SMA SOLAR TECHNOLOGY AG

Investor Presentation: ODDO BHF German Conference

Presented by: Ulrich Hadding (CFO)

February 20, 2019
Disclaimer

IMPORTANT LEGAL NOTICE
This presentation does not constitute or form part of, and should not be construed as, an offer or invitation to subscribe for, underwrite or otherwise acquire, any securities of SMA Solar Technology AG (the "Company") or any present or future subsidiary of the Company (together with the Company, the "SMA Group") nor should it or any part of it form the basis of, or be relied upon in connection with, any contract to purchase or subscribe for any securities in the Company or any member of the SMA Group or commitment whatsoever.

All information contained herein has been carefully prepared. Nevertheless, we do not guarantee its accuracy or completeness and nothing herein shall be construed to be a representation of such guarantee. The Company shall assume no liability for errors contained in this document, unless damages are caused intentionally or through gross negligence by the Company. Furthermore, the Company shall assume no liability for effects of activities that evolve from the basis of data and information provided by this presentation.

The information contained in this presentation is subject to amendment, revision and updating, which does not underlie any prior announcement by the Company. Certain statements contained in this presentation may be statements of future expectations and other forward-looking statements that are based on the management's current views and assumptions and involve known and unknown risks and uncertainties. Actual results, performance or events may differ materially from those in such statements as a result of, among others, factors, changing business or other market conditions and the prospects for growth anticipated by the management of the Company. These and other factors could adversely affect the outcome and financial effects of the plans and events described herein. The Company does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. You should not place undue reliance on forward-looking statements which speak only as of the date of this presentation.

This presentation is for information purposes only and may not be further distributed or passed on to any party which is not the addressee of this presentation solely after prior consent of the Company. No part of this presentation must be copied, reproduced or cited by the addressees hereof other than for the purpose for which it has been provided to the addressee. The content of this presentation, meaning all texts, pictures and sounds, are protected by copyright. The contained information of the presentation is property of the Company.

This document is not an offer of securities for sale in the United States of America. Securities may not be offered or sold in the United States of America absent registration or an exemption from registration under the U.S. Securities Act of 1933 as amended.
1. Review 2018
Review 2018: Sales and Earnings within Guidance; EBITDA Impacted by Net Extraordinary Effects of about €100 Million

Sales (in € million)

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>Target 2018(^1)</th>
<th>2018(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GW</td>
<td>8.5</td>
<td>760-780</td>
<td>761</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EBITDA (in € million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Margin</td>
</tr>
<tr>
<td>11%</td>
</tr>
<tr>
<td>n.m.</td>
</tr>
<tr>
<td>n.m.</td>
</tr>
</tbody>
</table>

2017 Guidance 11/18\(^1\)

Mid to upper double-digit million Euro range

2018\(^2\)

-67

1. as announced November 30, 2018
2. preliminary figures
In 2018, SMA Generated new Opportunities in a Challenging Market Environment

**Challenges**

- Policy shake-up in China: impacted inverter prices in H2/18
- Component shortages: affected mainly the Commercial segment in H1/2018
- Limited battery availability: caused storage sales that remained below expectations

**Opportunities**

- New strategic partnerships: with BYD and Audi generate new opportunities in the storage and new energy sector
- Strong EMEA market: favors SMA as we hold the #1 market position and have a strong repowering business
- Tap into digital business: with the IoT platform ennexOS and the new subsidiary coneva, which develops new energy services
2. Market & Competition
The Solar Market is set to Disrupt the Energy Sector

The sharp price decline for PV components results in competitiveness of PV with other energy sources. Beyond 2020, the price decline for solar p.a. is expected to slow down to single digit rates.

Policies, sustainability concerns and strong growth in primary energy demand drive expansion of PV capacity.

High share of renewables results in increased volatility and requires capacity balancing and optimization.

1. Bloomberg article on energy costs, January 3, 2017, and SMA estimates
2. CCGT=combined cycle gas turbine
3. Fraunhofer Institute for Solar Energy Systems 2015, and SMA estimates
4. Bloomberg NEO 2017, small and utility scale batteries
The New Energy World is Decentral

Digitalization is Key for Decentrally Controlled Grid

Yesterday

Tomorrow

- Consumer
- Prosumer
- Producer
- Home
- Business
- Generation asset (solar, biomass, wind)
- Electric vehicle (EV)
- Heat, including CHP
- Storage

1. combined heat and power
Global PV Installations Expected to Grow in all Regions, Except China

Core Business: PV Installations

**REGIONS**

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>44</td>
<td>40</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>APAC</td>
<td>24</td>
<td>28</td>
<td>30</td>
<td>33</td>
</tr>
<tr>
<td>AMER</td>
<td>17</td>
<td>20</td>
<td>22</td>
<td>23</td>
</tr>
<tr>
<td>EMEA</td>
<td>17</td>
<td>20</td>
<td>28</td>
<td>31</td>
</tr>
</tbody>
</table>

**SECTIONS**

<table>
<thead>
<tr>
<th></th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility</td>
<td>102</td>
<td>109</td>
<td>121</td>
<td>127</td>
</tr>
<tr>
<td>Commercial</td>
<td>71</td>
<td>71</td>
<td>76</td>
<td>79</td>
</tr>
<tr>
<td>Residential</td>
<td>20</td>
<td>24</td>
<td>31</td>
<td>33</td>
</tr>
</tbody>
</table>

**New installations**

From 2018 on PV installations are expected to show a continuous average growth of 8% p.a.

**EMEA**

EMEA is most promising region with >20% annual growth. MEA is expected to add huge potential from 2020.

**China**

Chinese installations decreased by 16% in 2018. 5-Year-Plan ends in 2020, forecast thereafter subject to uncertainty.

**Utility**

Utility remains largest segment. Most promising markets are USA, Australia, Japan. India and China are largest low-cost markets.

---

1. SMA Market Model Q1 2019, new PV installations, Res ≤10kW plants, Com 10kW-1MW plants, Uti >1MW plants
2. Middle East and Africa region
Price Pressure will Largely Erode Growth in PV Installations

**PV Inverter Revenue**

<table>
<thead>
<tr>
<th>REGIONS</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>4.3</td>
<td>4.2</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>APAC</td>
<td>1.2</td>
<td>1.1</td>
<td>1.0</td>
<td>0.9</td>
</tr>
<tr>
<td>AMER</td>
<td>1.3</td>
<td>1.3</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>EMEA</td>
<td>0.8</td>
<td>0.8</td>
<td>0.9</td>
<td>0.9</td>
</tr>
</tbody>
</table>

**SEGMENTS**

<table>
<thead>
<tr>
<th>SECTIONS</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility</td>
<td>4.3</td>
<td>4.2</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>Commercial</td>
<td>2.1</td>
<td>2.0</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Residential</td>
<td>1.1</td>
<td>1.1</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>

**Revenue potential**

After drop from 2017 to 2018 by ~10%, flat revenue expected until 2021. Price pressure will largely erode volume growth.

**EMEA**

Emerging PV markets in MEA² contribute strongly to growth in EMEA, which is expected to reach 7% p.a.

**AMERICAS**

Largest country in Americas region remains the USA. Latin America gains importance with revenue growth of 14% p.a.

**Segments**

Revenue potential for each segment expected to remain rather stable, no significant shift among segments expected.

1. SMA Market Model Q1 2019, incl. new and repowering installations, product mix in segments considered, Res ≤10kW plants, Com 10kW-1MW plants, Uti >1MW plants

2. Middle East and Africa region
Storage and Digital Energy Solutions Drive Global Market Growth

- Power generation costs decrease, integrated energy and digitalization will lead to a higher share of renewable energy and its growth.
- The traditional PV inverter market revenue potential is expected to be stable. Digital solutions and battery storage are attractive additional value pools.
- PV inverters will serve as the backbone for smart grid solutions connecting the components and collecting data.
- Digital energy solutions gain importance for both homes and businesses, e.g. energy services for residential houses, food and non-food retail.
- O&M services remain important with continuously declining equipment prices and are key for sustainable PV investments. Service packages aim utility plants in particular and vary from full to partial.

Global Market Outlook by Sector

<table>
<thead>
<tr>
<th>Year</th>
<th>Digital energy</th>
<th>O&amp;M services</th>
<th>Battery storage inverters</th>
<th>PV inverter business</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>6.3 €bn</td>
<td>0.5 €bn</td>
<td>4.3 €bn</td>
<td>1.1 €bn</td>
</tr>
<tr>
<td>2019</td>
<td>6.8 €bn</td>
<td>0.8 €bn</td>
<td>4.2 €bn</td>
<td>1.1 €bn</td>
</tr>
<tr>
<td>2020</td>
<td>7.5 €bn</td>
<td>1.4 €bn</td>
<td>4.3 €bn</td>
<td>1.2 €bn</td>
</tr>
<tr>
<td>2021</td>
<td>8.0 €bn</td>
<td>1.8 €bn</td>
<td>4.3 €bn</td>
<td>1.2 €bn</td>
</tr>
</tbody>
</table>

- Power generation costs decrease, integrated energy and digitalization will lead to a higher share of renewable energy and its growth.
- The traditional PV inverter market revenue potential is expected to be stable. Digital solutions and battery storage are attractive additional value pools.
- PV inverters will serve as the backbone for smart grid solutions connecting the components and collecting data.
- Digital energy solutions gain importance for both homes and businesses, e.g. energy services for residential houses, food and non-food retail.
- O&M services remain important with continuously declining equipment prices and are key for sustainable PV investments. Service packages aim utility plants in particular and vary from full to partial.

1. SMA Market Model Q1 2019
2. SMA estimate of addressable market for home and business digital energy solutions
SMA is a leading Player of PV Technology with a Market Share of 13%\(^1\) in 2018

SMA continues to lead the EMEA PV inverter market.

SMA is the only non-Chinese PV inverter supplier among top 5 in APAC.

---

1. in €-terms, based on SMA Market Model Q1 2019, PV Inverters only
2. in MW-terms, based on IHS Markit Inverter Tracker Q3 2018 and SMA estimates
3. Restructuring 2019
With the 2019 Restructuring we Reduce our Costs by c. €40 m p.a. while Maintaining SMA’s Ability to Seize Opportunities

1. Consolidation
- Production Sites
  - Sale of production site, procurement and design center in China to lower fixed costs and complexity
- Global Workforce
  - Reduction of around 425 FTE\(^1\), thereof c. 300 in China

2. Focus
- Exit from China
  - Withdrawal from the Chinese market
- Focus on Core Competencies
  - Outsourcing and automation of activities
- Optimization of Product Offering
  - Reduction of product platforms
  - Streamlining of product portfolio

3. Optimization
- Customer Centricity & Market Focus
  - Closer collaboration between sales, service and business units
- Driving Future Topics
  - Digitalization, repowering, storage sales, service sales and O&M
- Reducing Complexity
  - Automation of administrative processes and overhead reduction

\(1\text{. Full Time Equivalent w/o temporary workers and learners}\)
The main Cost Reduction, the Majority of which will be Fully Effective in 2019, results from Closing SMA's Facilities in China.

SMA will optimize the utilization of the CO\textsubscript{2}\textsuperscript{-}neutral production site in Germany and close its production, procurement and development facilities in China.

SMA can scale its operations 1:2 according to demand within one month and 1:7 within one year.
To Return to Profitability, we must Increase our Focus on Reducing Variable Costs and Push Sales Initiatives even Further

1. **Variable Cost Reduction**
   SMA will continuously reduce manufacturing costs for existing products and launch new products with significantly lower costs.

2. **Platform Reduction**
   SMA will improve the time to market and decrease development adjustments.

3. **Strategic Partnerships**
   SMA’s strategic partnerships will help to increase the top line.

4. **Ease of Doing Business**
   SMA’s focus is to ease the job of the installer with partner programs and by offering system packages.
4. SMA’s Global Presence
SMA has a Specialized Sales and Service Infrastructure

**AMERICAS**
- 18 GW SMA Cum. Installed Base
- 12% SMA Market Share in MW
- 150+ Sales & Service Experts

**EMEA**
- 40 GW SMA Cum. Installed Base
- 21% SMA Market Share in MW
- 310+ Sales & Service Experts

**APAC**
- 17 GW SMA Cum. Installed Base
- 5% SMA Market Share in MW
- 140+ Sales & Service Experts
SMA is the Market Leader in EMEA

EMEA

Sales Initiatives 2018
- Certified Installer Program:
  - Germany Since 2014
  - Italy: Certified Installer Program Launch Q1/19
- Established dedicated Large Scale Storage and Service Repowering sales team to drive significant opportunities in these segments in Europe.
- More than 400 MW of inverter sales secured by European EPCs in Australia.

Highlights 2018
- Won 120 MW Utility project in Israel: One of the largest projects in the region in 2018.
- Cooperation with Audi – SMA is the interface between Audi E-Mobility and Home Energy Management.
The Strongest Markets of SMA in APAC are Australia, Japan, and South Korea

APAC

Sales Initiatives 2018
• Certified Installer Program:
  • Launched Q4/18 in Australia
• New battery partner - BYD Alliance, joint market approach in Australia.
• SMA established Sales Agents in Thailand and Korea to support growing customer demand in markets w/o subsidiary.
• Appointed Service partners in various locations in SEA and Korea.

Highlights 2018
• 112 MW Karadoc solar farm in South Australia
• In Australia, 1.8 GW Utility inverters commissioned in 2018
• Secured 400 MW of inverter sales in Vietnam
SMA Strives to Win Back Market Share in Americas

**AMERICAS**

**Sales Initiatives 2018**
- Certified Installer Program:
  - Launched Q4/18 in USA
- New Subsidiary in Mexico
- Dedicated Large Scale Storage and Service Repowering sales team to drive strong pipeline for 2019-2020
- BYD Alliance (Total Storage Solution Provider)

**Highlights 2018**
- Top 5 Utility Projects of more than 400 MW installed in 2017/18

- 150+ Sales & Service FTE
- 12% Market Share¹
- 5 Subsidiaries
- 2.4 GW O&M under Management

¹ in MW
5. Technology & Portfolio
SMA’s R&D Excellence in Numbers

- 4,000 meter altitude
- 30 years experience
- Data from > 1.5 m inverters
- > 5 m inverters sold
- 500 engineers
- 75 GW installed base
Strong Strategic Partnerships

Storage Systems

Energy & Grid Services

E-Mobility

SMA Smart Home

Module-Level Power Electronics

Standards

Strategic Collaborations

R&D Collaborations

PV Diesel Hybrid-Systems
SMA has a Complete Portfolio to Serve all PV Segments

SMA RESIDENTIAL 25% of Group net sales

SMA COMMERCIAL 30% of Group net sales

SMA UTILITY 35% of Group net sales

SMA STORAGE 10% of Group net sales

1. w/o the new segment Digital Energy
SMA’s Patents and Trademarks Protect our Broad Innovations Unmatched in the PV Industry

<table>
<thead>
<tr>
<th>Patents, Utility Models and Trademarks</th>
<th>December 2017</th>
<th>December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patents and utility models</td>
<td>1.057</td>
<td>1.244</td>
</tr>
<tr>
<td>Patent applications</td>
<td>600</td>
<td>536</td>
</tr>
<tr>
<td>Trademarks</td>
<td>899</td>
<td>1.048</td>
</tr>
</tbody>
</table>

License income 2018: €1 million
SMA can do more than Selling Components – We Possess the Necessary Prerequisites for Offering Future-Proof Systems


Complete SMA PV & Storage Systems

SMA’s System Offering for Residential and Commercial

HARDWARE – Intelligent PV and storage technology
Smart products such as intelligent inverters, powerful storage technologies and innovative data managers.

SOFTWARE – Energy management software
Cross-sectoral energy platform with applications and tools to manage and make energy consumption transparent.

SERVICES – (Digital) sales processes and services
Tailor-made sales processes along the customer journey to ensure ease of use and a maximum positive customer experience.
SMA’s Portfolio Covers Every Stage of Energy Integration

1. Energy Monitoring
2. Solar Power Generation
3. Storage
4. Integrated Energy
5. Energy Market Integration

SMA’s Internet Portal  SMA’s PV Inverters  SMA’s Battery Inverters  SMA’s IoT Platform  SMA’s Direct Marketing Solution
SMA Residential Offers Cost Improved Hardware and Additional Value for Customers

**Latest Residential Inverters**

- **Sunny Boy**
  - 3.0 – 6 kW
  - (Q2/2019)

- **Sunny Tripower**
  - 8.0 – 10.0 kW
  - (Q1/2019)

- **Sunny Boy Storage**
  - 3.7 – 6 kW
  - (H2/2018)

**Software**

- **Sunny Portal**: Comfortable PV system monitoring
- **Sunny Design Pro**: Cross sector design, simulation & analysis
- **SMA Repowering App**: Tool for a growing market
- **Installer App** (H1/2019)

**Services**

- **Smart Connected**: Automatic replacement service for more convenience

**Complete SMA PV & Storage Systems**

- SMA Energy System
  - (Q1/2019)
  - Power class: 5 kW
  - Pilot market: Italy
SMA Commercial Offers PV & Storage Systems for Future-Proof PV Plants

**Latest Commercial Inverters**

- **New CORE1 release**
  - Power class: 62.5 kW
  - Q4/2018
  - First mover: NEC 2017 compliant
  - Cost reduction: - 20%

- **Sunny Tripower Storage**
  - 60 kW
  - (H2/2018)

**Software**

- **Sunny Portal**: Comfortable PV system monitoring
- **Sunny Design Pro**: Cross sector design, simulation & analysis
- **SMA Repowering App**: Tool for a growing market
- **Installer App** (H1/2019)

**Services**

- **Smart Connected**

**Complete SMA PV & Storage Systems**

- **SMA Energy System**
- **(Q1/2019)**
- Power class: 250 kW
- Pilot market: Germany
SMA Utility Simplifies Complexity With New Product Launches Throughout 2019

**Latest Utility Inverters**

- **Sunny Highpower PEAK3**
  - 150 kW, 1,500 V
  - (Q1/2019)

- **Medium Voltage Power Station**
  - 4.6 MW
  - (Q3/2019)

- **Sunny Central UP**
  - 4.6 MW
  - (Q3/2019)

**Service**

- **SMA Repowering**
  - Market Potential until 2020: >+40%
- **Availability Guarantees**
  - SMA Utility provides 99.9+% uptime

**Software & Competence**

- **SMA Engineering Services**
- **Response Time Guarantees**
  - Most up-to-date technology for 24/7 real time monitoring

**Cost reduction of up to -35%**
SMA is the #1 Storage Inverter Manufacturer in a fast Growing Segment

**SMA’s Offering**

**Behind-the-Meter**
- Energy shifting
- Peak shaving
- ToU
- Power Quality

**Front-of-Meter**
- Micro Grid Management
- On-Grid Storage for Grid Services
- Renewable integration

**Concepts of Battery Integration**

**AC-Coupling Battery Concept**

**DC-Coupling Battery Concept**

**SMA + BYD Battery Solution**
- (Q1/2019)
- 5-60 kW
- Securing battery availability

**Sunny Central Storage UP**
- (Q3/2019)
- 4.6 MW

**SMA DC/DC Converter**
- (Q1/2019)
6. Financials & Guidance
Sales 2018 Remained Below Expectations; EBITDA Impacted by Extraordinary Effects

---

## Preliminary Key Financials (in €m)

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018e¹</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sales</strong></td>
<td>891</td>
<td>761</td>
<td>-15%</td>
</tr>
<tr>
<td>Residential</td>
<td>233</td>
<td>182</td>
<td>-22%</td>
</tr>
<tr>
<td>Commercial</td>
<td>272</td>
<td>252</td>
<td>-7%</td>
</tr>
<tr>
<td>Utility</td>
<td>289</td>
<td>266</td>
<td>-8%</td>
</tr>
<tr>
<td>Storage</td>
<td>97</td>
<td>61</td>
<td>-37%</td>
</tr>
<tr>
<td>Digital Energy</td>
<td>./.</td>
<td>0</td>
<td>n.m.</td>
</tr>
<tr>
<td><strong>EBITDA</strong></td>
<td>97</td>
<td>-67</td>
<td>n.m.</td>
</tr>
<tr>
<td><strong>EBIT</strong></td>
<td>44</td>
<td>-150</td>
<td>n.m.</td>
</tr>
<tr>
<td><strong>Net income</strong></td>
<td>30</td>
<td>-174</td>
<td>n.m.</td>
</tr>
<tr>
<td><strong>Net cash</strong></td>
<td>450</td>
<td>306</td>
<td>-32%</td>
</tr>
<tr>
<td><strong>NWC ratio (in %)²</strong></td>
<td>19%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td><strong>Gross margin</strong></td>
<td>22%</td>
<td>10%</td>
<td></td>
</tr>
</tbody>
</table>

---

## Comments

- Sales 2018 below prior year in every segment due to very high price pressure, component shortages in H1/2018, project postponements and limited battery availability.
- EBITDA impacted by extraordinary effects of net €97m.
- In addition, 2018 EBIT is affected by the impairment of R&D intangible assets (-€30m).
- Net income is impacted by Finance and tax result (-€26m; at-equity valuation of Tigo and write down of deferred tax assets).

---

1. preliminary figures  
2. Net Working Capital ratio: inventory + trade receivables - trade payables (advance payments included); as of last twelve months sales
SMA Reduces its Global Workforce by Around 425 FTE

Preliminary Group Balance Sheet\(^1\) (in €m)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-current assets</td>
<td>358</td>
<td>283</td>
<td>-21%</td>
</tr>
<tr>
<td>Working capital</td>
<td>325</td>
<td>302</td>
<td>-7%</td>
</tr>
<tr>
<td>Other assets</td>
<td>63</td>
<td>82</td>
<td>31%</td>
</tr>
<tr>
<td>Total cash</td>
<td>470</td>
<td>324</td>
<td>-31%</td>
</tr>
<tr>
<td>Shareholder’s equity</td>
<td>612</td>
<td>426</td>
<td>-30%</td>
</tr>
<tr>
<td>Provisions(^2)</td>
<td>156</td>
<td>155</td>
<td>-1%</td>
</tr>
<tr>
<td>Trade payables</td>
<td>130</td>
<td>111</td>
<td>-15%</td>
</tr>
<tr>
<td>Financial liabilities(^3)</td>
<td>20</td>
<td>18</td>
<td>-12%</td>
</tr>
<tr>
<td>Other liabilities(^2)</td>
<td>298</td>
<td>281</td>
<td>-6%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,216</strong></td>
<td><strong>991</strong></td>
<td><strong>-19%</strong></td>
</tr>
</tbody>
</table>


- Non-current assets: -21%
- Working capital: -7%
- Other assets: 31%
- Total cash: -31%
- Shareholder’s equity: -30%
- Provisions: -1%
- Trade payables: -15%
- Financial liabilities: -12%
- Other liabilities: -6%
- **TOTAL**: -19%

Global FTE\(^4\)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>235</td>
<td>3.006</td>
<td>3.177</td>
<td>2.882</td>
</tr>
</tbody>
</table>

- 31.12.2017
- 31.12.2018
- Target Structure 2019

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-current assets</td>
<td>358</td>
<td>283</td>
<td>-21%</td>
</tr>
<tr>
<td>Working capital</td>
<td>325</td>
<td>302</td>
<td>-7%</td>
</tr>
<tr>
<td>Other assets</td>
<td>63</td>
<td>82</td>
<td>31%</td>
</tr>
<tr>
<td>Total cash</td>
<td>470</td>
<td>324</td>
<td>-31%</td>
</tr>
<tr>
<td>Shareholder’s equity</td>
<td>612</td>
<td>426</td>
<td>-30%</td>
</tr>
<tr>
<td>Provisions(^2)</td>
<td>156</td>
<td>155</td>
<td>-1%</td>
</tr>
<tr>
<td>Trade payables</td>
<td>130</td>
<td>111</td>
<td>-15%</td>
</tr>
<tr>
<td>Financial liabilities(^3)</td>
<td>20</td>
<td>18</td>
<td>-12%</td>
</tr>
<tr>
<td>Other liabilities(^2)</td>
<td>298</td>
<td>281</td>
<td>-6%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,216</strong></td>
<td><strong>991</strong></td>
<td><strong>-19%</strong></td>
</tr>
</tbody>
</table>

\(^1\) Preliminary figures, reclassified
\(^2\) not interest-bearing
\(^3\) w/o not interest-bearing derivatives: €2m [2017: €0.4m]

- Reduction of around 425 FTE, thereof c. 300 in China
- Part of FTE reduction already done in 12/2018
- In Q2/2019 the number of FTE will be reduced by about 350

4. w/o temporary workers and learners
5. incl. 235 temporary workers who became FTE 01/ 2018
Order Intake Started Recovering late in 2018

**Order Backlog by Segment and Region (in € million)**

**Total order backlog: €578 m (Dec 31, 2018)**

- Utility: $82 m
- Commercial: $45 m
- Residential: $29 m
- Storage: $20 m
- Service: $403 m

**Product order backlog by regions (in %)**

- Americas: 36%
- EMEA: 17%
- APAC: 47%

**Order Backlog Development (in € million)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Products</th>
<th>Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.12.2017</td>
<td>651</td>
<td>405</td>
</tr>
<tr>
<td>30.03.2018</td>
<td>647</td>
<td>391</td>
</tr>
<tr>
<td>30.06.2018</td>
<td>580</td>
<td>393</td>
</tr>
<tr>
<td>30.09.2018</td>
<td>549</td>
<td>386</td>
</tr>
<tr>
<td>31.12.2018</td>
<td>578</td>
<td>403</td>
</tr>
<tr>
<td>23.01.2019</td>
<td>596</td>
<td>403</td>
</tr>
</tbody>
</table>

- Product order backlog increased by nearly 20% since 09/2018.
- Increase in 2019 order backlog for products across all segments, especially Commercial.
- EMEA markets remain most promising.
- 25% of guided sales figure 2019 is covered with product backlog.
For 2019 Management Expects Sales Growth

**Guidance 2019 (in € million)**

<table>
<thead>
<tr>
<th>Sales</th>
<th>EBITDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>761</td>
<td>20-50</td>
</tr>
<tr>
<td>800-880</td>
<td>.67</td>
</tr>
</tbody>
</table>

**Management Comments**

- SMA strives to increase market share, especially in the U.S.
- Management expects growth in all segments, especially in Utility and our storage business.
- In 2019, Energy Management and digital solution business will still have only limited sales contribution.
- Price pressure remains high in all segments.
- Most of the restructuring measures will be effective in 2019.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Net Cash</td>
<td>&gt; €300m</td>
</tr>
<tr>
<td>NWC-Ratio</td>
<td>19-24%</td>
</tr>
<tr>
<td>CapEx (incl. R&amp;D)$^2$</td>
<td>c. €60m</td>
</tr>
<tr>
<td>Depreciation / Amortization</td>
<td>c. €50m</td>
</tr>
</tbody>
</table>

1. after extraordinary effects, e.g. from restructuring
2. incl. c. €10m for R&D and a one-off effect from IFRS 16 - Leases of c. €25m
Setting the Standards for the New Energy Market

Investment Highlights

• **Focus**: A leading global specialist for photovoltaics system technology with 70 GW installed base

• **Complete portfolio** to serve all PV segments

• **Global reach**: Present in 18 countries with a strong sales and service infrastructure; serving > 160 countries

• **Awarded production**: CO₂ neutral production with a capacity of 15 GW p.a. in Germany

• **Bankable partner**: c. 50% equity ratio and c. 400m net cash

• **Technological Know-how** & products to benefit from strong growth in future fields such as energy management, storage & repowering

• **Strong partnerships** to create a new energy ecosystem
Back up
Managing Board and Shareholder Structure

Managing Board

Juergen Reinert
CEO
born 1968
With SMA since 2011
Contract 2024

Ulrich Hadding
CFO
born 1968
With SMA since 2009
Contract 2019

Shareholder Structure

- 54.83% SMA founders, their trusts and families
- 25.17% Danfoss A/S
- 20.00% Freefloat

1. as of January 23, 2019, Company Information

• No pre-emption rights or other restrictions
Thank you

SMA Solar Technology AG
Sonnenallee 1
34266 Niestetal, Germany

Tel. +49 561 9522 0
Fax +49 561 9522 100

www.SMA.de
info@SMA.de