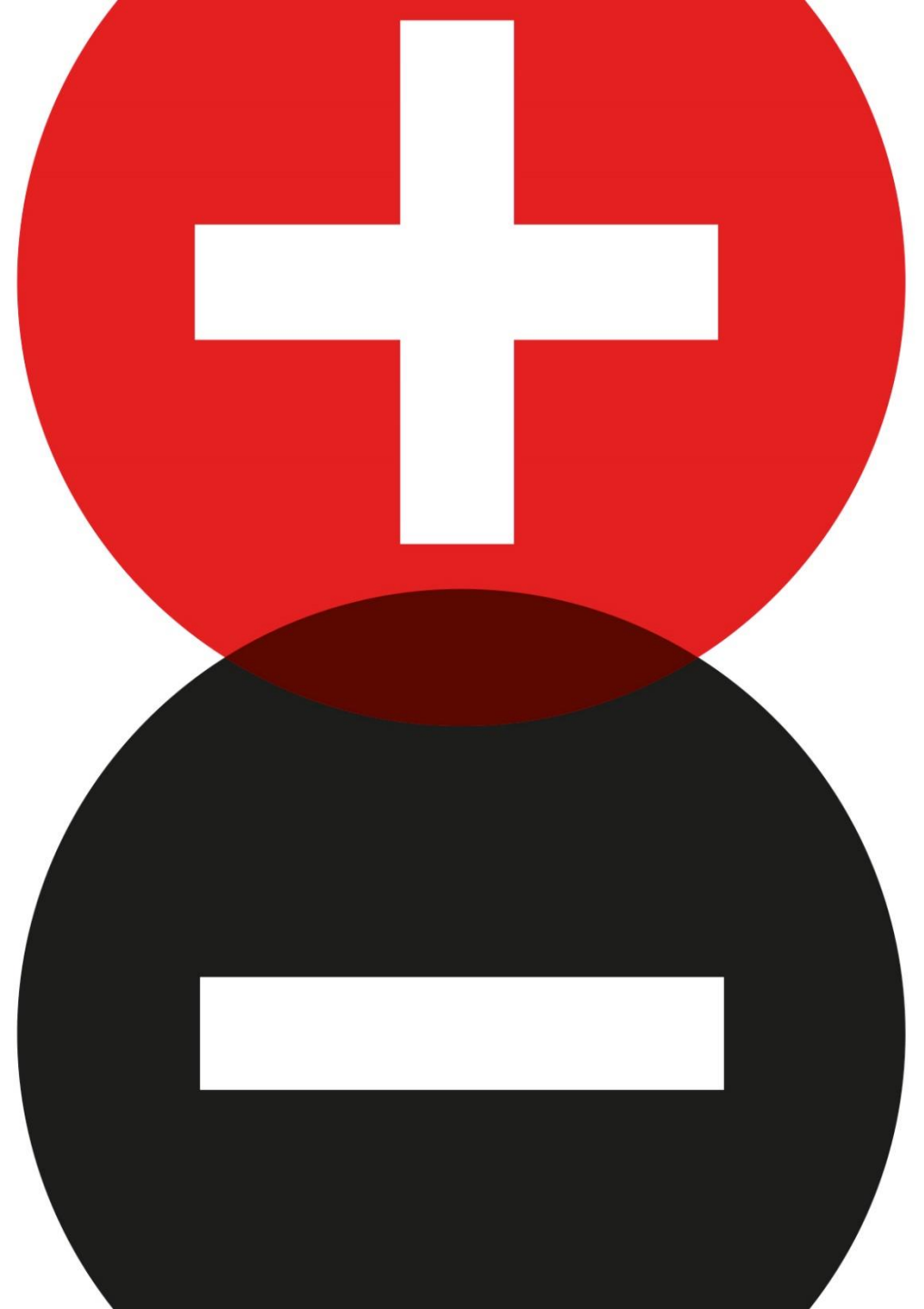


Voltabox electrifies!

Investor/Analyst Presentation

EquityForum Fall Conference
September 2-3, 2019



Key Facts from 6M/2019

Continued top line growth **+77%**

EBIT margin **burdened** by high material input at **-3.6%**

Equity ratio decreases to **78%**

Available liquidity at **€ 18.6m**

Main drivers in 6M/18:  and  and 

CAPEX: € 8.9m



Adjusted Forecast for 2019: Revenues of € 70m - € 80m, EBIT margin between -8 to -9%

Agenda

- Company Presentation
- Current Developments in Operational Business
- Financials
- Outlook

Voltabox Corporate Development


Year	Strategic Milestones	Market Development	Results
2019 ff.	+ Start Intralogistics in-house development + Entry into US Intralogistics and ESS market	+ EV-Buses + Stationary Energy Back-up Systems + OEMs	→ 2019e: € 70 – 80m Revenue, -8 to -9 % EBIT margin
2018	+ Acquisitions of Concurrent Design & ACCURATE (Branch: Korntal-Münchingen) + Start of Intralogistics direct sales	E-Bikes / Pedelects	→ € 66,9m Revenue, 8,4 % EBIT margin 235 FTE
2017	Change of legal form to AG & IPO + Branch Aachen	Agriculture & Construction	→ € 27,3m Revenue, -10,3 % EBIT margin 99 FTE
2016		VOLTAPOWER® VOLTAFORCE® VOLTAMOTION®	→ € 14,5m Revenue, -25,4 % EBIT margin 67 FTE
2015		Mining	→ € 7,4m Revenue -31,6 % EBIT margin 62 FTE
2014	Foundation Voltabox Deutschland GmbH + Branch Austin (TX, USA)	Material Handling (Intralogistics) Motorcycles	→ € 4,6m Revenue -9,7 % EBIT-Marge 41 FTE
	Strategic Milestones	Market Development	Results

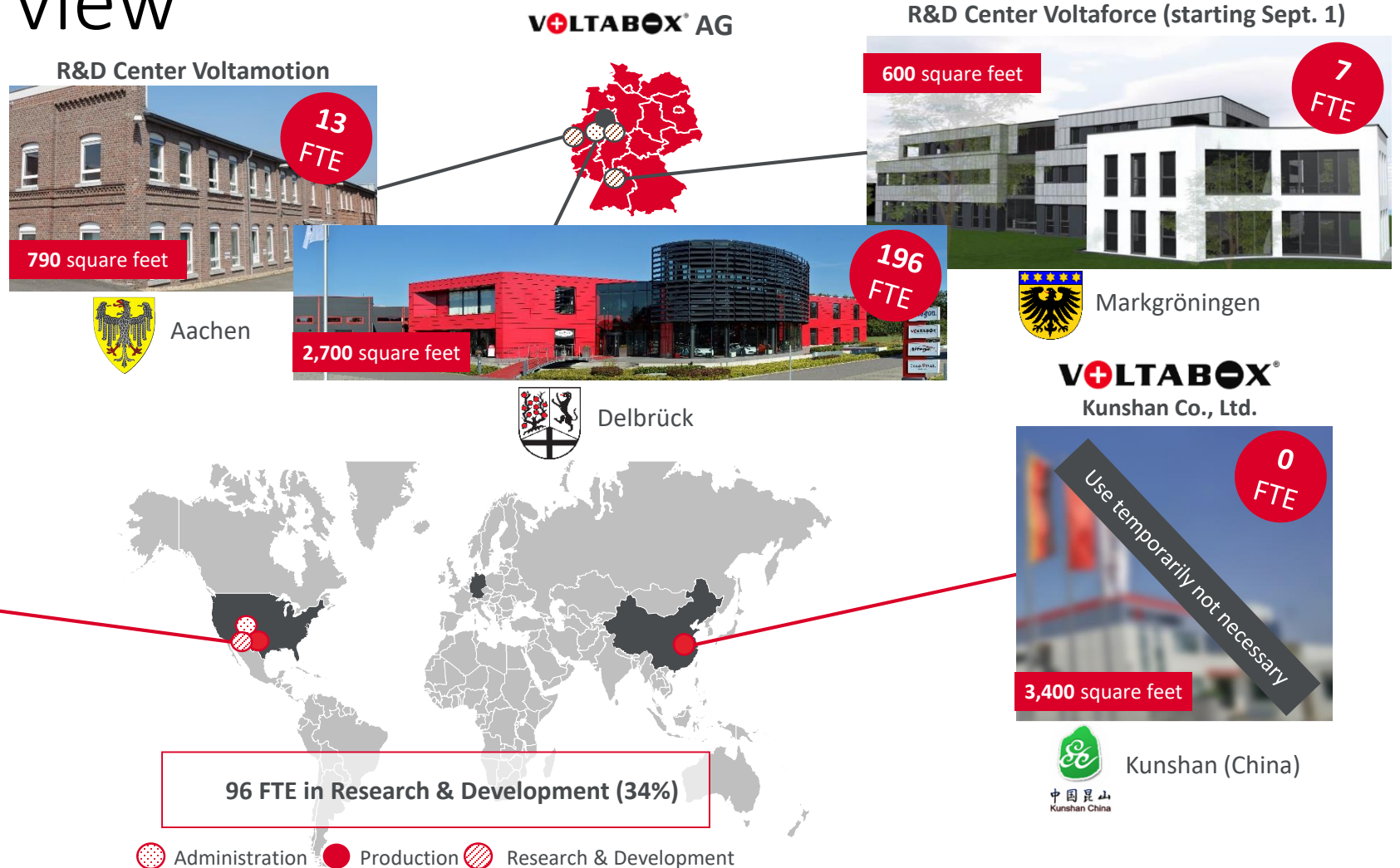
Location Overview

With 282 FTE*, technology hubs and state-of-the-art production facilities, Voltabox is well positioned to grow its business on a global scale.

V+LTABOX® of North America, Inc. **V+LTABOX®** of Texas, Inc.



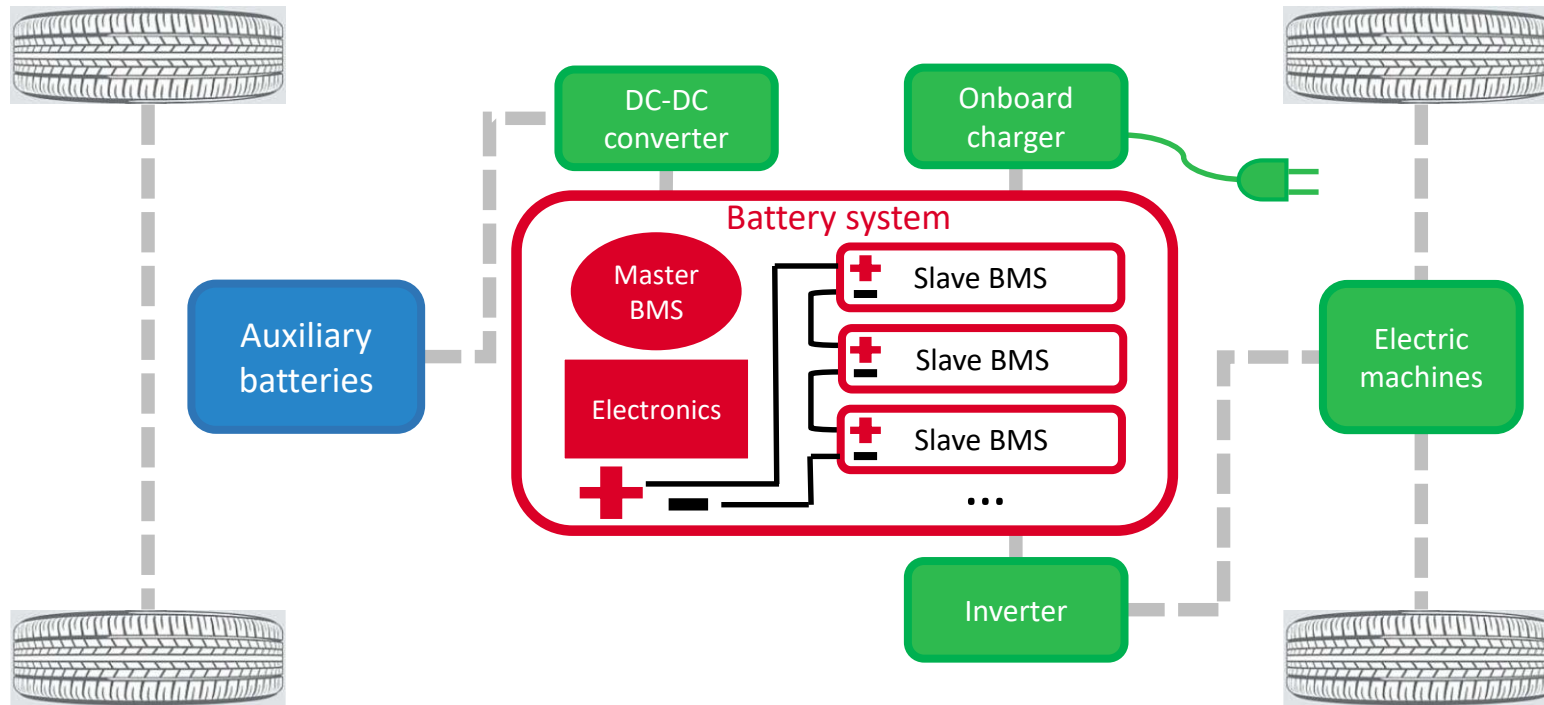
 Austin, TX (USA)



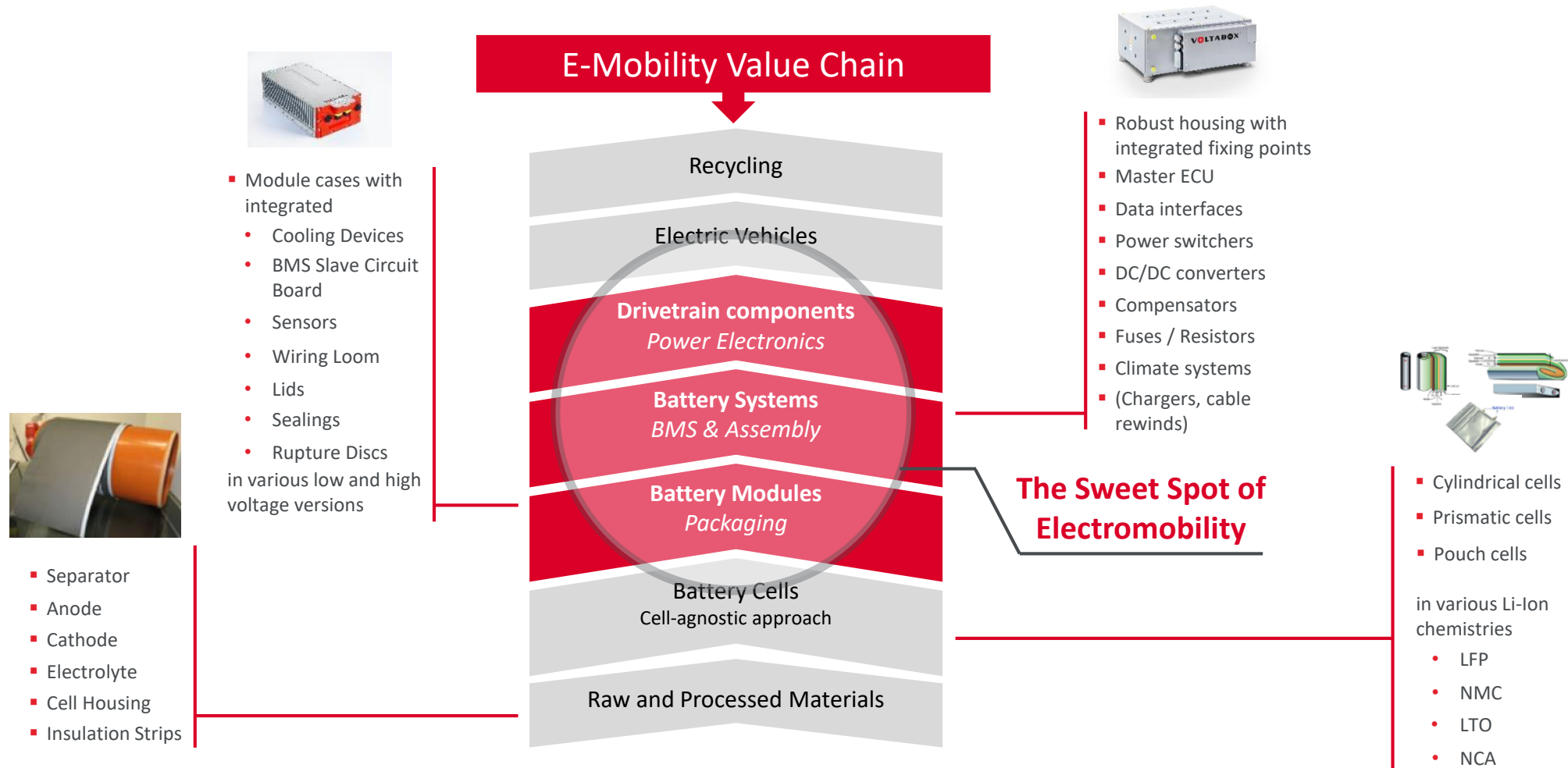
* Full time equivalents (FTE) incl. 33 temporary employees, as of June 30, 2018.

Product segments

Voltapower – **Voltamotion** – **Voltaforce**



E-Mobility Pure Play

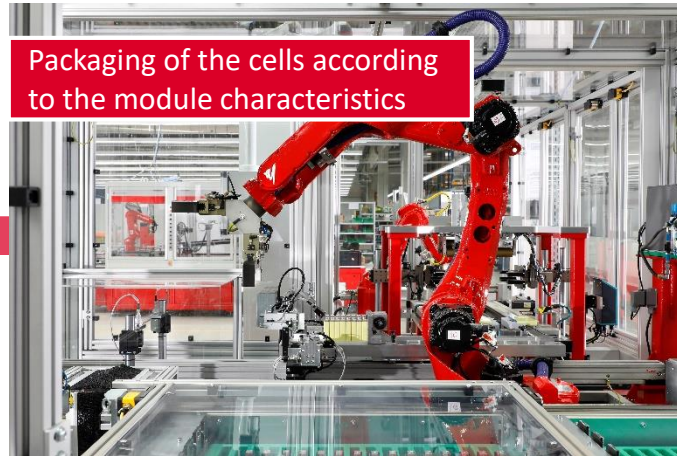


Production Steps - From the Cell to the Complete System

Procurement of cells and preparation of production



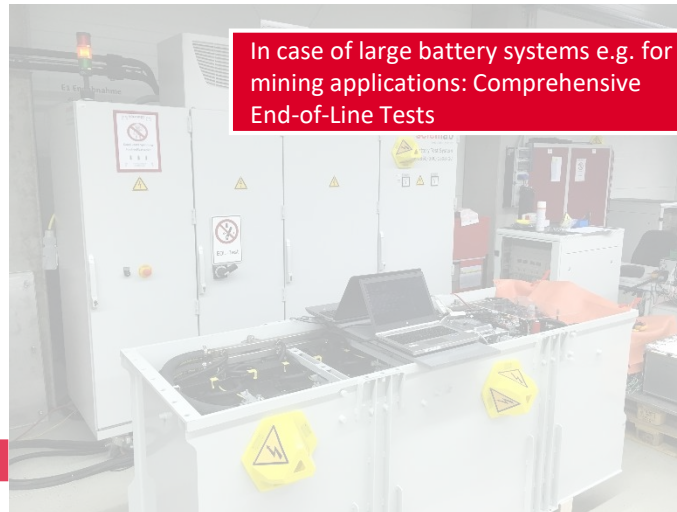
Packaging of the cells according to the module characteristics



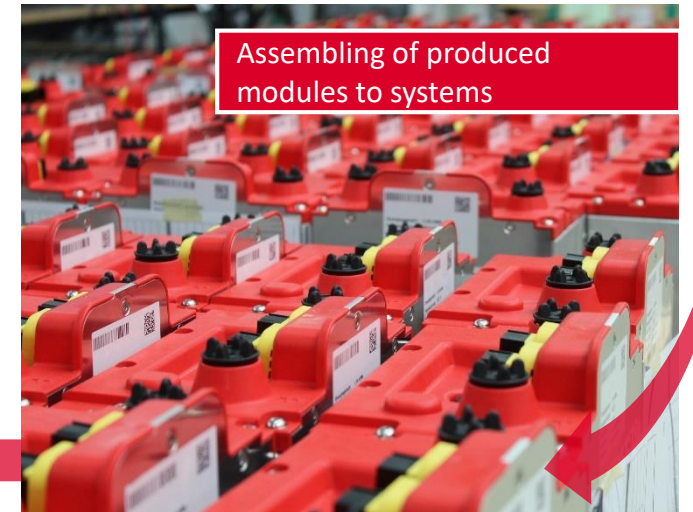
Connecting the cells, adding of BMS and further components



In case of large battery systems e.g. for mining applications: Comprehensive End-of-Line Tests

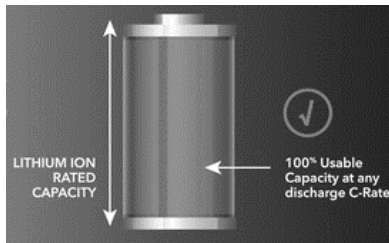


Assembling of produced modules to systems



TCO-Advantages Driving Substitution of Lead-Acid by Li-Ion

Li-Ion Technology

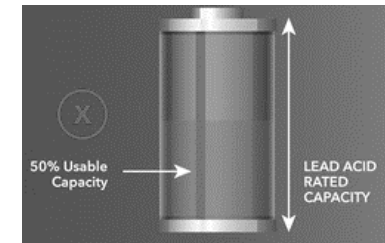


Additional advantages:

- No memory effect (opportunity charging)
- Very low self-discharge
- No maintenance
- Full functionality at low temperatures
- Optimum control and (remote) monitoring

Up to 240 Wh/kg	Energy density	40 Wh/kg
Up to 95%	Charging efficiency	Up to 70%
Up to 30,000 cycles at 80% DOD	Cycle life	1,200
Up to 80% in 6 min (10C)	Fast charging	50% in 3 hrs.
Zero emissions	Emissions	Gassing & water loss

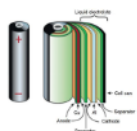
Lead-Acid Technology



Voltabox is Cell Agnostic!

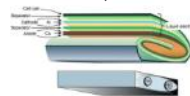
Cell Types

Cylindrical



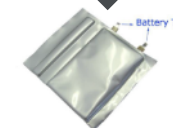
A spirally wound design (jelly-roll). Designated by size, e.g. 26650 cylindrical battery (Diameter: 26mm, length: 65.2 mm; code for cylindrical shape: 0)

Prismatic



A prismatic design indicate a flat battery design. The stacks can be wound (as shown in the photo) or stacked (with alternating cathode/separator/anode structure). The stacks are usually inserted into rigid casing to form prismatic

Pouch



Rather than rigid metallic casing, conductive foil-tabs are welded to the electrodes and seal the battery fully. The tacks inside can be wound or stacked. Swelling and gassing could be a concern for pouch cells

Cell Chemistries

Lithium Iron Phosphate (LFP)

- Nominal cell voltage: 3.2 V to 3.3 V
- No risk of thermal runaway (in case of an accident)
- High cycle stability of up to 4,000 cycles at 80% DoD
- Large operating temperature range -20/+ 55 °C
- High energy density (125 Wh/kg and 292 Wh/l)
- Using only a small portion of rare earths

Nickel Manganese Cobalt (NMC)

- Nominal cell voltage: 3.6 V to 3.7 V
- High cycle stability of at least 6,000 cycles at 80% DoD
- Great operating temperature range of -30/+ 60 °C
- High energy density (136 - 230 Wh/kg and at least 309 Wh/l)

Lithium Titanium Oxide (LTO)

- Nominal cell voltage: 2.3 V
- Highest cycle stability of up to 30,000 cycles at 80% DoD
- High level of safety thanks to LTO anode
- Great operating temperature range of -30/+ 55 °C
- Energy density of 96 Wh/kg or 202 Wh/l
- Great SoC range useable with the highest performances

Nickel Cobalt Aluminum Oxide (NCA)

- Nominal cell voltage: 3.6 - 3.7 V (vs. graphite)
- Very wide operating temperature range of -20 /+75°C
- High cycle stability of up to 1,500 cycles at 80-70% DoD
- High energy density (140 - 280 Wh/kg and 300 - 590 Wh/L)
- Currently being tested or upscaled by many cell manufacturers

Source: IDTechEx.

Li-Ion Battery System Supplier for Defying Applications

- Voltabox is a **pioneer** in the **electrification of industrial applications**. In 2018, the Group **expanded** its **solution portfolio** in order to open up **further mass markets** in the future.
 - **Mindset focus on applications**
(authentic added value solutions)
 - **Exceptional integration power**
(experience in automotive interfaces)
 - **Superior realization processes**
(short time-to-market with modular kit)



Agenda

- Company Presentation
- Current Developments in Operational Business
- Financials
- Outlook

New Market for Voltabox: 5G Mobile Transmission



With the 5G technology the basis is created for...

Smart Cities



Autonomous Driving



Smart Factories and Industrial Internet of Things (IIoT)



Smart Homes and Smart Buildings



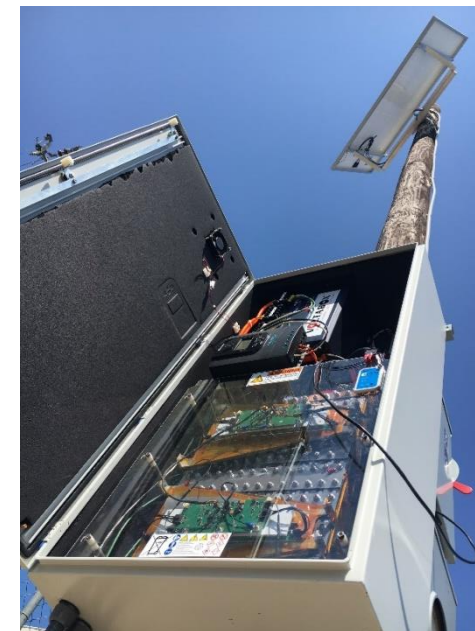
The New 5G Mobile Communications Technology

- In densely populated areas (large cities), transmission cells with a maximum centre distance of 300m are typically required. Here around 3,000 to 5,000 5G transmission towers are required. In rural areas the distances are larger, max. 1km.
- In comparison, the number of required 5G transmitters is 10 times higher than with the current 3G or LTE technology. Studies concerning the necessary German 5G network construction show a demand of 750,000 to 1.2 million 5G mobile transmission towers.
- Each transmitter needs a back-up battery to bridge power network failures. Compared to conventional lead-acid batteries, Voltabox lithium-ion batteries are lighter, smaller, more durable and maintenance-free.



Large Initial Order for Voltabox Back-up Systems

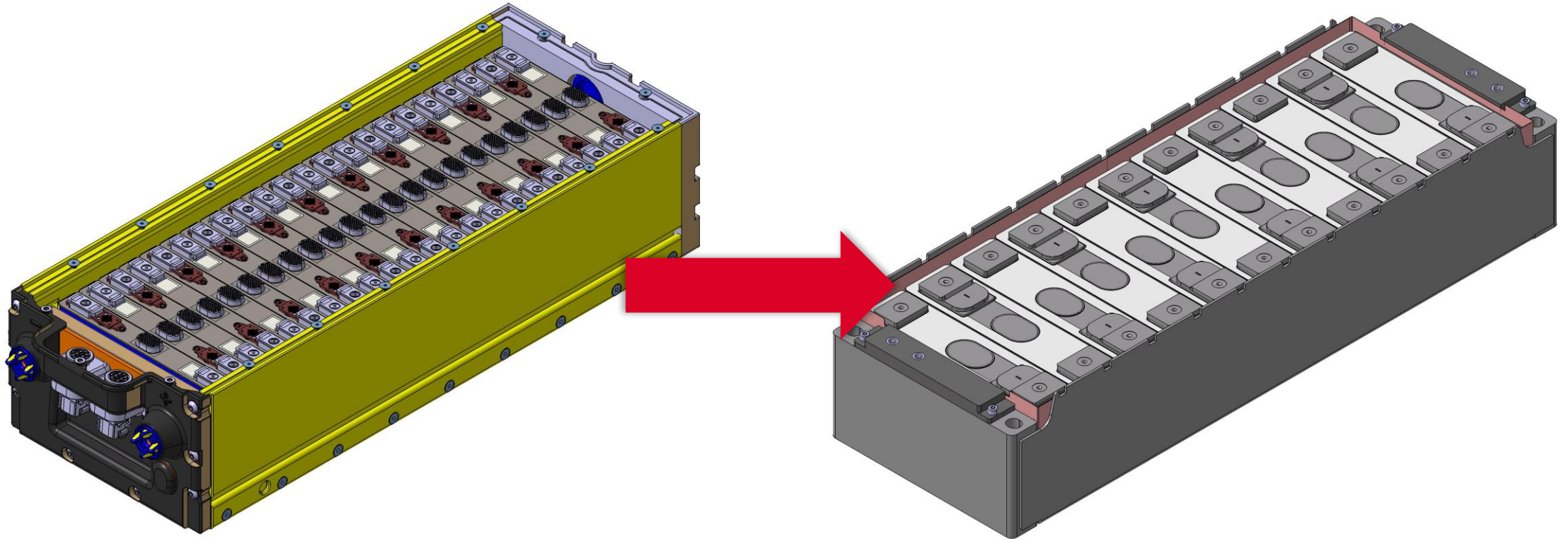
- Client: located in Austin, active in 5 federal states
 - Alpha Prototype: June 18, 2019 (1 piece)
 - Beta Prototype: July 2019 (5 pieces)
 - Volume First Order: 2.200 pieces
 - New customer requirements in 08/2019:
 - 44 hrs durability instead of 33 hrs
 - 1,500 cycles instead of 3,600 cycles
- Technically not challenging
- Impact on battery size and management
- New validation necessary >> Time delay



Images: Prototype installations of the Voltabox systems in Austin/TX



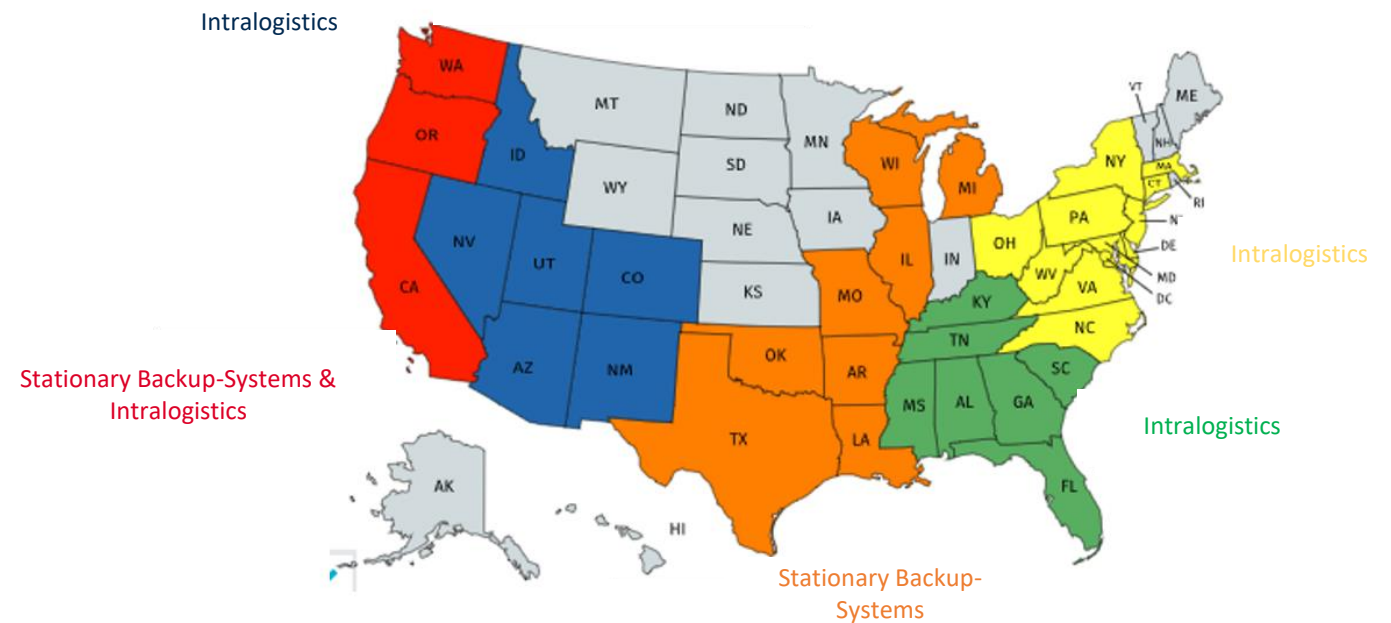
Change of Technology: Single Size vs. Double Size



Currently alternative cells in the approval process to increase security against delivery stops

Market Segment Intralogistics: Strategy for the USA

- Implementation of the market approach strategy for the North American Intralogistics market is underway.
- Five sales experts with partly extensive track records have been installed and trained.
- Extension of the field of sales activities due to the planned market entry into the telecommunications industry (equipment of 5G mobile transmission towers) with stationary backup battery systems.
- Currently: Advanced process of further identifications of prospects and market opportunities in the relevant regions and hubs



Voltabox of Texas: Expansion Into New Markets



**Thomas Marc Becker (39):
New CFO Voltabox USA**

Graduate business economist and industrial engineer with professional background gained at Continental Automotive Systems in China and USA, most recently Head of Finance/IT in Santa Teresa (Texas, USA)

Market segments already entered



Market segments under development



Image sources: Komatsu Mining, Kijng County Metro

Mining: Roadmap* for the Komatsu projects

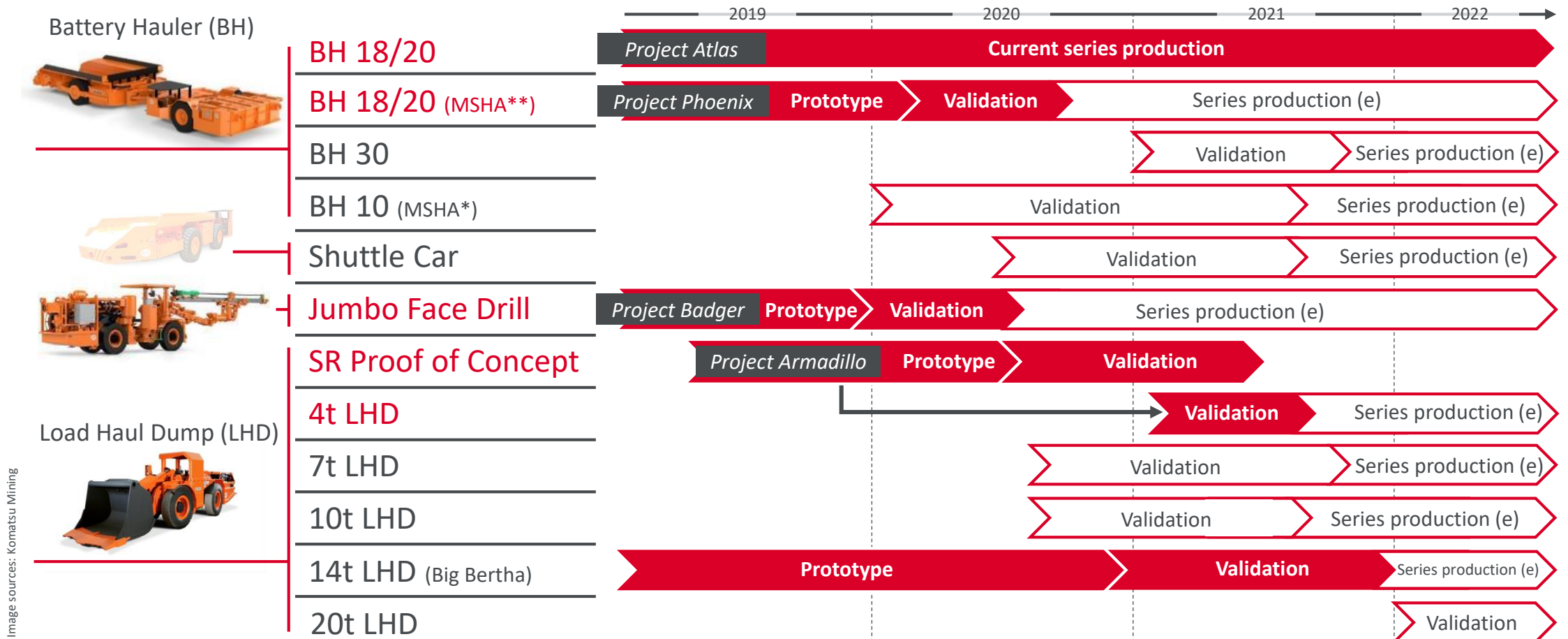
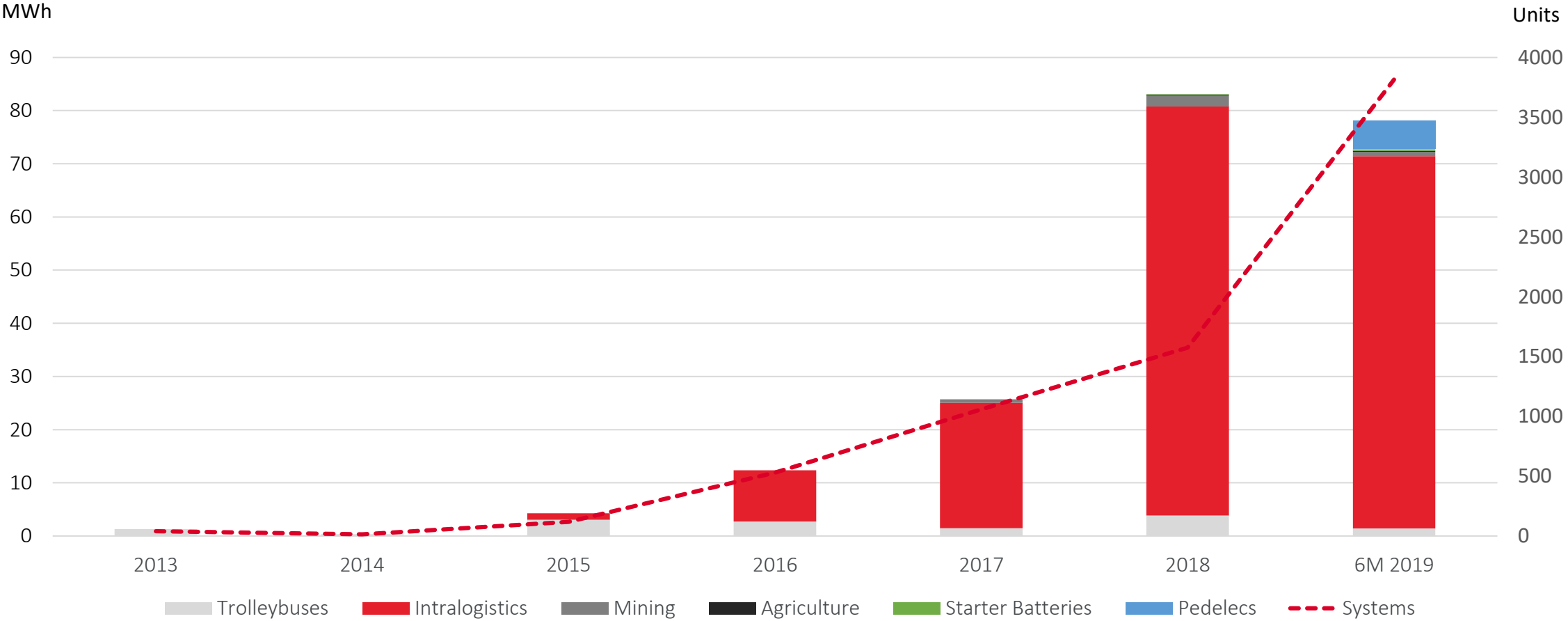


Image sources: Komatsu Mining

* Series production also includes pre-series production processes and intermittent production of small batches.
 ** Mine Safety and Health Administration.

Installation of Energy by End Markets



Agenda

- Company Presentation
- Current Developments in Operational Business
- Financials
- Outlook

Financials in the Focus – 6M/2019

↗ € 32.1 million ^{↗ 77 %}

Revenues (previous year: € 18.1 m)

↗ 249 employees* ^{↗ 6 %}

(31 December 2018: 235)

**Significant Growth of Business Again –
Profitability Lowered Due to High Material Input**

↘ € 0.4 million

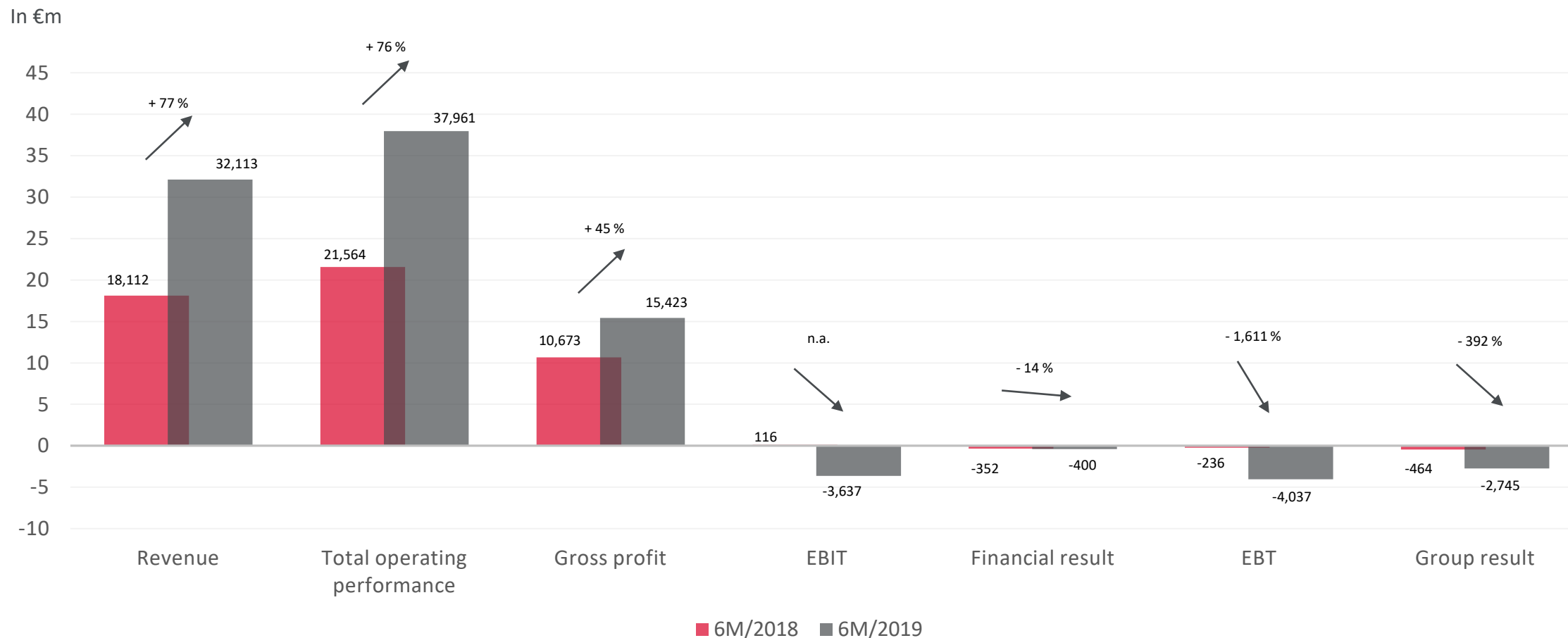
EBITDA (previous year: € 1.7 m)**

↘ € -3.6 million

EBIT (previous year: € 0.1 m)**

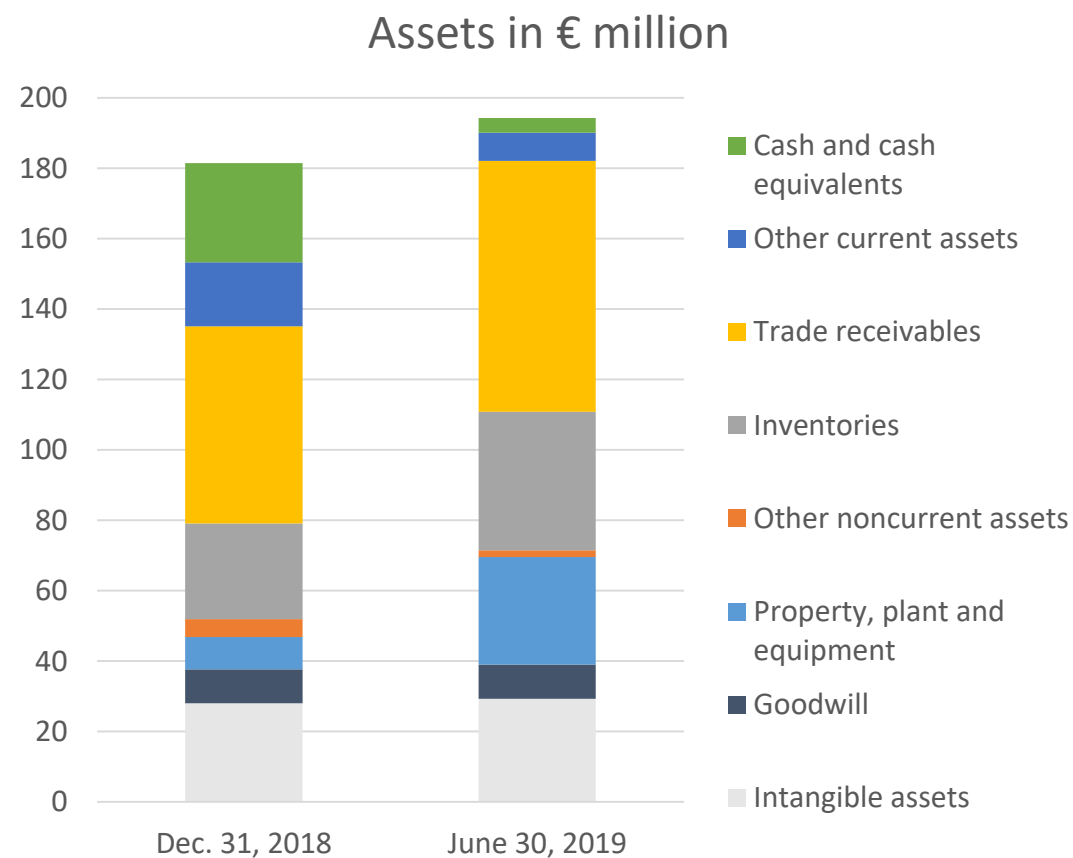
** Excluding 33 temporary employees, as of June 30, 2019.*

Ongoing Top-Line Growth at a Negative Profitability



Key Developments of Assets

- Increase of noncurrent assets by € 19.6m
 - Intangible assets € +1.3m – capitalized development expenses
 - Property, plant equipment € +21.4m – IFRS16 (Leasing) effect
 - Other assets € -3.5m – Reclassification of long-term rent prepayments to property, plant and equipment due to IFRS16
- Decrease of current assets by € 6.8m
 - Inventories € +12.0m – mainly sourcing of materials for the planned production the second half of the year
 - Trade receivables € +15.3m – expansion of the operating business
 - Liquid funds € -24.0m – business expansion, prefinancing of planned production in the second half of the year (see Inventories) plus expansion of the US facilities
 - Receivables from related parties € +9.8m – Repayment from parent company



Key Developments of Equity and Liabilities

- Increase of noncurrent provisions and liabilities by € 13.6m
 - Noncurrent loans € +0.5m
 - Noncurrent liabilities from Finance Lease € +13.3m
- Increase of current provisions and liabilities by € 2.6m
 - Trade payables € +4.5m
 - Liabilities to related parties € 0.3m
 - Other current liabilities € -2.9m
- Decrease of equity by € 3.4m
 - Equity ratio at 77.7 % (Dec. 31, 2018: 85.3 %)

	June 30, 2019	Dec. 31, 2018
Equity	151,064	154,484
Subscribed capital	15,825	15,825
Capital reserve	127,992	127,992
Profit/loss carried forward	9,718	7,614
Consolidated net income	-2,745	2,579
Currency translation differences	274	474
Noncurrent provisions and liabilities	21,434	7,808
Noncurrent finance lease liabilities	13,341	17
Noncurrent loans	652	141
Deferred tax liabilities	7,441	7,650
Current provisions and liabilities	21,810	19,224
Trade payables	13,743	9,257
Liabilities to related parties	860	557
Other current liabilities	1,852	5,871
	194,308	181,516

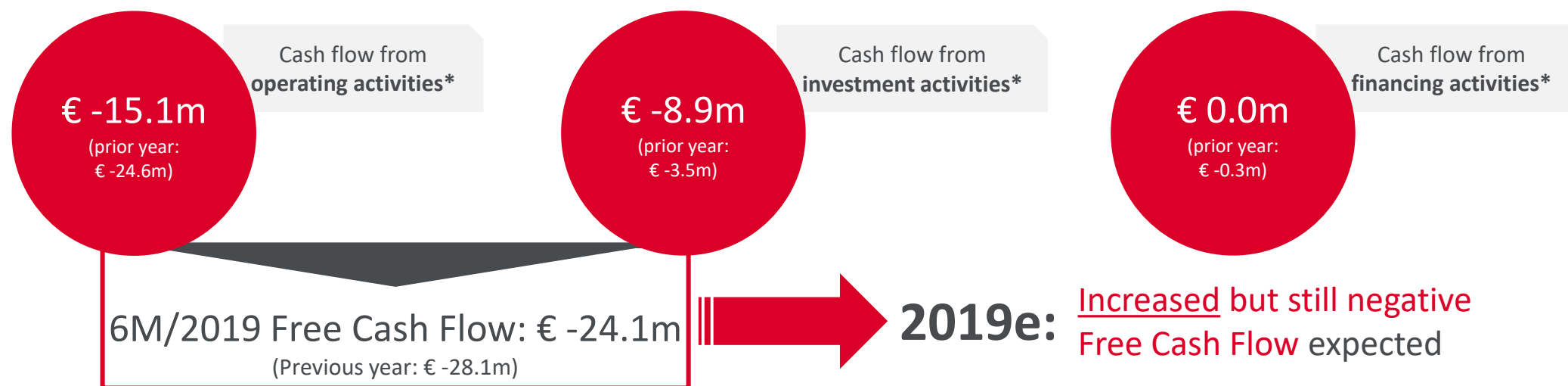
Cash Flow Statement 6M/2019

Net working capital still influencing **operating Cash Flow** mainly as a consequence of

- once again increased **inventories** due to necessary sourcing activities for several projects in the first half year

Cash Flow from investment activities according to plan due to

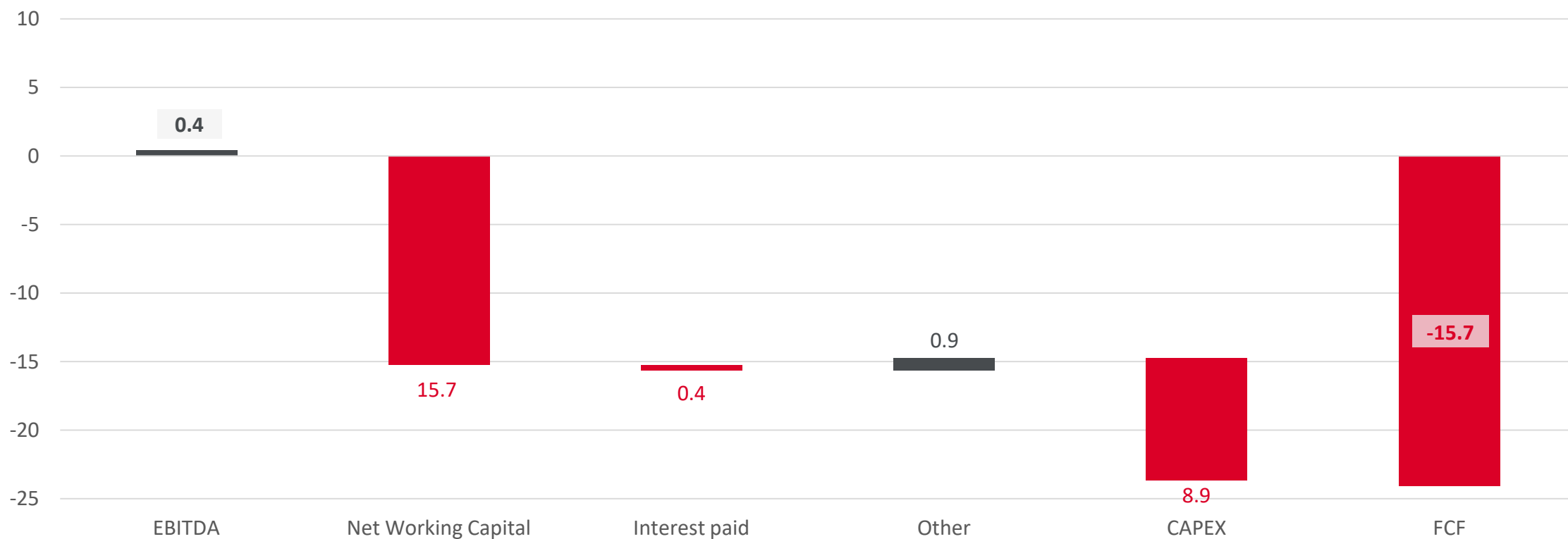
- CAPEX Investments** amounting to more than 60 % of planned investments for the year as a whole at the end of the first half year



* Jan. 1, 2019 – Jun. 30, 2019.

Key Cash Flow Developments in 6M/2019

EBITDA / Free Cash Flow Bridge [in €m]



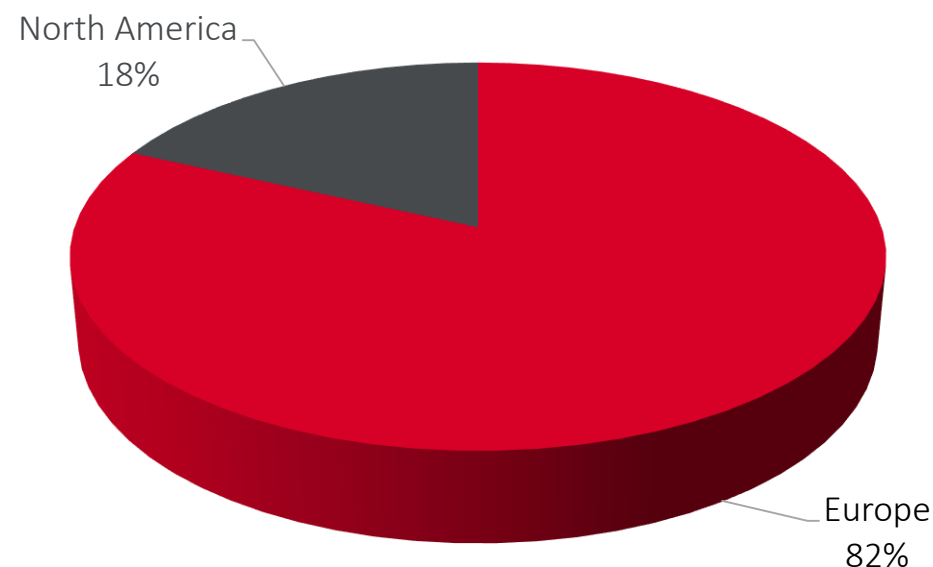
Agenda

- Company Presentation
- Current Developments in Operational Business
- Financials
- Outlook

60-Months Cumulative Order Book*

- Total 60-months order book* amounts to around € 1.1bn.
- Thereof approx. 64% signed orders and framework agreements (weighted with 100%)
 - Estimated order backlog is weighted according to the expected lifetime and the probability of occurrence
 - Serves as base for planning
 - Evaluation system in place since inception in 2011

60-months cumulative order book* with 100% weighting as of June 30 2019



















* As defined by the company.

Keyfacts for Revenues 2019e

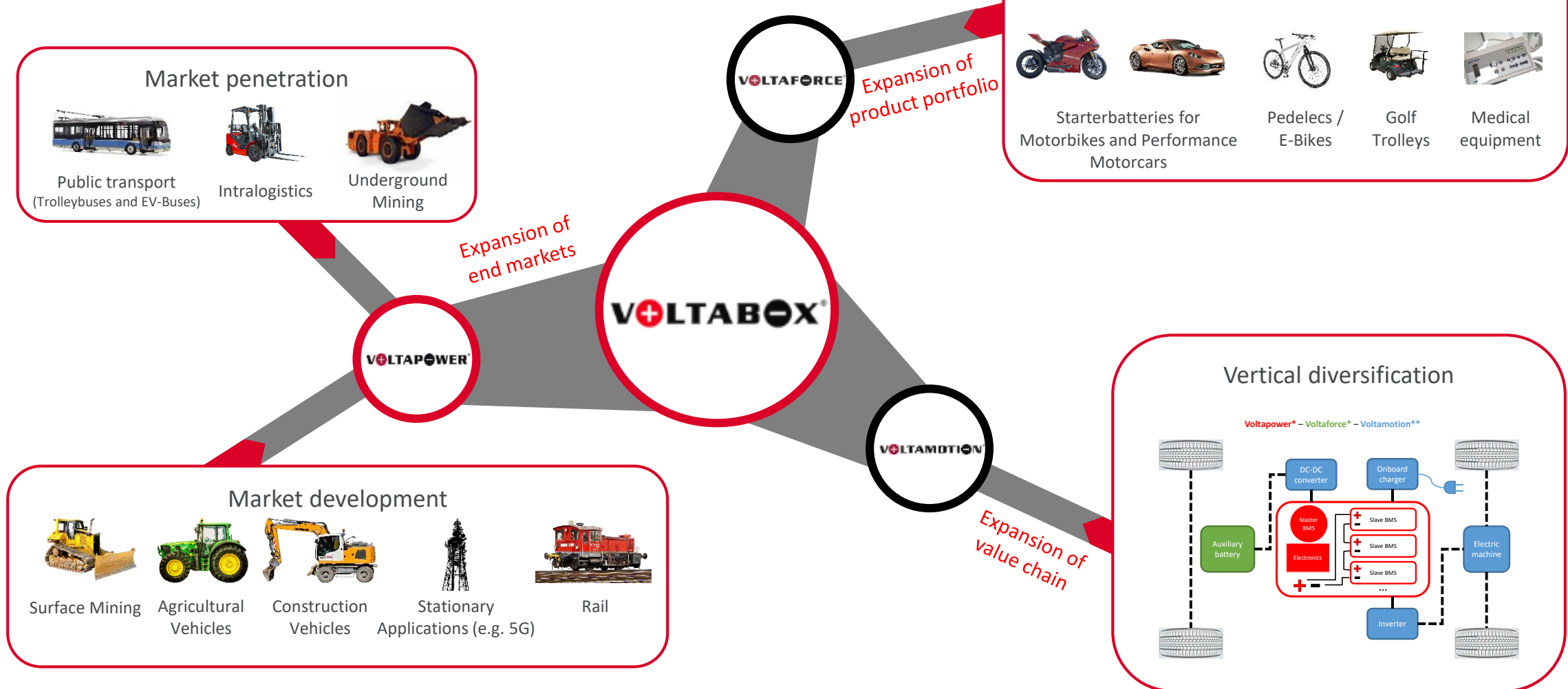
Megatrend Electrification:



	Intralogistics			Agriculture / Construction	
-	Direct sales share			Mining	
-	Triathlon share (JT Energy)			Port / Rail	 *
	Bus industry			Electric Vehicles	 *
	Mass markets (Starter batteries, Pedelects, Backup Battery Systems*...)				

* New market segment.

Multiple Growth Paths



Adjusted Forecast 2019

↗ € 70m to € 80m

Revenues 2019 (e) (prior: € 105m to € 115m)

↗ -8 to -9 %

EBIT Margin 2019 (e) (prior: 8 to 9 %)

Preparing for the Return to Profitability in 2020

Strengthening Working Capital

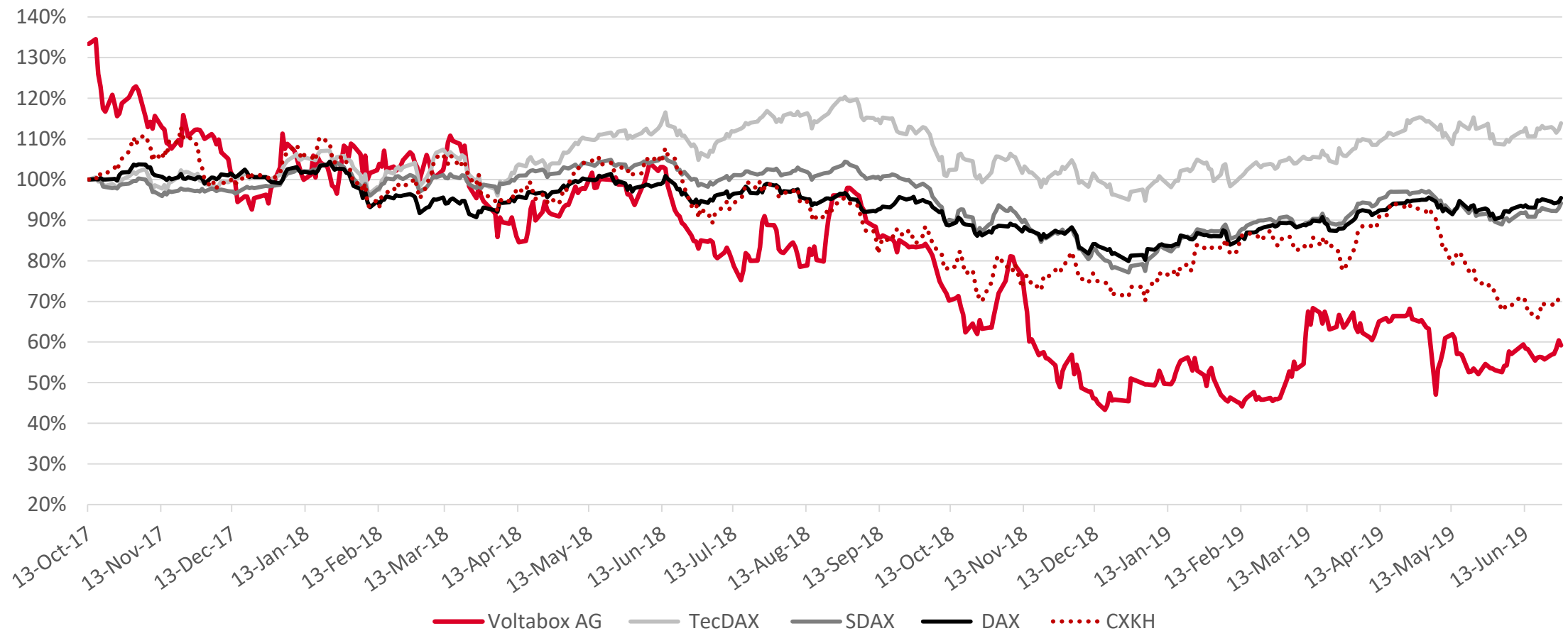
- Use of existing inventories for revenue recognition in 2020 without significant use of liquidity
- Clear reduction of trade receivables by the end of 2019 contractually agreed

Increasing efficiency and refocusing in part on current markets

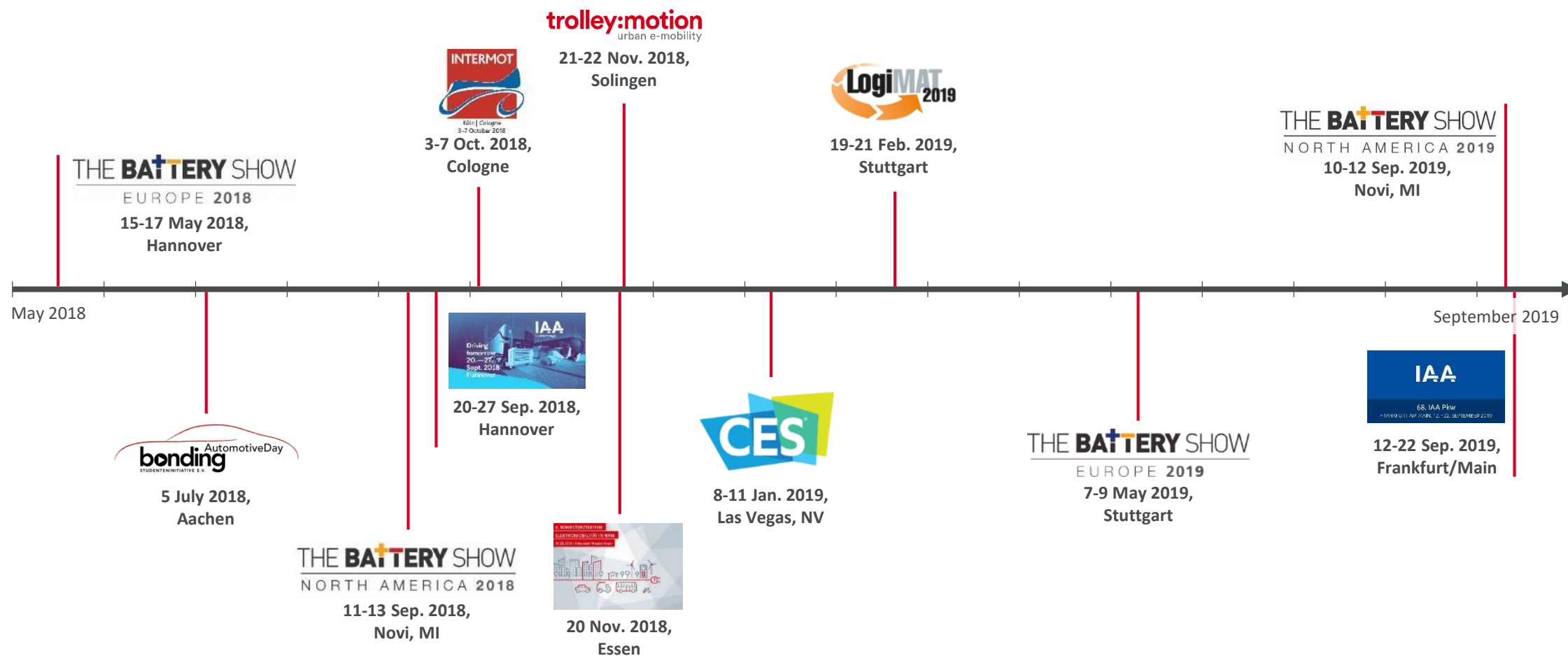
- Focus on profitable growth markets with innovative and scalable systems
- Significant cost savings targeted
- Better ratio of development expenditure to potential turnover
- Future high margins through new cell technology
- Development of new high-margin markets (e.g. 5G) as innovation leader

As planned: Re-conversion of bound capital in order to expand business and improve operational performance

Performance of Voltabox Share (VBX) since IPO



Voltabox on the Road – Trade Fairs and Exhibitions



Financial Calendar 2019

- January 10-11 ODDO BHF FORUM, Lyon
- January 31 Bankhaus Lampe German Corporate Conference, London
- February 19-20 ODDO BHF German Conference, Frankfurt am Main
- April 1 Annual Report – Consolidated Financial Statements 2018
- April 3-5 Bankhaus Lampe German Conference, Baden-Baden
- April 11 Solventis Aktienforum, Frankfurt am Main
- May 13 Group Interim Report as of March 31, 2019 – First quarter
- May 16 Annual General Meeting, Delbrück
- August 21 Group Interim Report as of June 30, 2019 – Half year
- September 2-3 Equity Forum Fall Conference, Frankfurt am Main
- November 13 Group Interim Report as of September 30, 2019 – 9 months

Disclaimer

This presentation is given to you in strict confidence. By attending the presentation, you agree that no part of this presentation or disclaimer may be disclosed, distributed or reproduced to any third party without the consent of Voltabox AG (“Voltabox”).

This presentation is being provided for the sole purpose of providing the recipients with background information about Voltabox’s business. This presentation, including the information contained in this disclaimer, does not constitute an offer, invitation or recommendation to subscribe for or purchase any security and neither the presentation, disclaimer nor anything contained in them forms the basis of any contract or commitment. This presentation does not purport to summarize all information that an investor should consider when making an investment decision. It should be read in conjunction with Voltabox’s other continuous disclosure announcements. Before making an investment decision you should consider whether it is suitable for you in light of your own investment profile and objectives and financial circumstances and the merits and risk involved.

No representation, express or implied, is made as to the fairness, accuracy, completeness or correctness of information, opinions and conclusions contained in this presentation, including the accuracy, likelihood of achievement or reasonableness of any forecasts, prospects, returns or statements in relation to future matters contained in the presentation (“forward-looking statements”). Such forward-looking statements are by their nature subject to significant uncertainties and contingencies and are based on a number of estimates and assumptions that are subject to change (and in many cases are outside the control of Voltabox and its Directors) which may cause the actual results or performance of Voltabox to be materially different from any future results or performance expressed or implied by such forward-looking statements. Forward looking statements are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance.

To the maximum extent permitted by law, neither Voltabox nor its related corporations, directors, employees or agents, nor any other person, accepts any liability, including, without limitation, any liability arising from fault or negligence, for any loss arising from the use of this presentation or its contents or otherwise arising in connection with it.

You represent and confirm by attending and/or retaining this presentation, that you accept the above conditions.

Company Contact

Voltabox AG

Investor Relations

Stefan Westemeyer

Artegastraße 1

D-33129 Delbrück

Phone: +49 (0) 5250 9930-685

E-Mail: investor@voltabox.ag

