



# **SMA SOLAR TECHNOLOGY AG**

# **13<sup>th</sup> Capital Markets Day**

Presented by Ulrich Hadding, CFO & Dr. Jürgen Reinert, CEO

February 5, 2021  
virtually

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# 13<sup>th</sup> Capital Markets Day - Agenda



SMA Solar Technology

- 1 Highlights 2020**  
Ulrich Hadding
- 2 Market Outlook**  
Ulrich Hadding
- 3 Positioning of SMA**  
Dr. Jürgen Reinert
- 4 Financials & Guidance**  
Ulrich Hadding
- 5 Specialist Presentation: E-Mobility**  
Lisa Spangenberg



# Highlights 2020

Presented by Ulrich Hadding

## SMA highlights 2020



### **>100 GW threshold exceeded**

With a total of 14.4 GW, SMA has increased inverter output sold by 26% despite the COVID-19 pandemic in 2020. This brings the accumulated inverter output ever sold by SMA to >100 GW.



### **Market leadership in Australia strengthened**

SMA has signed contracts for the delivery of system solutions for PV power plants with a total of 1.6 GW in Australia. To date, SMA has a share of approx. 65 percent of the 6.5 GW central inverter capacity committed or already commissioned overall in Australia.



### **U.S. large-scale sales significantly increased**

SMA has significantly increased sales and regained market shares in the U.S. utility segment. Among the highlights here was the delivery of 98 Sunny Central Storage inverters to the world's largest battery storage project.

Despite the substantial challenges posed by the global COVID-19 pandemic, SMA has increased sales and earnings again and achieved its guidance 2020.



# Market Outlook

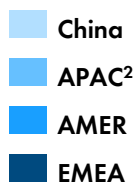
Presented by Ulrich Hadding

# Global PV installations expected to grow by 9% p.a. until 2023, mainly driven by EMEA and Americas regions



## Core business: PV installations<sup>1</sup>

### REGIONS in GWdc



### SEGMENTS in GWdc



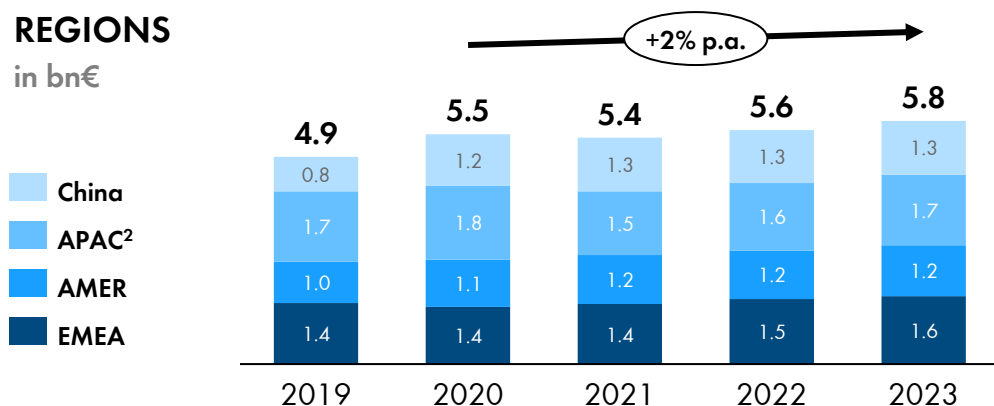
- Despite Corona crisis, a surge in installations in China, the USA and Vietnam led to 137 GW of new PV installations in 2020 (+23% compared to 2019).
- Major countries in Americas covering more than 80% of new PV installations in this region over the next three years will be USA, Brazil and Chile.
- China's target to be carbon neutral by 2060 will expedite renewables deployment, particularly PV, over the next years.
- After a small dip in 2021, APAC<sup>2</sup> region will see growth led by Japan, Australia and India.
- EMEA region will see a good growth led by France, Germany, Netherlands and Spain.

Growing PV installation volumes with changes in country and product mix will see slight increase in investments until 2023

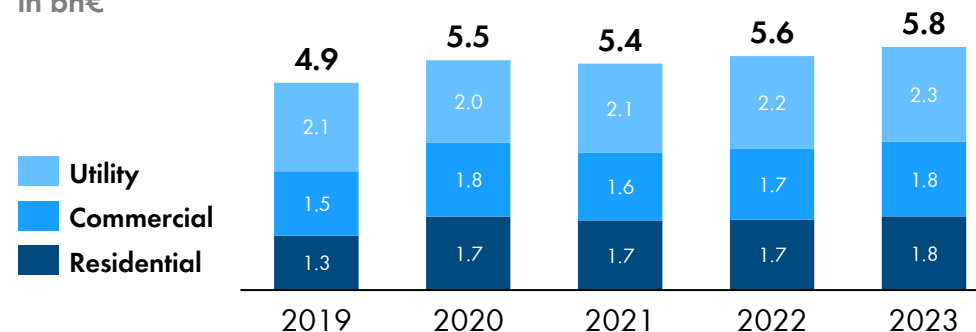


### PV inverter revenue<sup>1</sup>

#### REGIONS in bn€



#### SEGMENTS in bn€



- Investments in PV system technology will slightly increase despite strong annual increase in new installations and growing repowering potential of existing plants.
- SMA expects further moderate price decrease in residential and commercial segments until 2023.
- In the Utility segment, the comparatively higher price pressure is expected to continue due to competitive tenders.

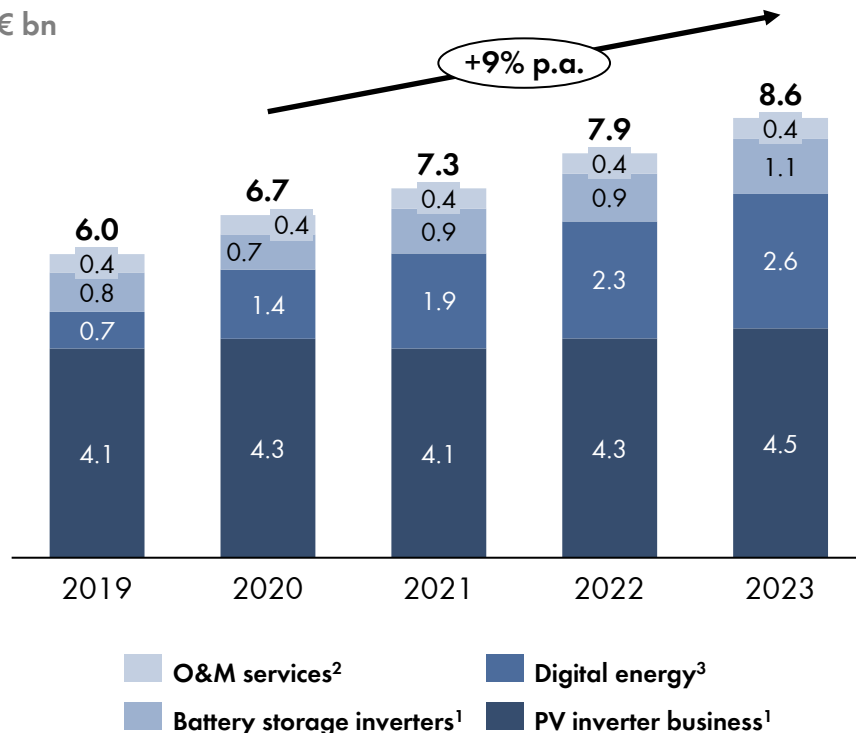


# Market for battery storage inverters and digital energy solutions is growing rapidly



**Market outlook by sector  
for market addressable by SMA<sup>1</sup>**

in € bn



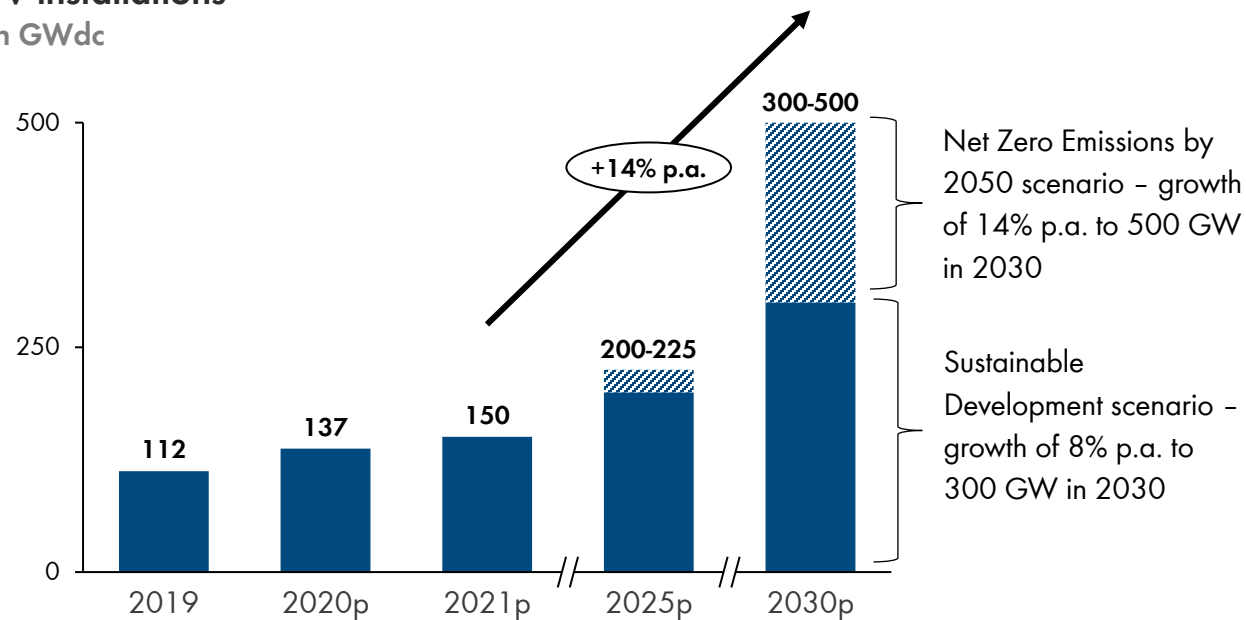
- The traditional PV inverter market outside of China will increase slightly over the next years. Digital solutions and battery storage are attractive additional value pools seeing strong growth.
- PV inverters will serve as the backbone for smart grid solutions connecting the components and collecting 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.

# PV is key for a cost-effective, secure and sustainable energy generation



## Long-term global market development<sup>1</sup>

### PV installations in GWdc



- Digitalization accelerates the transition towards a decentralized energy supply system based on renewable energies.
- With the electrification of additional sectors, electricity is expected to become the main energy source, contributing almost 50% to final consumption in 2050. This means gross electricity consumption would more than double.
- PV will become the preferred energy source in the decentralized, digital energy supply system of tomorrow. This will lead to records in installations year over year.

# Current developments provide bright perspectives for PV

## **Higher EU climate target**

The EU accelerated its 2030 emission reduction target from 40% to 55%. To achieve this, EU member states will have to massively increase their renewable energy capacities.

## **New U.S. administration**

The new U.S. administration has a strong climate agenda. This provides excellent perspectives for the U.S. PV market.

## **“Green” recovery programs**

National and supranational administrations around the world have initiated Corona recovery programs with a focus on the sustainable transformation of the economy.

## **Supportive regulation in key markets**

The U.S. Congress extended the Solar ITC to 2023. In Germany, the 52 GW cap on solar subsidies has been removed.





# Positioning of SMA

Presented by Dr. Jürgen Reinert

In 2020, SMA management has sharpened and focussed the company strategy



The company's further development into a provider of systems and solutions remains at the core of the SMA Strategy 2025. Our strategic goals form the basis for our future success:

- Closer to our customers
- Stability through profitability
- Integrated sustainability
- Shaping the future through innovation
- Strong partnerships

➤ **SMA is leveraging its unique systems expertise to develop complete, sustainable and future-proof solutions with high customer benefits in close collaboration with strong partners and to tap into new business fields.**



SMA's goal is to combine long-term business success with environmental protection and social responsibility

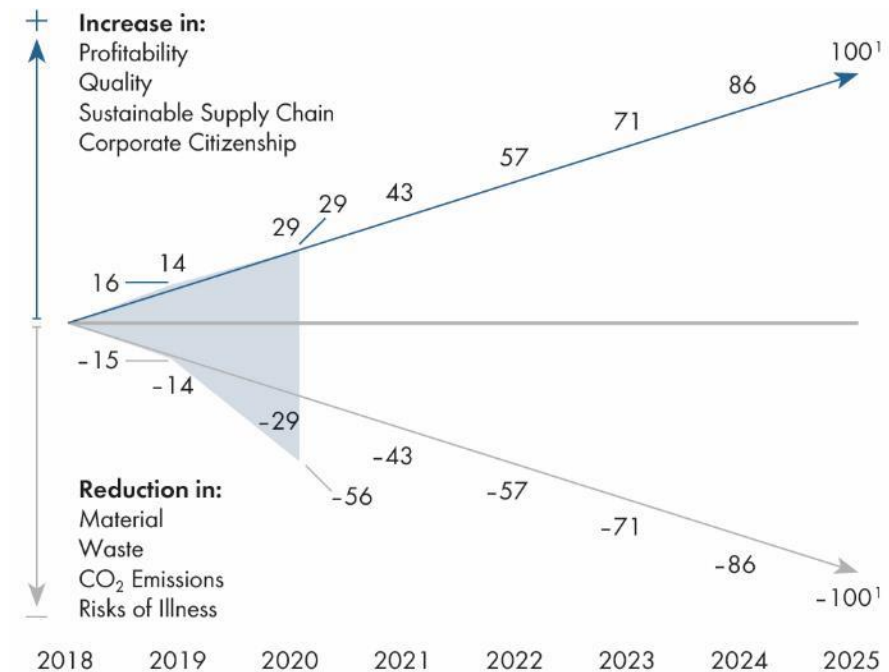


"The risk that companies will talk up ESG factors in financial statements means that investors need to be conducting research into the credibility of corporations' claims. But just because a project or company is cleantech doesn't mean that it automatically meets ESG criteria."

Forbes.com<sup>1</sup>

This is why sustainability is not only at the center of SMA's strategic goals – we have also defined clear and measurable KPIs for our sustainability performance on a company and product level.

SMA Company KPIs and Performance achieved



> We clearly show SMA's sustainability performance – both on the basis of many individual key performance indicators and in the overall view of the interaction of all factors based on an overarching sustainability key figure.

1. <https://www.forbes.com/sites/miriamtuerk/2020/10/01/esg-investing-boom-is-bullish-for-cleantech/#4d8a1ed13648>

1. Planned level of target achievement by 2025 in %

# We live sustainability in all areas of the company

## **SMA is committed to international standards, ...**

We have signed the UN Global Compact and respect the “Business Principles for Countering Bribery” of Transparency International.

## **... zero emission goals, ...**

Energy supply at SMA headquarters is already CO<sub>2</sub>-neutral. We will join the Carbon Disclosure Project<sup>1</sup> in 2021, enforce our efforts to become CO<sub>2</sub>-neutral on a global base, and report even more transparently.

## **... high ESG rating performance ...**

Our ESG engagement and reporting have resulted in an AA ESG Rating by MSCI and a Prime Status Rating by ISS ESG.

## **... and eco labeling.**

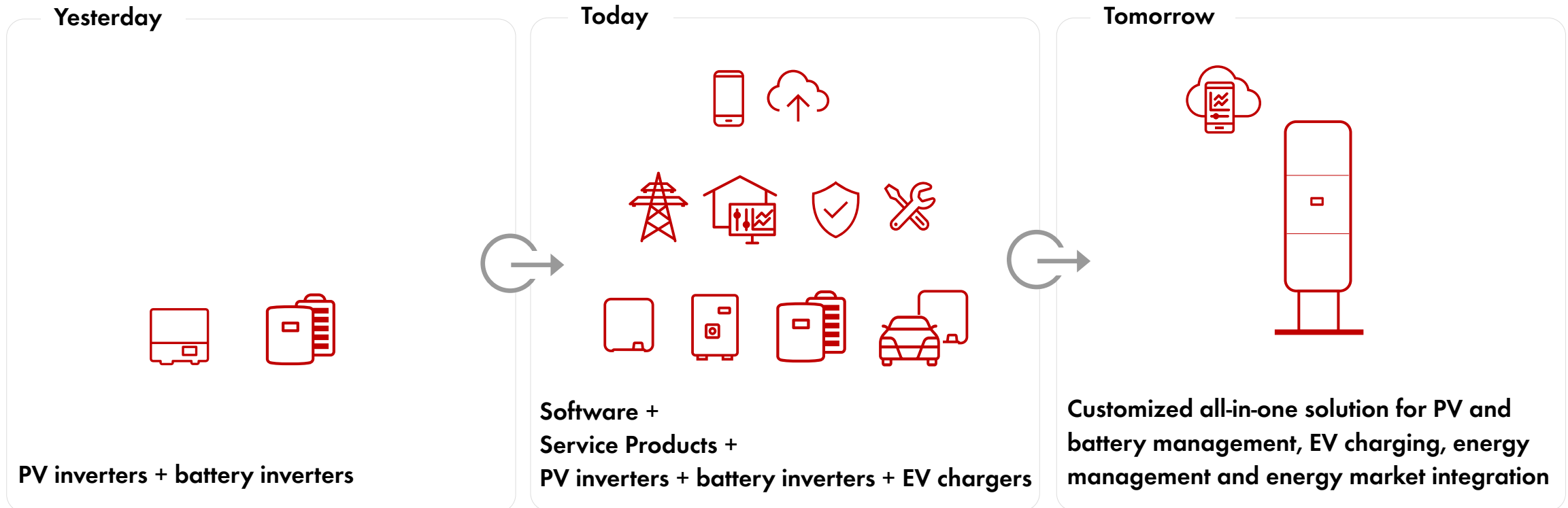
SMA supports the EU initiative to develop a uniform eco-design directive and energy efficiency labeling for PV systems.



Our unique system expertise enables SMA to develop an all-in-one solution to decisively differentiate from our competitors



### SMA offering for home and business applications



> We will offer our customers an all-in-one solution customized to their individual needs that removes system complexity.

# SMA core business – SMA Energy Systems for all customer groups



## Home Solutions

The SMA Energy System Home enables private households to generate, store and manage solar energy.



## Business Solutions

With the SMA Energy System Business, companies can substantially reduce their energy bills.



## Large Scale & Project Solutions

The SMA Energy System Large Scale secures future-proof investments for project developers, investors and PV system operators.



# EV charging becomes an integral part of SMA's offering



**EV charging for businesses and fleets**  
Products, planning, installation and servicing of/for company charging infrastructure



**Energy management and services**  
E.g. managed reduction of peak load to reduce costs of energy and investments



**EV charging solution at home**  
The SMA EV charger enables fast, reliable and cost-effective charging with maximum use of solar power.

> **SMA combines the competencies of different entities to offer holistic solutions based on the open ennexOS platform.**



# O&M business develops successfully and provides for steady income



SMA offers comprehensive Operation & Maintenance Services for PV power plants and battery storage projects, covering all inverter brands and all parts of the plant.

- Major mandates won in the U.S. and EMEA in 2020; organic growth by >20%
- Total assets of 4.8 GW under management
- This will make SMA #5 of the top global providers in 2020<sup>1</sup>
- Addressable Market size of 400 million Euros expected for 2021<sup>2</sup>

1. Wood Mackenzie 2019 Global PV Operations & Maintenance Report + SMA estimates

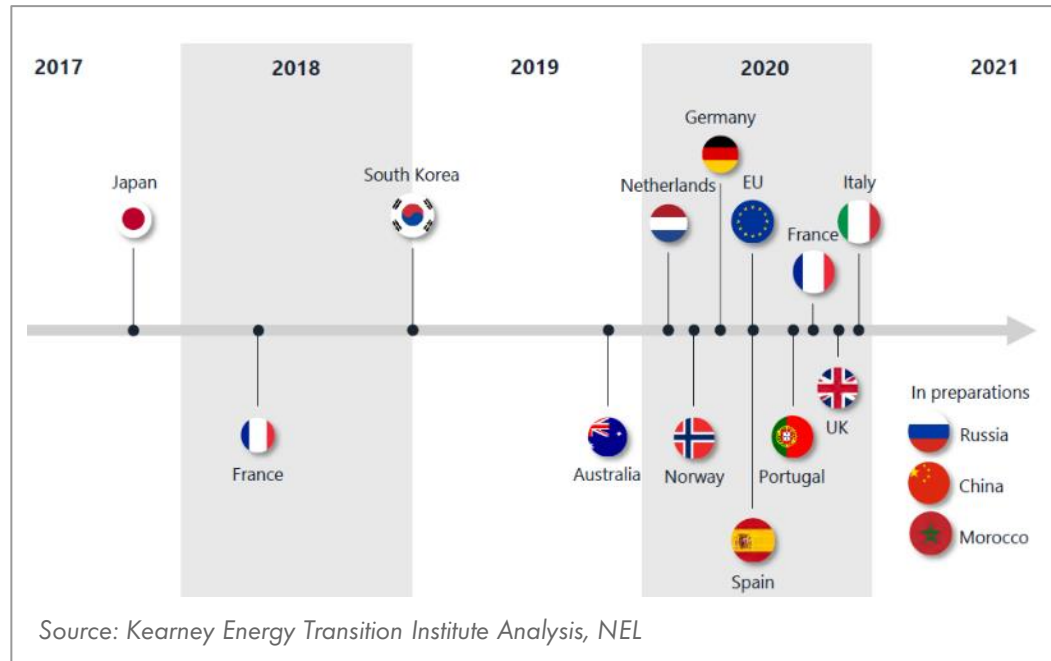
2. Total addressable market of PV power plants that are not yet or no longer under contract, selected countries addressable by SMA; SMA estimates



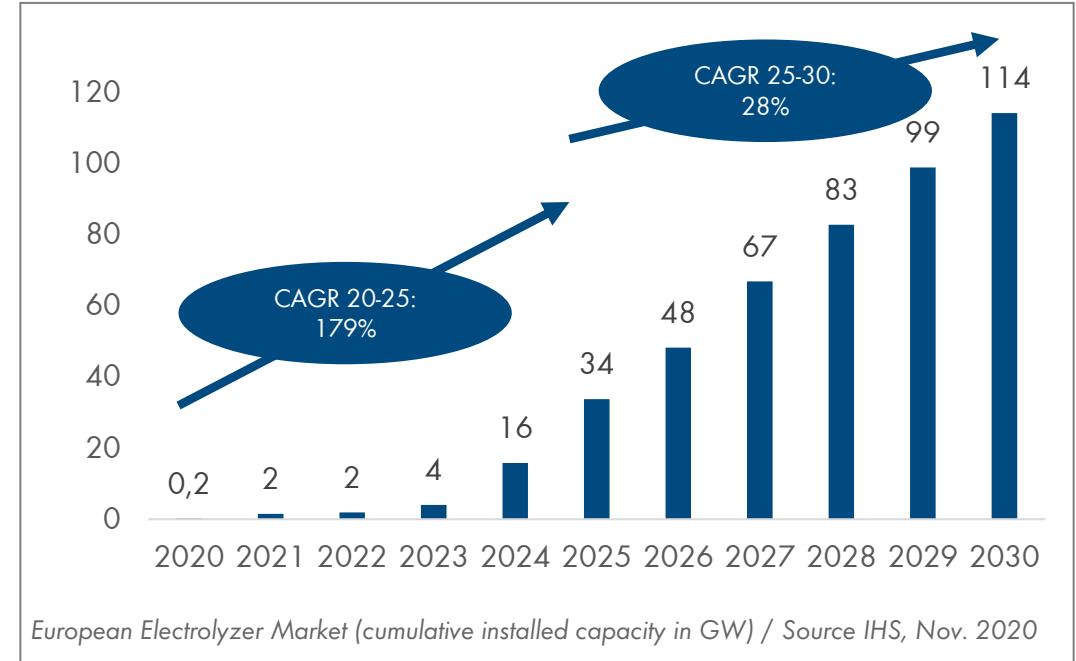
# Power-to-Gas – Market potential has become serious



## Multiple countries publishing (green) hydrogen strategies

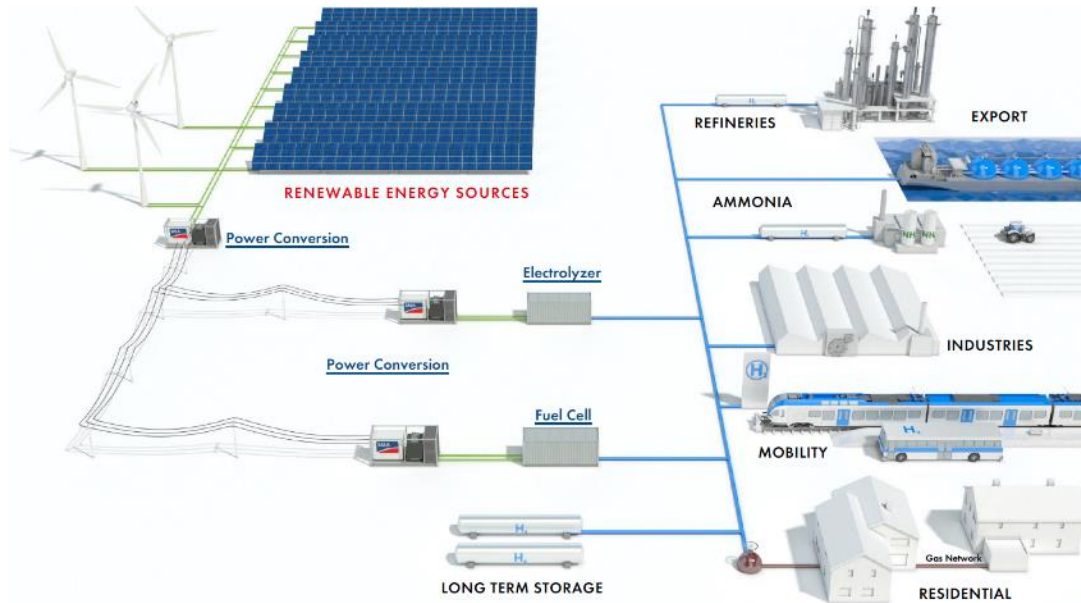


## Anticipated European Electrolyzer Market Development (GW)



- Green hydrogen will become a major clean energy carrier in a world struggling to limit global warming.
- The market is now being driven by serious political will and substantial funding.
- We will see a high growth dynamic with a comparably low installed base through 2025 but significant volume growth after that.

# Power-to-Gas for SMA is not the “latest fashion”, but rather a consistent enhancement of our strategy



Decarbonization requires CO<sub>2</sub> neutral energy carriers



Growing share of renewables requires storage



Green Hydrogen will soon become economically feasible



SMA is well positioned as early mover in an upcoming mass market

SMA is well positioned to participate in this new upcoming growth market, as

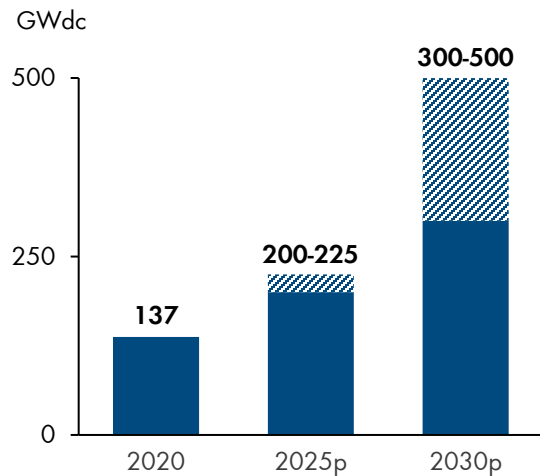
- additional renewable capacities are required for the envisaged increase of green hydrogen production, and
- our offering will be vital to optimize electrolyzer performance & functionality.

Both factors will contribute to the optimization of green hydrogen production and thereby increase its economic feasibility.

# SMA is perfectly positioned to profit from long-term megatrends

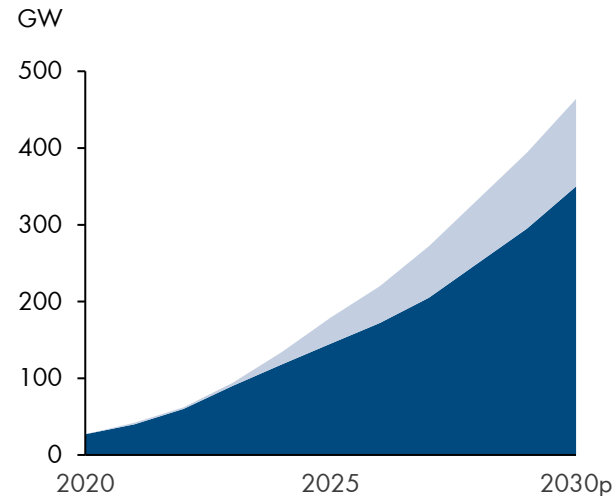


**Annual PV Capacity Additions**  
by scenario<sup>1</sup>



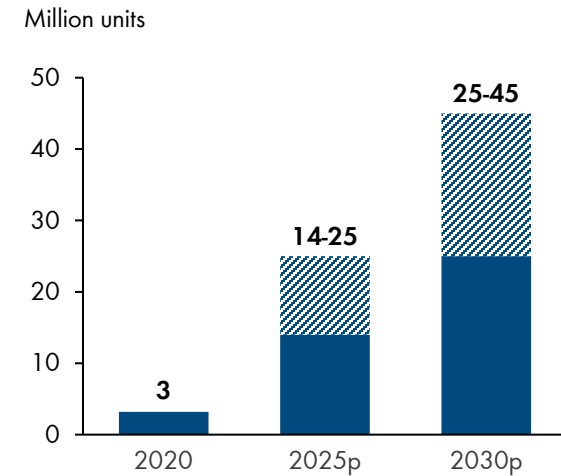
Zero carbon policies, electrification of additional sectors and strong growth in primary energy demand drive expansion of PV capacity.

**Cumulative Global Storage Power<sup>2</sup>**



High share of renewables results in increased volatility and requires capacity balancing and optimization through battery and hydrogen storage systems.

**Annual Electric Vehicle Sales**  
by scenario<sup>3</sup>



The annual electric vehicle market is expected to grow tenfold until 2030. Correspondingly, the expected average year-on-year growth rate for the EV charger market is at more than 30%.

1. SMA Market Model Q1-2021, IRENA (Edition:2020) Global Renewables Outlook: Energy Transformation 2050, IEA (Edition: 2020) Global solar and coal-fired installed capacity by scenario

2. Bloomberg Energy Storage Outlook 2019, small and utility scale batteries, IHS, Nov. 2020

3. IEA Global EV Outlook 2020; EV-Volumes.com



# Financials & Guidance

Presented by Ulrich Hadding



# Sales grew by 12% and profitability improved significantly in 2020



## Preliminary key financials<sup>1</sup> (in €m)

	2019	2020e	Change
<b>MW sold</b>	<b>11,409</b>	<b>14,416</b>	<b>26%</b>
<b>Sales</b>	<b>915</b>	<b>1027</b>	<b>12%</b>
<b>Home Solutions</b>	<b>240</b>	<b>264</b>	<b>10%</b>
<b>Business Solutions</b>	<b>296</b>	<b>293</b>	<b>-1%</b>
<b>Large Scale &amp; Project Solutions</b>	<b>379</b>	<b>470</b>	<b>24%</b>
<b>Gross margin<sup>2</sup></b>	<b>18%</b>	<b>16%</b>	
<b>EBITDA<sup>2</sup></b>	<b>34</b>	<b>72</b>	<b>109%</b>
<b>Depreciation</b>	<b>46</b>	<b>44</b>	<b>-5%</b>
<b>EBIT<sup>2</sup></b>	<b>-12</b>	<b>28</b>	<b>n.m.</b>
<b>Net result<sup>2</sup></b>	<b>-9</b>	<b>28</b>	<b>n.m.</b>
<b>Net cash</b>	<b>303</b>	<b>226</b>	<b>-25%</b>
<b>Net CapEx (incl. R&amp;D)</b>	<b>28</b>	<b>39</b>	<b>41%</b>



## Comments

- 2020 Sales increased by 12% with strong growth in the Home Solutions and Large Scale & Project Solutions segments. Business Solutions sales decreased slightly due to price decline and postponed investments in key markets as a result of the COVID-19 crisis.
- Gross margin was below 2019 level due to one-time effects in Q4 2020.
- EBITDA improved significantly in 2020 driven by higher sales and improvements in our product portfolio. Our profitability was impacted by positive and negative one-time effects in Q4 2020.

	2020e			
	Q1	Q2	Q3	Q4
<b>Sales</b>	<b>288</b>	<b>226</b>	<b>259</b>	<b>254</b>
<b>Gross margin<sup>2</sup></b>	<b>17%</b>	<b>22%</b>	<b>20%</b>	<b>7%</b>

# Strong EBITDA drives strong gross cash flow in 2020



## Preliminary group balance sheet<sup>1</sup> (in €m)

	31.12.2019	31.12.2020e	Change
<b>Non-current assets<sup>2</sup></b>	299	329	10%
<b>Working capital</b>	425	377	-11%
<b>Other assets</b>	65	108	65%
<b>Total cash</b>	318	237	-25%
<b>Shareholder's equity</b>	417	439	5%
<b>Provisions<sup>3</sup></b>	153	167	8%
<b>Trade payables</b>	175	144	-18%
<b>Financial liabilities<sup>4</sup></b>	15	11	-23%
<b>Other liabilities<sup>2,3</sup></b>	347	290	-17%
<b>TOTAL</b>	<b>1,107</b>	<b>1,051</b>	<b>-5%</b>



## Preliminary cash flow (in €m)

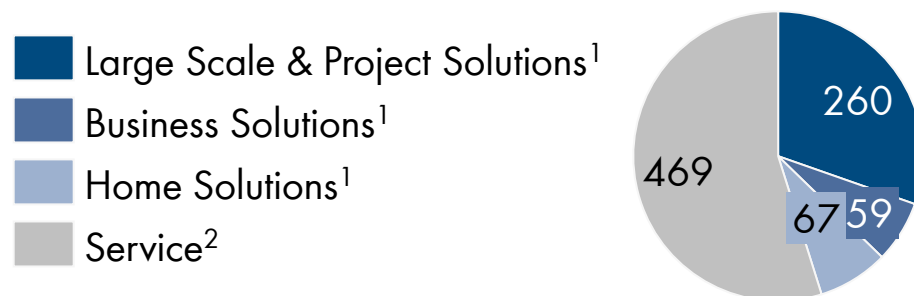
	2019	2020e
Net income	-9	28
Gross cash flow	31	76
Cash flow from operating activities	-1	-31
Net capex	-28	-39
<b>Free cash flow (Adj.)</b>	<b>-29</b>	<b>-70</b>
Cash inflow from divestitures	0	2
Net investments from securities and other financial assets	111	0
<b>Free cash flow (IFRS)</b>	<b>82</b>	<b>-68</b>

# Order backlog for products remained on a high level with €386m at the end of 2020



## Order backlog by segment (in €m) and region (in %)

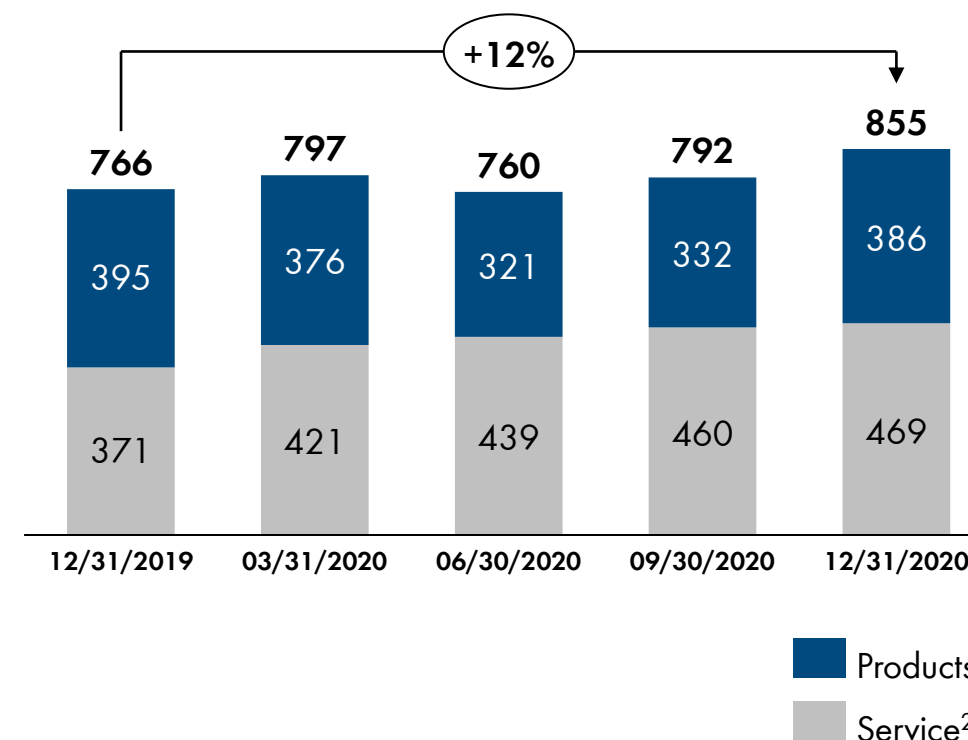
Total order backlog: €855m (Dec. 31<sup>st</sup>, 2020)



## Product order backlog by regions (in%)



## Order backlog development (in €m)

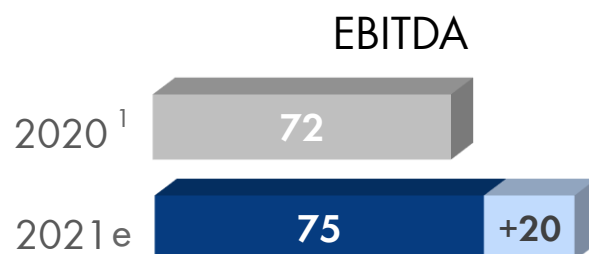
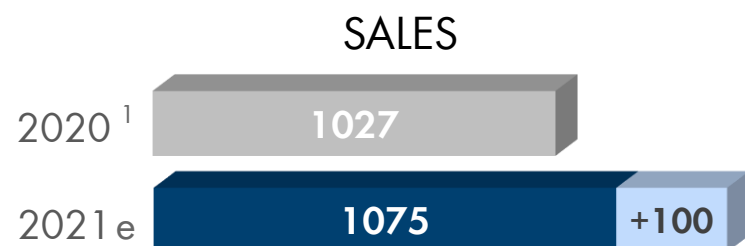


> Product order backlog at end of 2020 secures approx. 35% of 2020 annual sales guidance.

# Management expects continued sales and profitability growth for 2021



## Guidance 2021 (in €m)



**2021**

CapEx (incl. R&D & leasing) <sup>2</sup>	c. €60m
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Depreciation / amortization	c. €45m
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## Management comments

- In 2021, management expects sales growth in all three segments.
- SMA strives to increase market share in all key markets.
- 2020 order intake of nearly 1,2 billion Euros and high level of product order backlog at beginning of 2021 help secure our sales guidance.
- Price pressure is expected to continue for all segments in 2021.
- Continuous improvement of our product portfolio and cost savings initiatives will drive sustained profitability in 2021.

# Specialist Presentation





# E-Mobility

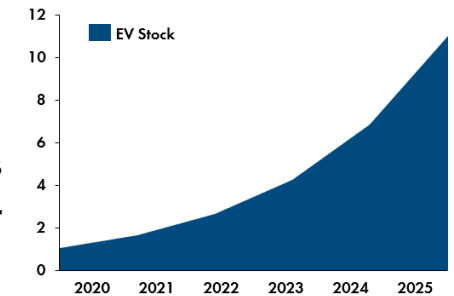
Presented by Lisa Spangenberg, Product Manager

# E-Mobility has entered mainstream in 2020



**37.6%** of Germans opt for an electric vehicle for environmental reasons<sup>1</sup>

The number of EVs in the EU is expected to **increase by factor 10** within the next 5 years



In September 2020, electric vehicles accounted **for 1/4 of all new registrations** despite COVID-19-related market decline of 29% in EU



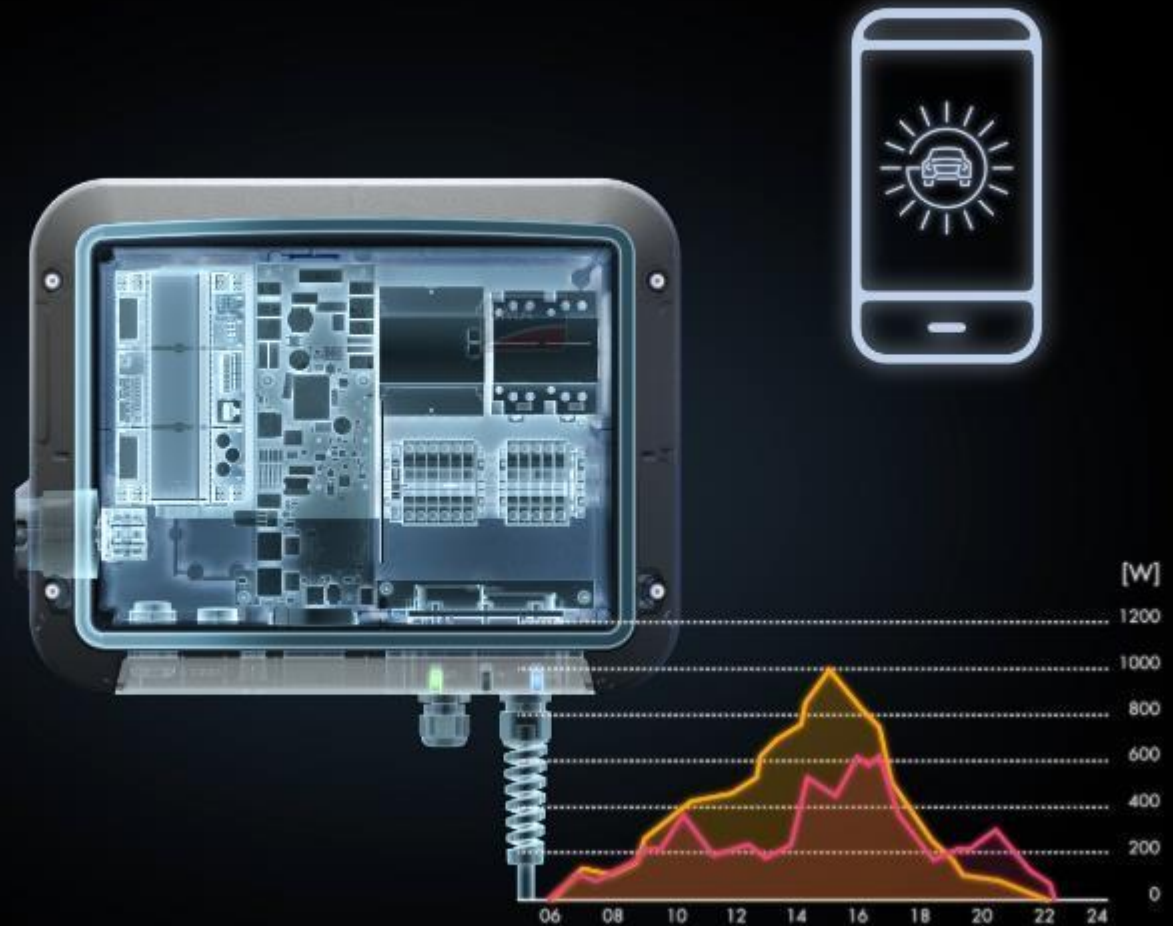
**Reduction of the charging costs** by 2/3 by using the self-generated PV electricity



# SMA EV Charger

**Refuel with solar power**  
Intelligent. Fast. Cost-effective.

- Maximum utilization of solar energy
- Economical charging
- Increased security
- Deep system integration
- Fast & automated service
- Everything from a single source



# Why the SMA EV Charger is one of our most successful products after just a few months



Strong initial demand, boosted by several incentives



Cross-selling for SMA system components



Simultaneous addressing of new and existing installations



Dedicated production line to significantly boost capacity



Green electricity tariff complements holistic system offering

# Product innovations – Positioning SMA as the leading premium home charging provider for solar applications



## Detection of major trends

Joining the emotions and desire of the automotive sector with sustainability and cost savings



## Seamless system integration

The perfect fit to the SMA Energy System; enabling installers to sell the most exciting story to date



## Focus on User Experience

Direct customer interaction via SMA Energy App for more brand visibility with end-customers



## Outstanding product

Class-leading feature-set benefitting both the installer and the end customer

The perfect way to exemplify the value of the SMA Energy System Home and cement SMA as leading premium solution provider



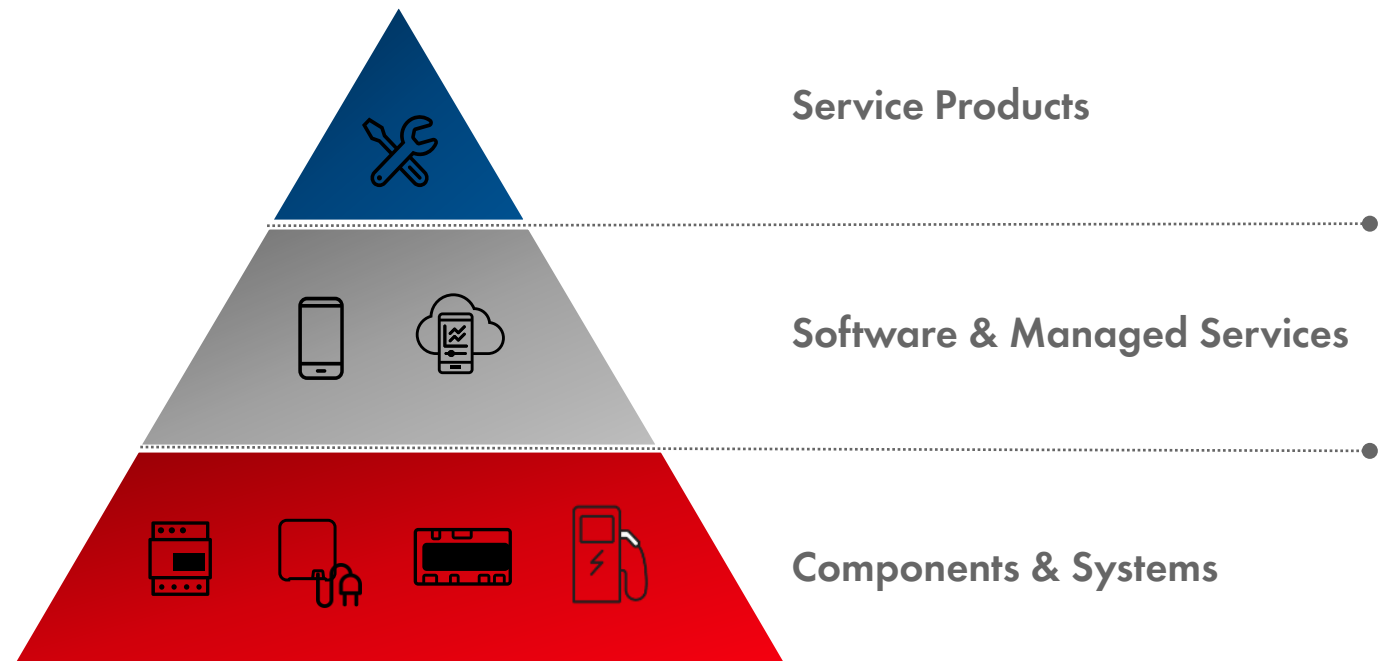
# EV charging competencies within the group as enabler for a holistic system offering



## Utilizing SMA Group synergies



## Holistic system offering

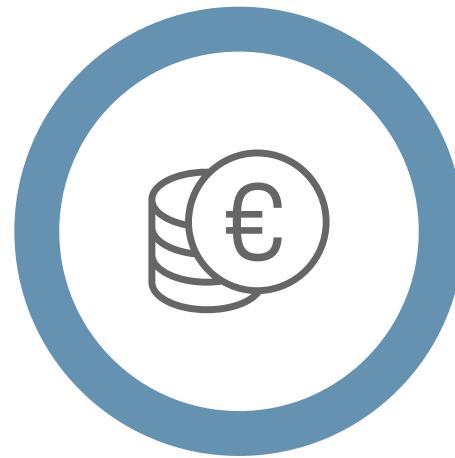


# New EV-centric opportunities strengthen SMA's end-customer access and increase reach of components



## **New sales channels/ partners**

Increase the reach of SMA component and solutions business, as well as significantly strengthening end-customer access for future business opportunities.



## **Up-selling with e-products**

Successful launch of the digital product upgrade via the SMA eShop, building on the modular nature of the ennexOS platform.



## **Pure digital services**

Use of monitoring, forecast and control APIs<sup>1</sup> for 3<sup>rd</sup> party smart charging applications without hardware in the loop.

# Future developments match SMA key competencies

## **Bi-directional charging**

Significant boost the attractiveness of the SMA Energy System through V2H and V2G applications in Home and Business segment.

## **Government incentives**

Covid-19 economic aid with a focus on sustainability, reducing CO<sub>2</sub> emissions and expanding renewable energies including charging infrastructure.

## **DC charging**

Aligns perfectly with our main competences and core inverter business.

## **Intelligent charging infrastructure**

The increasing share of volatile energy generation promotes the need for intelligent charging infrastructure to maintain stability and reduce costs.





# Backup

# Managing Board and shareholder structure



## Managing Board



**Dr. Jürgen Reinert, CEO**

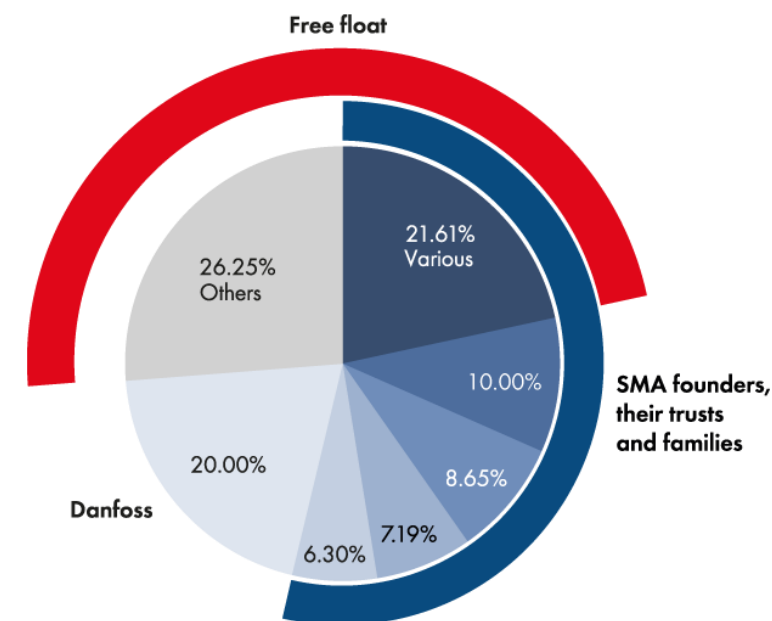
Sales & Service, Technology,  
Operations, Business Units



**Ulrich Hadding, CFO**

Finance, HR, Legal, Investor Relations

## Shareholder Structure<sup>1</sup>



- No pre-emption rights or other restrictions





**Thank you  
for  
participating!**

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