



CAPITAL MARKET DAY ANDRITZ

DOMENICO IACOVELLI | VIENNA | SEPTEMBER 15, 2021

CAPITAL MARKET DAY ANDRITZ

AGENDA

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- 2 TECHNOLOGIES & PRODUCTS
- 3 MARKET ENVIRONMENT
- 4 CORE STRATEGY
- 5 STATUS OF RESTRUCTURING
- 6 OUTLOOK 2021



FORMING THE FUTURE

SCHULER AT A GLANCE

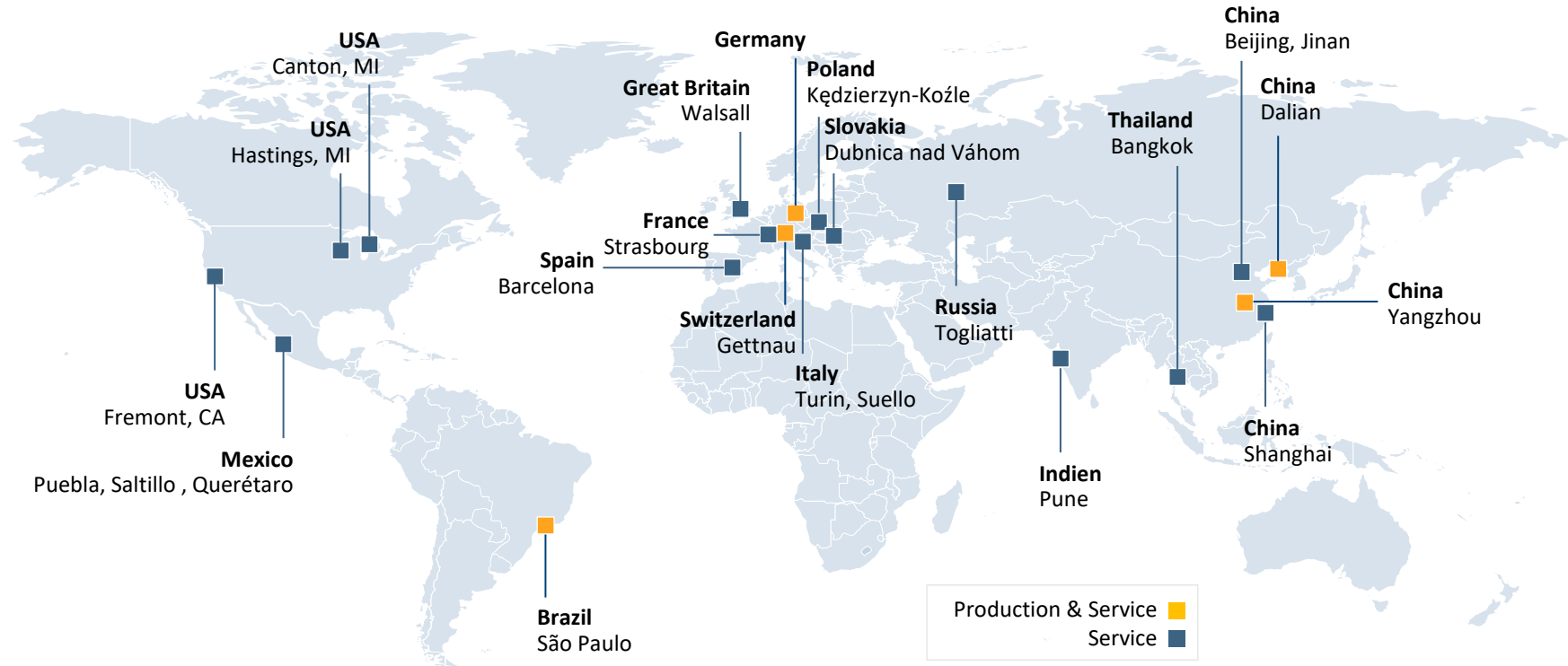
SCHULER AT A GLANCE

FACTS AND FIGURES

- Founded **1839** in Göppingen, Germany
- **Products:** Presses, automation and software solutions, dies, process know-how, and services for the entire metalforming industry
- Provider of **first-rate technology and innovative system solutions for the digital transformation** of forming technology
- **Top-tier customers:** Car manufacturers and their suppliers, forging, household, household appliance and electronics industries, mints



SITES WORLDWIDE



FORMING THE FUTURE

TECHNOLOGIES & PRODUCTS

MACHINES AND TECHNOLOGIES

CUSTOMER CENTRIC INNOVATION AND SUSTAINABILITY



Pressure Controlled Hardening



Hot Stamping Press



Efficient Hydraulic Forming



C-Frame Press



SUSTAINABLE
FORMING SOLUTIONS



Mechanical Press



Transfer Press



ServoDirect Technology



TwinServo Technology



Transfer Press



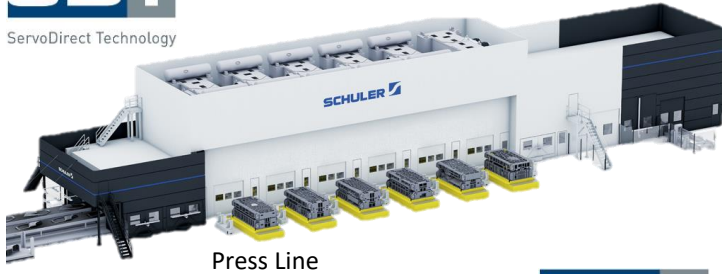
ServoDirect Technology

MACHINES AND TECHNOLOGIES

PROOF OF CONCEPT AT SMART PRESS SHOP | HALLE (SAALE)



ServoDirect Technology



Press Line



SUSTAINABLE
FORMING SOLUTIONS



DynamicFlow Technology



Easy to Stop Technology



ServoDirect Technology



Tryout Press



Check to Flatten Technology



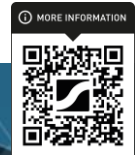
Laser Blanking Line



Stop to Drop Technology

Digital Suite Solutions

- Visual Die Protection
- Monitoring Solutions
- Track and Trace
- Analytic Solutions
- DigiSim
- Schuler Connect



<https://digitalsuite.schulergroup.com/en/>

THE “DIGITAL SUITE” CONSOLIDATES ALL DIGITAL PRODUCTS

- Schuler is **taking the digital transformation of metalforming technology to the next level** and **pooling its entire portfolio of digital products** under the new umbrella brand “**Digital Suite**” with immediate effect
- All Digital Suite solutions offer customers **added value with regard to unit costs and Overall Equipment Efficiency (OEE)**
- Current and potential customers can find information more easily about our digital solutions and contact our specialists via a **dedicated Digital Suite website: <https://digitalsuite.schulergroup.com/>**

Visual Die Protection has left the introduction phase and is now established on the market

17 systems sold, **10** systems already in operation on 8 different types of Schuler as well as competitor machines in 12 different locations in Germany and Poland

Finalist
Schuler Pressen

Visual Die Protection as platform for additional solutions

Various connecting products like precision cam triggering and **Machine Vision Analyzer** have been developed and sold along with the VDP system

The vendor agnostic system can be used on Schuler Presses as well as competitor machines

Visual Die Protection is successfully running on machines from different **competitors** at customer sites in Germany and Poland

Visual Die Protection

17 Systems Sold, 10 in Operation

Digital sales channel successfully introduced

Requests for Quotations received via **Microsite**
<https://digitalsuite.schulergroup.com/en/index.html> from international customers

Webinars have been established as first point of contact to many interested Customers

Online Seminar “Die monitoring in the press shop” with **46 participants** as the start of a series of webinars on all products of the digital suite

International sales activities have been started

First VISUAL DIE PROTECTION system running in **Poland**, hot project offered to **Turkish** stamping company, mobile systems for demonstration and test days at customer site are being produced for **USA** and **Brazil**, system will be presented at the FABTECH expo in Chicago

Track & Trace has become a lighthouse product with ready to quote development time less than **12** months first successful installation at Smart Press Shop in Halle (Saale)

Comprehensive Southbound/Northbound Connectivity

Interfaces to Lines **PLC's** and customers **ERP/MES**

Full Transparency about the products state, quality and production data

High customers interest in different Markets and Areas potential product for all Automotive **OEM's**

Interest and requests in new areas of **E-mobility** for rotor/stator sheets and bipolar cells (stamping & cutting)

Track & Trace

Strong Sales Pipeline

User centered design for front-end development

Press Shop relevant **Dashboards** and **Analytic functions** for detailed drill down.

Digital Integration of Coil Data from supplier

Additional **Sensors** (thickness, roughness, lubrication, ...) to evaluate the physical properties of the processed **Material**

Full integrated **Lasermarking** and Scanning of the **Part's ID** with admission for outer skin parts (no visibility after painting)

High **reliability** with integrated error correction.

Cloud solutions are standard in nearly all new machines of Division Industry

E.G. TSD4-2000 Mülhoff, MC 300 MEPA, Smartline Feintool Jessen, TSD4-2000 Küçükoglu, RSE 800 Kernl

Cloud Solutions

> 45 Systems Sold

First Edge Connectivity Project

9 Brownfield Machines

Implementation of Edge Connectivity on 9 machines in Siemens plant in Nuremberg

SE4-200, SP 250, HUQ 450, 3 x NINA 20, 2 x NUPA, NNb

Cloud Solutions will be implemented also in the newest press line in the Smart Press Shop

Machine Data of the Smart Press Shop available anytime and everywhere

The Schuler Service Hotline has also access to the data and can therefore better support the customers

Already one system installed in USA MSD2-800 e

First system for China planned for 2021 TST 1600



MARKET ENVIRONMENT

CAR MARKET STRONGLY IMPACTED BY COVID-19 IN 2020 RECOVERY IN 2021, BUT PRE-CRISIS LEVEL STILL NOT REACHED



- The **global automotive industry** was hit hard by the **COVID-19 pandemic** in 2020.
- In the second half of the year, **demand for cars in China** grew strongly again.
- In total, **car sales fell by 15% to 75 million vehicles in 2020**.
- **An upturn in the car market** is forecast for **2021**: the market is expected to grow by **14% to 86 million vehicles**.

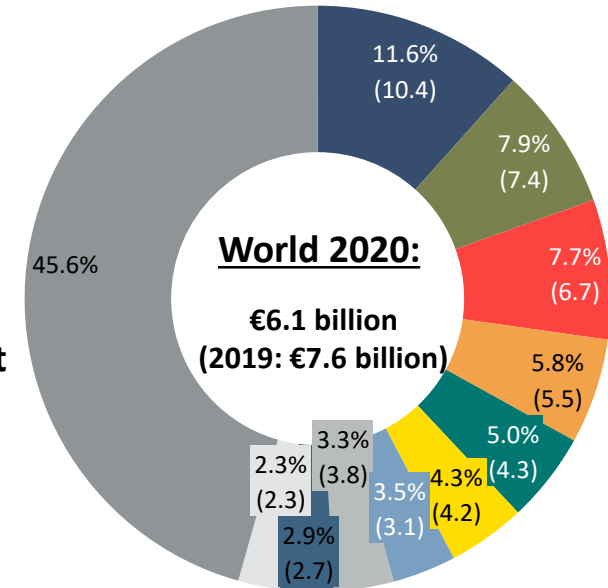


BUT: The pre-crisis level of 2019 will not be reached until 2022. China remains the only exception.

GLOBAL MARKET FOR MECHANICAL AND HYDRAULIC PRESSES

TOP 10 COMPANIES DOMINATE THE MARKET

- The **press market declined by 20%** in 2020
- The COVID-19 pandemic, global recession and restrained investment in the automotive industry all contributed to this
- The top 10 companies dominate the global market with a market share of 55% (€3.3 billion)
- **Schuler is the market leader (11.6%) and expanded its market share.** Aida/Japan (7.9%) and Jier/China (7.7%) are second and third in the global rankings



incl. servo and conventional presses

Schuler

2021: GLOBAL DEMAND FOR LIGHT VEHICLES

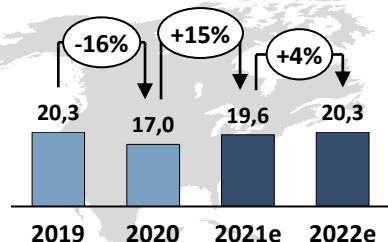
RECOVERY STILL LOOKS DURABLE

in mil. Units

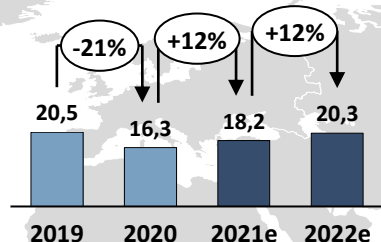


■ June Update 2021

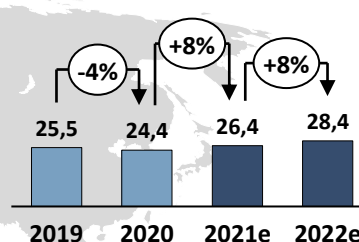
North America



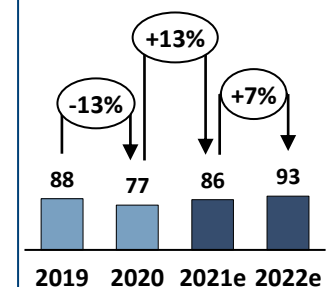
Europe*



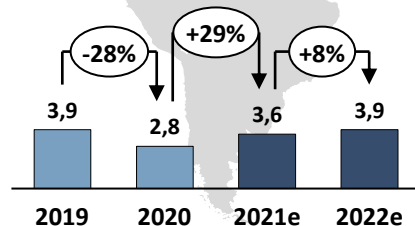
China



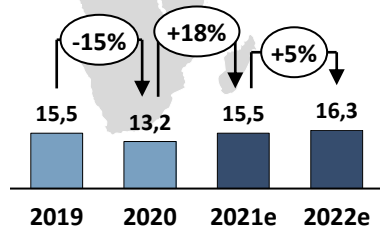
World



South America



Asia/Pacific**



Forecast incl. Cars + Light trucks

*incl. Russia, Turkey, UK, Korea, India, TW 15.09.2021

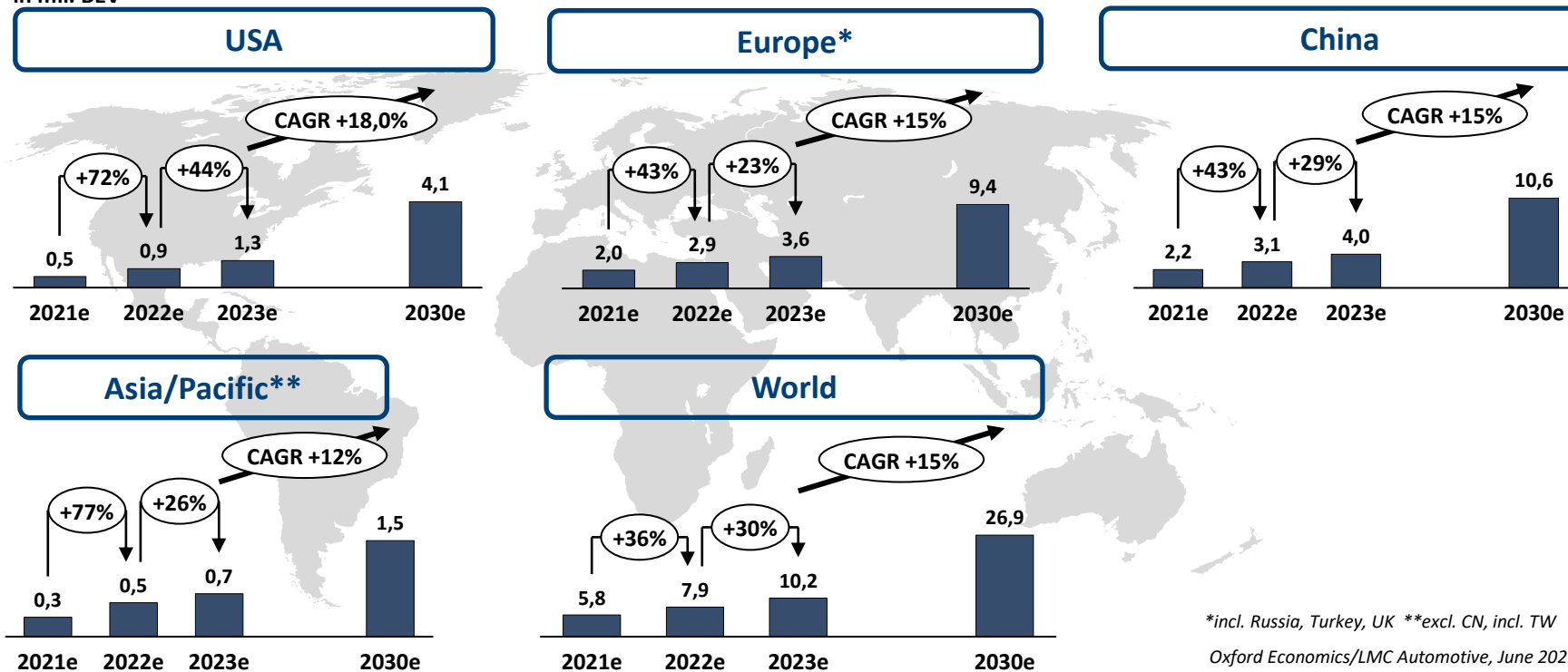
Oxford Economics/LMC Automotive, June 2021

The chance of a repeat of the 2020 lockdowns has receded – vaccination programs imply that an increasing number of markets will be resilient. Direct COVID-related plant shutdowns are unlikely to return. Selling can happen in safer dealership settings and online. Personal mobility is in demand (for now). Shortages remain a risk – inventories depleted with risk to sales and more production disruption.

OUTLOOK 2030: GLOBAL BATTERY ELECTRIC VEHICLE (BEV) SALES

DEMAND – STRONG INCREASE IN ALL MARKETS

in mil. BEV

 June Update 2021


*incl. Russia, Turkey, UK **excl. CN, incl. TW

Oxford Economics/LMC Automotive, June 2021

SUMMARY: DEVELOPMENT OF GLOBAL BATTERY ELECTRIC VEHICLE (BEV) SALES



- Demand for battery electric vehicles is growing strongly
- Worldwide demand for electric vehicles will increase by an average of **15% until 2030 (CAGR)**.
- The strong growth is mainly due to the numerous **subsidy programs** and the efforts to **achieve the set CO₂ targets**.
- Car manufacturers are investing almost exclusively in **electromobility**, partly due to the enormous success of Tesla.
- In **2030**, the largest sales markets for battery electric vehicles will still be **Europe (9.4 million BEVs)** and **China (10.6 million BEVs)**.



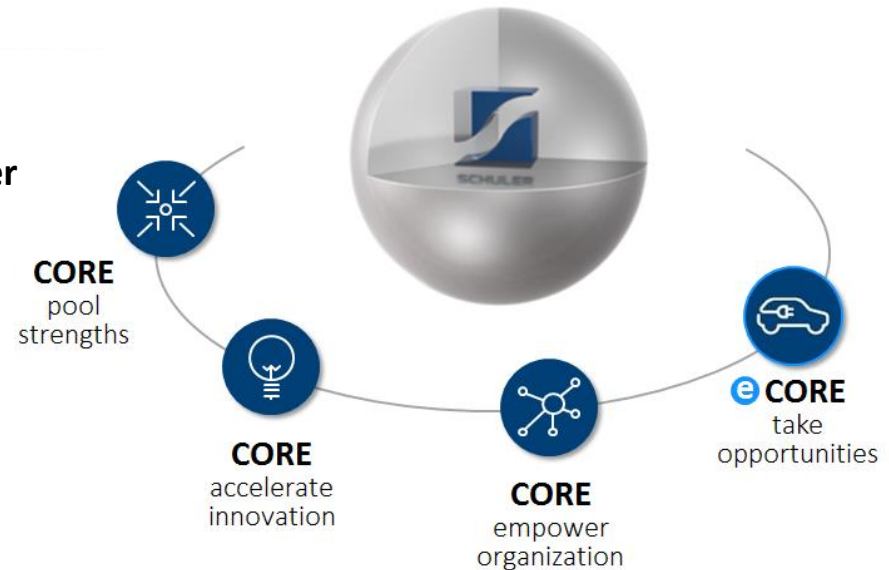


CORE STRATEGY

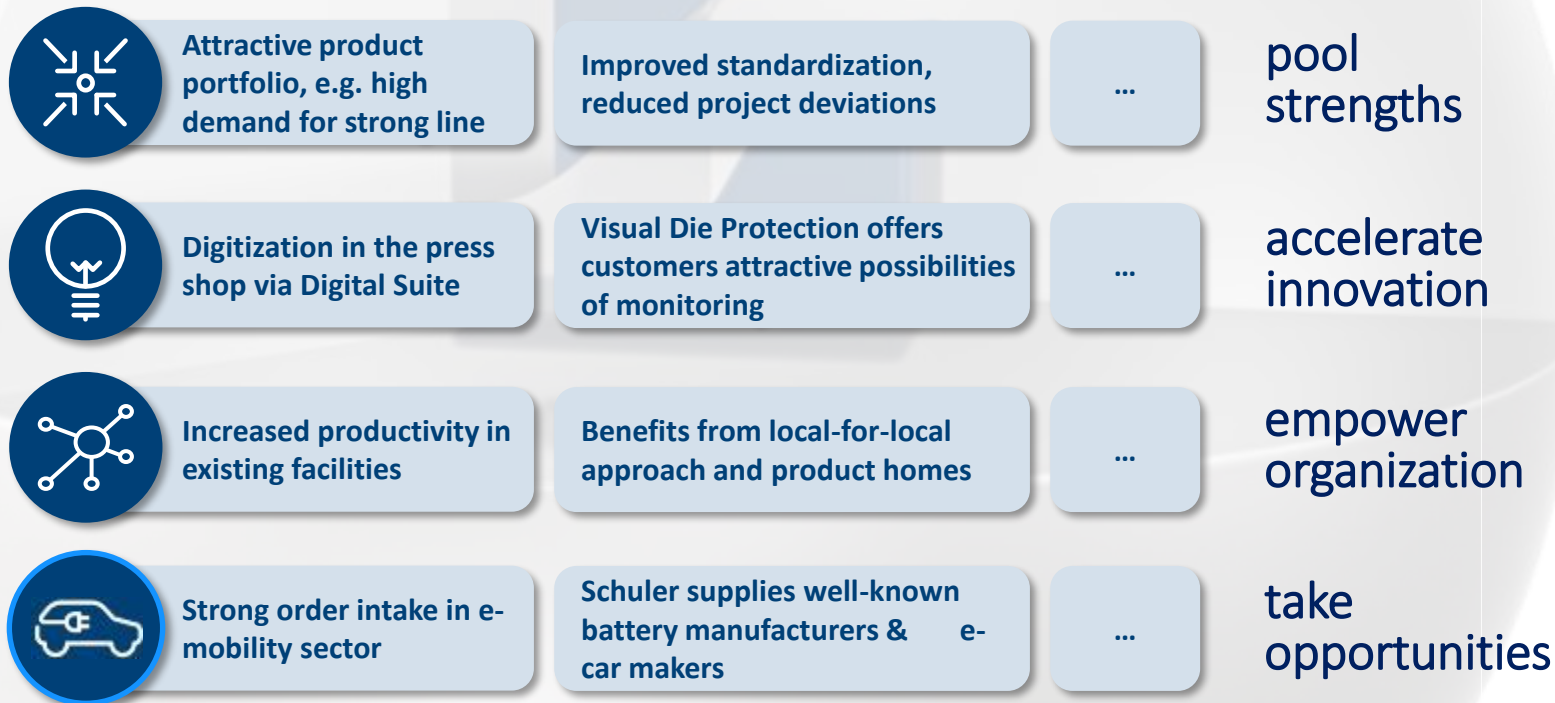
CORE | HOW WE AIM TO LEAD SCHULER TO NEW STRENGTH

FOCUS ON SCHULER'S CORE BUSINESS + OPPORTUNITIES IN E-MOBILITY

- Build **top-quality presses** (performance, quality,...)
- **State-of-the-art in innovation and technology**
- Product development **strictly aligned with customer and market needs**
- Development of **customer solutions offering best value for money** while being profitable for Schuler
- **Avoidance of over-engineering**
- Excellent project management
- Leadership which our employees can rely on
- **Reduction of cost overruns**

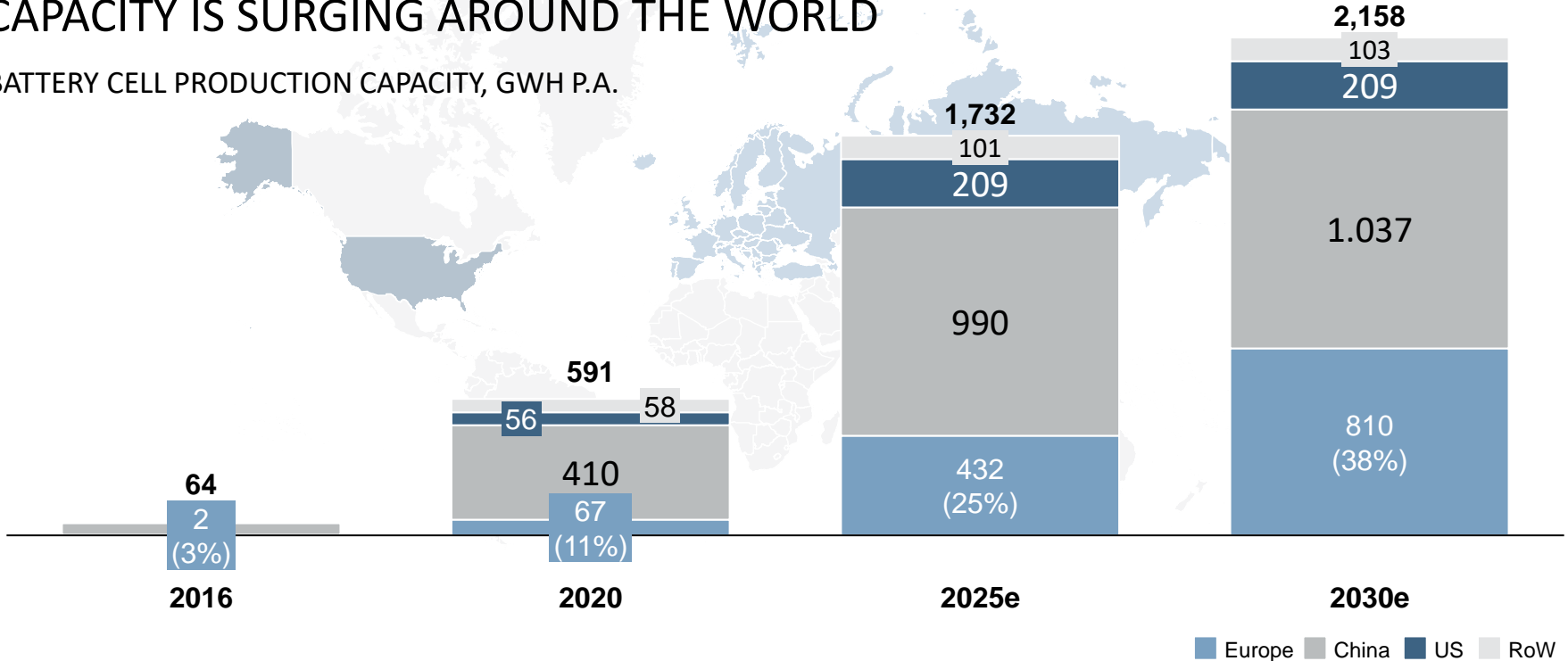


JUST TO NAME SOME ACHIEVEMENTS BASED ON CORE...



DRIVEN BY THE E-MOBILITY BREAKTHROUGH, BATTERY PRODUCTION CAPACITY IS SURGING AROUND THE WORLD

BATTERY CELL PRODUCTION CAPACITY, GWH P.A.



Source: McKinsey battery supply tracker (March 2021)

CORE | HOW WE AIM TO LEAD SCHULER TO NEW STRENGTH GROWTH OPPORTUNITIES IN E-MOBILITY

ELECTRIC MOTORS

	Prototypes	Series Production Dies	Machines
Axial-Flux Stator Lamination Stacks	✓	✓	✓
Stator Lamination Stacks	✓	✓	✓
Rotor Lamination Stacks	✓	✓	✓
Stator Carrier	✓	✓	Partner
Motor Housing	✓	✓	Partner
Rotor End Shields	✓	✓	Partner
Rotor Casting	✓	✓	Partner
Windings	✗	✗	✗
Shaft	Purchase Part	-	-
Bearings	Purchase Part	-	Presses
Assembly / Production	✗	✗	✗
Series Production	Joint Venture		

Source: Audi Mediacenter

BATTERIES

	Prototypes	Series Production Dies	Machines
Cylindrical Cell Housings	✓	✓	✓
Lids	✓	✓	✓
Prismatic Cell Housings	✓	✓	✓
Foil Pouch	✓	✓	✓
Cutting Electrodes and Separators	✓	✓	Self-Driven Die
Stacking Electrodes and Separators	✓	✓	Self-Driven Die
Cutting Conductor Tabs	✓	✓	✓
Busbars and flexible Cell Connectors	✓	✓	✓
Modul-Housing (Sheet Metal or Die Casting)	✓	✓	✓
Pack Housing (Sheet Metal or Die Casting)	✓	✓	✓
Electrode Coils	Purchase Part		
Cell Assembly	Schuler Know-how Build-up		
Windings and Z-Foldings	Schuler Know-how Build-up		
Cell Finishing	tbd.		
Modul und Pack Assemblys	tbd.		

Source: Porsche

Evaluating growth opportunities through horizontal and vertical integration

STATUS OF RESTRUCTURING

STATUS OF RESTRUCTURING

RESTRUCTURING PROGRAMS TAKING EFFECT

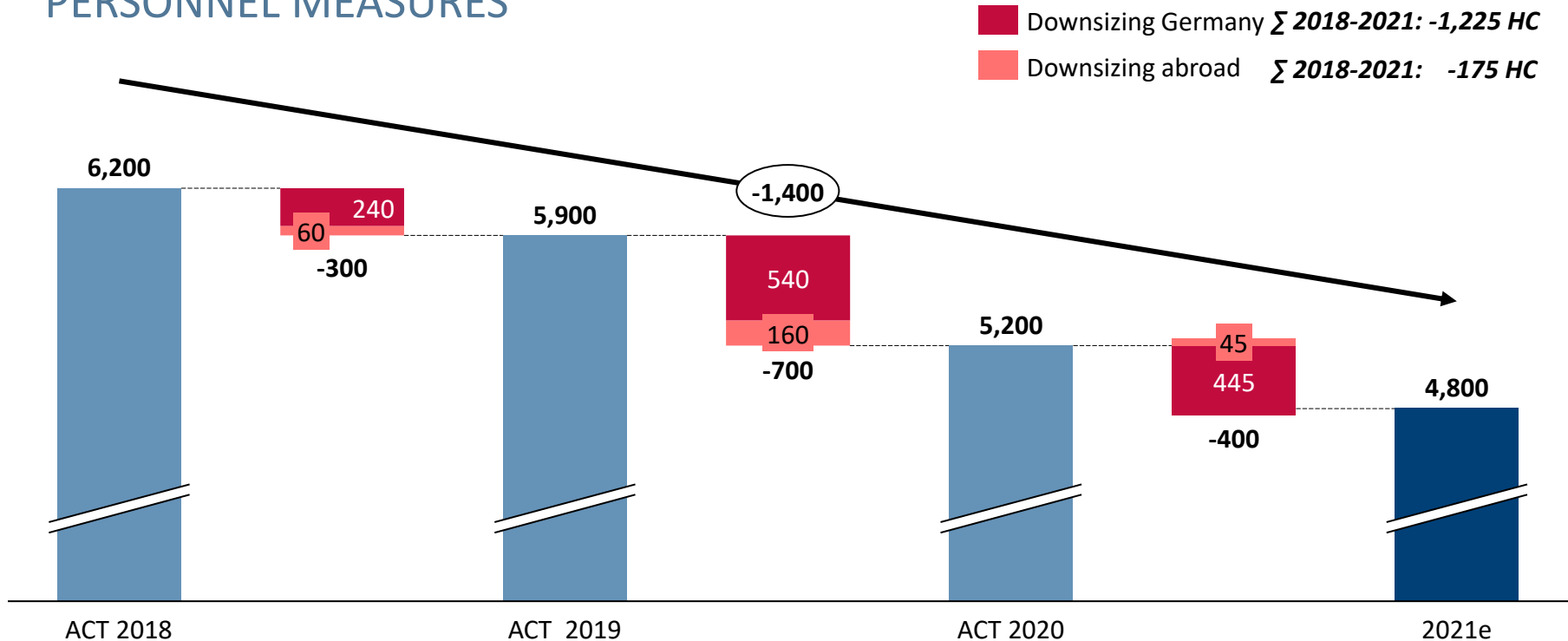
- With our **Future Concept** and the sale of the Body Panel business unit, Schuler already introduced **initial measures** to secure our future in **2019**.
- Due to the **sustained change in supply and demand structures** – strengthened by corona – these measures were not sufficient.
- Further steps were therefore necessary. We have extended our already ongoing Future Concept by size and speed:
 - Spin-off Business Unit Body Panel
 - Closure of PTW Weingarten
 - Downsizing of AWEBA / WVW to break-even €50 million
 - Reorganization of Hydraulic



- Streamlining of divisions and overheads
- International measures
- Product adjustments: Separation of non-profitable product groups

HEADCOUNT DEVELOPMENT OF SCHULER GROUP **WORLDWIDE** 2018-2021

PERSONNEL MEASURES



SALES AND GROSS EXPENSES 2021 COMPARED TO 2019

- Sales reduced by 21%
- **Gross Expenses reduced by 25%**
- Profitability (w/o NOI) despite lower sales increased by 285%
- **Break-even point reduced by more than 200 Mill. €**



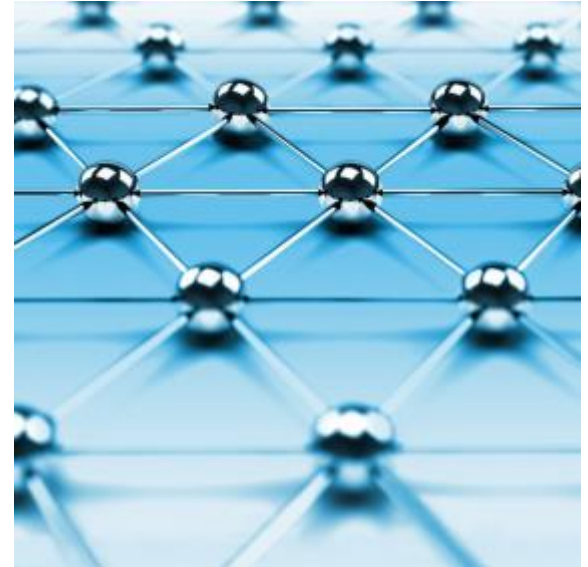
Basis for profitable growth in the future

OUTLOOK 2021

SETTING THE COURSE FOR STABILITY

WE HAVE ALREADY ACHIEVED A LOT

- With our **CORE strategy**, the **Fit for Growth structural program**, and the **Future Concept**, we have laid the foundations for a **stronger alignment of our product portfolio with market needs**, a faster time-to-market for innovations, and a **significant reduction in our cost base**.
- Schuler could only address the enormous additional challenges of the **COVID-19 pandemic** and **avert existential dangers** with the aid of these programs. Without them, we would not be able to face the future with confidence.
- We have also initiated **additional measures**:
 - Temporary measures, including use of short-time work
 - Limited capacity adjustments
 - Further streamlining of our infrastructure
 - Further reduction of product costs in order to make us more competitive
 - New products esp. in the new field of electrification



SITUATION ONLY STABLE AS OF 2022/23

FUTURE BUSINESS VOLUME IN 2021 STILL BELOW PRE-CORONA LEVEL

- **Fiscal year 2021 will continue to be challenging**; decisive action with regard to costs is essential to secure the company's future.
- **Implementation** of adopted **restructuring measures** are major focus of our activities in 2021.
- The **course of business** so far in **2021** gives us **reason to be confident**, especially the **development of order intake**.
- **Sustained stabilization of business** expected in **2022**, depending on course of the pandemic and economic recovery.



NEW ROADMAP 2022 - 2024

IMPROVE PROFITABILITY AND GROW BUSINESS VOLUME


- **Return to former business volume and profitability**
 - More competitive after restructuring
 - Benefit from e-mobility -> increase share up to 50%
 - Growing service to over 25%
 - Expand non-automotive products
- **Revenue growing towards 1.2 bn. EUR (w/o upside potential in the field of renewable energy) and step-by-step profitability improvement by at least 1%pt p.a. expected for the next few years)**

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FOR YOUR ATTENTION