## SMA SOLAR TECHNOLOGY AG Analyst / Investor Presentation Quarterly Financial Results: January to March 2018





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# SMA Generated Sales of ${\in}183m$ and an EBITDA of ${\in}18m$ – in line with Q1/2018 Guidance^1





## Financial Highlights Q1/2018

### **Top Line**

- SMA generated sales of €183m, in line with Q1/2018 guidance<sup>1</sup>
- Sales growth(+ 5% y/y) driven by the utility segment in APAC and EMEA - SMA America was below expectations in all segments

### Profitability, Bankability

- EBITDA increased by 10% to €18m in Q1/18 compared to Q1/17; Q1/17 included the book gain from the sale of the Railway division<sup>2</sup>
- Q1/18 gross margin was impacted by a negative mid-single digit €m-amount for warranty provisions in the Utility segment<sup>3</sup>
- Rock solid balance sheet structure with >50% equity ratio, €445m net cash and €100m long-term credit facility

### Outlook 2018

- Market outlook remains unchanged (2018: €7bn)
- Management confirms guidance with sales of €900m to €1,000m and EBITDA of €90m to €110m
- Management and Supervisory Board have recommended a dividend of €0,35 per share (40% payout ratio)



## > 2018 earnings guidance includes investments in new digital solutions of > €10 million.

1. Guidance Q1/2018: Sales c. €180m; EBITDA c. €18m 2. High single-digit €m-amount 3. Pro-forma gross margin w/o warranty provision c. 24%

# EMEA Sales Increased by c. 20%, APAC Stable, Americas Decline by c. 20%



Change

-1%

1%

n.m.

Q1

183

39

57

67

20

0

21%

18



## Key Financials (in € million)

	Q1/17	Q1/18	Change	20	17
MW sold	1,661	1,843	11%	Net cash	
Sales	173	183	5%	Total assets	
Residential	43	39	-10%	NWC ratio (in %) <sup>2</sup>	
Commercial	58	57	-1%		
Utility	57	67	18%		
Storage	15	20	29%		
Digital Energy	./.	0	n.m.		
Gross Margin (in %)	19%	21%	n.m.	Sales	
EBITDA	16	18	10%	Residential	
Depreciation	13	13	-2%	Commercial	
EBIT	3	4	72%	Utility	
Thereof One-Offs	-11	0	n.m.	Storage	
Net income	6	3	-53%	Digital Energ	ју
Free Cash Flow (adj.)	35	-3	n.m.	Gross margin	
Net CapEx (incl. R&D)	7	7	0%	EBITDA	

1.Q1/2017 w/o the book gain from the sale of the Railway Technology business in a high-single digit €m range

2. NWC ratio as of 2018 reporting includes advanced payments; the year end figure 2017 has been adjusted accordingly (see back up slide for more details); Net Working Capital ratio: inventory + trade 4 receivables-trade payables (advanced payments included); as of last twelve months sale

MEGATRENDS WILL CHANGE BUSINESS MODELS IN THE ENERGY SECTOR FUNDAMENTALLY

PHOTOVOLTAICS WILL BECOME THE MOST IMPORTANT ENERGY SOURCE

VERTICAL PLATFORMS ARE REQUIRED TO OPTIMIZE THE SYSTEM AND TO SCALE BENEFITS

SMA HAS THE APPLICATION KNOW-HOW TO CREATE A POWERFUL ENERGY MANAGEMENT PLATFORM (ennexOS)



## Megatrends are Transforming the Electricity Ecosystem





#### Decarbonization

is leading to an expansion of PV capacity, which in turn fosters decentralization and the demand for storage systems

#### Sector convergence

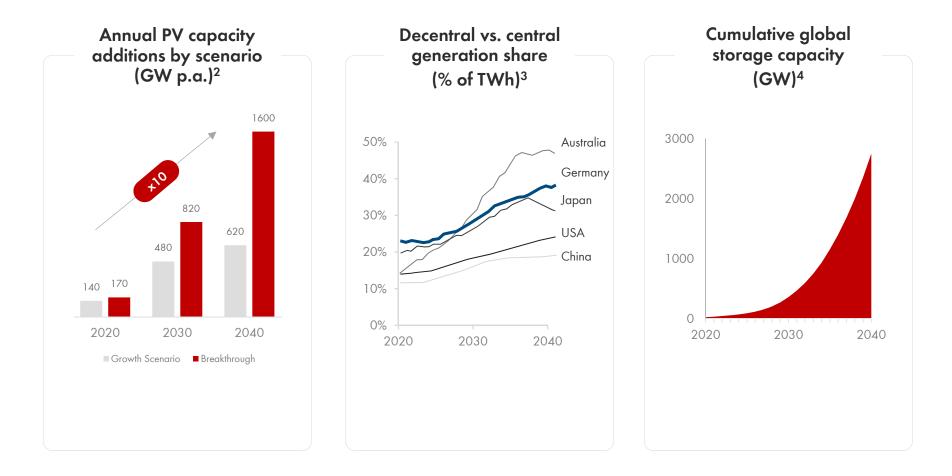
is providing new means of flexibility – Managing the resulting complexity is creating demand for new energy solutions The structural transformation of the energy system

will require solutions to control and manage the increasingly decentralized grid enabled by digitalization

> SMA will leverage its existing experience to expand into digital solutions.

Decarbonization is Supported by a Broad Community of Nations.<sup>1</sup>





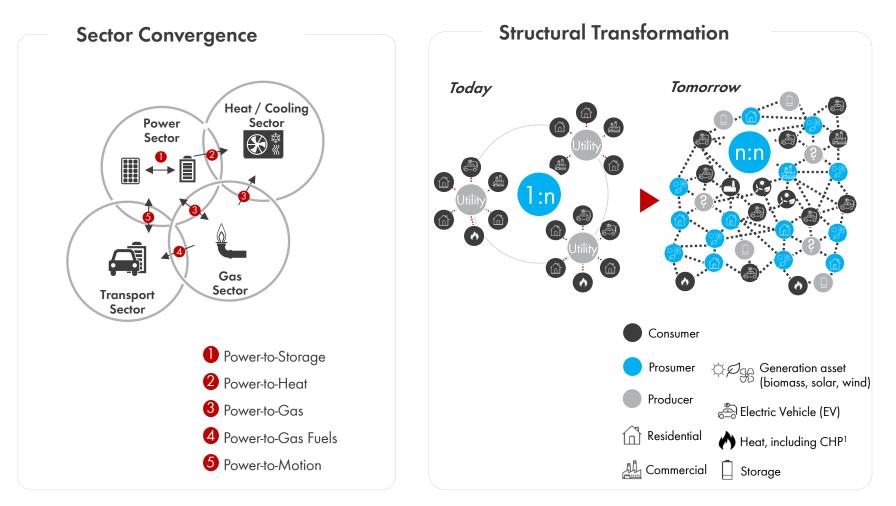
#### > Cost-efficient storage technologies can balance the volatility of renewable energy generation.

1 Paris agreement from 2015 within the United Nations Framework Convention on Climate Change 2 Fraunhofer-Institute for Solar Energy Systems, 2015

3 Bloomberg New Energy Outlook, 2017: Ratio of non-grid scale (PV, batteries, demand response) to total installed capacity in moderate PV growth scenario 7 4 Bloomberg New Energy Outlook, 2017: Capacity of small scale batteries and utility scale batteries

## Megatrends Driving Energy Market Disruption





> The structural transformation of the energy system requires solutions to control and manage the decentralized grid.

1. CHP: Combined Heat Power

## The Solar Inverter is a Perfect Sensor to Collect Data; ennexOS is the Perfect Platform to Connect Different Technologies





### **Optimize Performance**

#### Sector Coupling

 Increase flexibility with SMA's capability to couple PV systems with various technologies such as HVAC, Batteries, E-Mobility, etc.

#### Analyze & Predict

• Apply powerful analytics to drive actionable predictions and make smarter decisions

#### Visualize the Pattern

• Visualize data in meaningful dashboards and distill useful information to see patterns of insights

#### Connect to Benefit from Decentralized Energy Market

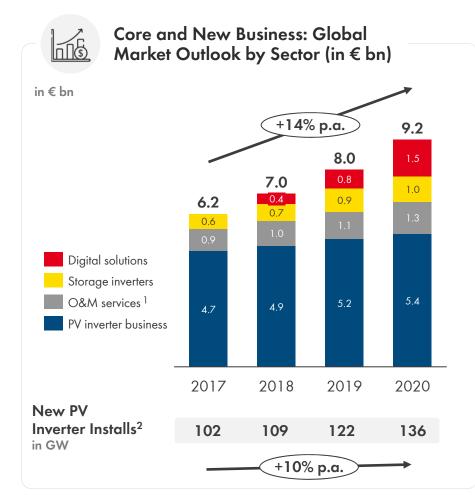
• Bring together the right data points to optimize the entire system in order to reduce costs. Connect the entire system to market places to benefit from new business models (e.g. energy trading, etc.).

Business Model	
Cloud Energy Management	Sunny Places & Portal
<ul> <li>Tariff data</li> <li>Weather forecast</li> <li></li> </ul> Payment based on usage transaction volume	ge or
Edge Energy Management <sup>1</sup> enne	ex <mark>OS</mark>
<ul> <li>Sector Coupling</li> <li>Analytics</li> <li>Visualization</li> <li>Connectivity</li> <li>Payment based on reta and / or cost savings</li> </ul>	iner
Photovoltaics Storage HVAC E-Mobility A Optimization of Photovoltaics, Storage, Heating & Cooling, Mobility	.ppliances

> SMA has the application know-how to optimize the entire system at any given point.

The Disruption in the Energy Sector will Open up New Value Pools for Technology Driven Companies such as SMA







#### **Market Comments**

- > The megatrends decarbonization, technical cost decrease, sector convergence and digitalization will lead to a higher share of renewable energy and its growth.
- > The need for digital solutions and battery storage will create new value pools.
- > PV-inverters will serve as the backbone for smart grids solutions connecting the components and collecting data.
- > The traditional PV market is expected to grow in volume and value until 2020. EMEA and APAC as well as Utility and Commercial are key growth markets.
- > O&M services gain importance with continuously declining equipment prices and are key for sustainable PV investments

## > Approximately 50% of global PV inverter installs (GW) are in China. Going forward, SMA expects a rather flattish market development in China.

Full O&M
 SMA MI Model; as published in our Capital Markets Day Presentation 01/2018

#### 11

## The Utility Market is Still Driven by Price Pressure– PPA's are Below 20 \$/MWh<sup>1</sup>



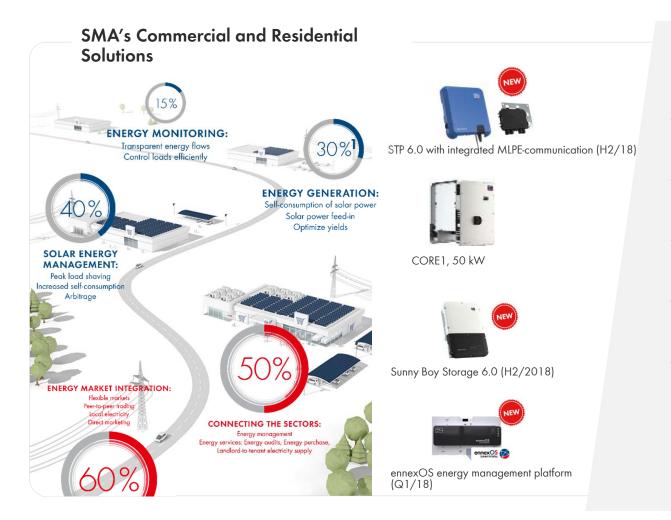


- Increase power sizes to reduce specific costs
- Additional features that reduce total system costs
- Profit+ is a new business model to reduce life-timecost
- Grid simulation to accelerate commissioning
- One brand strategy with various product lines



## Intelligent Energy Management Reduces Energy Costs of Private Households and Commercial Customers Drastically





#### **Success Factors**

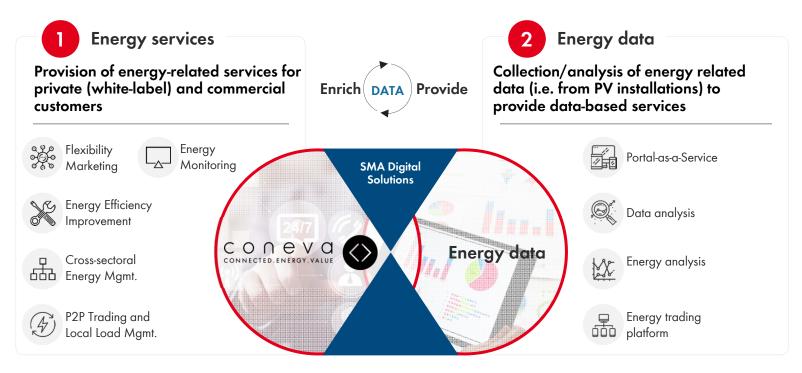
- Reduce number of platforms to improve cost competitiveness
- Improve yield with module optimization (partial/full)
- Storage integration for greater flexibility
- Energy management platform to couple sectors
- One brand strategy with various product lines

## > SMA forms strategic alliances to approach new customer groups.<sup>2</sup>

- 1. Energy Cost Savings
- 2. Eg. JV Danfoss Cooling (planned), MVV, VW, Audi, LG, Samsung and others.

## SMA is the First Mover of its kind in the Digital Energy Solutions Business





- Available technology platform across sectors
- Access to 300,000 PV systems provides data from >1.5 m devices, allowing to create a worldwide database and data services as well as for integrating energy service solutions

## > SMA has in-depth energy economical know-how and unparalleled access to energy data to create new business models.

## SMA GENERATED SALES OF €183M AND AN EBITDA OF €18M

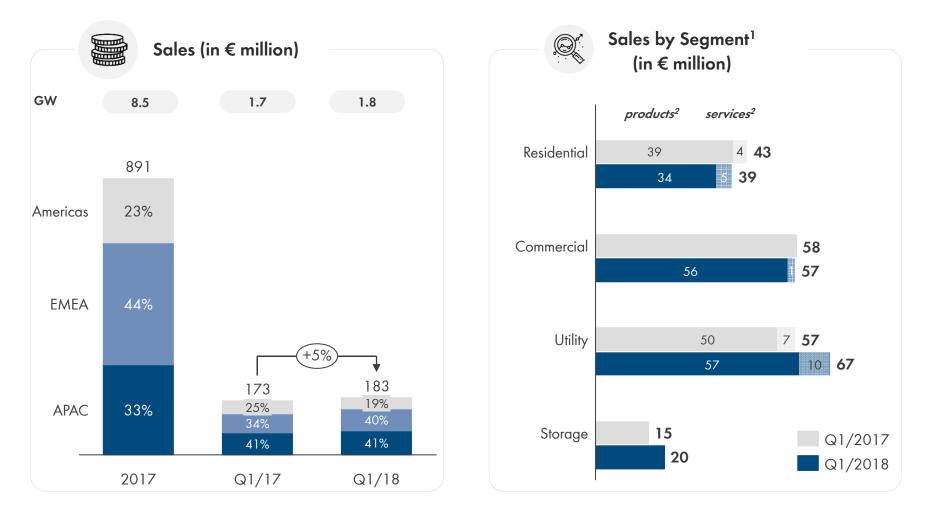
# SMA IMPROVED ITS PROFITABILITY DUE TO NEW PRODUCTS AND COST OUT INITIATIVES

## GUIDANCE 2018 CONFIRMED BASED ON CURRENT TRADING AND HIGH ORDER BACKLOG



Sales Growth in EMEA more than Offset Sales Decline in Americas; APAC is Stable





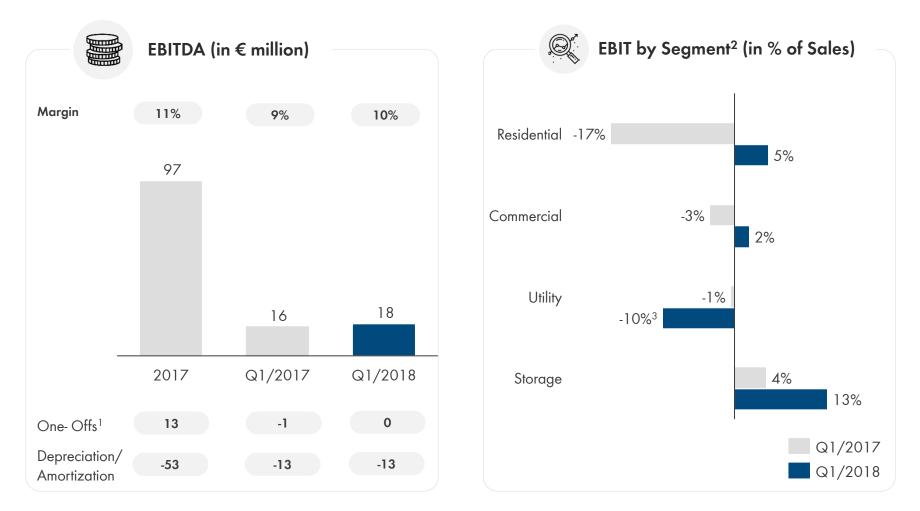
## > Sales growth in nearly every segment – Management expects accelerating growth in H2/2018.

1.w/o Digital Energy

2. New Segment information according to IFRS 15 shows sales with external services per segment. Thereby, External Services are unlike the former Service segment and include commissioning, extended warranties, service and maintenance contracts, operational management, remote system monitoring and digital energy services. External Product Sales include inverters, storage systems, communication products, spare parts and accessories. See back up for further information.

EBITDA Increased Significantly Taking in Account the Q1/17 Book Gain from the Sale of the Railway Technology Business





## > SMA improved its profitability due to new products – the Utility segment was negatively impacted by warranty provision in the mid-single digit €m-range.

Q1/2017: w/o the book gain book gain from the sale of the Railway Technology business in a high-single digit €m-range
 w/o Digital Energy
 Incl. a negative mid-single €m-amount for warranty provision

# Finished Goods Increased in Q1/18 due to Higher Stock Levels for Residential Products



A.	Net Working	Capital
	(in € mill	ion)
NWC ratio <sup>1</sup>	19%	19%
	168	170
	160	131
	64 13 88	73 17 115
	-130 -27	-137 -29
]	Dec. 31, 2017 (adjusted) <sup>2</sup>	March 31, 2018
Trade receiv	vables	Finished goods
Raw materia	als and consumables	Trade payables
Unfinished g	goods	Advanced Payments



Group Balance Sheet, reclassified (in € million)

	2017/12/31	2018/03/31	Change
Non-current assets	358	353	-2%
Working capital	325	336	3%
Other assets	63	70	12%
Total cash	470	465	-1%
Shareholder's equity	612	613	0%
Provisions <sup>2</sup>	156	156	0%
Trade payables	130	137	5%
Financial liabilities <sup>3</sup>	20	20	0%
Other liabilities <sup>2</sup>	298	298	0%
Total	1,216	1,224	1%

## > Non-current assets include c. €130m for land and buildings.

 1. Net Working Capital ratio: inventory + trade receivables-trade payables (advanced payments included); as of last twelve months sale
 been adjusted accordingly (see back up for further information)

 3. Not interest-bearing

2.NWC ratio as of 2018 reporting includes advanced payments; the year end figure 2017 has 4.w/o not interest bearing derivatives: € 0.2m (2016: € 0.4m)

# Cash Flow from Operating Activities Lower than in Previous Year due to NWC-Development<sup>1</sup>



Cash Flow (in			
	Q1/2017 Q1/2	2018	• Co
Net Income	6	3	
Gross Cash Flow	11	21	
Cash Flow from Operating Activities	42	4	
Net Capex <sup>2</sup>	-7	-7	
Free Cash Flow (Adj.)	35	-3	
Net Investments from Securities and Other Financial Assets	-6	-21	• No
Acquisitions/ Divestitures	17	0	Fir
Free Cash Flow (IFRS)	46	-24	

• Cash Flow from Operating Activities

Comments

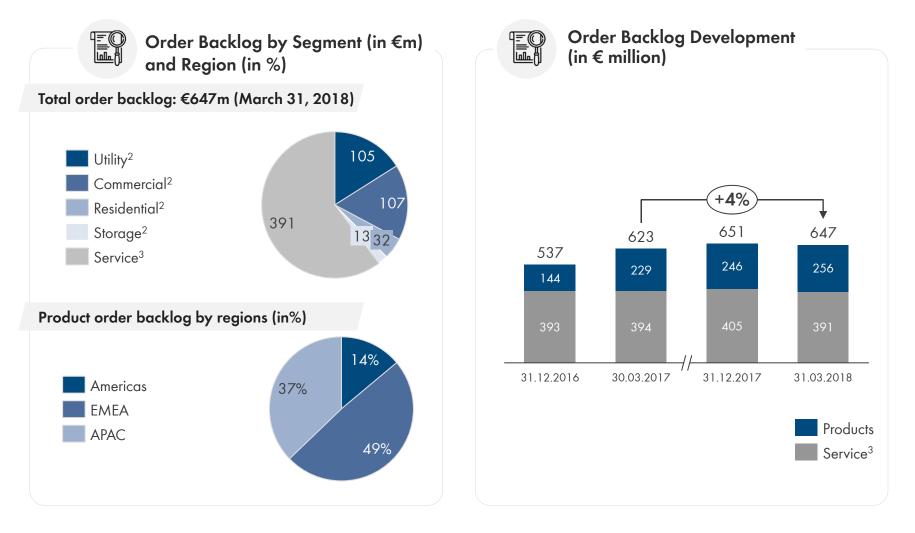
- Significant decrease in Net Working Capital in Q1/2017 compared to end of 2016 (32 M€) mainly from decreased trade receivables
- Higher inventory levels in Q1/2018 due to expected increase in demand in the following months
- Net Investments from Securities and Other Financial Assets reflect the investment of cash in long-term, interest-bearing time deposits

## > SMA's business is not capital intense.

- 1. NWC Q4/2016: c. €205m (c. 22% of LTM Sales); Q1/2017: €177m (20% of LTM Sales); Q4/2017: €168m (19& of LTM Sales); Q1/2018: €170m (19% LTM Sales)
- 2. Thereof R&D capitalization: Q1/2018: €4m (Q1/2017: €4m)

Order Backlog Q1/18 Increased by 4% - at the end of April Order Backlog Stood at €635m<sup>1</sup>





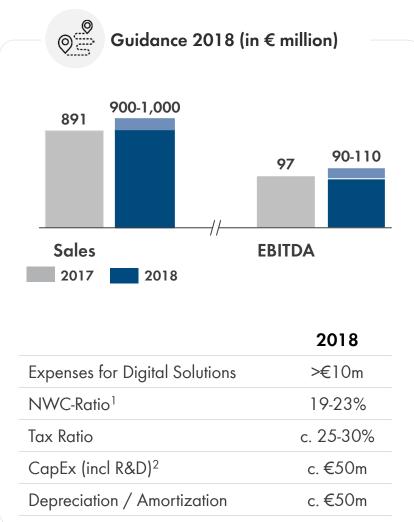
## > Q1/18 sales and product order backlog secure nearly 50% of 2018 annual sales guidance.

1. Thereof €242m for products

2. w/o "Service"

3. Order backlog attributable to the former segment "Service", which will be recognized over a period of 5 to 10 years

# Guidance 2018 confirmed - SMA's Management Estimates with a Moderate Sales and Earnings Increase





- SMA plans to increase market share, mainly in APAC (China, Japan, Australia).
- Strong growth in Commercial due to new products.
- Energy Management and digital solution business will only have limited sales contribution.
- Price pressure in Utility remains high. Moderate development in Residential and Commercial.
- Supply constraints will impact SMA's business at least until the end of Q2/2018, but ease starting Q2/2018.
- Acquisitions in the fields of energy management technology and O&M (total volume €50-100 m).

## > The Managing Board and Supervisory Board have recommended a dividend of €0.35 per share to the General Meeting (payout ratio: 40%).<sup>3</sup>

 As of 2018, the net working capital ratio includes advanced payments: inventory + trade receivables-trade payables (incl. advanced payments); as of LTM
 Incl. c. €20m for R&D 3. Our earnings-based dividend policy is basically reflected in a payout ratio of 30 to 60% of Group net income.



SMA is a Leading player for PV Inverters, Storage and O&M





### Investment Highlights

## Uniquely positioned in the solar market / best brand

- A leading global specialist for photovoltaics system technology with 65 GW installed base
- Complete portfolio to serve all PV segments
- 20 subsidiaries with strong service capabilities and access to all channels
- Award-winning 20 GW production to achieve scale

### Leverage PV expertise to enter into high margin business

- Strong partnerships to create a new ecosystem
- Know-how & products to benefit from strong growth in the field of battery storage
- With ennexOS<sup>1</sup>, SMA has set the basis to manage the complexity of integrated solutions
- Infrastructure to expand into data-driven business models and services



## > SMA has an experienced management team with a proven track record.

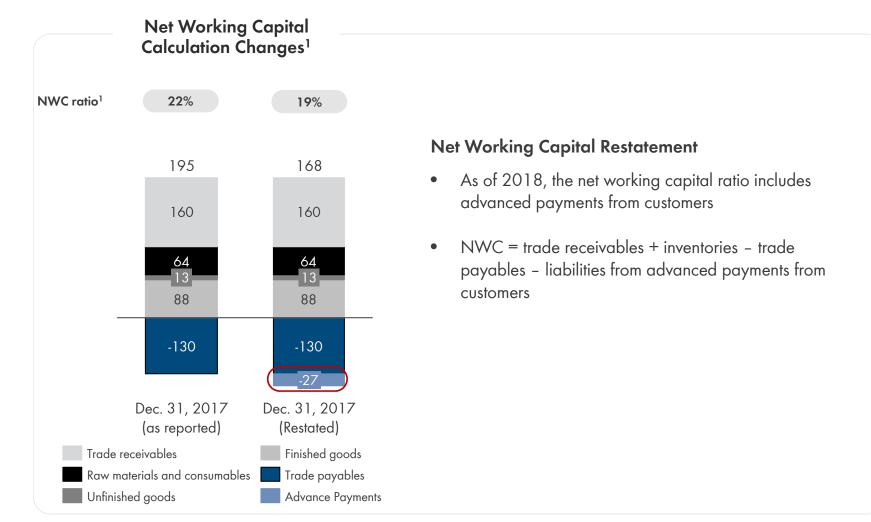


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## For 2018, SMA has Changed its Calculation Method for Net Working Capital





## For 2018, SMA has Changed its Segment Information - it now Includes Details on External Product and Services Sales (IFRS)



Product BU Sales ES, COM, UT, Other)	t Information External Product Sales	<ul> <li>Inverters (new)</li> <li>Storage systems</li> <li>Communication products</li> <li>Accessories</li> </ul>	 2018 Segment	External Product Sales	<ul> <li>Inverters (new &amp; replacements)</li> <li>Storage systems</li> <li>Communication products</li> <li>Accessories</li> <li>Spare parts</li> </ul>
Comice DU	External Product Sales	- Inverters (replacements) - Spare parts	 (RES, COM, UT, STO ind. Service BU)	External Services Sales	<ul> <li>Service / O&amp;M contracts</li> <li>Warranty extensions</li> <li>Commissioning / Implementing</li> <li>Digital Energy Services</li> </ul>
Service BU Sales External Servi Sales		<ul> <li>Service / O&amp;M contracts</li> <li>Warranty extensions</li> <li>Commissioning / Implementing</li> <li>Operational management &amp; monitoring</li> </ul>	 		- Operational management & monitorin