

# SMA SOLAR TECHNOLOGY AG

## Analyst / Investor Presentation

### Roadshow Zurich / Geneva



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April 17, 2018



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# SMA Expects Sales and Earnings Increase in 2018



## Financial Highlights 2017

### Top Line

- Record Shipments with more than 8.5 GW
- Sales decline was mainly due to regulatory uncertainties in the U.S.
- Sales decline in the Utility segment in North America could not be fully compensated by the positive development in APAC/EMEA

### Profitability, Bankability

- SMA delivered higher earnings than initially guided - all segments were break-even or profitable in 2017
- Cash break-even point <€700m in 2017
- Rock solid balance sheet structure with >50% equity ratio, €450m net cash and €100m long-term credit facility

### Outlook 2018

- Management confirms guidance with sales of €900m to €1,000m and EBITDA of €90m to €110m
- Management and Supervisory Board will recommend a dividend of €0,35 per share (40% payout ratio)
- Q1 sales are expected to reach c. €180m and Q1 EBITDA of c. €18m<sup>1</sup>

## Strategic Highlights

### New subsidiary



### New products



### Awards



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

# Gross Margin Increased in the Second Half of 2017 due to Cost-Improved Products and a Positive One-Off Effect



## Key Financials (in € million)

	2016	2017	Change
MW sold	8.2	8.5	4%
Sales	947	891	-6%
Residential	191	208	9%
Commercial	273	268	-2%
Utility	397	240	-40%
Service	45	78	73%
Other Business	41	97	>100%
Gross Margin (in %)	26%	22%	n.m.
EBITDA	142	97	-31%
Depreciation	77	53	-31%
EBIT	65	44	-32%
Thereof One-Offs <sup>1</sup>	-31	13	n.m.
Net income	30	30	+/-0
Free Cash Flow (Adj.)	121	85	-30%
CapEx (incl. R&D)	29	33	15%

	2016/12/31	2017/12/31	Change
Net cash	362	450	24%
Total assets	1,211	1,216	1%
NWC ratio (in %) <sup>2</sup>	24%	22%	n.m.

	2017			
	Q1	Q2	Q3	Q4
Sales	173	208	211	299
Residential	37	57	57	57
Commercial	57	66	62	83
Utility	49	59	60	72
Service	15	13	15	35
Other Business	15	13	17	52
Gross margin	19%	20%	25%	25%
EBITDA	16	13	26	42

1. 2017: Release of deferred sales for long-term service and maintenance contracts, w/o the book gain from the sale of the Railway Technology business division; 2016: Consolidation of production sites, impairment on working capital, R&D impairment, release of employee bonus provision

2. Net Working Capital ratio: inventory + trade receivables-trade payables (no advanced payments included); as of last twelve months sale



MEGATRENDS WILL CHANGE BUSINESS MODELS  
IN THE ENERGY SECTOR FUNDAMENTALLY

THE RESULTING DECENTRALIZATION REQUIRES  
INTELLIGENT CONTROL

PHOTOVOLTAICS WILL BECOME THE MOST  
IMPORTANT ENERGY SOURCE

# Megatrends are Transforming the Electricity Ecosystem



## 1 Decarbonization

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

## 2 Sector convergence

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

## 3 The structural transformation of the energy system

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

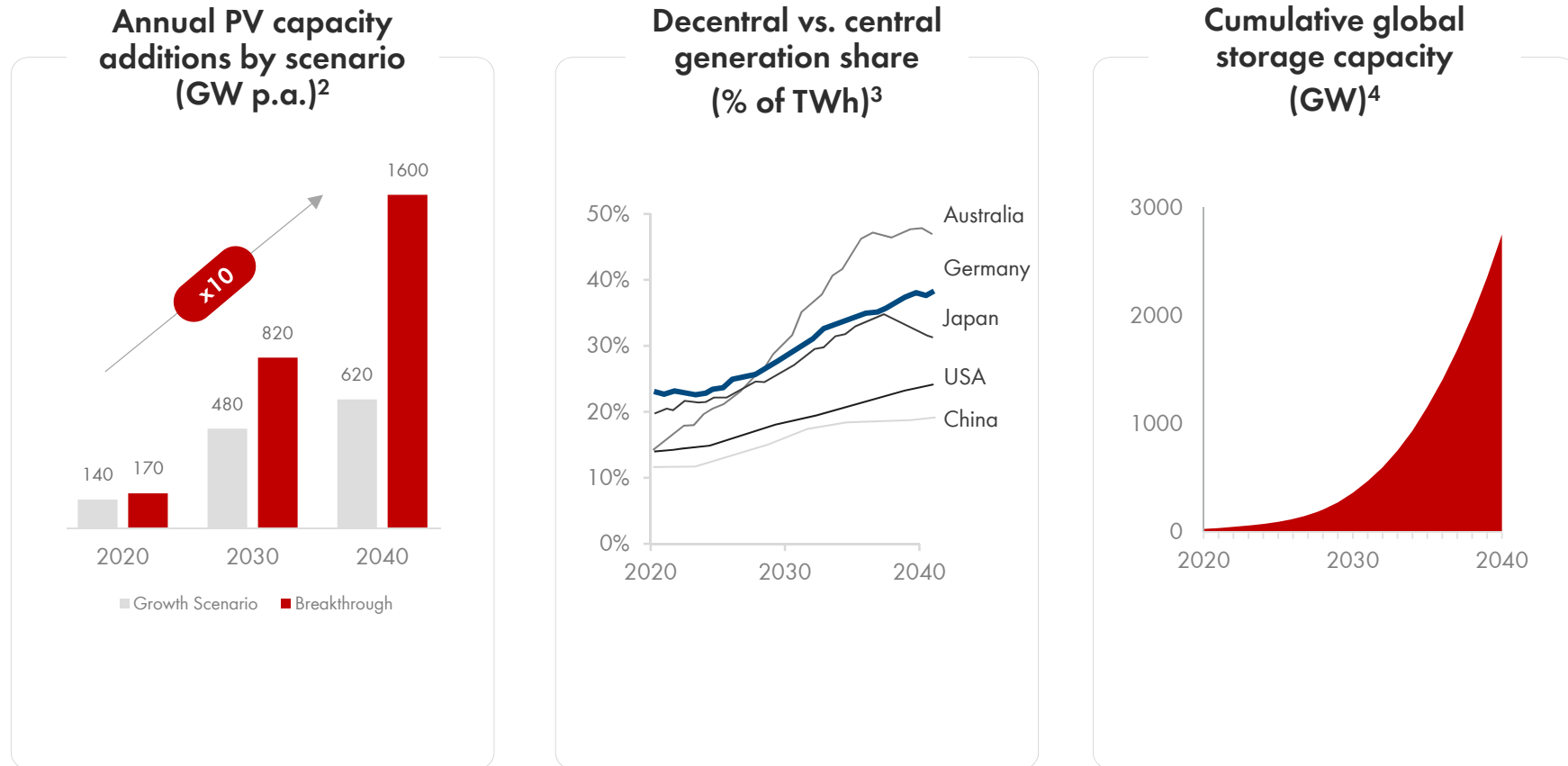
## 4 Disruption in the electricity industry

creates new roles to be played by traditional OEMs<sup>1</sup> along the entire value chain

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

1. OEM: Original Equipment Manufacturer

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



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

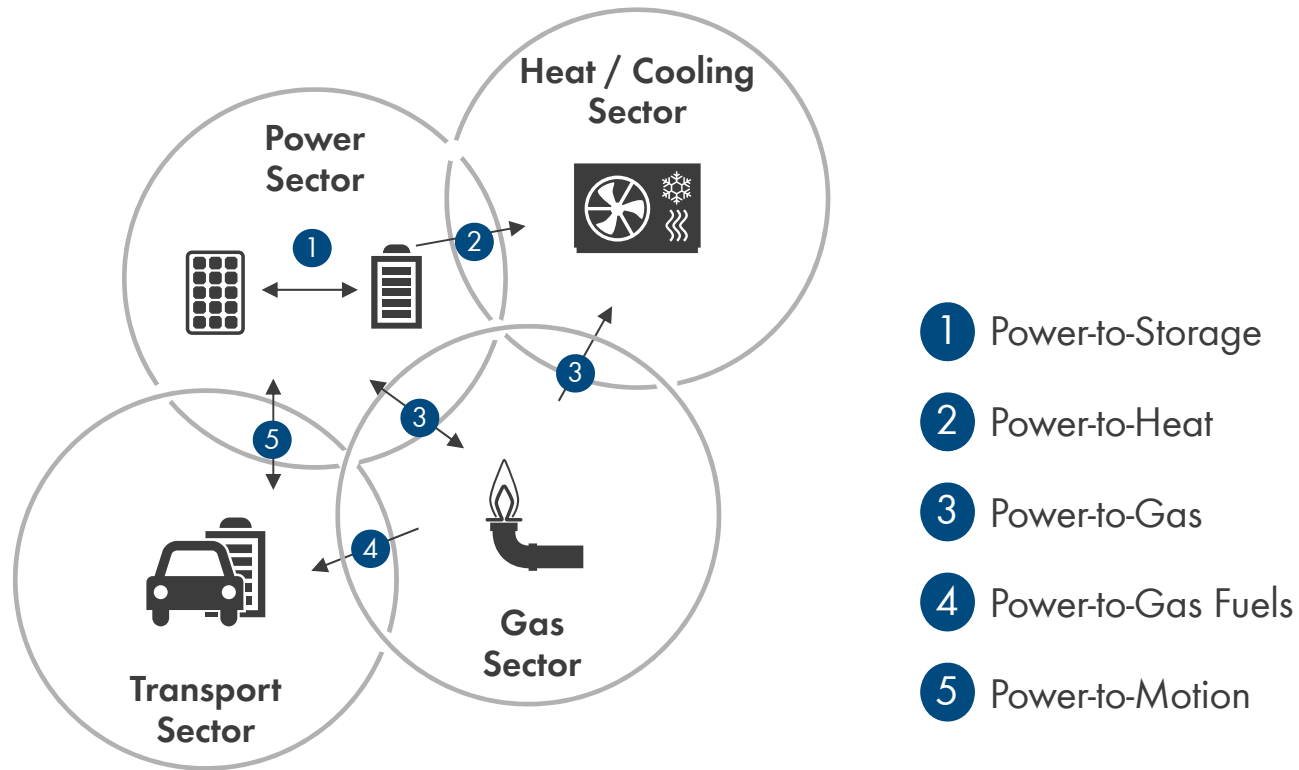
1 Paris agreement from 2015 within the United Nations Framework Convention on Climate Change

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

4 Bloomberg New Energy Outlook, 2017: Capacity of small scale batteries and utility scale batteries

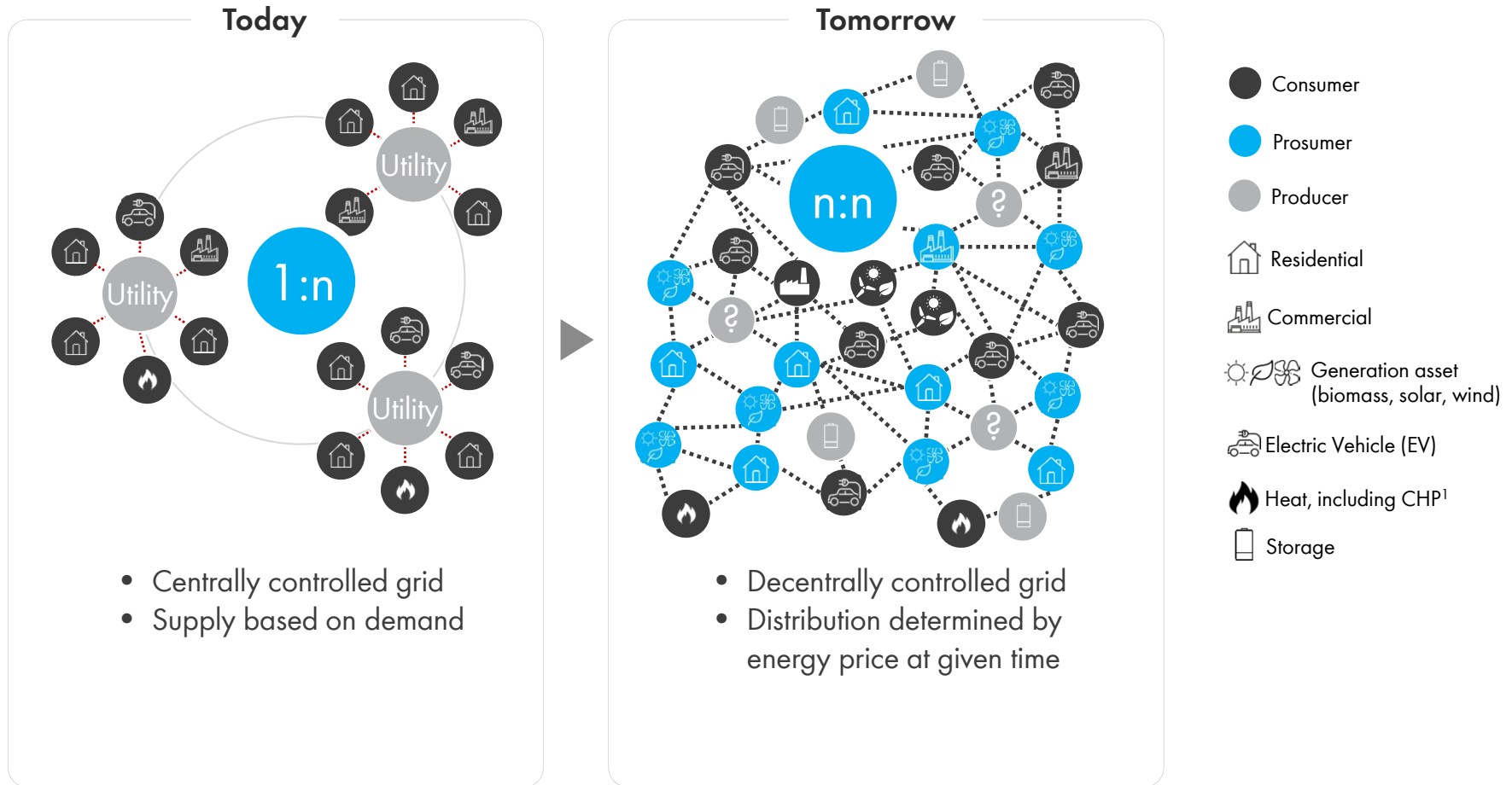
# Sector Convergence Provides new Means of Flexibility – Managing the Resulting Complexity Requires Intelligent Control



> Variable power prices and new technologies add new options for energy trading.



# The Structural Transformation of the Energy System Requires Solutions to Control and Manage the Decentralized Grid



> Digitalization is the key for decentralized applications and new business models

<sup>1</sup> CHP: Combined Heat Power

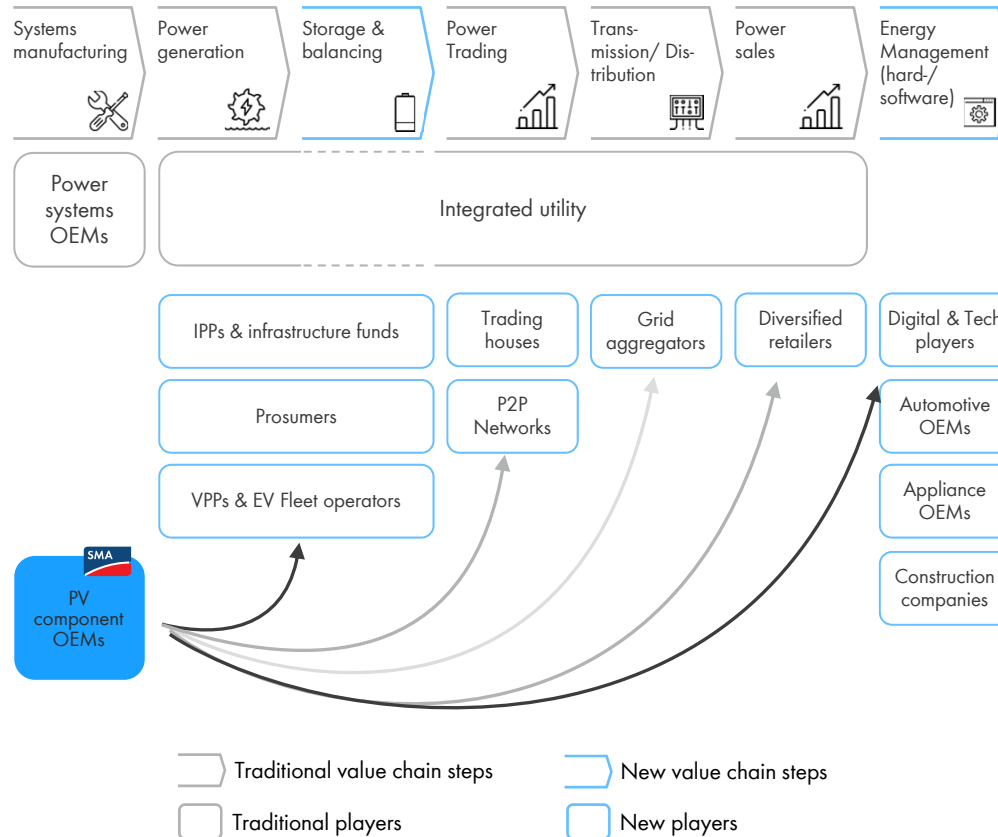
# Disruption in the Energy Industry Creates New Roles to be Played by Traditional OEMs Along the Value Chain



## Market Trends

- Energy value chain is expanding to storage & balancing and energy management
- As technological progress accelerates and power prices continue to decline, the integrated utility model becomes less attractive
- Highly competitive and specialized players enter the market to capitalize on their capabilities and resources, leveraging economies of scale
- Additionally peer-to-peer networks emerge

## Emerging Player Landscape



> **The solar inverter is the key sensor to collect energy data. SMA has the data analytics and energy management know-how to create new services.**

OEM: Original Equipment Manufacturer  
 IPPs: Independent Power Producer

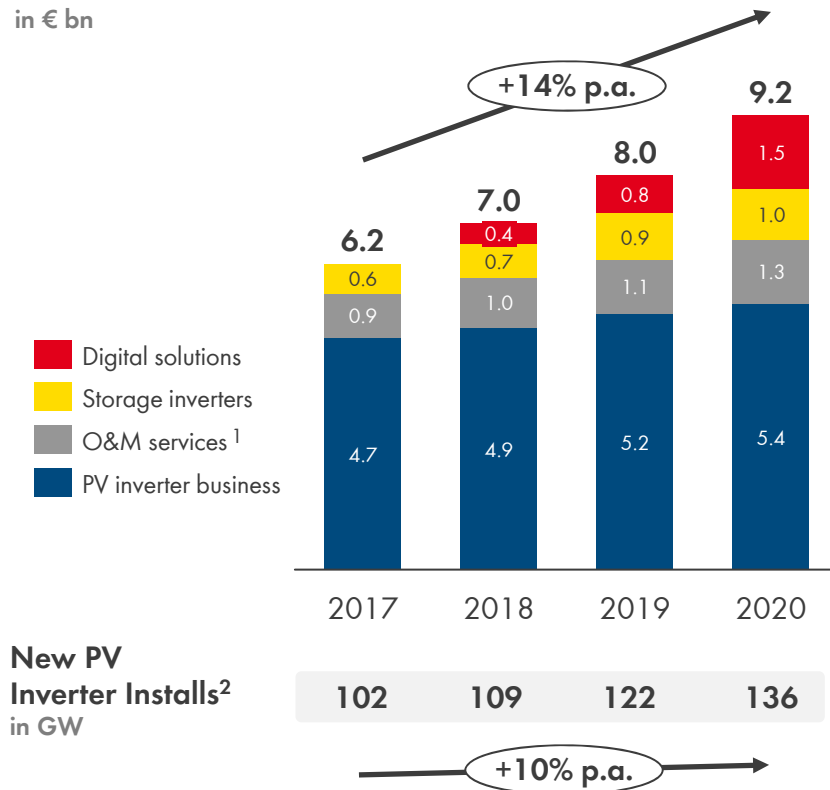
VPPs: Virtual Power Plant, EV: Electric Vehicle  
 P2P: Peer-to-Peer

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



## Core and New Business: Global Market Outlook by Sector (in € bn)

in € bn



## 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

> **SMA has a clear understanding how to approach digital solutions and battery storage and builds strong market position.**

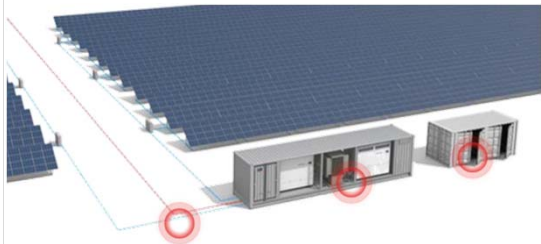
1. Full O&M

2. SMA MI Model; as published in our Capital Markets Day Presentation 01/2018

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

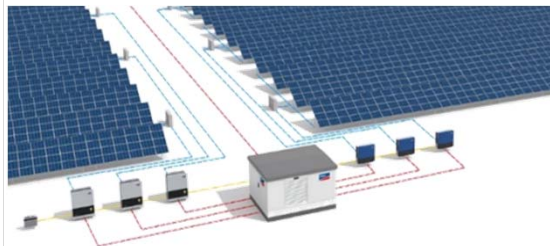


## SMA's Solution for Central Power Plant Design



SMA Medium Voltage Turnkey Solution, up to 6 MW, 1,500 V (2018)

## SMA's Solution for Decentral Power Plant Design



SMA Solid-Q (2018)



SUNNY HIGHPOWER PEAK1 (2018)

## SMA Focus

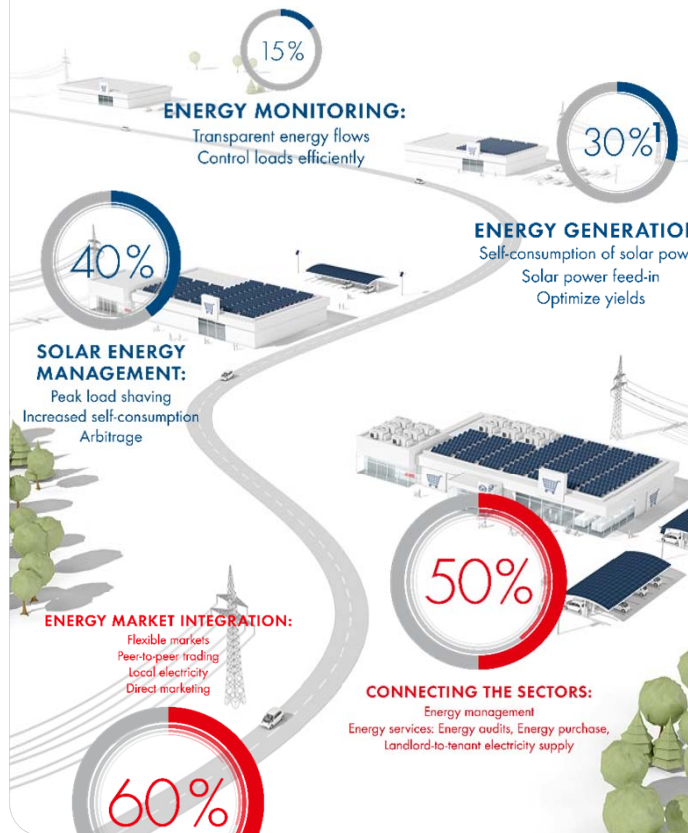
- Increase power sizes to reduce specific costs
- Additional features that reduce total system costs
- Profit+ is a new business model to reduce life-time-cost
- Grid simulation to accelerate commissioning

> SMA's new products / solutions will come with an improved cost structure.

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



## SMA's Commercial and Residential Solutions



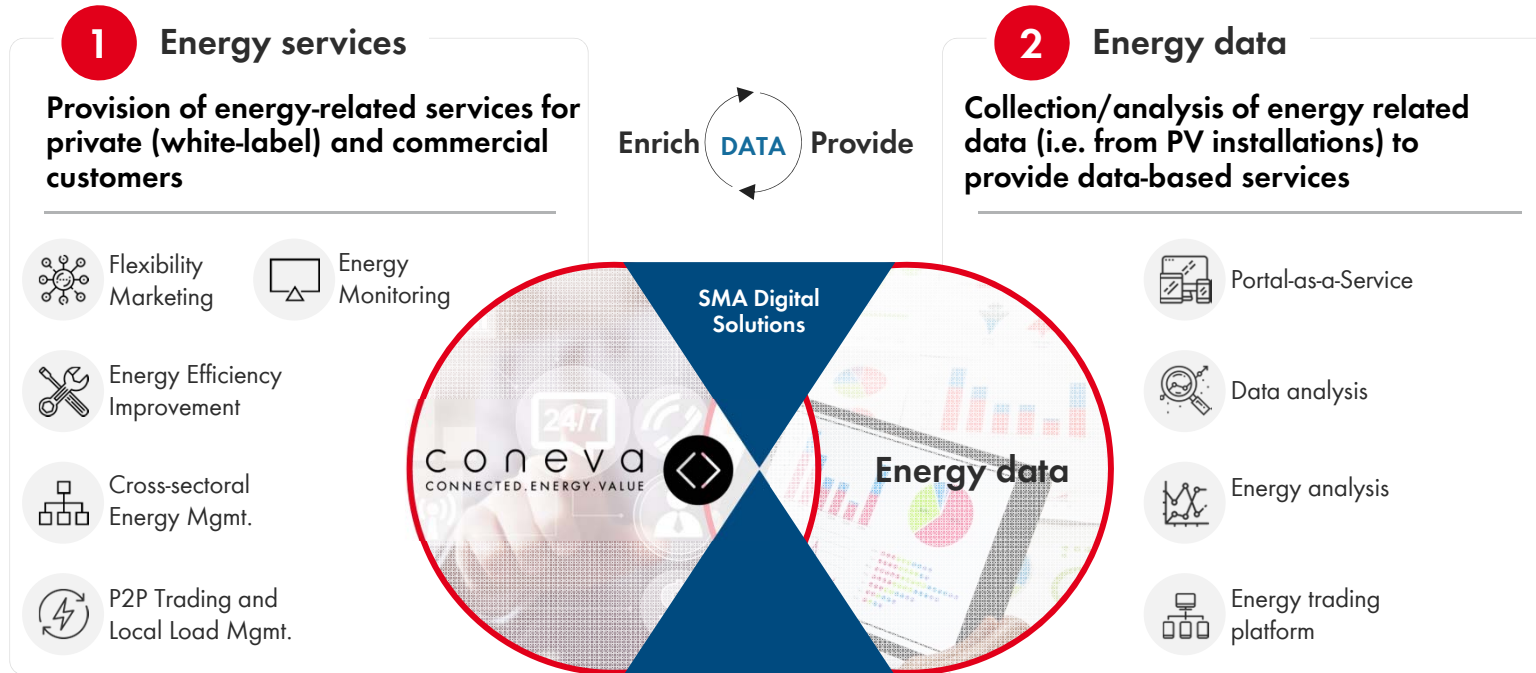
## Success Factors

- Reduce number of platforms to improve cost competitiveness
- Improve yield with module optimization
- Storage integration for greater flexibility
- Energy management platform to couple sectors

> SMA forms strategic alliances to approach new customer groups.



# 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.**

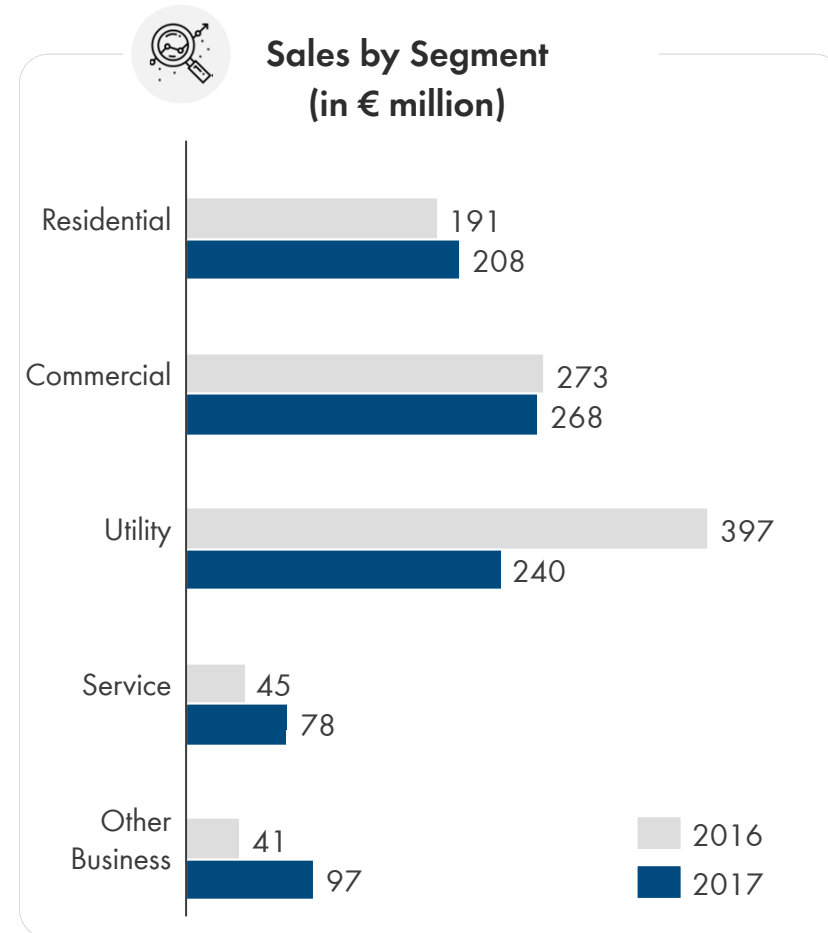
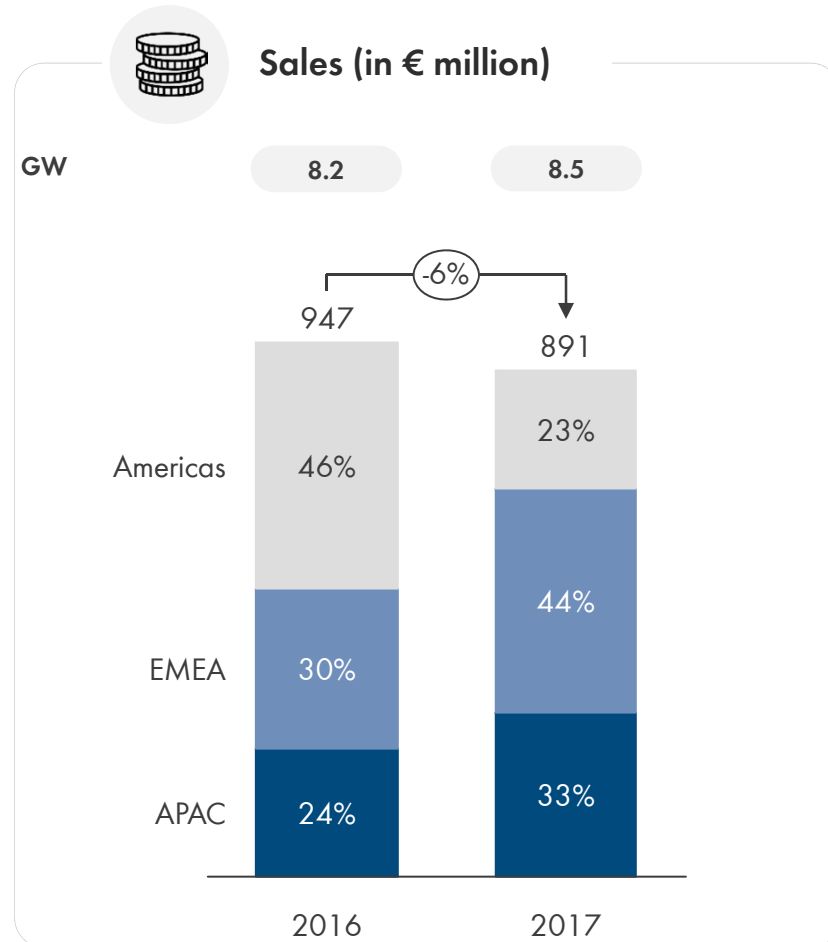
SMA GENERATED SALES OF €891M AND AN  
EBITDA OF €97M

SOLID BALANCE SHEET STRUCTURE WITH AN  
EQUITY RATIO OF 50 % AND NET CASH OF €450M

THE MANAGING BOARD AND SUPERVISORY  
BOARD WILL RECOMMEND A DIVIDEND OF €0.35  
PER SHARE

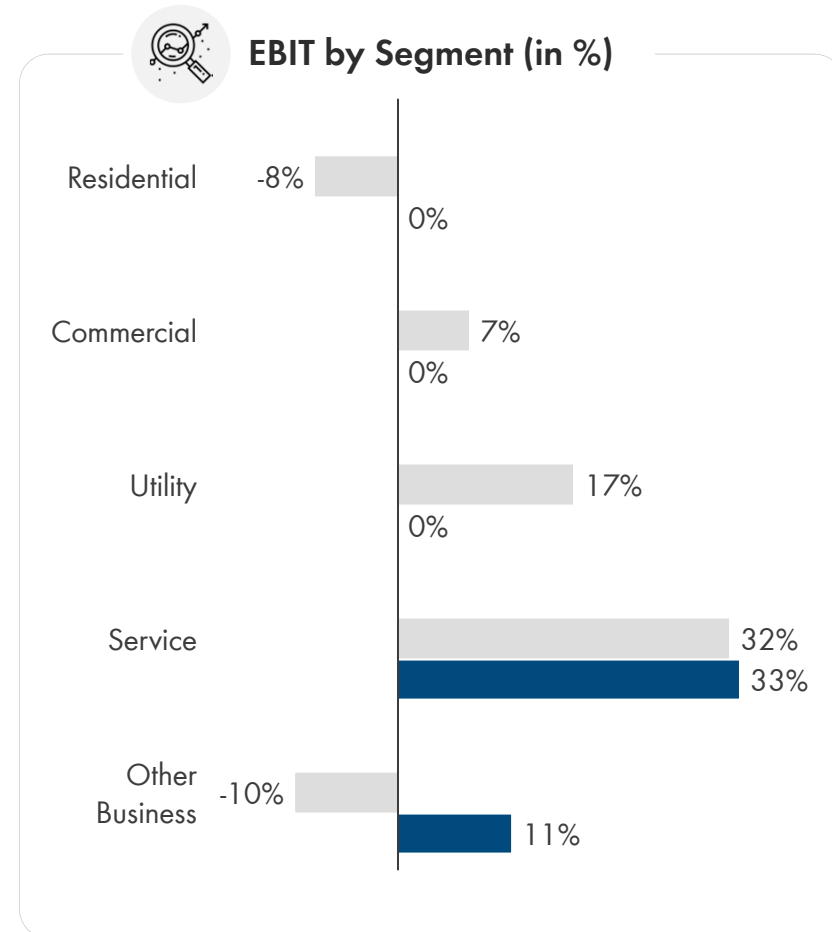
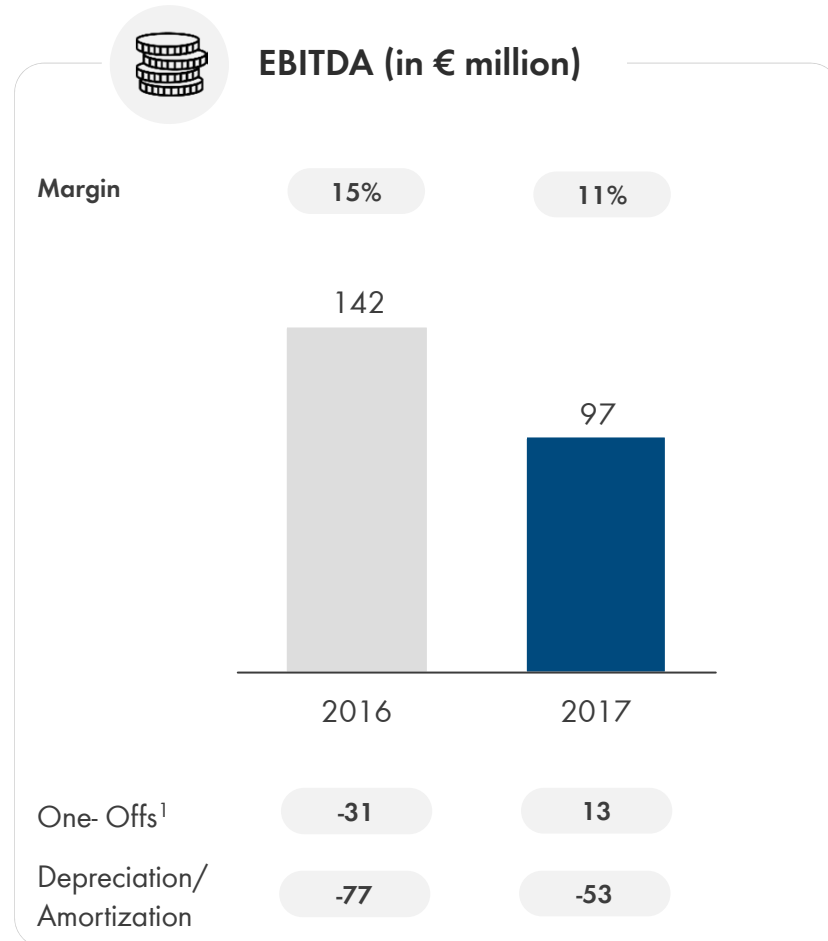
GUIDANCE 2018 CONFIRMED; Q1 FIGURES ON  
TRACK

# Record Shipments in 2017 with More than 8.5 GW



> Sales decline in the Utility segment in North America could not be fully compensated by the positive development in APAC/EMEA.

# Earnings Decline Mainly due to the decline of Utility Sales in North America



> **Earnings are impacted by positive one-offs from the sale of SMA Railway and the release of deferred sales for long-term service and maintenance contracts.**

1. 2017: Release of deferred sales for long-term service and maintenance contracts, w/o the book gain from the sale of the Railway Technology business division; 2016: Consolidation of production sites, impairment on working capital, R&D impairment, release of employee bonus provision

# SMA has a Solid Balance Sheet Structure with an Equity Ratio of 50%

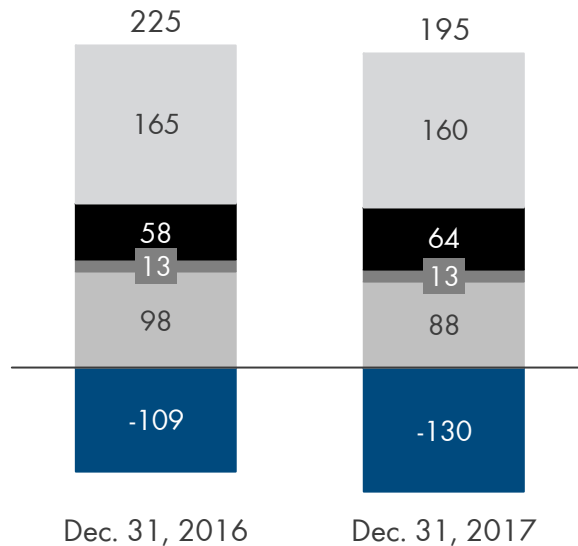


## Net Working Capital (in € million)

NWC ratio<sup>1</sup>

24%

22%



- Trade payables
- Unfinished goods
- Trade receivables
- Finished goods
- Raw materials and consumables



## Preliminary Group Balance Sheet, reclassified (in € million)

	2016/12/31	2017/12/31	Change
Non-current assets	426	358	-16%
Working capital	334	325	-3%
Other assets	66	63	-4%
Total cash	385	470	22%
Shareholder's equity	585	612	5%
Provisions <sup>2</sup>	177	156	-12%
Trade payables	109	130	19%
Financial liabilities <sup>3</sup>	23	20	-13%
Other liabilities <sup>2</sup>	317	298	-6%
<b>Total</b>	<b>1,211</b>	<b>1,216</b>	

## > SMA improved its NWC structure in 2017

1. Net Working Capital ratio: inventory + trade receivables-trade payables (no advanced payments included); as of last twelve months sale

2. Not interest-bearing

3. w/o not interest bearing derivatives: € 0,4m (2016: € 17,6m)



In 2017, SMA Operated with a Cash Break-even Point of c. €700m



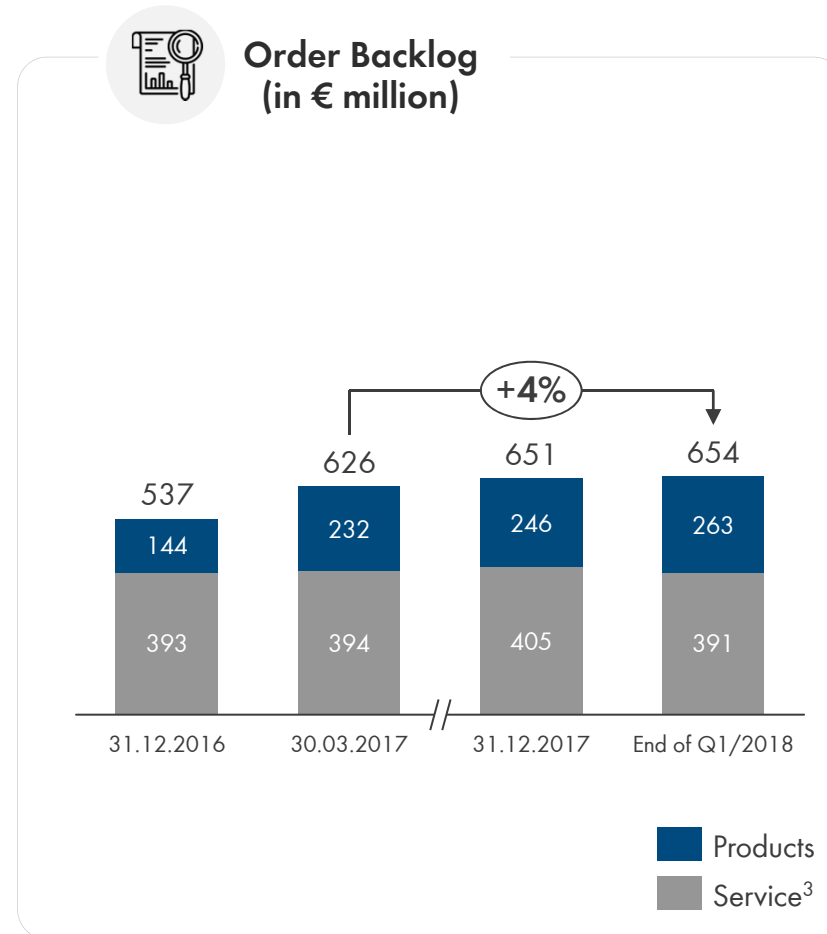
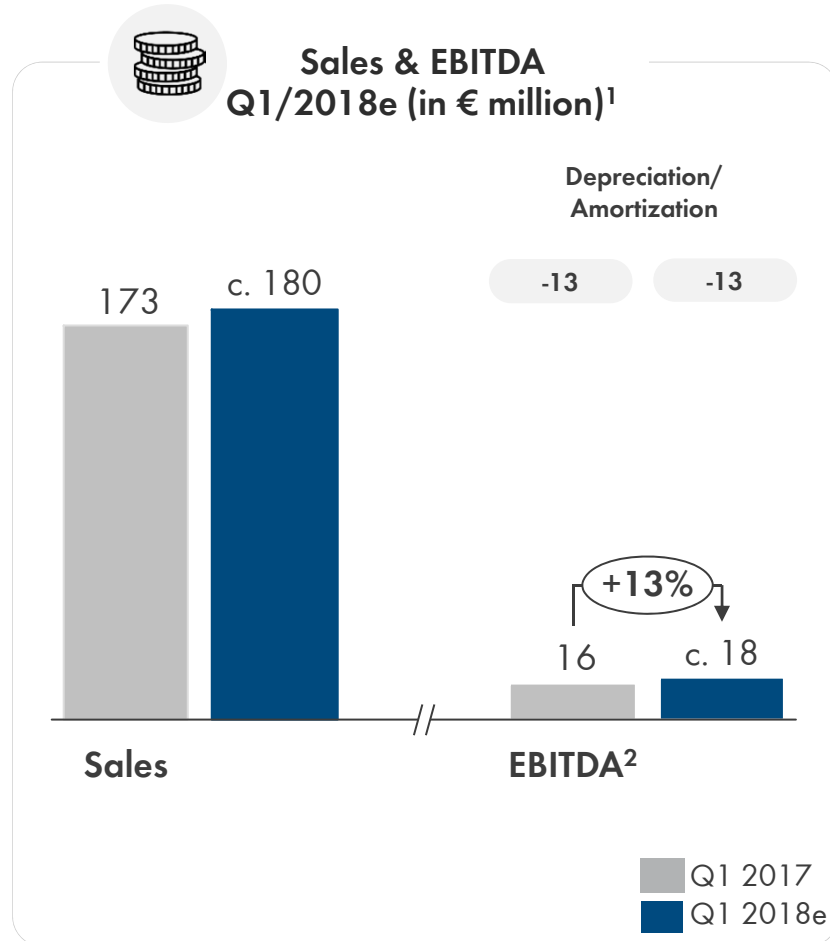
Cash Flow (in € million)

	2016	2017	Change
Net Income	30	30	+/-0%
Gross Cash Flow	132	84	-36%
Cash Flow from Operating Activities	148	117	-21%
Net Capex <sup>1</sup>	-27	-32	18%
Free Cash Flow (Adj.)	121	85	-30%
Net Investments from Securities and Other Financial Assets	-62	-66	7%
Acquisitions/ Divestiture	-19	17	n.m.
Free Cash Flow (IFRS)	40	36	-10%

> SMA's business is not capital intense; therefore, SMA offers an attractive cash flow profile.

1. Thereof R&D capitalization: 2017: €18m ; 2016: €13m

In Q1/18, SMA's Management Estimates Sales of c. €180m and EBITDA of c. €18m



> C. 50 % of guided sales figure 2018 is covered with Q1 sales and order backlog for products.

1. Preliminary figures

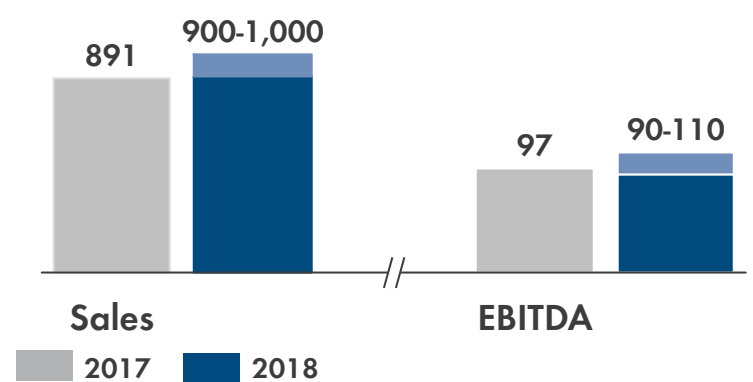
2. Q1/2017 EBITDA includes a positive one-off from the divestment of SMA Railway

3. Order backlog in service will be recognized over a period of 5 to 10 years

# SMA's Management Estimates with a Moderate Sales and Earnings Increase



## Guidance 2018 (in € million)



	2018
Expenses for Digital Solutions	>€10m
NWC-Ratio <sup>1</sup>	19-23%
Tax Ratio	c. 20-30%
CapEx (incl R&D) <sup>2</sup>	c. €50m
Depreciation / Amortization	c. €50m



## Management Comment

- SMA plans to increase market share, mainly in APAC (China, Japan, Australia).
- Strong growth in commercial and residential (incl. Optimizer) due to new products. Storage will be strong due to market development.
- Energy Management and digital solution business will only have limited sales contribution.
- Price pressure in utility remains high. Moderate development in all other segments.
- 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 portfolios and additional optimizer technology are likely (total volume €50-100 m).

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

1. As of 2018, the net working capital ratio includes advanced payments: inventory + trade receivables-trade payables (incl. advanced payments); as of last twelve months sale  
 2. Incl. c. €20m for R&D

3. Our earnings-based dividend policy is basically reflected in a payout ratio of 20 to 40% of Group net income.

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



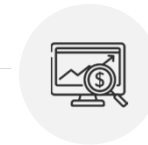
## Investment Highlights

### 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



## Key Financials 2018

### Sales

€ 900 m - € 1,000 m

### EBITDA

€ 90 m - € 110 m



## Key Product Innovation 2018



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

ENERGY  
THAT  
CHANGES



SOCIAL MEDIA  
[www.SMA.de/Newsroom](http://www.SMA.de/Newsroom)

