of the expenditure needed to discharge the liability. Reimbursement claims are not offset against these amounts. Each situation is evaluated separately to determine the probability that pending proceedings will be successful, or to qualify the possible amount of the payment obligations. In each case, the most probable settlement amount has been taken into account. Noncurrent provisions have been measured at their discounted settlement amount as of the reporting date.

Due to the uncertainty associated with these evaluations, the actual settlement obligation or the actual outflow of resources may deviate from the original estimates and, accordingly, from the amounts of the provisions made. In addition, estimates may change based on subsequent new information, which may have a substantial impact on the future earnings position.

Recognition of Income and Expenses

Voltabox AG recognizes revenue when performance obligations to customers are fulfilled by the transfer of a promised good or service. The transaction price is the consideration that the entity expects to receive for transferring the goods and services to a customer. Variable transaction price components such as rebates, discounts, contractual penalties or customer bonuses reduce revenues. Voltabox AG recognizes revenue from services on a time and period basis. Revenue over the period is either realized in the amount of the costs incurred in the period to the estimated total costs or recognized in the amount that the company is allowed to invoice. Simplification according to IFRS 15.B16 is not used. Costs for initiating a contract with a customer are capitalized as an asset if Voltabox AG assumes that it will recover these costs and these costs are directly attributable. For the liquidation of the asset, Voltabox AG compares the fulfilled performance obligations with the total of the performance obligations of the respective contract with customers.

In the case of sales with return rights, revenue is recognized in the amount that corresponds to the company's expectations. The expense items associated with revenue are adjusted accordingly. Voltabox AG recognizes an asset for the right to return and a refund liability for the unrealized revenue rather than a reduction in trade receivables.

10 Use of Estimates, Assumptions and Judgments

The preparation of the consolidated financial statements in accordance with IFRS requires assumptions and estimates to be made that impact the assets and liabilities recorded, the disclosure of contingent liabilities as of the reporting date and the presentation of income and expenses during the period under review. If actual events deviate from these estimates, this could have a positive or negative impact on the assets, financial position and earnings.

When applying the accounting policies, the following estimates and assumptions were made that significantly influenced the amounts contained in the financial statements:

Summary of Cash-Generating Units

The assessment of whether several assets are to be combined in a single cash-generating unit is subject to a discretionary decision by the Group.

Measurement of the Fair Values of the Assets Acquired and Liabilities Assumed in Business Combinations

The fair values as well as the allocation of acquisition costs to the assets acquired and liabilities assumed were determined on the basis of experience and estimates regarding future cash inflows. The actual cash inflows may differ from the estimated amounts.

Goodwill

As described in the accounting principles, the Group tests goodwill for impairment once a year and when there are any indications that the value of goodwill may be impaired. This involves estimating the recoverable amount of the cash generating unit. This corresponds to the higher of fair value less costs of disposal and value in use. When determining the value in use, adjustments and estimates have to be made concerning the forecast and discounting of future cash flows. Although the Management Board believes that the assumptions used to determine the recoverable amount are appropriate, unforeseeable changes in these assumptions could lead to an impairment loss that could have a sustained negative influence on assets, financial position and earnings.

Capitalized Development Costs

In order to measure capitalized development costs, assumptions have been made about the amount of anticipated future cash flows from assets, about the discount rates to be used and about the period of time during which these assets will generate anticipated future cash flows. The assumptions made regarding the timing and amount of future cash flows are based on expectations of the future development of the order backlog from those customers with whom development projects are being conducted. The period of normal use corresponds to the estimated economic life. Since the 2019 fiscal year, the Company has been using future revenue figures, which take into account a discount for the probability of occurrence, for the impairment test of IAS 38 projects.

Transfer of Assets and Leasing Objects

The question of when all the significant risks and rewards of ownership of financial assets and leased assets are essentially transferred to other companies is regularly subject to discretionary decisions.

Leases

Voltabox AG accounts for individual leasing components and non-leasing components separately. If a lease exists, the contract is allocated to the individual leasing components on the basis of the contractually agreed relative individual selling prices of the leasing components and the aggregated individual selling prices of the non-leasing components. In doing so, Voltabox AG determines the relative individual selling price with reference to the price that a lessor or similar supplier of Voltabox AG would charge separately for these or similar components. Where no observable market exists, Voltabox AG makes use of estimates.

Voltabox AG makes assumptions about the incremental borrowing rate in the context of the replacement approach to leases and bases this on an easily observable interest rate based on the same payment profile as that of the lease. Otherwise, it is discounted at the lessee's incremental borrowing rate, i.e. the rate of interest that would be payable by the lessee if they had to borrow funds to acquire, in a similar economic environment, an asset of similar value for a similar term with comparable security and under similar conditions. Wherever possible, financing arrangements entered into with third parties by the individual lessee are used as a starting point. Where necessary, these are adjusted to take into account changes in conditions since receipt of the financing. If there are no recent borrowings from third parties, the Group uses a risk-free interest rate as a starting point and adjusts it to the credit risk of the lessee. Other adjustments also relate to those for the term of the lease, the economic environment, the currency of the lease and collateralization.

Inventories

In specific cases, inventories are measured based on anticipated revenue less the estimated costs to completion and the estimated selling costs required. Actual revenue and the actual costs to completion may deviate from anticipated amounts.

Information about the measurement discounts can be found in the comments on inventories in the previous section.

Other Assets and Liabilities

Assumptions and estimates are also necessarily made when calculating allowances for doubtful receivables, for expected credit losses in accordance with IFRS 9, when estimating contingent liabilities and other provisions, and when determining the fair value of long-lived assets included in property, plant and equipment and intangible assets.

In individual cases, actual values may deviate from the assumptions and estimates made, requiring an adjustment of the carrying amounts of the assets or liabilities concerned.

Deferred Tax Assets

The amount of deferred tax assets in excess of deferred tax liabilities of the same taxable entity and the same tax authority is recognized only to the extent that a positive taxable result is expected in future periods and its realization appears sufficiently certain. In addition, there are estimation uncertainties regarding the reversal effects under IAS 12.29 (ii). The actual taxable income situation in future periods may deviate from the estimate made at the time the deferred tax assets were recognized.

Other Provisions

The recognition and measurement of other provisions was based on the estimated probability of the future outflow of benefits and on experience values, and on the facts and circumstances known as of the reporting date. The subsequent actual outflow of benefits may therefore differ from the amount recorded within other provisions as of the reporting date.

Contingent Liabilities

The recognition of an identified contingent liability within the scope of a purchase price allocation is based on assumptions that the Management Board arrives at on the basis of the information available as of the date of acquisition.

Legal Risks

From time to time, Voltabox Group companies may become parties to legal disputes. Management regularly analyzes the latest information available for these cases and, where necessary, recognizes provisions to cover probable obligations, including the estimated amount of associated legal costs. External attorneys are consulted in the process of making these assessments. In determining the need for provisions, the Management Board accounts for the probability of an unfavorable outcome and whether the obligation can be measured with sufficient reliability. The filing of a lawsuit, the formal assertion of a claim or the presence of a disclosure for legal dispute in the notes does not automatically mean that a provision for the respective risk is appropriate.

Revenue

The Management Board makes discretionary decisions regarding the classification of the transaction price to performance obligations. The transaction prices are allocated to performance obligations on the basis of the relative individual sale prices.

For revenue with return rights, the company estimates the probability that the customer will make the return.

11 Revenue

Revenue consists of the proceeds from sales of products, materials, distribution rights, and services less any sales deductions.

Revenue is classified on the basis of product segments and realized over time or at a certain point in time. Voltabox AG had the product segments Voltapower, Voltaforce and Voltamotion in fiscal year 2019. In addition, there is separate reporting by region.

2019 € '000	Voltapower	Voltaforce	Voltamotion	Consolidation	Total
Domestic	38,306	5,102	0	0	43,408
EU	0	1,090	343	0	1,433
Rest of the world	26,564	0	0	-14,788	11,776
Total for geographical territories	64,870	6,192	343	-14,788	56,617
Realization at a certain point in time	64,870	6,192	343	-14,788	56,617
Realization over time	0	0	0	0	0
Total for product segments	64,870	6,192	343	-14,788	56,617
Product revenue	64,817	6,187	343	-14,788	56,559
Service revenue	53	5	0	0	58
Total for revenue types	64,870	6,192	343	-14,788	56,617

In fiscal year 2018, revenue was distributed as follows:

2018 € '000	Voltapower	Voltaforce	Voltamotion	Consolidation	Total
Domestic	48,945	2,124	3,098		
EU	648	142	0		
Rest of the world	13,707	53	0		
Total for geographical territories	63,300	2,319	3,098	-1,808	66,909
Realization at a certain point in time	59,309	2,319	1,788		
Realization over time	3,991	0	1,310		
Total for product segments	63,300	2,319	3,098	-1,808	66,909
Product revenue	58,480	2,289	0		
Service revenue	4,820	30	3,098		
Total for revenue types	63,300	2,319	3,098	-1,808	66,909

The Voltapower product segment manufactures complex lithium-ion battery systems for demanding industrial applications. Revenue in this operating segment was realized in the fiscal year on a time and period basis. Revenue is recognized upon delivery and transfer of control to the customer. Period-related revenue results from agreed order developments within the framework of long-term production and delivery orders. Payment terms customary in the industry without a significant financing component are used. Variable consideration does not occur regularly.

The Voltaforce product segment comprises the development and production of standardized lithium-ion batteries for selected segments of the mass market. Revenue is recognized at the time of sale. Realization takes place upon delivery of the goods. The contracts with customers contain payment terms customary in the industry without significant financing components. Variable consideration does not occur regularly. Contracts with customers in this operating segment contain functional guarantees relating to the intended use.

The third product segment, Voltamotion, which has since been written down, comprised drive technology and power electronics. In this operating segment as well, revenue was mainly realized at the time of sale. Realization took place upon delivery of the goods. The contracts with customers contained payment terms customary in the industry without significant financing components. Variable consideration did not occur regularly. The Voltamotion product segment was located at the Aachen site. As part of the focusing strategy, Voltabox AG decided in fiscal year 2019 to promote the product segments Voltapower and Voltaforce in the coming fiscal years and to terminate the activities in the product segment Voltamotion.

As of December 31, 2019, there were trade receivables of € 31,085 thousand (prior year: € 56,025 thousand) and contractual assets of € 0 thousand (prior year: € 5,298 thousand). Contract assets were written down in the amount of € 4,877 thousand due to a lack of realizability and predictability.

In fiscal year 2019, impairment losses of € 7,345 thousand (prior year: € 0 thousand) were recognized for contract assets from contracts with customers.

During the fiscal year, the company resolved to implement a carve-out of the IP connected with Voltamotion to two automotive companies. This transaction was reversed in early 2020 against the backdrop of the buyer's highly limited opportunities for monetization due to the coronavirus crisis. As a result, no revenue generation took place during the reporting year. There is thus an impairment in place. The revenue of € 12.5 million must therefore be rectified. Due to the spin-off of the Voltamotion product segment, the carrying amounts of the contract assets were adjusted.

12 Other Operating Income

In fiscal year 2019, other operating income mainly includes the following items:

€ '000	**Jan. 1 to Dec. 31, 2019**	Jan. 1 to Dec. 31, 2018
Income from currency translation	**701**	1,368
Income from the provision of motor vehicles to employees	**137**	91
Income from reimbursement of advance payments	**0**	117
Income from electricity charging stations	**22**	30
Remaining other operating income	**948**	532
Total other operating income	**1,808**	2,139

13 Other Own Work Capitalized

For development projects that meet the requirements of IAS 38.21 and IAS 38.57 in the reporting period and for which project-related development costs have been capitalized, the capitalized development costs have been recognized in other own work capitalized. The amounts capitalized are recognized under intangible assets. Other own work capitalized also includes costs incurred in manufacturing test equipment.

€ '000	**Jan. 1 to Dec. 31, 2019**	Jan. 1 to Dec. 31, 2018
Project-related development costs	**6,686**	2,897
Production costs of test equipment	**1,092**	108
Other own work capitalized	**7,778**	3,005

In fiscal year 2019, there were R&D expenses of € 10,923 thousand (prior year: € 7,935 thousand).

14 Cost of materials

€ '000	**Jan. 1 to Dec. 31, 2019**	Jan. 1 to Dec. 31, 2018
Raw materials, consumables and supplies	**42,974**	39,289
Expenses for purchased services	**2,046**	2,958
Cost of materials	**45,020**	42,247

15 Personnel Expenses

Personnel expenses amounted to € 15,917 thousand in the reporting period (prior year: € 13,622 thousand) and consist of the following:

€ '000	**Jan. 1 to Dec. 31, 2019**	Jan. 1 to Dec. 31, 2018
Wages and salaries	**13,981**	12,043
Social contributions/pensions	**1,936**	1,579
Personnel Expenses	**15,917**	13,622

The average number of employees has changed as follows in comparison to the prior year:

€ '000	**Jan. 1 to Dec. 31, 2019**	Jan. 1 to Dec. 31, 2018
Salaried employees	**131**	164
Hourly-paid employees	**60**	71
Number of employees	**191**	235

16 Other Operating Expenses

Other operating expenses comprise the following items:

€ ’000	**Jan. 1 to Dec. 31, 2019**	Jan. 1 to Dec. 31, 2018
Expenses from currency translation	**333**	228
Expenses for Group costs and integrated services	**1,271**	1,781
Expenses for insurance policies	**632**	278
Expenses for external services for development costs and prototype material	**2,546**	1,504
Expenses for motor vehicles, advertising and travel costs	**1,002**	992
Expenses for buildings and rent	**284**	1,386
Expenses for freight and packaging	**655**	407
Expenses for purchased services and IT	**2,416**	2,070
Expenses for warranties	**18**	323
Remaining other operating expenses	**8,732**	5,937
Total other operating expenses	**17,890**	14,607

17 Depreciation and Amortization

A breakdown of depreciation of property, plant and equipment and amortization of intangible assets can be found in the consolidated statement of fixed assets. Depreciation includes extraordinary depreciation in the amount of € 31.5 million. Detailed information on this is provided in the chapters on intangible assets, property, plant and equipment and financial assets.

18 Financial Result

€ ’000	**Jan. 1 to Dec. 31, 2019**	Jan. 1 to Dec. 31, 2018
Financial income	**9**	2
Interest revenue	**9**	2
Financial expenses	**-224**	-149
Other financial and interest expenses	**-224**	0
Financial result	**-215**	-149

Other financial and interest expenses include interest expenses to banks of € 224 thousand (prior year: € 371 thousand).

Income from financial instruments is summarized below, with a breakdown for different measurement categories. The carrying amounts for the measurement categories are indicated in section (35).

€ '000	2019	2018
Financial assets		
Measured at amortized cost	**9**	2
Measured at fair value through profit or loss	**0**	0
	9	2
Financial liabilities		
Measured at amortized cost	**-224**	-149
Measured at fair value through profit or loss	**0**	0
	-224	-149

Net income from financial instruments includes netted interest revenues and expenses, measurements at fair value, currency translation, valuation allowances and disposal effects.

19 Income Taxes

Domestic deferred taxes were calculated as of December 31, 2019, at an unchanged combined income tax rate of 30 % (prior year: 30 %). This includes a corporate tax rate of 15 % and a solidarity surcharge of 5.5 %. The income tax rate also reflects trade taxes, taking into account the breakdown of the trade tax assessment rates among the municipalities in which the company's branches are located. Foreign deferred taxes were calculated as of December 31, 2019, at a combined income tax rate of 27.6 % (prior year: 27.6 %). The Group tax rate amounts to 28.8 % (prior year: 28.8 %).

The income tax expense in fiscal year 2019 is shown in the following table:

€ '000	Jan. 1 to Dec. 31, 2019	Jan. 1 to Dec. 31, 2018
Current taxes	**-618**	618
Current taxes in Germany	**-618**	618
Current taxes in foreign countries	**0**	0
Deferred tax liabilities	**-5,265**	2.268
Deferred taxes in Germany	**-5,091**	1.468
Deferred taxes in foreign countries	**-174**	799
Income taxes	**-5,883**	2.885

As of the end of the reporting period, of deferred tax assets in the amount of € 4,246 thousand (prior year: € 72 thousand), € 4,246 thousand (prior year: € 0 thousand) relates to Germany and € 0 thousand (prior year: € 72 thousand) relates to other countries. As of the end of the reporting period, of deferred tax liabilities in the amount of € 6,630 thousand (prior year: € 7,722 thousand), € 5,304 thousand (prior year: € 7,650 thousand) relates to Germany and € 1,326 thousand (prior year: € 72 thousand) relates to other countries.

Deferred tax assets and liabilities were recognized for the following items:

	Dec. 31, 2019		Dec. 31, 2018	
€ '000	**Deferred tax assets**	**Deferred tax liabilities**	Deferred tax assets	Deferred tax liabilities
Intangible assets	**0**	**1,670**	0	5,846
Property, plant and equipment and rights of use	**4,246**	**4,099**	0	0
Receivables and other assets	**0**	**861**	72	1,876
Liabilities	**0**	**0**	0	0
Loss carryforwards	**0**	**0**	0	0
Deferred tax assets and liabilities before offsetting	**4,246**	**6,630**	72	7,722
Offsetting	**-4,099**	**-4,099**	-72	-72
Deferred tax assets and liabilities after offsetting	**147**	**2,531**	0	7,650

The increase in deferred taxes from property, plant and equipment and rights of use results from the introduction of IFRS 16.

Tax losses in Germany can be carried forward and used for an indefinite period of time, subject to minimum taxation rules. Foreign tax losses carried forward relate to Voltabox of Texas, Inc., and their use is limited to a period of 20 years. Tax losses carried forward from Voltabox of Texas, Inc., that have arisen since fiscal year 2019 can be carried forward indefinitely.

Deferred taxes on losses carried forward were not recognized in Germany for a total amount of € 109,205 thousand (prior year: € 0 thousand) and in other countries of € 0 thousand (prior year: € 18,893 thousand).

The following table shows the tax losses carried forward following the year in which they arose and the year in which their usability ends:

Year of origin	**Amount (€'000)**	End of usability
2014	**1,761**	2034
2015	**2,916**	2035
2016	**3,155**	2036
2017	**5,115**	2037
2018	**5,946**	unlimited
2019	**109,205**	unlimited

In accordance with IAS 12.81 (c), the actual tax expense must be compared to the tax expense calculated by applying the tax rates to be recognized to the reported earnings before taxes. The following table shows a reconciliation between the actual tax expense and the expected tax expense.

€ '000	**Jan. 1 to Dec. 31, 2019**	Jan. 1 to Dec. 31, 2018
Earnings before taxes	**-107,807**	5,764
Calculated tax expense at a tax rate of 28.8 % (prior year: 28.8 %)	**-31,048**	1,660
Difference between local tax rates and Group tax rate	**0**	0
Tax-free income	**0**	0
Non-deductible operating expenses	**0**	0
Non-recognition of deferred taxes	**23,700**	1,225
Goodwill impairments	**2,927**	0
Loss from merger in separate financial statements	**-1,462**	0
Current tax expense	**-5,883**	2,885

20 Earnings per Share

Basic earnings per share are calculated by dividing the result for the reporting period by the weighted average number of shares issued. The weighted average number of shares issued in the reporting period was 15,825,000 (prior year: 15,825,000).

Based on the result for the period of € -101,924 thousand (prior year: € 2,579 thousand), the basic earnings per share amount to € -6.44 per share (prior year: € 0.16).

Stock option plans generally result in a potential dilution of earnings per share. As in the prior year, there were no share option rights to acquire outstanding Voltabox AG shares during the fiscal year from January 1 to December 31, 2019.

21 Intangible Assets

The changes in and analysis of intangible assets, property, plant and equipment, as well as financial assets, is shown in the consolidated statement of noncurrent assets. A description of investments made can be found in the combined management report.

Capitalized Development Costs

Intangible assets include capitalized development costs of € 8,044 thousand (prior year: € 19,206 thousand). Internal development costs of € 5,155 thousand (prior year: € 3,005 thousand) were capitalized as intangible assets in the reporting period. With regard to the development expenses of the fiscal year, please refer to the section “Other Performance Indicators” in the combined management report.

Depreciation and amortization in the reporting period amounted to € 1,582 thousand (prior year: € 2,491 thousand). The depreciation period for development projects depends on the expected period of use and begins upon completion.

The capitalized development costs were subject to an impairment test in accordance with IAS 36. The impairment loss in accordance with IAS 36 totaled € 12,021 thousand in the reporting period (prior year: € 374 thousand).

The recoverable amount of internally generated intangible assets is determined based on the calculation of the value-in-use using estimated cash flows, which are in turn derived from revenue forecasts adopted by the Management Board. The revenue forecasts cover a period of five years. A growth rate is determined for each product based on market analyses. A risk-adjusted discount factor of 6.63 % is applied to the estimated cash flows. The borrowing rate used in fiscal year 2019 is 4.0 % (prior year: 4.0 %).

22 Goodwill

In accordance with IFRS 3 (Business Combinations) and the two standards revised in this respect, namely IAS 36 (Impairment of Assets) and IAS 38 (Intangible Assets), goodwill and internally generated intangible assets whose production is not yet complete are subject to regular impairment tests.

This involves goodwill and internally generated intangible assets whose production is not yet complete being tested for potential impairment once a year. In addition, the impairment test is also to be performed more frequently should any events or changes in circumstances indicate that a potential impairment has occurred.

The impairment tests performed at the Voltabox Group involve comparing the residual carrying amounts of individual cash generating units (CGUs) with their respective recoverable amounts, i.e., the higher of their fair value less costs to sell and their value in use. Where the carrying amount of the cash-generating unit is higher than its recoverable amount, an impairment loss is recognized in the amount of the respective difference. The recoverable amount is determined by calculating the value in use by means of the discounted cash flow method. The cash flows used to calculate the value in use are determined on the basis of management's medium-term planning. These budgets are based on past experience and on expectations as to future market developments, taking account of strategic and operative measures already initiated to manage the respective business field. The detailed planning period is usually a period of five years.

The cost of capital is calculated as the weighted average of equity and debt capital costs (weighted average cost of capital – WACC). Equity costs are derived from a peer group analysis of the relevant market sector, i.e., information that can be obtained from capital markets. The weighted average cost of capital, i.e., WACC before taxes used to discount cash flows, amounted to 9.89 % for the cash generating unit (CGU) Europe and 9.86 % for North America. The growth assumption following the detailed planning period is 2.03 %.

Goodwill as of December 31, 2019, can be allocated to the following CGUs:

Company	Amount	CGU
ACCURATE – SMART BATTERY SYSTEMS – GmbH	0	EUROPE
Voltabox of Texas, Inc.	0	NORTH AMERICA
Concurrent Design, Inc.	0	

At the end of fiscal year 2019, the goodwill of Concurrent Design, Inc. was recognized in full, as the original reason for a recognition of goodwill was permanently eliminated following the merger with Voltabox of Texas, Inc., and the refocusing as an internal development service provider. The goodwill as of December 31, 2018 amounted to € 2,580 thousand. The goodwill of Voltabox of Texas, Inc., which amounted to € 3,187 thousand as of December 31, 2018, was also corrected to € 0 thousand. The goodwill of ACCURATE-SMART BATTERY SYSTEMS-GmbH was also written down. This amounted to € 4,121 thousand on December 31, 2018. As the assets of Voltabox of Texas, Inc. and Accurate – SMART BATTERY SYSTEMS – GmbH can no longer be used to the planned extent due to the adjusted sales planning, they have been completely written down.

23 Property, Plant and Equipment

Depreciation and amortization in the reporting period amounted to € 1,266 thousand (prior year: € 1,116 thousand). The plot of land and the building in the USA are subject to property charges as collateral for long-term bank loans, but were sold at the end of fiscal year 2019.

Certain items of movable noncurrent assets are financed by leases. Generally, these leases have terms of four to five years. The corresponding payment obligations for future lease installments are recognized as liabilities. The net carrying amount of assets capitalized under leases amounted to € 14,799 thousand as of December 31, 2019 (prior year: € 42 thousand). The corresponding payment obligations for future lease installments amounted to € 14,799 thousand (prior year: € 42 thousand) and are recognized as liabilities at their present value. The capitalized assets under leases wholly relate to technical plants and machinery. The majority of these lease arrangements provide for the transfer of ownership without further payments after full settlement of all obligations during the basic lease period (full amortization). No firm agreements have been entered into concerning the further use of the leased assets following expiry of the basic lease period. Nevertheless, Voltabox AG assumes that the leased assets can be acquired at a favorable price after the basic lease period has expired or may continue to be used at a favorable lease rate.

Advance payments for machinery and equipment amounting to € 19 thousand were made in the reporting year (prior year: € 355 thousand).

Income from disposal of property, plant and equipment amounted to € 7,275 thousand (prior year: € 0 thousand).

24 Leases

The Group rents or leases various office and warehouse buildings, equipment and vehicles. These contracts are usually concluded for fixed periods of six to 180 months.

The access amount and depreciable amount, and the residual carrying amount for the rights of use, can be found in section (38). The interest expense of leasing liabilities amounted to € 226 thousand in fiscal year 2019.

Expenses for short-term leases not recognized in the balance sheet amounted to € 887 thousand in fiscal year 2019.

In fiscal year 2019, there was no expense for variable lease payments that was not included in the measurement of the lease liability and no income from a sublease.

Voltabox of Texas, Inc. sold a developed property to third parties in the year under review. This transaction resulted in other operating income of € 1,956 thousand. The developed property is leased back in the form of a sale and leaseback agreement until the end of 2034. A graduated rent was agreed. The annual rent for 2020 amounts to € 760 thousand. The leasing liability and the capitalised right of use amount to €10,839 thousand as of December 31, 2019. The transfer of the asset meets the requirements of IFRS 15 and must be accounted for as a sale in the fiscal year. Voltabox AG recognizes the gain from the sale in the amount relating to the rights transferred to the buyer. No gain was realized for the rights to the asset that Voltabox of Texas, Inc. leased back.

The cash outflows from leases amounted to € 621 thousand in the fiscal year.

In fiscal year 2019, no extension or termination options were exercised that would have an effect on future cash outflows. There are no residual value guarantees or leases that have not commenced that will have a material effect on future cash outflows.

25 Other Noncurrent Assets

As of December 31, 2019, other noncurrent assets primarily include:

- Rental prepayment of € 0 thousand (prior year: € 3,549 thousand)
- Contract assets of € 0 thousand (prior year: € 5,298 thousand)
- Investment in ForkOn GmbH € 1,400 thousand (prior year: € 0)

The rental prepayment represented a down payment in connection with a real estate lease. Additional information on financial instruments is provided in chapter (35).

26 Inventories

Inventories consist of the following:

€ ’000	**Dec. 31, 2019**	Dec. 31, 2018
Raw materials, consumables and supplies	**9,162**	8,829
Work in progress and finished goods and services	**6,498**	8,262
Advance payments for inventories	**13**	10,137
Inventories	**15,674**	27,228

In addition, no reversals were recognized in the reporting period, as in the prior year. Inventories were written down in the reporting period with a volume of € 48,033 thousand (prior year: € 953 thousand). As in the prior year, no inventories served as collateral for liabilities on the reporting date.

Voltabox AG has increased the impairment rates in these financial statements as a result of holding time depreciation due to the intensity of inventories and decreased stock turnover. Raw materials and supplies, work in progress and finished goods were written down by € 48,033 thousand (prior year: € 0 thousand). These mainly result from the fact that modules, parts and components of an old cell generation can no longer be used commercially.

27 Trade Receivables

The carrying amount of trade receivables is derived as follows:

€ ’000	**Dec. 31, 2019**	Dec. 31, 2018
Gross trade receivables	**31,116**	56,025
Less value adjustments	**31**	0
Trade receivables	**31,085**	56,025

Receivables of € 13,640 thousand (prior year: € 0 thousand) were derecognized in fiscal year 2019.

Trade receivables are assigned as part of factoring, if possible and intended by the Management Board. As of the reporting date, there are no receivables whose assignment will be made in the following reporting year as part of factoring. Therefore, trade receivables are assigned to the valuation category AC according to IFRS 9.

Within the scope of factoring, the default risk is transferred to the factoring provider.

The maturity structure of trade receivables for which no impairment allowances have been recorded as of the reporting date is as follows:

€ '000	**Carrying amount**	of which neither impaired nor overdue	thereof past due as follows but not impaired			
Dec. 31, 2019			0 – 30 days	30 – 60 days	60 – 90 days	> 90 days
Trade receivables	**31,116**	28,668	779	932	69	668
Impairment recognized	**31**	0	0	0	0	31
Net amount	**31,085**	28,668	779	932	69	637
Dec. 31, 2018			0 – 30 days	30 – 60 days	60 – 90 days	> 90 days
Trade receivables	**56.025**	54.234	22	1.681	45	42
Impairment recognized	**0**	0	0	0	0	0
Net amount	**56.025**	54.234	22	1.681	45	42

There were no indications as of the reporting date that debtors with receivables that are neither impaired nor overdue will fail to meet their payment obligations.

28 Other Current Assets

Other current assets were as follows:

€ '000	**Dec. 31, 2019**			Dec. 31, 2018
	AC	FVPL	FVOCI	
Blocked account for validity guarantee	93	0	0	0
Deferrals	136	0	0	165
Contract assets	0	0	0	3.988
Other assets	512	0	0	2.330
Other current assets	741	0	0	6.483

Voltabox AG is pledging a sight deposit in favor of the factoring bank as part of factoring. This account safeguards Voltabox AG's validity guarantee for sold receivables. In the event of insolvency, other account balances with credit institutions can be offset against any balances and liabilities between the respective counterparties.

The overdue amounts included in other current assets as of the reporting date were as follows:

€ '000	Carrying amount	of which neither impaired nor overdue	thereof past due as follows but not impaired			
Dec. 31, 2019			0 – 30 days	30 – 60 days	60 – 90 days	> 90 days
Other current assets	**741**	741	0	0	0	0
Dec. 31, 2018			0 – 30 days	30 – 60 days	60 – 90 days	> 90 days
Other current assets	**6.483**	6.483	0	0	0	0

As of December 31, 2019, there were no indications that significant amounts included in other current assets would not be collectable.

29 Cash and Cash Equivalents

Cash on hand and bank deposits are recognized at their nominal amounts. Cash and cash equivalents include € 2 thousand (prior year: € 2 thousand) in cash on hand and € 5,034 thousand (prior year: € 28,232 thousand) in bank deposits.

Voltabox AG does not engage in cash pooling with group companies and the parent company.

30 Equity

The changes in the individual components of equity for the reporting period from January 1 to December 31, 2019, are presented in the consolidated statement of changes in equity.

Subscribed Capital

Voltabox AG's subscribed capital as of the reporting date amounted to € 15,825 thousand (prior year: € 15,825 thousand) and is divided into 15,825,000 no-par-value shares with a notional share in the share capital of € 1.00 each.

Currency Translation Reserve

Loans granted by Voltabox AG to Voltabox of Texas, Inc. represent a net investment in a foreign operation. Resulting currency translation effects are recognized directly in equity in the currency translation reserve. This item is also affected by currency conversion rate differences from the reporting date translation of the annual financial statements of Voltabox of Texas, which is included in the consolidated financial statements. The currency translation reserve amounted to € 214 thousand (prior year: € 474 thousand) as of December 31, 2019.

31 Leasing Liabilities

The initial recognition of the lease liability comprises the lease payments not yet made at the present value of the lease payments as of the provision date. Discounting is calculated on the basis of the underlying constant interest rate. If this is not available, Voltabox AG uses an incremental borrowing rate of interest that is used as a basis for comparable lease financing. Lease payments not yet made comprise

- all fixed payments less lease incentives received,
- variable lease payments,
- amounts expected to be paid at the end of the lease term under residual value guarantees,
- the exercise price of a purchase option if exercise is reasonably certain and
- penalties for termination if exercise is reasonably certain.

The carrying amount of the leasing liability is increased by the interest expense and reduced by the payments made after provision on the reporting date. A remeasurement of the leasing liability is immediately recognized.

€ '000	Remaining term < 1 year	Remaining term between 1 and 5 years	Remaining term > 5 years	**Dec. 31, 2019**
Minimum lease payments	2,094	5,593	12,446	**20,132**
Future interest payments	-469	-1,609	-3,877	**-5,954**
Liabilities from leases (repayment portion)	1,625	3,984	8,569	**14,178**
thereof reported under noncurrent liabilities				**12,553**
thereof reported under current liabilities				**1,625**

In this context, we refer to the changeover effects of IFRS 16 on January 1, 2019, in section (4).

€ '000	Remaining term < 1 year	Remaining term between 1 and 5 years	Remaining term > 5 years	**Dec. 31, 2018**
Minimum lease payments	26	18	0	**44**
Future interest payments	-1	-1	0	**-2**
Liabilities from leases (repayment portion)	25	17	0	**42**
thereof reported under noncurrent liabilities				**17**
thereof reported under current liabilities				**25**

32 Liabilities to Banks

Current and noncurrent liabilities to banks totaled € 544 thousand (prior year: € 3,681 thousand), and collateral for liabilities to banks was provided in the amount of € 544 thousand (prior year: € 3,681 thousand).

Liabilities to banks are secured by property charges for loan liabilities in the amount of € 0 thousand (prior year: € 3,280 thousand) and by charges over property, plant and equipment of € 543 thousand (prior year: € 970 thousand).

Liabilities to banks mature as follows:

€ '000	Remaining term < 1 year	Remaining term between 1 and 5 years	Remaining term > 5 years	**Dec. 31, 2019**	Dec. 31, 2018
Liabilities to Banks	269	275	0	**544**	3.680

There is no exposure to interest rate risk for the loans with fixed interest rates. Loans with floating interest rates of € 0 thousand (prior year: € 3,280 thousand) are subject to interest rate risk (see section (36)).

The liabilities have been assigned to the IFRS 9 measurement category AC.

33 Other Liabilities

Other liabilities were as follows:

€ '000	**Dec. 31, 2019**	Dec. 31, 2018
Miscellaneous other liabilities	**634**	2,392
Liabilities from other taxes	**2,745**	2,369
Other liabilities	**3,379**	4,761

Other liabilities mainly include personnel obligations from outstanding vacation entitlements, as well as employee bonuses and profit sharing.

Other liabilities mature as follows:

€ '000	Remaining term < 1 year	Remaining term between 1 and 5 years	Remaining term > 5 years	**Dec. 31, 2019**	Dec. 31, 2018
Miscellaneous other liabilities	634	0	0	**634**	2,392
thereof reported under noncurrent liabilities				**0**	0
thereof reported under current liabilities				**634**	2,392

The other liabilities have been assigned to the IFRS 9 measurement category AC.

34 Other Provisions

Other provisions are all due within one year. The movements on the provisions were as follows:

€ '000	Jan. 1, 2019	Utilization	Release	Allocation	**Dec. 31, 2019**
Other provisions	467	592	25	3,946	**3,796**

Other provisions mainly include provisions for warranties and guarantees of € 743 thousand (prior year: € 433 thousand) and € 37 thousand (prior year: € 28 thousand) for take-back obligations for old batteries and other provisions. This figure also includes personnel provisions of € 267 thousand (prior year: € 359 thousand). In addition, an impending loss provision of € 3,015 thousand (prior year: € 0 thousand) was recognized. A return rate of 70 % and a recyclability of 75 % of the returned batteries was assumed for the determination of the provision in the context of the take-back obligations for old batteries. Due to possible future income from the utilization of raw materials, a range was determined for the provision to be formed. The provision is measured in the annual financial statements on the basis of the discounted disposal costs likely to be incurred.

35 Additional Disclosures on Financial Instruments

This section provides an overview of financial instruments in use at Voltabox AG. The carrying amounts of the financial instruments included in the consolidated financial statements in accordance with the IFRS measurement categories are summarized below:

€ '000	**Dec. 31, 2019**	Dec. 31, 2018
Financial assets		
Measured at amortized cost	**44,240**	107,441
Measured at fair value through profit or loss	**1,400**	0
Measured at fair value directly in equity	**0**	0
	45,640	107,441
Financial liabilities		
Measured at amortized cost	**30,991**	18,297
Measured at fair value through profit or loss	**0**	0
	30,991	18,297

Voltabox AG has not implemented any reclassification between these categories in fiscal year 2019.

As of the reporting date, the carrying amounts and the fair values of the current and noncurrent financial assets are as follows:

Dec. 31, 2019	AC		FVPL		FVOCI	
€ '000	CA	FV	CA	FV	CA	FV
ASSETS						
Cash and cash equivalents	5,036	5,036				
Trade receivables	31,085	31,085				
Receivables from related parties	5,327	5,327				
Investments			1,400	1,400	0	0
Other assets	2,792	2,792				
Total assets	**44,240**	**44,240**	**1,400**	**1,400**	**0**	**0**
LIABILITIES AND EQUITY						
Liabilities to banks	544	544				
Trade payables	12,418	12,418				
Leasing liabilities	14,178	14,178				
Other liabilities	3,851	3,851				
Total equity and liabilities	**30,991**	**30,991**				

Dec. 31, 2018	AC		FVPL		FVOCI	
€ '000	CA	FV	CA	FV	CA	FV
ASSETS						
Cash and cash equivalents	28,234	28,234	0	0	0	0
Trade receivables	56,025	56,025	0	0	0	0
Receivables from related parties	11,683	11,683	0	0	0	0
Other assets	11,469	11,233	0	0	0	0
Total assets	**107,411**	**107,175**	**0**	**0**	**0**	**0**
LIABILITIES AND EQUITY						
Liabilities to banks	3,722	3,722	0	0		
Trade payables	9,257	9,257	0	0		
Other liabilities	5,318	5,318	0	0		
Total equity and liabilities	**18,297**	**17,955**	**0**	**0**		

Voltabox AG does not hold any cash collateral and does not implement any offsetting in the balance sheet. Derivative financial instruments, balances and liabilities to banks are reported gross in the consolidated balance sheet.

Voltabox AG is pledging a sight deposit in favor of the factoring bank as part of factoring. This account safeguards Voltabox AG's validity guarantee for sold receivables. In the event of insolvency, other account balances with credit institutions can be offset against any balances and liabilities between the respective counterparties. At the present time, Voltabox AG neither has a legal right of set-off nor intends to settle on a net basis.

There are no significant potential offsetting situations involving the relevant parties in the event of insolvency.

Voltabox AG has not provided any financial assets as collateral for financial liabilities. Voltabox AG does not hold any collateral in relation to financial assets.

Voltabox distinguishes between collectable and doubtful or non-performing and uncollectable financial assets. For recoverable financial assets, depreciation takes place after the expected twelve-month credit loss. For doubtful or defaulted financial assets, a depreciation is made in the amount of the credit loss expected to maturity. Uncollectable receivables are recorded as disposals. A receivable is considered to be non-performing (definition of default) when there is a strong indication that a debtor will not fulfill its payment obligations to Voltabox AG.

The following overview summarizes the credit quality and the maximum default risk of the financial assets valuated at amortized cost according to the aforementioned categories:

Dec. 31, 2019 € '000	Credit quality	Treatment	Gross carrying amount	Valuation allowance	Net carrying amount
Loans	Collectable	12-month ECL	0	0	0
	Collectable	lifetime ECL	0	0	0
	non-performing	lifetime ECL	0	0	0
			0	**0**	**0**
Other assets	Collectable	12-month ECL	2,792	0	2,792
	Collectible	lifetime ECL	0	0	0
	non-performing	lifetime ECL	0	0	0
			2,792	**0**	**2,792**
Trade Receivables	lifetime ECL	Simplified approach	31,116	31	31,085
	Lifetime ECL	Simplified approach	0	0	0
	non-performing	lifetime ECL	0	0	0
			31,116	**31**	**31,085**
Receivables from related parties	Collectable	12-month ECL	5,327	0	5,327
	Collectible	lifetime ECL	0	0	0
	non-performing	lifetime ECL	0	0	0
			5,327	**0**	**5,327**
Cash and Cash Equivalents	Collectable	12-month ECL	5,036	0	5,036
	Collectable	lifetime ECL	0	0	0
	non-performing	lifetime ECL	0	0	0
			5,036	**0**	**5,036**

Dec. 31, 2018 € '000	Credit quality	Treatment	Gross carrying amount	Valuation allowance	Net carrying amount
Loans	Collectable	12-month ECL	0	0	0
	Collectable	lifetime ECL	0	0	0
	non-performing	lifetime ECL	0	0	0
			0	**0**	**0**
Other assets	Collectable	12-month ECL	11,469	0	11,469
	Collectable	lifetime ECL	0	0	0
	non-performing	lifetime ECL	0	0	0
			11,469	**0**	**11,469**
Trade receivables	lifetime ECL	Simplified approach	56,025	0	56,025
	lifetime ECL	Simplified approach	0	0	0
	non-performing	lifetime ECL	0	0	0
			56,025	**0**	**56,025**
Receivables from related parties	Collectable	12-month ECL	11,683	0	11,683
	Collectable	lifetime ECL	0	0	0
	non-performing	lifetime ECL	0	0	0
			11,683	**0**	**11,683**
Cash and cash equivalents	Collectable	12-month ECL	28,234	0	28,234
	Collectable	lifetime ECL	0	0	0
	non-performing	lifetime ECL	0	0	0
			28,234	**0**	**28,234**

Voltabox recognizes valuation allowances for loans and other receivables while taking into consideration past events and expectations regarding the future development of credit risk. There has been no change in the methods used to measure valuation allowances since the prior year.

The balance from valuation allowances has changed as follows:

€ '000	
Jan. 1, 2019	0
Adjustments due to changes in credit rating parameters	
Increase due to remeasurement of receivables	31
Reduction due to reversals of impairments	0
Adjustments due to changes in the gross amount of assets	
Reduction due to the derecognition of assets	0
Increase due to the capitalization of assets	0
Dec. 31, 2019	31

Cash and cash equivalents consist of cash on hand and bank balances. The Voltabox Group only deposits cash and cash equivalents with the highest creditworthiness and default probabilities close to zero. On grounds of materiality, the valuation allowance has not been reported. In the event of a significant increase in the probability of default, the Group companies are required to withdraw cash and cash equivalents without delay. For this reason, cash and cash equivalents are allocated to the collectible (twelve-month ECL) or uncollectable (lifetime ECL) category. The change in the carrying amounts of uncollectable cash and cash equivalents is attributable to currency translation.

In accordance with the simplified approach under IFRS 9.5.5.15, valuation allowances on trade receivables are measured consistently on the basis of the lifetime expected credit losses.

For the calculation of the valuation allowance, the receivables are divided up into risk categories and assigned different loss rates. Receivables are written off where a debtor is in serious financial difficulties and there is no prospect of collection.

The companies of the Voltabox Group determine the risk of default on the basis of individual methods, taking into consideration risks specific to the particular operating segment. The companies use data from Schufa, historical default rates and customer-specific future-oriented credit risk analyses, inter alia. Voltabox AG has no significant holdings of past due assets.

Receivables from related parties and liabilities to related parties correspond to their fair values. Since these items do not relate to entities outside of the Group, no further disclosures have been provided in this section and the next in relation to these receivables and liabilities.

36 Management of Risks Associated with Financial Instruments

The following section explains the Group's positions with regard to financial risks and how these may affect the Group's net assets, financial position and results of operations in the future.

The risks from financial instruments, their effects and their management are presented below:

Risk	Risks from	Measurement	Management
Market price fluctuations	Future transactions	Estimated cash flows	Market and value analysis of the products
Foreign currency risks	Future transactions	Estimated cash flows and sensitivity analyses	Currency forwards and currency options
Interest rate risks	Variable interest rates	Sensitivity analysis	Interest rate swaps
Liquidity risks	Lack of refinancing of business activities and profitability	Rolling liquidity management	Acquisition of loan funds and credit lines
Credit Risks	Cash, receivables and other assets	Age structure analysis and credit rating	Diversification strategy for bank deposits, trade credit insurance

The risks listed can have a considerable impact on the cash flow, profitability and financial situation of Voltabox AG.

The Voltabox Group has implemented an internal sensitivity analysis system based on a variety of risk analysis and risk management methods. The use of sensitivity analyses enables the Group to identify risk positions within the segments. Sensitivity analyses quantify the risks that can arise within given assumptions when certain parameters are changed in a defined range. They include the following assumptions:

- An appreciation of the euro against all foreign currencies by 10 percentage points
- A parallel shift in interest rate curves of 100 basis points (one percentage point)

The potential effects of the sensitivity analysis are estimates and are based on the assumption that the supposed negative market changes will occur. The actual effects may differ significantly if market developments deviate from assumptions made.

Market Price Fluctuations

Market price fluctuations can involve substantial cash flow and profit risks for Voltabox. Voltabox AG regularly conducts market analyses to monitor the market price risk. To ensure competitiveness, value analyses are carried out as part of the development of new products.

Foreign Currency Risks

Due to the international nature of its operations, Voltabox AG's ongoing business operations are exposed to foreign currency risk. Exchange rate fluctuations can lead to undesirable earnings and liquidity fluctuations. For Voltabox AG, the risk arises on foreign currency positions and possible changes in the relevant exchange rates. The uncertainty involved in future trends is referred to as exchange rate risk. Relevant risk variables are generally all non-functional currencies in which Voltabox enters into financial instruments. Voltabox AG limits risk by settling purchases and sales of goods and services mainly in the local currency.

The sensitivity to potential fluctuations in foreign currency exchange rates is determined by aggregating the net currency positions of the operating business that are not denominated in the Group's functional currency. Sensitivity is calculated by simulating a 10 % depreciation of the euro in relation to all foreign currencies. The simulated appreciation of the euro would have resulted in a change in future payment inflows in the amount of € 401 thousand as of December 31, 2019 (prior year: € 414 thousand). To the extent that future purchases are not hedged against currency exchange risks, a depreciation of the euro against other currencies would have a negative effect on the financial position and earnings as the Group's purchases in foreign currencies exceed its foreign currency cash inflows.

The following table provides an overview of the net foreign currency exchange risk by currency as of December 31, 2019. The periodic effects are determined by relating the hypothetical changes in risk variables to the portfolio of financial instruments at the end of the reporting period. It is assumed that the portfolio as of the reporting date is representative for the year as a whole.

€ ’000	**Dec. 31, 2019** USD	**Dec. 31, 2019** Other	Dec. 31, 2018 USD	Dec. 31, 2018 Other
Transaction-related foreign currency risk				
Foreign currency risk from balance sheet items	**21,388**	**1**	1,167	264
Foreign currency risk from pending transactions	**0**	**0**	0	0
	21,388	**1**	1,167	264
Net exposure – foreign currency positions	**21,388**	**1**	1,167	264
Change in foreign currency positions due to 10 % appreciation of the euro	**1,910**	**0**	117	26

Interest Rate Risks

Interest rate risk refers to any change in interest rates that impacts earnings or equity. Interest rate risks result from changes in market interest rates, especially for medium and long-term variable-interest assets and liabilities. The interest-bearing financial liabilities mainly have fixed interest rates.

The interest rate risks associated with variable-rate financial liabilities are measured using cash flow sensitivity techniques. The Voltabox Group had variable-rate financial liabilities of € 0 thousand as of December 31, 2019 (prior year: € 3,239 thousand). A change in interest rates (+1/-1 percentage point) is associated with the following cash flow risk:

€ ’000	**Dec. 31, 2019** + 1 %	**Dec. 31, 2019** - 1 %	Dec. 31, 2018 + 1 %	Dec. 31, 2018 - 1 %
Cash flow risk				
related to floating rate financial instruments	**0**	**0**	-32	32

Liquidity Risks

Liquidity risk, i.e., the risk that the Voltabox Group might not be able to meet its payment obligations as they fall due, is managed by means of flexible cash management. As of December 31, 2019, Voltabox had cash and cash equivalents of € 5,036 thousand (prior year: € 28,234 thousand) at its disposal. In addition to the instruments providing assurance of liquidity described above, the Group follows developments on financial markets on an ongoing basis in order to take advantage of attractive financing opportunities as they become available.

The following table shows the maturity date of installments, maturity repayments and interest arising on the financial liabilities recorded in the balance sheet as of December 31, 2019:

€ '000	2020	2021 – 2025	2026 and thereafter
Non-derivative financial liabilities			
Liabilities to banks	**269**	274	0
Liabilities from leases	**1,625**	3,984	8,569
Trade payables	**12,418**	0	0
Liabilities to related parties	**472**	0	0
Other financial liabilities	**3,379**	0	0
Non-derivative financial liabilities	**18,163**	4,258	8,569

€ '000	2019	2020 – 2024	2025 and thereafter
Non-derivative financial liabilities			
Liabilities to banks	**3,539**	141	0
Liabilities from leases	**25**	17	0
Trade payables	**9,257**	0	0
Liabilities to related parties	**557**	0	0
Other financial liabilities	**4,761**	0	0
Non-derivative financial liabilities	**18,139**	158	0

The net liquidity and net borrowing are derived from the sum of cash and cash equivalents less liabilities to banks and liabilities from leases as shown in the statement of financial position.

€ '000	Dec. 31, 2019	Dec. 31, 2018
Cash and cash equivalents	**5,036**	28,234
Total liquidity	**5,036**	28,234
Current financial liabilities and portions of noncurrent financial liabilities due in the short term	**1,894**	3,564
Noncurrent financial liabilities	**12,827**	158
Total financial liabilities	**14,721**	3,722
Net debt	**-9,685**	24,512

There were no defaults on interest and principal payments in the reporting period. It is not expected that significant actual liabilities and thus significant cash flows will arise for liabilities from contingent liabilities for which no provisions have yet been formed.

Credit risks

Credit risk is defined as the financial loss that arises when a contract partner fails to meet its payment obligations. The maximum risk of default is therefore equal to the positive fair value of the respective interest rate instruments. The effective supervision and control of credit risk is a core task of the risk management system. Voltabox performs credit checks on all customers requiring credit limits that exceed defined amounts. The Group monitors credit risk on an ongoing basis. To control the credit risk, Voltabox AG has set up various credit assessment instruments. Before accepting an order, a credit check is carried out on the basis of creditworthiness data available for the customer. Credit risk classes and credit limits are determined from the results of the credit assessment. If the credit limits are exceeded, further transactions require the express approval of the Management Board. As a rule, such transactions are only carried out against advance payment or after additional collateral, such as bank guarantees, has been deposited.

37 Commitments, Contingent Assets, Contingent Liabilities and Other Financial Obligations

There were no commitments or off-balance sheet contingent assets or contingent liabilities as of December 31, 2019. Other financial liabilities are as follows:´

€ '000	Remaining term < 1 year	Remaining term between 1 and 5 years	Remaining term > 5 years	**Dec. 31, 2019**	Dec. 31, 2018
Order commitments	13,684	0	0	**13,684**	87,928
Tenancy obligations	385	0	0	**385**	12,168
Other obligations	0	0	0	**0**	0
Guarantees	0	0	0	**0**	0
Other financial obligations	14,069	0	0	**14,069**	100,096

The purchase commitment includes purchase order items from noncurrent assets and inventories.

38 Consolidated Statement of Movements on Noncurrent Assets

Consolidated Statement of Movements on Noncurrent Assets as of December 31, 2019

	Acquisition costs						
€ '000	Jan. 1, 2019	IFRS 16 initial recognition	Exchange rate changes	Additions	Outflows	Transfers	**Dec. 31, 2019**
Intangible assets							
Industrial property rights and similar rights and assets as well as licenses to such rights and assets	13,099	0	0	1,058	0	0	**14,157**
Goodwill	9,706	0	0	0	0	0	**9,706**
Capitalized development costs	20,015	0	0	8,044	0	0	**28,059**
Total intangible assets	42,820	0	0	9,102	0	0	**51,922**
Rights of use							
Properties and buildings	0	10,861	0	0	0	0	**10,861**
Technical equipment and machinery	0	3,658	0	0	0	0	**3,658**
Other plant, office furniture and equipment	0	280	0	0	0	0	**280**
Total rights of use	0	14,799	0	0	0	0	**14,799**
Property, plant and equipment							
Properties and buildings	6,507	0	0	3,228	9,267	0	**468**
Technical equipment and machinery	3,477	0	0	1,028	0	0	**4,505**
Other plant, office furniture and equipment	2,967	0	0	844	66	0	**3,744**
Advance payments	355	0	0	806	1,143	0	**19**
Total property, plant and equipment	13,306	0	0	5,906	10,476	0	**8,736**
Grand total	56,126	14,799	0	15,008	10,476	0	**75,457**

	Depreciation and amortization						Carrying amount
	Jan. 1, 2019	Exchange rate change	Additions	Outflows	Transfers	**Dec. 31, 2019**	**Dec. 31, 2019**
	1,369	-154	10,974	0	0	**12,189**	1,968
	0	-51	9,757	0	0	**9,706**	0
	3,754	-615	16,163	0	0	**19,302**	8,757
	5,123	-820	36,894	0	0	**41,197**	10,725
	0	0	25	0	0	**25**	10,836
	0	0	1,022	0	0	**1,022**	2,636
	0	0	88	0	0	**88**	192
	0	0	1,135	0	0	**1,135**	13,664
	468	0	135	135	0	**468**	0
	2,202	48	695	0	0	**2,945**	1,561
	1,456	139	437	0	0	**2,032**	1,713
	0	0	0	0	0	**0**	19
	4,126	187	1,266	135	0	**5,444**	3,292
	9,249	-633	39,295	135	0	**47,776**	27,681

Consolidated Statement of Movements on Noncurrent Assets as of December 31, 2018

	Acquisition costs						
€ ’000	Jan. 1, 2018	Exchange rate change	Addi-tions	Group accruals	Outflows	Transfers	**Dec. 31, 2018**
Intangible assets							
Industrial property rights and similar rights and assets as well as licenses to such rights and assets	439	28	8,546	4,087	0	0	**13,099**
Goodwill	3,187	-182	0	6,701	0	0	**9,706**
Capitalized development costs	18,278	128	3,397	0	1,788	0	**20,015**
Total intangible assets	21,904	-26	11,943	10,788	1,788	0	**42,821**
Property, plant and equipment							
Properties and buildings	5,888	278	341	0	0	0	**6,507**
Technical equipment and machinery	3,172	12	282	24	13	0	**3,477**
Other plant, office furniture and equipment	1,947	244	661	115	0	0	**2,967**
Advance payments	19		336	0	0	0	**355**
Total property, plant and equipment	11,026	534	1,620	139	13	0	**13,306**
Grand total	32,930	509	13,563	10,927	1,801	0	**56,127**

Depreciation and amortization						Carrying amount
Jan. 1, 2018	Exchange rate change	Additions	Outflows	Transfers	**Dec. 31, 2018**	Dec. 31, 2018
159	5	1,204	0	0	**1,369**	11,731
0	0	0	0	0	**0**	9,706
2,077	16	1,661	0	0	**3,754**	16,261
2,236	22	2,865	0	0	**5,123**	37,698
315	16	137	0	0	**468**	6,039
1,526	90	590	4	0	**2,202**	1,274
1,060	3	389	-4	0	**1,456**	1,510
0	0	0	0	0	**0**	355
2,901	109	1,116	0	0	**4,126**	9,179
5,137	131	3,982	0	0	**9,250**	46,876

39 Notes to the Consolidated Cash Flow Statement

The consolidated cash flow statement shows the cash flows within a given fiscal year in order to present information about movements in the company's cash and cash equivalents in accordance with IAS 7 (Statement of Cash Flows). The consolidated cash flow statement has been prepared pursuant to the indirect method as defined in IAS 7.18 (b). Cash flows are classified separately as cash flows from operating activities, cash flows from investing activities and cash flows from financing activities.

The cash and cash equivalents shown in the consolidated cash flow statement include all cash and cash equivalents reported in the balance sheet that are available for use at short notice.

€ '000	**Dec. 31, 2019**	Dec. 31, 2018
Bank balances	**5,034**	28,233
Cash on hand	**2**	1
Cash and cash equivalents	**5,036**	28,234

Net liabilities changed as follows in the fiscal year:

	Liabilities from financing activities			
€ '000	Loans	Leasing	Cash and cash equivalents	**Total**
Net liability as of January 1, 2019	4,064	58	102,679	**98,557**
Cash flows	-523	-16	-74,445	**-73,906**
Change in fair value	0	0	0	**0**
Currency translation effects	139	0	0	**-139**
Net liability as of December 31, 2018	3,680	42	28,234	**24,512**
Retrospective adjustment IFRS 16	0	14,799	0	**-14,799**
Cash flows	-2,773	-663	-23,198	**-19,762**
Change in fair value	0	0	0	**0**
Currency translation effects	1	0	0	**-1**
Net liability as of December 31, 2019	908	14,178	5,036	**-10,050**

40 Segment Reporting

The Group Steering Committee consists of the Chief Executive Officer of Voltabox AG and the Chief Executive Officer of Voltabox of Texas. They represent the Group's key decision makers and they review the results. In contrast to the sales-oriented product segments, Voltabox AG has identified the following reportable segments in accordance with IFRS 8:

- The Europe operating segment comprises the design, development, production and sale of high-performance lithium-ion-based battery systems for the European market. This operating segment serves the Voltapower and Voltaforce product areas. Until the end of fiscal year 2019, this also included the Voltamotion product area, which has since been relinquished.

  In the Voltapower product segment, the company develops, manufactures and sells high-performance battery solutions for particularly demanding applications in industrial sub-markets. These primarily include the sectors of intralogistics (mainly forklifts, industrial trucks), mining (mainly mining vehicles) and agriculture and construction (mainly wheel loaders). In addition, Voltabox develops and produces battery systems for local public transportation applications.

  Under the brand name Voltaforce, Voltabox develops, manufactures and sells standard batteries in the low-voltage range that are used in various segments of the mass battery market. In these particular applications, lightweight batteries are particularly advantageous for improved driving dynamics as well as in terms of their efficiency and are therefore accordingly in demand. This demand will be enhanced as a result of increasing market penetration and awareness. Starter batteries for motorcycles represent one example of such applications. Voltaforce batteries are increasingly replacing existing lead-acid batteries.

  Under the Voltamotion brand name, Voltabox developed e-drive components, such as power electronics, that enable the complete electrification of high-performance vehicles. This made it possible for Voltabox to address individual markets with its products, such as inverters, chargers, DC-to-DC converters, electric motors and other comparable powertrain elements. The Voltamotion products were developed to an advanced stage of development. Following the failed sale of the product segment, Voltabox discontinued its activities in this area.

- The North America operating segment comprises the conception, development, production and distribution for the North American Market in a separate organization. In this segment, the company develops, manufactures and sells high-performance battery solutions for particularly demanding applications in industrial sub-markets. In the North America operating segment, these are primarily mining (mainly mining vehicles) and local public transportation (mainly trolleybuses and e-buses) and (mobile) stationary storage systems. The customers in this product segment include Komatsu Mining Corp. (mining) and the system integrator Kiepe Electric (local public transportation). The battery systems used in these fields are all for high-voltage applications.

  Management is the responsibility of the segment manager and CEO of Voltabox of North America, Inc.

Segment reporting is based on directly attributable transactions. An allocation is therefore not necessary. The Steering Committee assesses the profitability of the operating segment on the basis of Group revenue, EBIT margin and investments. It incorporates information on the assets of the Group on a monthly basis. Revenue between the operating segments is shown in the section of the consolidation column indicated.

The EBIT and the adjusted EBIT constitute alternative performance measures (APMs) that are not defined by the International Financial Reporting Standards. These are explained in the following.

Profitability in the Europe and North America segments is measured using the segment EBIT. This is calculated by deducting material and personnel expenses, other operating expenses and impairments from revenue and other operating income. Interest and other financing costs or income are taken into consideration in the financial result.

The following adjustments were made in fiscal year 2019 on the basis of the EBIT:

The impairment effects and restructuring effects from the focusing strategy have been included in the EBIT. These are expressed more precisely for Europe:

- impairment of current assets of € 46,577 thousand,
- impairment of goodwill of € 4,122 thousand,
- impairment of intangible assets of € 20,573 thousand,
- an impending loss provision of € 3,015 thousand and
- the reversal effects from the Voltamotion takeover of € 9,190 thousand.

For the North America segment, the following effects were adjusted:

- impairment of current assets of € 8,800 thousand,
- impairment of goodwill of € 5,635 thousand,
- impairment of intangible assets of € 1,193 thousand.

The EBITDA (earnings before interest, taxes, depreciation and amortization) and the adjusted EBITDA are also APMs. To calculate EBITDA, the depreciation of property, plant and equipment and amortization of intangible assets and impairments are added back to the EBIT.

The adjusted EBIT and the adjusted EBITDA reflect the operating performance of the Group, since non-operational one-time effects are eliminated. This elimination serves to make the information on the operating result more reliable and comparable.

Comparison with figures from the prior year is impossible because these figures were applied for the first time in fiscal year 2019.

The adjusted key figures will not be subject to the same influences in fiscal year 2020, since the impairments were one-off and thus very different.

Jan. 1 – Dec. 31, 2019 € '000	Europe	North America	Consolidation	Group
Revenue from third parties	65,208	6,197	-14,788	56,617
Operating segment revenue	65,208	6,197	-14,788	56,617
Changes in inventories, other operating income and own work capitalized	22,150	3,948	-2,895	23,204
Overall operating segment performance	87,358	10,145	-17,683	79,821
Material and personnel expenses, other operating expenses	93,798	-18,758	18,346	-94,210
Depreciation (incl. impairment)	-76,815	-16,388	0	-93,203
Operating segment EBIT	-83,255	-25,000	663	-107,592
Financial result				-215
Tax expense				5,883
Fiscal year profit				-101,925
Operating segment EBIT	-83,255	-25,000	663	-107,592
Impairment effects without regular expected credit loss	71,272	15,630	0	86,902
Impending loss provision	3,015		0	3,015
Reversal of sale of Voltamotion intangible assets	9,190		0	9,190
Adjusted EBIT	222	-9,370	663	-8.485

Jan. 1 – Dec. 31, 2018 € '000	Europe	North America	Consolidation	Group
Revenue from third parties	56,866	11,849	-1,807	66,909
Operating segment revenue	56,866	11,849	-1,807	66,909
Changes in inventories, other operating income and own work capitalized	12,236	1,543	-619	13,160
Overall operating segment performance	69,103	13,393	-2,426	80,069
Material and personnel expenses, other operating expenses	-58,832	-14,700	3,056	-70,476
Depreciation (incl. impairment)	-2,915	-693	-374	-3,982
Operating segment EBIT	7,355	-2,000	256	5,611
Financial result				-147
Tax expense				-2,885
Fiscal year profit				2,579

The following overview shows the assets and investments made in the reporting year.

2019 € '000	Europe	North America	Consolidation	Group
Assets	116,019	36,198	-63,075	89,142
Investments	24,289	4,722	0	29,011

2018 € '000	Europe	North America	Consolidation	Group
Assets	187,754	28,124	-34,361	181,516
Investments	9,978	3,584		13,563

For reasons of materiality, revenue is not broken down by products and services for each individual segment.

Geographical Territories

The following table provides information on the Group's revenues with external customers by geographical territories. The allocation is based on the location of the external customer.

2019 € '000	Germany	EU	Third country	**Total**
Umsatzerlöse vor Konsolidierung	45,271	0	11,346	56,617

2018 € '000	Germany	EU	Third country	**Total**
Umsatzerlöse vor Konsolidierung	55,954	790	13,760	70,504

Key Transactions With Customers

In fiscal year 2019, two customers exceeded the threshold of 10 % of revenue in accordance with IFRS 8.34. These customers accounted for revenue of € 27.3 million (38.4 %) and € 11.0 million (15.5 %), respectively. Both are attributable to the Voltapower product segment.

41 Directors and Officers

In the reporting year through July 1, 2019, the Management Board of Voltabox AG comprised CEO Jürgen Pampel and Jörg Dorbandt. Since July 2, 2019, Jürgen Pampel has acted as sole executive officer of Voltabox AG in the reporting year.

The following persons are members of the Supervisory Board:

Name	Occupation
Klaus Dieter Frers Chairman	Chairman of Management of paragon GmbH & Co. KGaA,
Prof. Dr. Martin Winter Vice-Chairman (until December 31, 2019)	Managing Director of Artega GmbH
Hermann Börnemeier	Professor at the Institute of Physical Chemistry at the University of Münster (WWU)

Prof. Dr. Martin Winter resigned from his role as member of the Supervisory Board of Voltabox AG as of the end of the fiscal year 2019. Walter Schäfers, attorney, was appointed as a new member of the Supervisory Board by the registry court. Walter Schäfers will be nominated for election at the Annual General Meeting.

42 Information on Related Companies and Persons

Related parties as defined in IAS 24 (Related Party Disclosures) include members of the Management Board, the Supervisory Board and their immediate families as well as affiliated companies of Voltabox AG.

Klaus Dieter Frers is Managing Director of paragon GmbH, the general partner of paragon GmbH & Co. KGaA, and managing partner of Artega GmbH. paragon GmbH & Co. KGaA is the parent company of Voltabox AG. Klaus Dieter Frers is able to control the parent company, paragon GmbH & Co. KGaA.

The outstanding balances for affiliated persons as of the reporting date are as follows:

Trade receivables from related companies in the amount of € 3,549 thousand (prior year: € 34 thousand) are attributable in full to Nordhagen Immobilien GmbH, a subsidiary of paragon GmbH & Co. KGaA. Receivables from paragon Automotive Kunshan total € 26 thousand (prior year: € 0 thousand) as of December 31, 2019. Receivables from paragon GmbH & Co. KGaA total € 45 thousand (prior year: € 22 thousand). Receivables from paragon electrodrive GmbH total € 1,416 thousand (prior year: € 1,753 thousand). Receivables from paragon movasys GmbH total € 171 thousand (prior year: € 0 thousand).

Liabilities from trade receivables from related companies in the amount of € 472 thousand (prior year: € 557 thousand) are attributable in full to paragon GmbH & Co. KG. In turn, paragon GmbH & Co. KGaA realized revenue with the Voltabox Group mainly through Group services in the amount of € 4,190 thousand (prior year: € 2,868 thousand). Revenue of € 26 thousand (prior year: € 0 thousand) was realized through the sale of goods to paragon Automotive (Kunshan). Revenue of € 1,190 thousand (prior year:

€ 0 thousand) was generated through sales of assets to paragon electrodrive GmbH. Revenue of € 123 thousand (prior year: € 0 thousand), of which € 23 thousand (prior year: € 0 thousand) pertained to the sale of goods, was generated through a material cost allocation with paragon GmbH & Co. KGaA. Further revenue was generated by passing on costs totaling € 187 thousand (prior year: € 0 thousand) to paragon movasys GmbH. Revenue totaling € 15 thousand (prior year: € 0 thousand) was generated through the trade fair costs of paragon semvox GmbH.

Hermann Börnemeier provided tax consulting services in the amount of € 37 thousand (prior year: € 27 thousand).

43 Auditor's Fee

Expenses of € 163 thousand were recognized in the period under report from January 1 to December 31, 2019 (prior year: € 124 thousand), as fees for the audit of Voltabox AG's separate financial statements prepared in accordance with German commercial law, and for the audit of Voltabox AG's consolidated financial statements prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, which were conducted by Baker Tilly GmbH & Co. KG, Wirtschaftsprüfungsgesellschaft. Of this, € 114 thousand relates to the auditor's services and € 49 thousand to other services in connection with a DPR audit.

44 Risk Management

The company's risk management is described in the combined management report.

45 Declaration Pursuant to Section 160 (1) No. 8 of the German Stock Corporation Act (AktG)

Voting Right Notifications

In the year under review, the company received no notifications pursuant to Section 26 (1) of the German Securities Trading Act (WpHG) that require disclosure in accordance with Section 160 (1) No. 8 of the German Stock Corporation Act (AktG).

Directors' Dealings

The company did not receive any reports on proprietary transactions by executives in accordance with Art. 19 of the EU regulation No 596/2014 (MAR) on market abuse (market abuse regulation) during the reporting period.

Corporate Governance Declaration

The Declaration of Conformity with the German Corporate Governance Code (GCGC) required under Section 161 of the German Stock Corporation Act (AktG) was most recently submitted in March 2018 and is available to shareholders on a permanent basis on the company's website (www.voltabox.ag).

Delbrück, August 20, 2020

Voltabox AG
Der Vorstand

Jürgen Pampel	Dr. Burkhard Leifhelm	Patrick Zabel
CEO	CTO	CFO

Independent Auditor's Report

To Voltabox AG, Delbrück

Report on the audit of the consolidated financial statements and the combined management report

Audit Opinions

We have audited the consolidated financial statements of Voltabox AG and its subsidiaries (the Group), which comprises the consolidated balance sheet as of December 31, 2019, the consolidated statement of comprehensive income (including the consolidated profit and loss account), the consolidated statement of changes in equity and the consolidated cash flow statement for the fiscal year from January 1 to December 31, 2019, as well as the notes to the consolidated financial statements, including a summary of important accounting policies. Furthermore, we have audited the combined management report of Voltabox AG for the fiscal year from January 1 to December 31, 2019.

In our opinion, based on the findings of our audit,

- the enclosed consolidated financial statements comply with IFRS as adopted by the EU and the additional requirements pursuant to Section 315e (1) of the German Commercial Code (HGB), and provide a true and fair view of the net assets and financial position of the Group as of December 31, 2019, as well as its earnings for the fiscal year starting January 1 and ending December 31, 2019, in accordance with these requirements.
- The enclosed combined management report provides a suitable view of the Group's position. The combined management report is consistent with the consolidated financial statements, complies with all statutory regulations and suitably presents the opportunities and risks of future development.

The disclosures made in the section "Corporate Governance Statement Pursuant to Section 315d in Conjunction with Section 289f (1) of the German Commercial Code (HGB)" of the combined management report and the non-financial statement contained in the section "Sustainability Reporting" pursuant to Section 289b of the German Commercial Code (HGB) have not been audited in accordance with German legal requirements.

Pursuant to Section 322 (3) sentence 1 HGB, we declare that our audit has not led to any objections to the regularity of the consolidated financial statements and the combined management report.

Basis for the Audit Opinions

We conducted our audit of the consolidated financial statements and the combined management report in accordance with Section 317 HGB and the EU Audit Regulation (no. 537/2014, referred to subsequently as "EU Audit Regulation") and in compliance with German generally accepted standards for the audit of financial statements promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities according to those requirements are further described in the "Auditor's Responsibility for the Audit of the Consolidated Financial Statements and the Combined Management Report" section of our auditor's report. We are independent of the Group companies in accordance with the requirements of European law and German commercial law and professional rules of conduct, and we have fulfilled our other German professional responsibilities in compliance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided any non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and the combined management report.

Material Uncertainty in Connection with the Continuation of Business Operations

We refer to the disclosures in the section "Going Concern" in the notes and in the "Risk Report" section of the combined management report under "Financial Risks," in which the legal representatives describe that the Group is in a tight liquidity situation due to the declining sales. As discussed in the in the aforementioned sections, these events and circumstances, together with other matters discussed therein, indicate the existence of material uncertainty that could cast significant doubt on the Group's ability to continue as a going concern and which represents a risk threatening the existence of the Group within the meaning of Section 322 (2) sentence 3 HGB. Our audit opinions have not been altered in respect to this matter.

Key Audit Matters in the Audit of the Consolidated Financial Statements

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements and of the combined management report for the fiscal year from January 1 to December 31, 2019. These matters were addressed in the context of our audit of the consolidated financial statements as a whole and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In addition to the matters described in the section "Significant uncertainties concerning the Company's ability to continue as a going concern", we have identified the issues described below as the most significant matters to be disclosed in our audit report.

In our opinion, the following matters were the most significant in our audit:

1) Recognition and measurement of capitalized development costs
2) Revenue recognition
3) Appropriateness of the going concern assumption

Our presentation of these key audit matters has the following structure:

1.) Specific matter and problem
2.) Audit approach and findings
3.) Further information

The most important audit issues are described below:

I. Recognition and measurement of capitalized development expenses

1.) As of December 31, 2019, the Company reported capitalized development expenses of € 8,757 thousand (prior year: € 16,261 thousand) under intangible assets in its balance sheet. Development projects are only capitalized at cost where these projects fulfill the criteria laid down in IAS 38 and this involves the development of marketable specific customer and product solutions. As a rule, no direct customer orders have been received for this development work. In the company's consolidated financial statements, this balance sheet item in the amount of € 8,757 thousand now accounts for 9 % (prior year: 8 %) of the balance sheet total. Own work capitalized in connection with development projects amounted to € 7,778 thousand in fiscal year 2019 (prior year: € 3,005 thousand). Capitalized development expenses have thus had a significant effect on the value of the company's financial performance indicators. In view of the amount of the total capitalized development costs, the complexity of the accounting and measurement of the capitalized development costs as well as due to considerable estimation uncertainties, this matter was particularly important for the purpose of our audit.

2.) Within the scope of our audit of development expenses capitalized, on a test basis we conducted disclosure-related audit activities in order to review the recognition, measurement and reporting of capitalized development costs. We reviewed the methodological approach applied in the measurement of development expenses capitalized and evaluated this calculation in terms of its amount. For this purpose, for the selected samples the project documentation was analyzed, discussions were held with the responsible controller and the project managers, and the related planned profit contribution calculation was analyzed. The amortization method for completed development projects was reviewed on a test basis. Our audit did not give rise to any objections to the recognition of own work capitalized in the balance sheet.

3.) The Group's disclosures concerning the effects of own expenses capitalized are included in the notes, mainly in the following sections: "(9) Description of Accounting Policies and Measurement Methods – Intangible Assets," "(10) Use of Estimates and Assumptions – Capitalized Development Costs," "(13) Other Own Work Capitalized" and "(21) Intangible Assets."

II. Revenue recognition

1.) The Voltabox Group reported revenue of € 56,617 thousand in fiscal year 2019. The assessment of revenue realization is subject to an inherent risk of error due to the contract structures with customers, some of which are individualized. The consolidated financial statements are subject to the risk that the demarcation of revenue as of the balance sheet date is erroneous, and that revenues are thus assigned to the wrong period.

2.) For this reason, our audit entailed the creation of a picture of the company's existing internal controls in the area of sales and a subsequent review of the effectiveness of the existing controls by means of a function test. The system audit was supplemented with disclosure-related audit activities in the form of analytical validations of revenue development, by reviewing the correctness of the accrual accounting for revenue, by obtaining balance confirmations from customers and through further case-by-case audit activities regarding the contractual bases and the document flow. On the whole, we were able to achieve a satisfactory level of confidence regarding the regularity of revenue recognition.

3.) We refer to the company's disclosures on revenue in the consolidated income statement.

III. Appropriateness of the going concern assumption

1.) The consolidated financial statements of Voltabox AG have been prepared under the going concern assumption. In view of the coronavirus pandemic and its consequences for the macroeconomic situation alongside the associated order cancellations with extensive revenue losses, the Management Board withdrew its previous revenue and earnings forecast for fiscal year 2020 on March 27, 2020. The Management Board also believes that there is considerable uncertainty around the duration and impact of the pandemic. The company does not intend to apply for government relief measures. Instead, corresponding cost reduction measures (e.g. short-time work, reduction of staff, closure of a site) will be employed in order to stabilize the strained financial position.

2.) Based on the adjusted income and liquidity planning, we have assessed, both for the Group companies and for the Group as a whole, whether the Management Board's assessment of the Voltabox Group's ability to continue as a going concern is appropriate. To this end, we first checked the submitted planning for formal consistency (mathematical accuracy, correct implementation of the underlying premises). In addition, we compared the planning assumptions (especially with regard to the revenue forecast) with existing customer orders and checked the plausibility of the main cost types. In our opinion, the going concern assumption on which the legal representatives are acting has been reasonably and appropriately derived from the budget planning.

3.) The information provided by the Group to assess its ability to continue as a going concern is contained in the section “Financial Risks” of the risk and forecast report of the combined management report.

Other Information

The company’s legal representatives and the Supervisory Board are responsible for the other information. Other information includes the information provided in the section “Corporate Governance Statement pursuant to Section 315d in conjunction with Section 289f (1) HGB” of the combined management report pursuant to Section 315d (5) in conjunction with Section 289f (1) HGB. This other information likewise includes the remaining parts of the Annual Report, with the exception of the audited annual financial statements, the audited combined management report and our auditor’s report, and also

- the assurance provided by the company’s legal representatives under Section 264 (2) sentence 3 HGB concerning the annual financial statements and the assurance under Section 289 (1) sentence 5 HGB regarding the combined management report,
- the corporate governance report pursuant to no. 3.10 of the German Corporate Governance Code (in the 2017 version), and
- other sections of the Annual Report of Voltabox AG, Delbrück, for the fiscal year ending December 31, 2019, which did not require auditing.

Our audit opinions on the consolidated financial statements and the combined management report do not cover this other information, and consequently we do not express an audit opinion or any other form of audit conclusion thereon.

In connection with our audit, our responsibility is to read this other information and, in so doing, to consider whether this other information

- is materially inconsistent with the consolidated financial statements, with the substantively verified information the combined management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

Responsibility of the Company’s Legal Representatives and the Supervisory Board for the Consolidated Financial Statements and the Combined Management Report

The company’s legal representatives are responsible for the preparation of the consolidated financial statements that comply with the IFRS as adopted by the EU as well as the German supplementary statutory regulations applicable under Section 315e (1) HGB in all significant respects and for ensuring that the consolidated financial statements provide a true and fair view of the net assets, financial position and earnings of the Group in accordance with these provisions. In addition, the company’s legal representatives are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the company’s legal representatives are responsible for assessing the Group’s ability to continue as a going concern. They are also responsible for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the company’s legal representatives are responsible for the preparation of the combined management report that, as a whole, provides an appropriate view of the Group’s position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the company’s legal representatives are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a combined management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the combined management report.

The Supervisory Board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and the combined management report.

Auditor's Responsibility for the Audit of the Consolidated Financial Statements and the Combined Management Report

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the combined management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and the combined management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Section 317 HGB and the EU Audit Regulation and in compliance with German generally accepted standards for the audit of financial statements promulgated by IDW will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users made on the basis of these consolidated financial statements and this combined management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement in the consolidated financial statements and the combined management report, 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 audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures relevant to the audit of the combined management report, in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by the company's legal representatives and the reasonableness of estimates made by the company's legal representatives and related disclosures.

- Draw conclusions regarding the appropriateness of the company's legal representatives' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the combined management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events such that the consolidated financial statements give a true and fair view of the net assets, financial position and earnings of the Group in compliance with IFRS as adopted by the EU and the additional requirements of German commercial law pursuant to Section 315e (1) HGB.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and the combined management report. We are responsible for the direction, supervision and performance of the audit of the consolidated financial statements. We remain solely responsible for our audit opinions.

- Evaluate the consistency of the combined management report with the consolidated financial statements, its conformity with German law and the view of the Group's position that it provides.

- Perform audit procedures regarding the prospective information presented by the company's legal representatives in the combined management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the company's legal representatives as a basis for the prospective information, and evaluate whether this prospective information has been properly derived from these assumptions. We do not express a separate audit opinion on this prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We discuss with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and discuss with them any relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

On the basis of the matters discussed with the persons charged with governance, we determine the matters that were of most significance in the audit of the consolidated financial statements for the current period under review and are therefore the key audit matters. We describe these matters in our auditor's report unless any law or other regulation precludes public disclosure of this matter.

Other legal and regulatory requirements

Further Information Pursuant to Article 10 of the EU Audit Regulation

We were elected as the auditor of the consolidated financial statements by the Annual General Meeting held on May 16, 2019. We were engaged by the Supervisory Board on December 03, 2019. We have audited the consolidated financial statements of Voltabox AG without interruption since fiscal year 2017.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the Supervisory Board pursuant to Article 11 of the EU Audit Regulation (long-form audit report).

German public accountant responsible for the audit

The German public accountant responsible for the audit is Markus Miklis.

Düsseldorf, August 20, 2020

Baker Tilly GmbH & Co. KG
Wirtschaftsprüfungsgesellschaft
(Düsseldorf)

Thomas Gloth	Markus Miklis
German Public Accountant	German Public Accountant

Declaration by the Legal Representatives

We declare that to the best of our knowledge and in accordance with the applicable accounting principles, the consolidated financial statements give a true and fair view of the assets, financial position and earnings of the Group, and that the combined Group management report presents the development of business, including the business results and the position of the Group, in such a way that a true and fair view is conveyed and the significant opportunities and risks of the Group's foreseeable development are described.

Jürgen Pampel
CEO

Dr. Burkhard Leifhelm
CTO

Patrick Zabel
CFO

Financial Calendar 2020

August 20, 2020	2019 Annual Report – consolidated financial statements
August 20, 2020	Group interim report as of March 31, 2020 – first quarter
September 1–3, 2020	EquityForum Fall Conference, virtual
September 4, 2020	Group interim report as of June 30, 2020 – the first six months
September 16, 2020	Annual General Meeting, virtual
October 19–20, 2020	European Large & MidCap Event, Paris
November 12, 2020	Group interim report as of September 30, 2020 – nine months
November 16–18, 2020	Equity Forum, virtual

Imprint

Voltabox AG
Artegastraße 1
33129 Delbrück / Germany
Phone: +49 5250 9930–0
Fax: +49 5250 9930–901
E-Mail: investor@voltabox.ag
www.voltabox.ag

Design
visuphil®

Photos
Sarah Bömer

Voltabox AG
Artegastraße 1
33129 Delbrück

voltabox.ag