

The background is a dark blue gradient with various financial and technological motifs. It includes a green bar chart with a red line graph, stacks of silver coins, and floating binary code (0s and 1s). A red and green network diagram is visible in the lower right. A solid cyan vertical bar is on the far right edge.

AT&S

WELCOME TO THE VIRTUAL

MARKET & TECH

UPDATE 2021



AT&S

MORE THAN AT&S **OUR STRATEGIES FOR** **THE FUTURE**

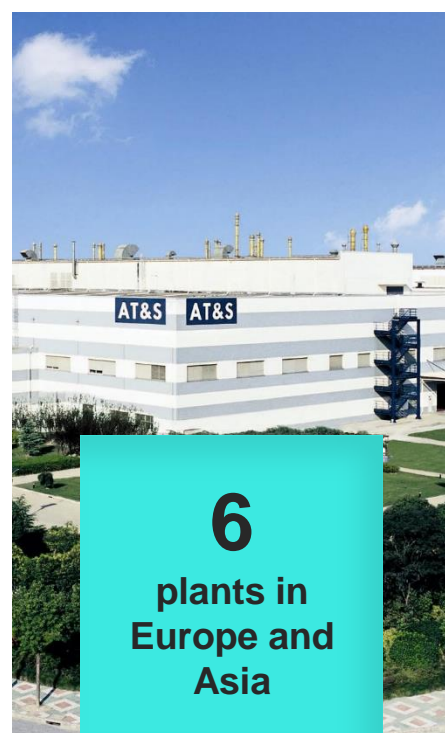
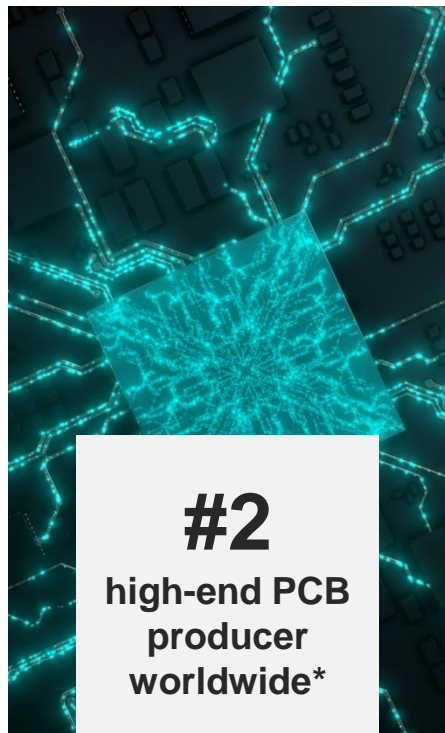


Andreas Gerstenmayer
CEO

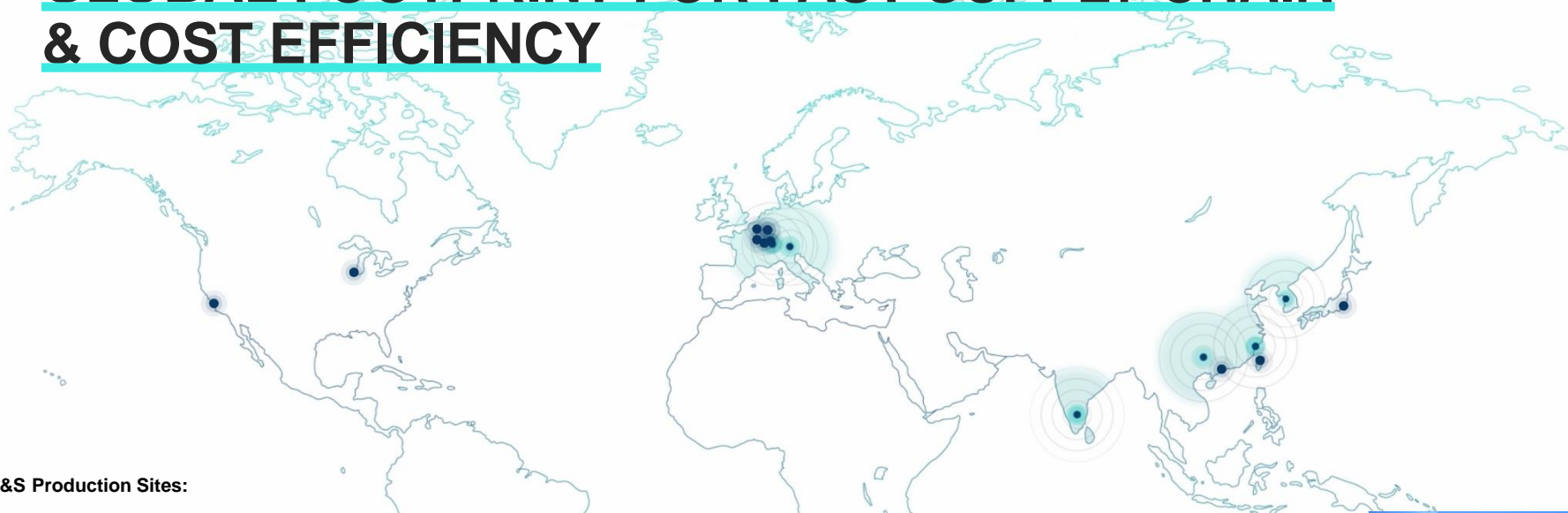
April 14, 2021



WORLD LEADING HIGH-TECH PCB & IC SUBSTRATES COMPANY



GLOBAL FOOTPRINT FOR FAST SUPPLY CHAIN & COST EFFICIENCY



AT&S Production Sites:



Leoben, Headquarters
Austria
1,041*



Fehring
Austria
389*



Nanjangud
India
1,352*



Chongqing
China
3,556*



Shanghai
China
4,497*



Ansan
Korea
251*

THE TRANSFORMATION TO A DIGITAL SOCIETY

COVID-19 has boosted digitalisation



Work at home

AT&S



Learn at home



Play at home

DIGITALISATION IS ACCELERATING

Growth in various areas



Server ICs in Data Centers (10% CAGR 2020-2025)



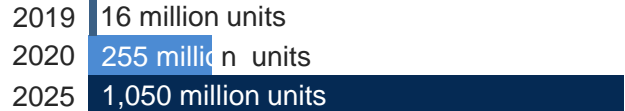
5G Base Station (25% CAGR 2020-2025)



Total Smartphone Market (4% CAGR 2020-2025)



5G Smartphones (+33% CAGR 2020-2025)



Sources: Yole; Dec. 2020; ABI, Jan 2020, IDC 2020, AT&S estimates 01/2021

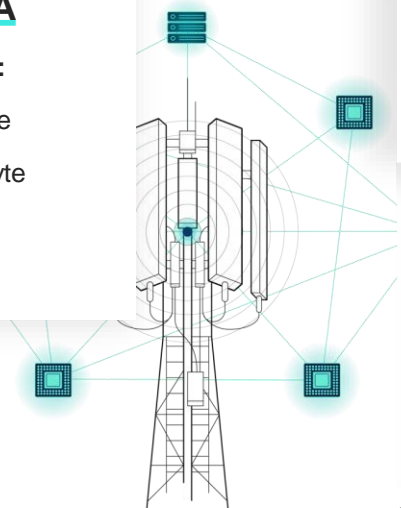
DIGITALISATION EVERYWHERE

Advanced AT&S solutions power the digital world

THE RISE OF THE DATA ERA

Global Data Volume:

- 2020: 59 Zetabyte
 - 2025: 175 Zetabyte
- (24% CAGR)



Autonomous Driving

Cameras, Lidar, Radar

Climate Research

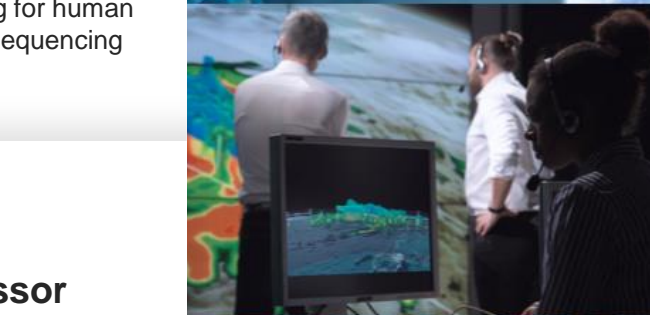
Data generation and analytics

Genomics

High performance computing for human genome sequencing

Vision Processor

Augmented reality applications



DATA DRIVEN SOCIETY

From cloud to edge

In the Cloud

Current Trend

On the Device



Real-time updated maps



E-commerce



Real-time translation



Augmented Reality



Scene recognition



Object recognition



Biometric authentication

**Connected devices:
(4.6% CAGR)**

2019: 42 billion units

2025: 55 billion units

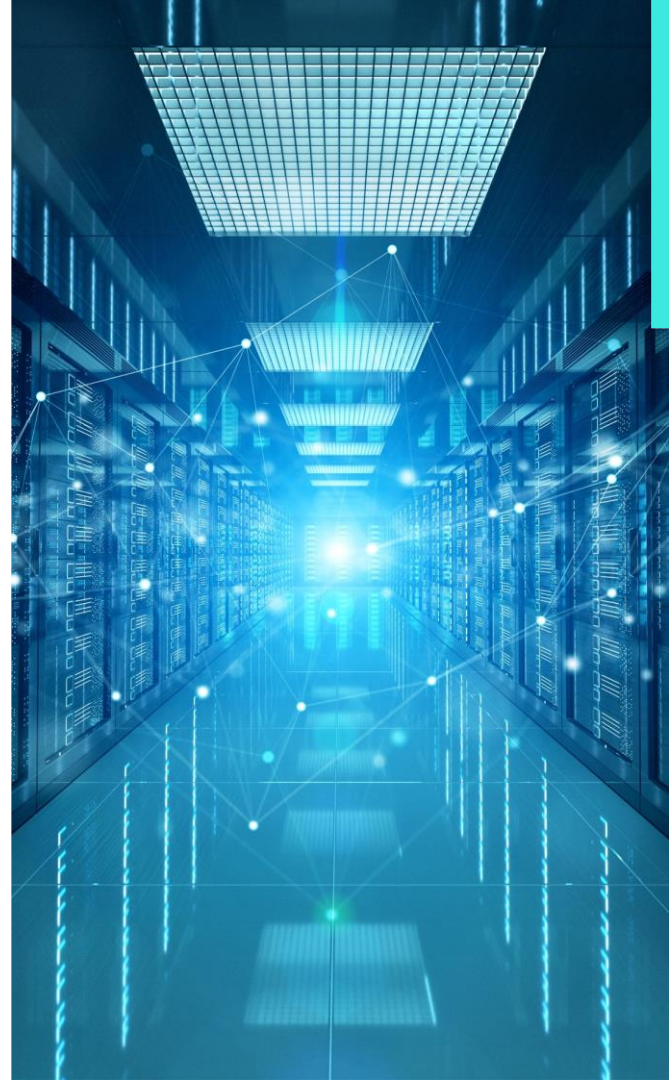
Source: IDC

DIGITALISATION REQUIRES AND GENERATES HUGE DATA VOLUMES

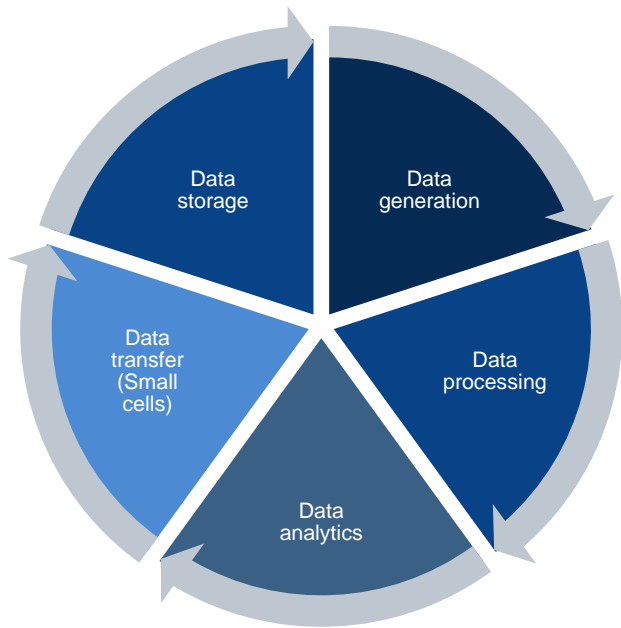
- Data and data management are the foundation of any digitalisation
- We are on the way to a data driven company
- Digitalisation only happens when we can map everything with data
 - It starts with self driving cars to the IoT-Solutions and 5G-Applications
- Since everything is based on data, all data must be perfectly managed



DIGITALISATION DRIVING THE IC SUBSTRATES MARKET GROWTH



INCREASING DATA VOLUMES



Data storage

Server farms / data centres
(Google/Apple/OEMS)
(e.g. server substrates)

- Solutions for increasing data speed (50gbit/second+)
- Reduced power consumption
- High level of integration and miniaturisation

Data generation

Sensors (e.g. mainboard, substrates for edge- & cloudcomputing)

- Ever-smaller line/spacing through innovative production processes (mSAP)
- Miniaturisation and increased functionalities
- 140 Gigahertz solutions for next generation radar applications (High-res Radar)

Data transfer (Small cells)

Antennas (e.g. antenna modules, RF-modules, 5G communication, Car2Car, Car2X)

- High end technologies for best in class signal integrity
- Low latency
- Higher bandwidth with new technical concepts

Data processing & analytics

Devices (e.g. mainboard, substrates for edge- & cloudcomputing)

- Ever-smaller form factors
- Integration of advanced active and passive RF components
- High end technologies for best in class signal integrity

AT&S SUBSTRATES PORTFOLIO

High-end technologies enable high-end applications and future growth for AT&S

+11.6%
CAGR
2020-2025

IC substrates



Server & cloud computing



High performance computers



Notebooks and 2-in-1-devices

Substrates for
modules



Smartphones (camera, RFFE)



Bluetooth earbuds



ADAS systems



M2M / C2X

Source: Yole

GLOBAL MARKET LEADERS USING ABF SUBSTRATES

Global market leaders in microelectronics are driving the growth

High-end processor modules

2025: 1.9 billion units

2020: 1.2 billion units

+10% CAGR



Source: Prismark 2020

WE PROMISE AND WE DELIVER

- We announced one billion in sales:
Achieved in FY 2018/19 ✓
- We announced the 2nd billion in sales:
We will achieve it one year earlier than planned ✓
- We present AT&S as one of the top players in HDI printed circuit boards:
Achieved – we have been among the top 3 for several years ✓
- We are on our way to become one of the top players in ABF substrates:
From #5 today to #3 in future ✓
- We transform from a PCB manufacturer to an Interconnection Solutions Provider:
Level 0 – high quality printed circuit boards ✓
Level 1 – Modul business (Substrates, Module PCBs) ✓
Level 2 – Ongoing preparations to provide solutions for Complete Modules ✓



PROGRESS IS OUR PASSION

We are in the right market with the right solutions at the right time: because we know the market, are forward thinking and continuously working on answers for tomorrows challenges

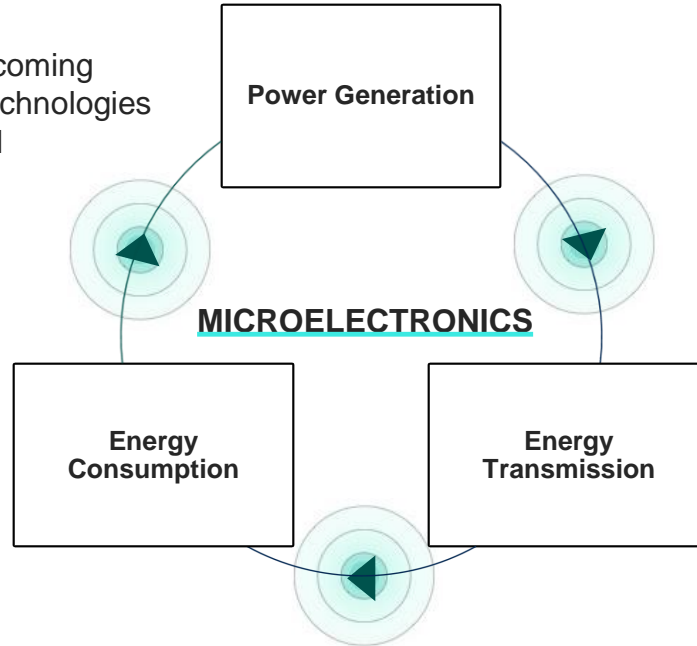
GREEN DEAL



GREEN DEAL

Microelectronics plays a central role to achieve climate targets

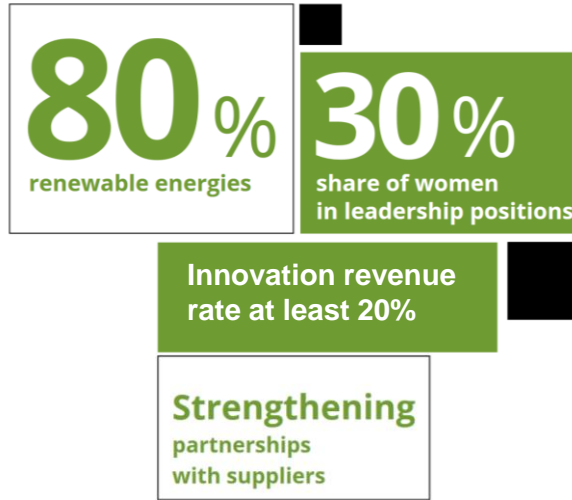
- Tech for Green Principle: Measure, analyze, control - this is the only way to bring renewable energy into the system and make energy efficiency possible in the first place
- The energy system is becoming more complex - digital technologies are necessary for control



OUR GREEN DEAL IS DRIVING SUSTAINABILITY

High level of social, ecological and economic responsibility

AT&S
Sustainability
strategy
2025



Achievements¹

- Share of renewable energies of 47%²
- Share of women in leadership positions of 19%
- Innovation revenue rate of 21%
- 95% of top suppliers signed our Code of Conduct

¹ as of 31.12.2020

² including big hydro power



THANK YOU FOR YOUR ATTENTION



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**ACCELERATE, INCREASE,
ENABLE – SOLUTIONS FOR
FUTURE**

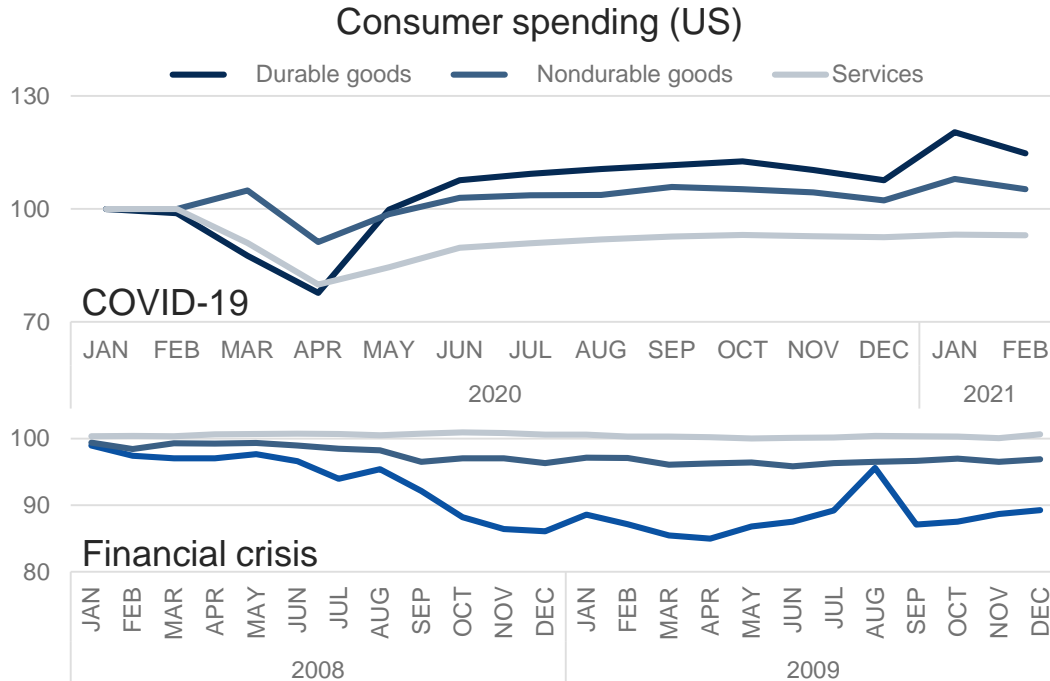
Jan Preibisch

Head of Market Intelligence

April 14, 2021

BUYING BEHAVIOR DURING THE PANDEMIC

COVID-19 radically changed customers needs unlike any other crisis



- Services often incorporates a risk of exposure
- Technology offers alternatives



NOTEBOOK DEMAND: X-FROM HOME

Initial boost and long lasting effect

- Initial boost from private purchase
- Lasting effect from companies and institutions investing



Learn at home



Play at home



Work at home

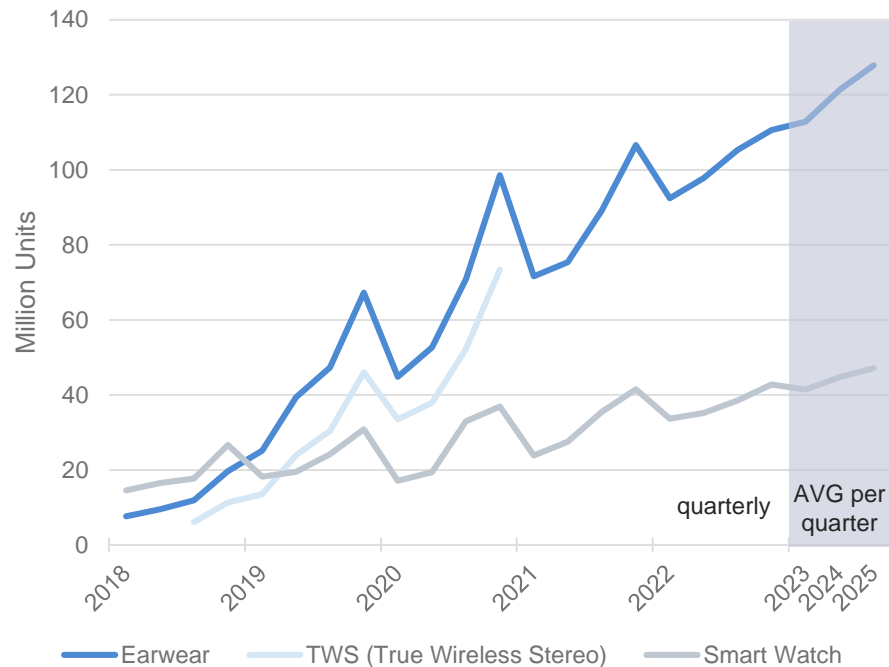


Source: IDC

WEARABLES DEMAND: UNABATED SUCCESS

How to deal with good resolutions in a lockdown?

- Demand boost during the entire year
- Driver for miniaturisation



THE TRANSFORMATION TO A DIGITAL SOCIETY

The digital society is requiring a backbone



Growth in devices

The new normal for Notebooks
Growth in wearable and connected device



Growth in used service

~9%* growth rate for video-on-demand user (2020 12%YoY)
~19%* growth rate of parallel streamers (2020 36%YoY)



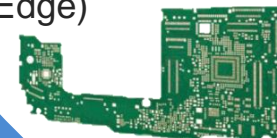
Increased quality of service

4K resolution in streaming increases from
5% in 2020 to 65% in 2025
Generated data is constantly increasing

Infrastructure
(Cloud)



Device level
(Edge)



HOW TO HANDLE THIS DATA?

More servers, more ICs per server and more complex ICs

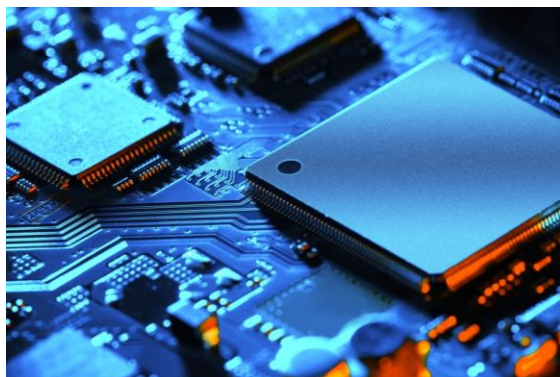
Servers



5% CAGR

Number of data centers, edge and cloud servers is continuously increasing

Servers ICs



10% CAGR

With very high growth rates for ICs dedicated to AI applications (AI Accelerators, GPUs, FPGA, ...)

Heterogeneous packaging

Former performance scalers:

- Silicon process → Saturated
- Core count → Saturated

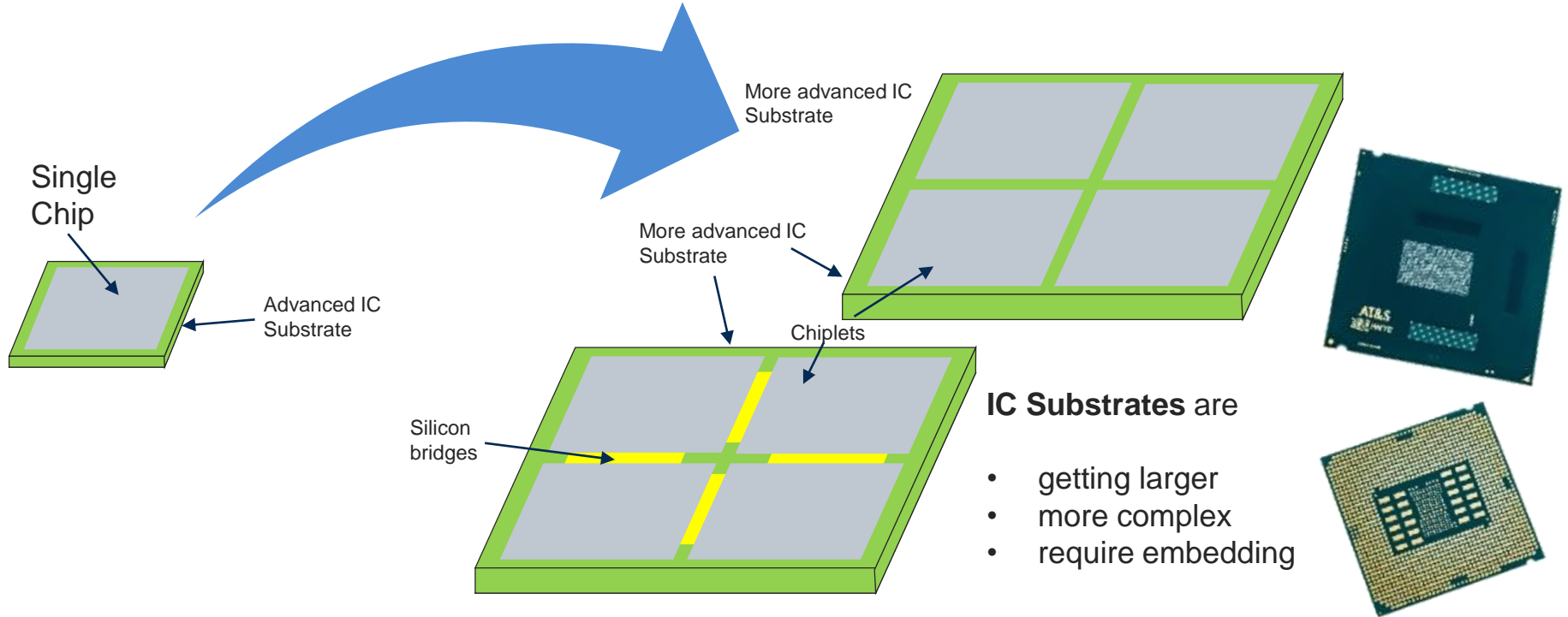
New performance scaler:

- # Chips per package
→ Chiplets



HETEROGENIOUS INTEGRATION AND CHIPLETS

Increasing size and complexity of substrates for advanced applications



IC Substrates are

- getting larger
- more complex
- require embedding

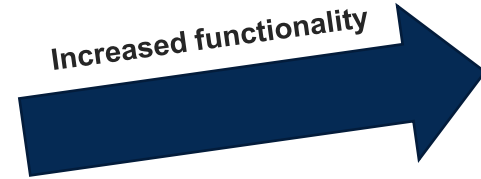
DRIVERS FOR SUSTAINABLE GROWS

Accelerated trends at the edge and in the cloud

Growth and a new normal for edge devices



Increased functionality

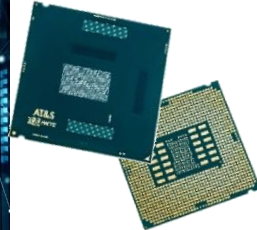


Increased functionality

Increased usage and quality of service



Miniaturisation and modularisation of edge devices



Larger and more advanced substrates



THANK YOU FOR YOUR ATTENTION

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GROWTH. DIGITALISATION, INVESTMENT – CORNERSTONE CHINA

Chen Jiang Phua

CEO BU Mobile Device and Substrates

April 14, 2021

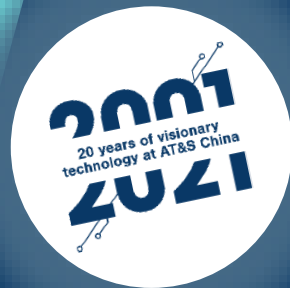


AGENDA TITLE

01 China Overview & Updates

02 Shanghai/Chongqing expansion

The 2021 marks a milestone for AT&S's 20-year presence in Shanghai and 10-year in Chongqing.



- Large scale high-end HDIs manufacturing base
- Driven by emerging applications enabled by 5G, AI, IoT and autonomous vehicle

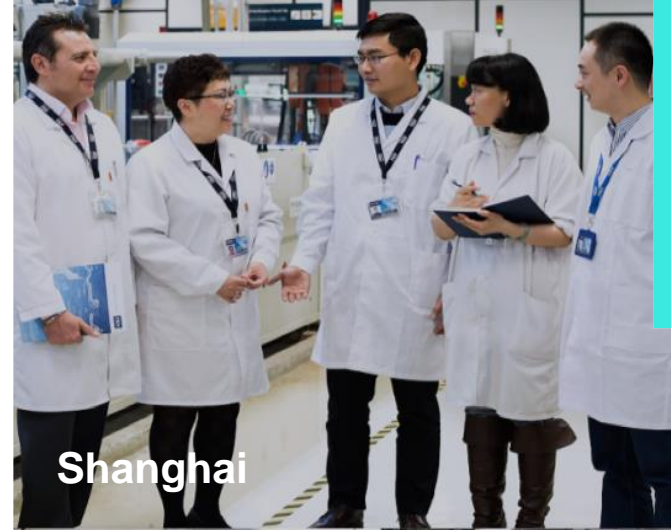


- From SLP mother boards to modules
- Development & manufacturing base for substrates and high-end packaging

AT&S, a partner of Micro-electronics and semiconductors industry in China

AT&S CHINA – FACTS & FIGURES

- **Since 2001** present in China with a high-end HDIs plant in Shanghai
- **Since 2011** Site in Chongqing to produce IC substrates & Modules
- **AT&S investment in China** : ~ € 1.9 billion
- **> over 9,000 employees** in China
- **80% of Group revenue** produced in Asia, mainly in China
- **Benchmark of the PCBs and IC substrates industry** in China with several awards for environmental protection, safety, education and social matters
- **Factors for competitiveness:** High-end production in China combined with European innovation and governance as well as absolute quality and customer orientation



Shanghai



Chongqing

AT&S

SHANGHAI OVERVIEW

- Location:** Shanghai Xin Zhuang Industrial Park
- Investment:** EUR 900.4 million
- Lot size:** 121,600 m²
- Floor area:** 129,143 m²
- Workforce:** >4,500



AT&S CHONGQING OVERVIEW

Location:	Chongqing LiangJiang New Area
Investment:	EUR 991.5 million
Lot size:	125,768 m ²
Floor area:	191,796 m ²
Workforce:	>4,500
Products:	IC Substrates/Modules



AGENDA TITLE

01 China Overview & Updates

02 Shanghai/Chongqing expansion



Drivers For Innovation

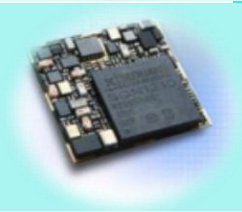
Miniaturisation

Increased computing power and data handling



Modularisation

Integration of additional functions at same or reduced form factor



Faster signal Speed and low Latency

Handling high data volume(5G, Autonomous driving...)



Power & Power Efficiency

Reducing non value Adding electrical loss



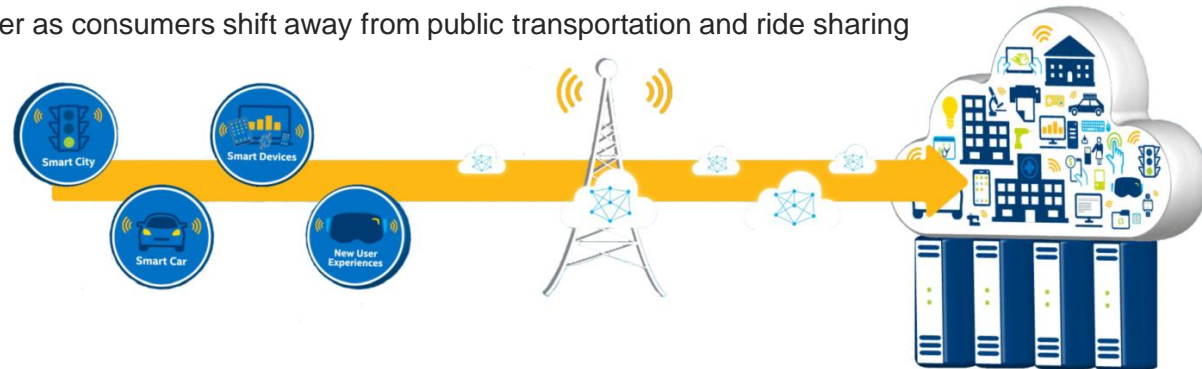
Manufacturing of the Future

Efficient and flexible Manufacturing under reduced resource consumption



TECHNOLOGICAL EXPANSION IN SHANGHAI

- Established as a leading supplier of the latest technology generation
 - including mSAP printed circuit boards and embedding technology
- 5G-powered digital economy catalyzing the high-end HDIs market
 - 5G roll-out drives the need for high-end PCBs for smart phone's mainboards and modules
 - 5G enabled autonomous driving and vehicle-to-X communication triggers additional demand
- Covid-19 unleashed a disruptive change in consumer behavior that favored HDIs
 - X-from-home continues to drive the needs of smart phone, tablet and wearable devices
 - Automotive sales continues to recover as consumers shift away from public transportation and ride sharing

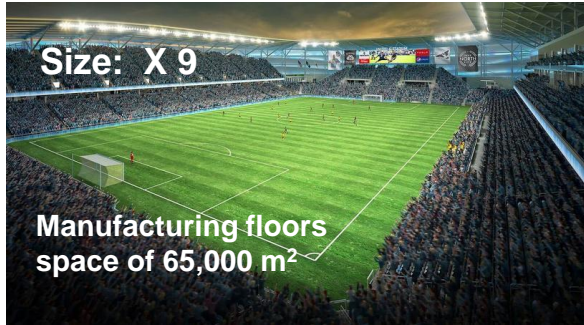


CAPACITY EXPANSION AT CHONGQING III

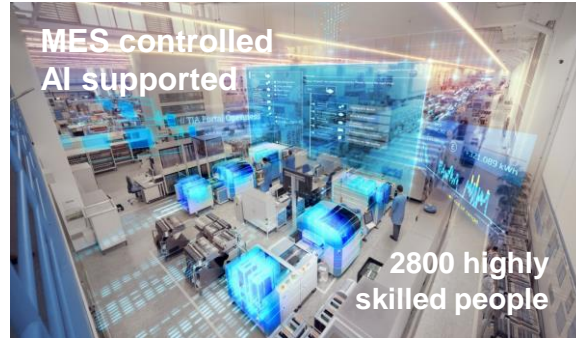
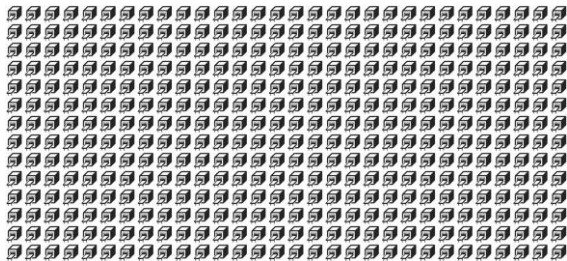
On the way to becoming one of the leading high-end ABF substrates producers



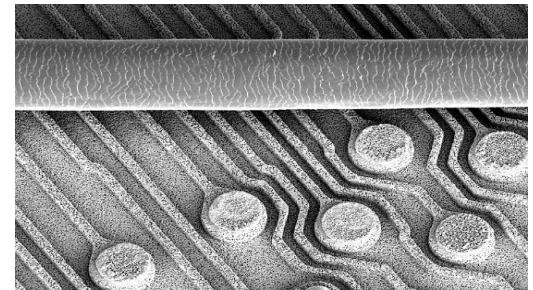
ONE OF THE MOST MODERN IC SUBSTRATE PLANTS IN THE WORLD



Process steps: 420



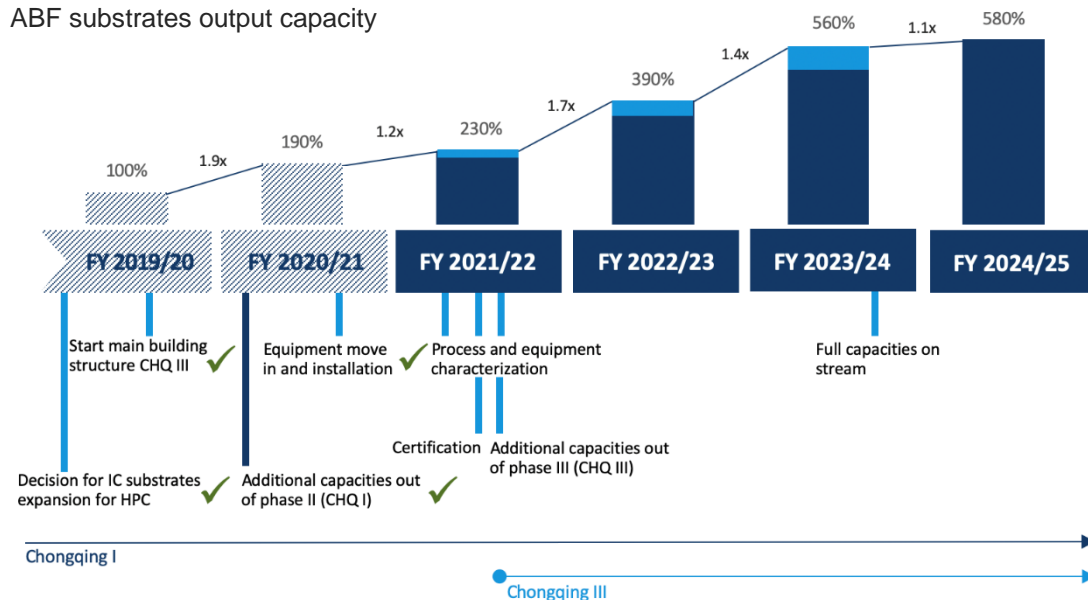
Structure is reduced to 3µm



GROWING DEMAND FOR ABF SUBSTRATES DRIVES CAPACITY EXPANSION

Chongqing I and III excellently executed

ABF substrates output capacity



- CHQ I: Running on full capacity since Q3 2020/21
- CHQ III: Currently in the installation and qualification phase
- Production will already be starting in FY 2021/22
- Additional € 200 M investment in CHQ III
- Full capacities available with the beginning of CY 2024 (Q4 2023/24)

Additional output capacity due to investment increase and earlier production start in CHQ III

CHINA - ONE OF THE CORNERSTONES OF AT&S GROWTH STRATEGY

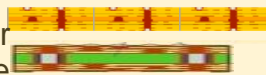


Plant Chongqing
China

Chongqing Plant I

Substrate

- Interposer
- Substrate



Plant Chongqing
China

Chongqing Plant II



Plant Shanghai
China

Shanghai Plant

HDI/SLP

- ✓ Multilayer
- ✓ Laser via
- ✓ HDI/Anylayer



Plant Shanghai
China

Shanghai Plant

Embedding





THANK YOU FOR YOUR ATTENTION



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VIRTUALITY, VARIETY, VIRTUOSITY – AT&S CORE DEVELOPMENT AREAS

Hannes Voraberger

Director Research and Development

April 14, 2021



R&D FOR
INTERCONNECT SOLUTIONS
OF THE FUTURE

R&D – BASIS FOR TECHNOLOGY LEADERSHIP

9,5%

R&D Quote

(corresponds
€ 94,8 Million)

R&D

Headquarters Austria

Development up to
series production at the
production sites.

326

Patents

30,8%

Innovation Revenue
Rate*

**International
R&D Partner**



Status: FY 2019/20

*Share of sales of technologically innovative products made in the last three years

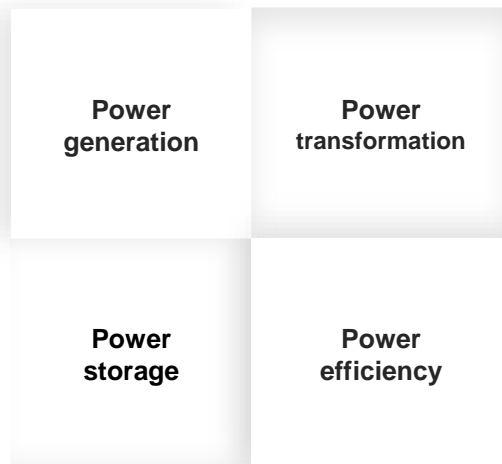
DRIVERS FOR DEVELOPMENT AT AT&S

Sustainable manufacturing and operation of electronics.

Digitalisation



Electrification



MICROELECTRONICS: BASIS FOR DIGITALISATION

Electronics and Innovation

- Increasingly digital networking
- Additional functionality
- Edge & cloud computing
- Big data / data centres
- Autonomous driving
- Drugs development
- Forecast of weather / natural phenomena
- Robots, VR, gesture recognition



5GmmWave vs. LTE

- 100x higher data throughput
- 100x more connections
- 1/30 of the response time

Summit, the current fastest computer creates:

148,6 Peta (Billiards)-FLOPS* =
148.600.000.000.000.000 arithmetic
operations / second

* Floating Point Operations Per Second

Autonomous driving

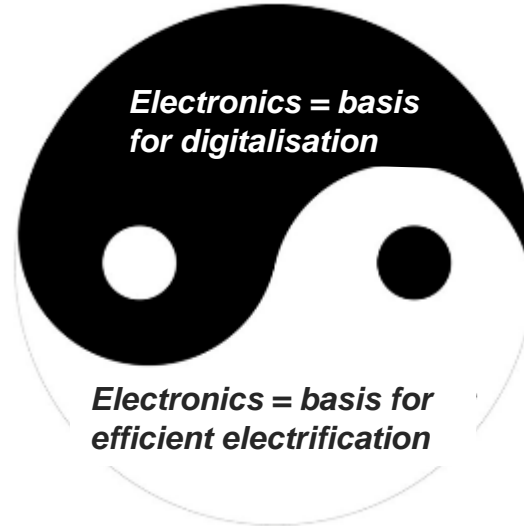
From Level 2 (= today's standard) to
Level 5 (fully autonomous):
4000-times computer performance in
the car

DIGITALISATION **AND** **ELECTRIFICATION** **WORK TOGETHER**

MICRO- **ELECTRONICS** **BUILD THE BASE** **FOR IT**

„The world wide web consumes in total as much energy as the whole aviation sector.“

Dr. Ralph Hintemann, Berliner Borderstep Institut



Latest semiconductor technology (7nm node) enables 35-40% higher computing speed at 65% lower energy consumption (vs. 16nm)

(2019 VLSI Technology Symposium, Kyoto)VLSI= Very Large Scale Integration

AT&S DEVELOPS THE CONNECTION SOLUTIONS OF THE FUTURE

Future 5 core development areas

Miniaturisation

Increased computing power for rapid data processing

Modularisation

More functions in a smaller space

Manufacturing of the future

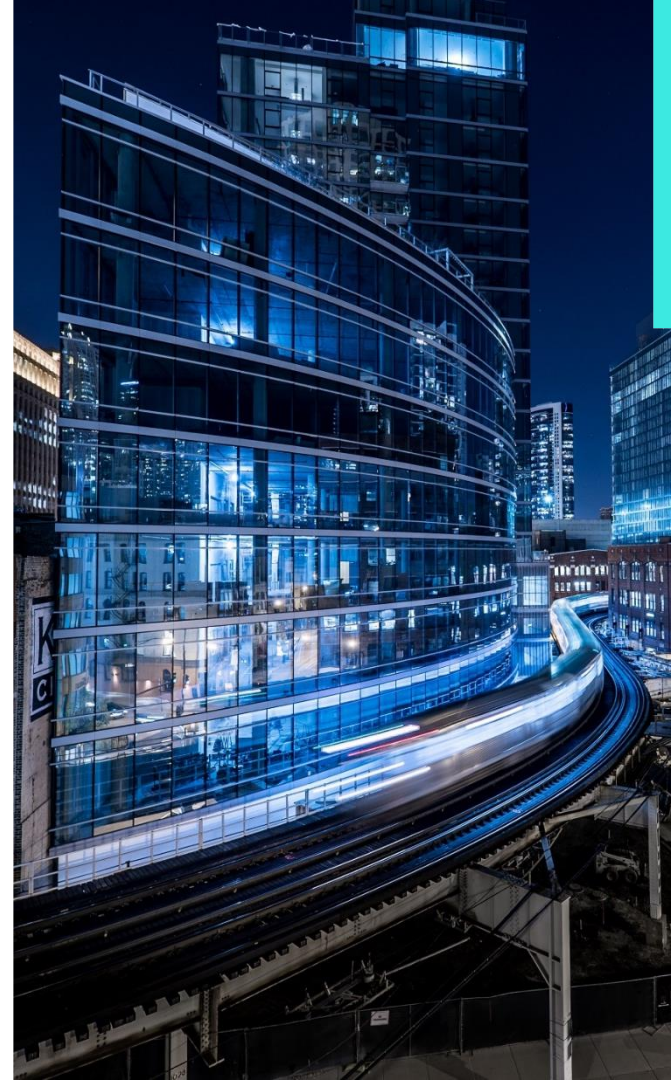
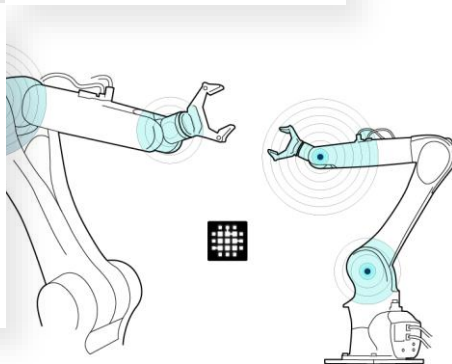
Efficient and flexible production with reduced resource consumption

Increased speed / low latency

Transport of larger amount of data
(5G, autonomous driving, ...)

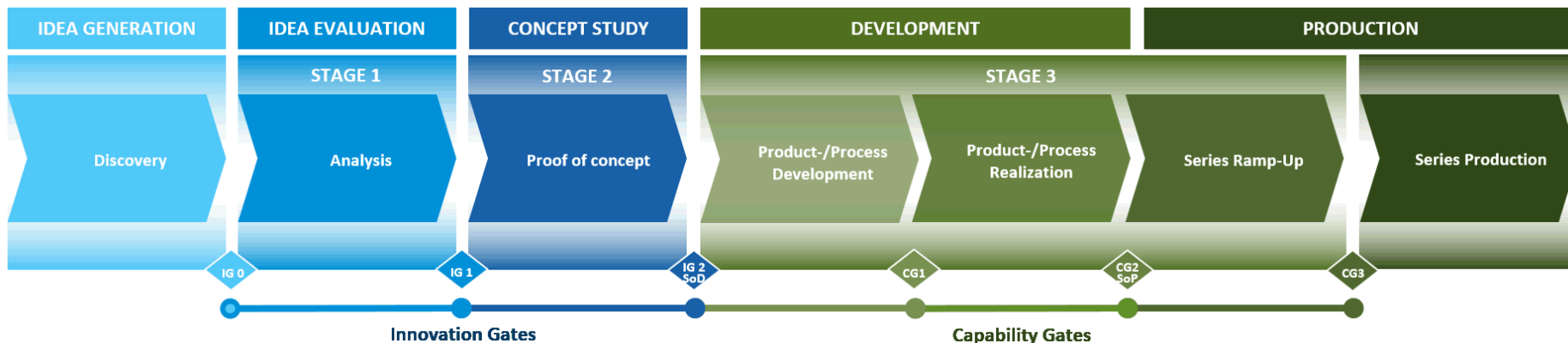
Power / Power efficiency

Reduction of electrical losses



AT&S INNOVATION PROCESS AND R&D ORGANISATION

NEW R&D CENTRE IN CHQ ESTABLISHED



R&D Centre Leoben (gen.)

R&D Centre CHQ (Substrate + Packaging)

TDI SHA (Mobile + Automotive)

TDI CHQ (Substrate)

TDI Leoben (Automotive, Industrial, Medical)

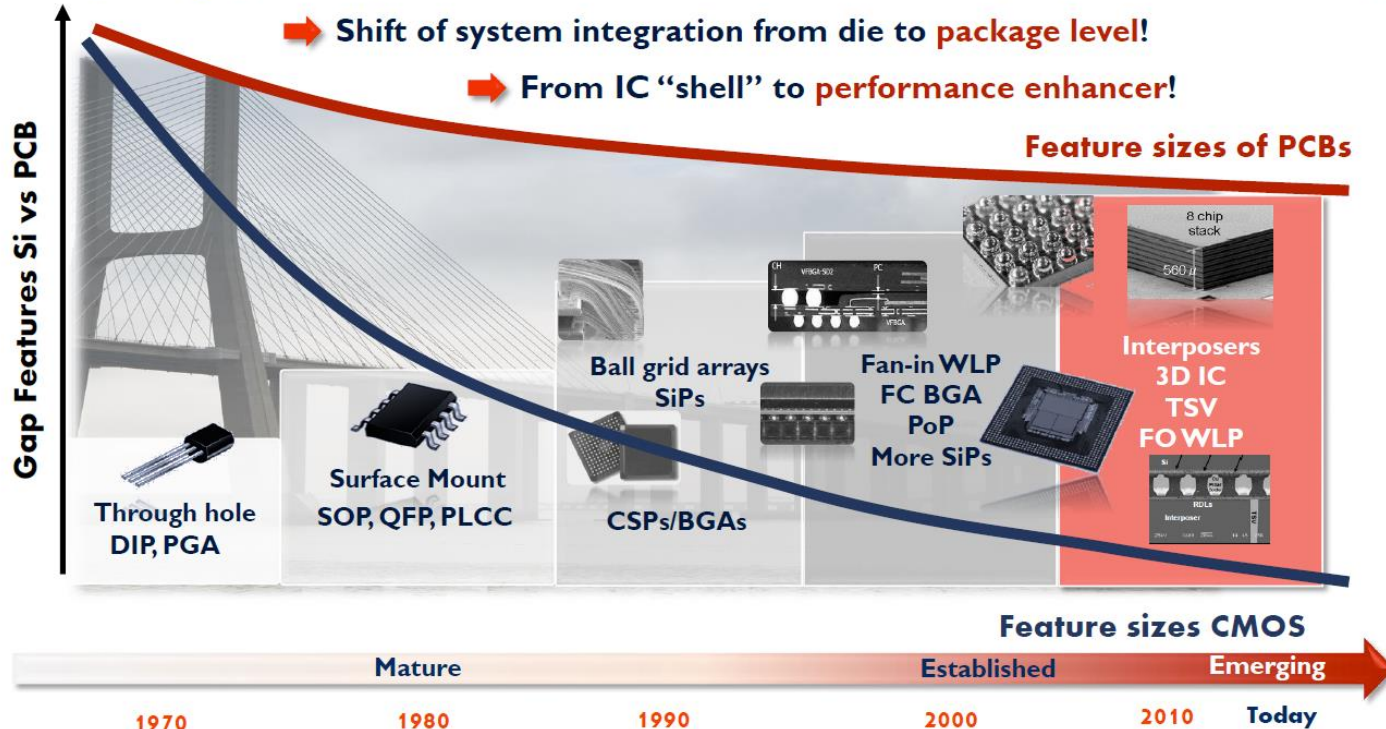
MINIATURISATION AND MODULARISATION:

- Package will become important driver for enhancing performance of electronic systems

➔ Bridging the Gap Between semiconductor and PCB level, IC protection, testability etc.

➔ Shift of system integration from die to **package level!**

➔ From IC “shell” to **performance enhancer!**



5G – DRIVER FOR INCREASED SPEED / LOW LATENCY

Miniaturization

Thermal Management

Loss Reduction

mmWave, Massive MIMO, Small Cells etc.









CLOUD (data center)

Edge Computing,
Active Antennas,
Network Slicing etc.

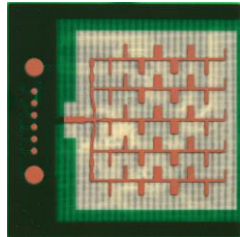
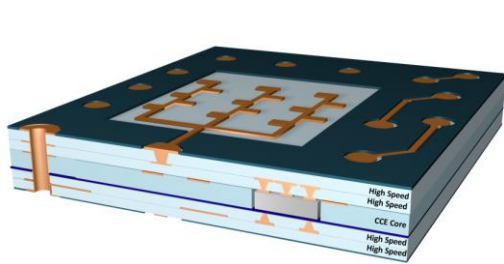
Integration

FOG (Connectivity, Storage & Computing at the edge)

Communication Satellites	Network Provider (Infrastructure, Base-station, Cell Towers)	Back End (Backhaul; Point-to-Point, Antennas)	Mid End (Active Antennas, Small Cells, Indoor Cells)	Front End (End user Devices)	Semiconductor (Chipset, Modules,...)
 <ul style="list-style-type: none"> Z-interconnect Center Core Embedding Extreme Layer Counts Large Form Factors Low Loss Materials 	 <ul style="list-style-type: none"> Low Loss Materials High Layer Counts Large Form Factors 	 <ul style="list-style-type: none"> Ultra Low Loss Materials High Layer Counts Large Form Factors 	 <ul style="list-style-type: none"> Ultra Low Loss Materials mSAP Embedded Components Thermal Management Dielectric Thickness <math>< 50\mu\text{m}</math> L/S 30-30 	 <ul style="list-style-type: none"> Low Loss Substrate Materials mSAP / SAP Embedded Components Dielectric Thickness <math>< 20\mu\text{m}</math> L/S down to 9/12 	 <ul style="list-style-type: none"> Low Loss Substrate Materials IC substrates SAP AiOP Dielectric Thickness <math>< 20\mu\text{m}</math> L/S <math>< 9/12</math>

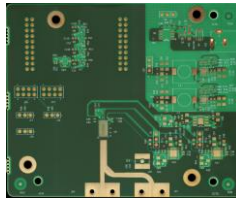
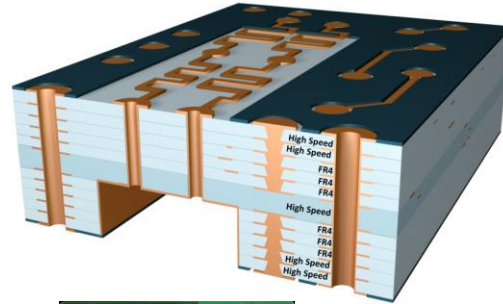
Required PCB Technologies

ENABLER TECHNOLOGIES IN PCB



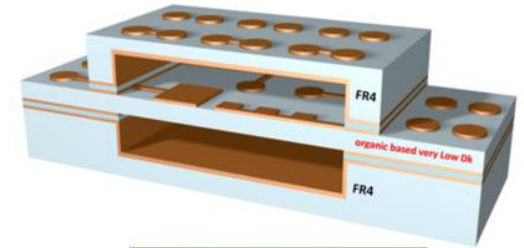
Feature

- Component underneath the antenna structure
- No solder joints between ASIC & antenna



Feature

- Fully exposed HF antenna (in 2.5D area)
- Metallized cavity



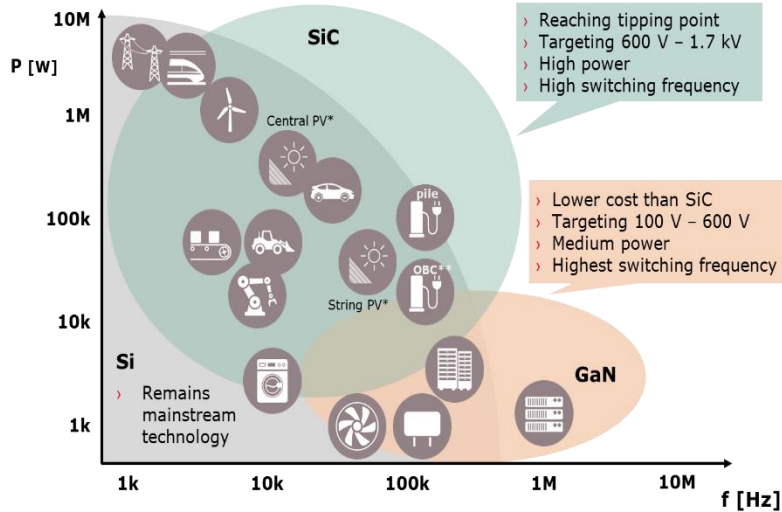
AT&S Patented

Feature

- Air gap beyond & underneath the antenna layer
- Metal shielded air cavity

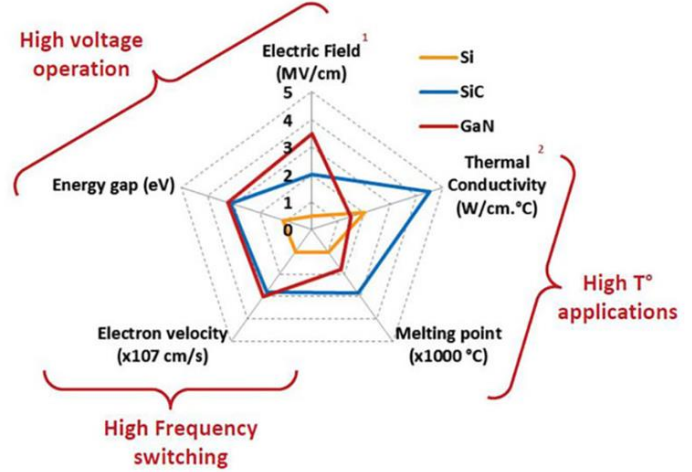
POWER & POWER EFFICIENCY

Benefits & use cases with Embedding of GaN & SiC



* PV = photovoltaic inverter; ** OBC = onboard charger

Source: Infineon, BOSCH (03/2019)



	DCDC converter	Inverter	Onboard Charger
Typical Power Range	1-4 kW	20-400 kW	2-8 kW
Typical op. Frequency	100-700 kHz	10-20 kHz	100-700 kHz
Benefit from using SiC Technology			
Higher Frequency	Shrinking of passive components	Potential motor damage due to high dU/dt	Shrinking of passive components
Lower RDS,onA	Efficiency	Efficiency	Efficiency
Lower Switching Losses	Enabler for higher frequency	Limited frequency	Enabler for higher frequency
Higher Junction T	Potential enabler for air-cooling	Minimize cooling system	Minimize cooling system

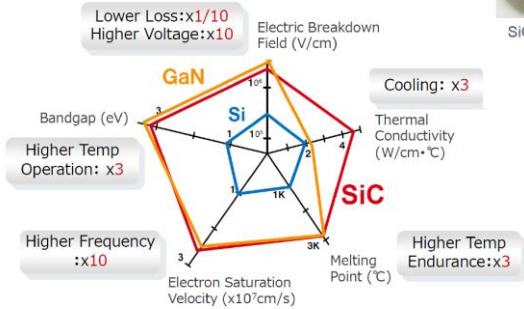
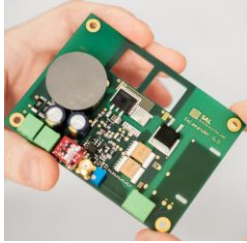
POWER & POWER EFFICIENCY

Ongoing development projects

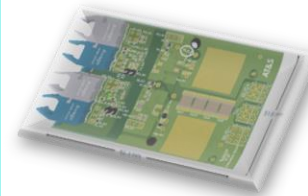
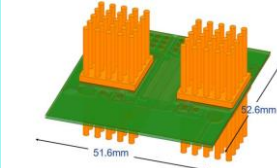


Tiny Power Box

Embedding Si, SiC
PFC – OBC 7-11 kW



SiC



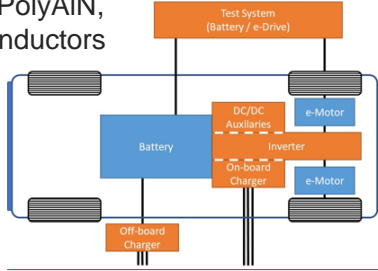
Embedding SiC
OBC 22 kW

- lower inductance
- smaller volume
- lighter weight



ECSEL Joint Undertaking
Electronic Components and Systems for European Leadership

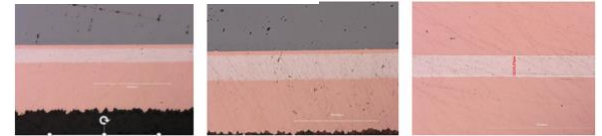
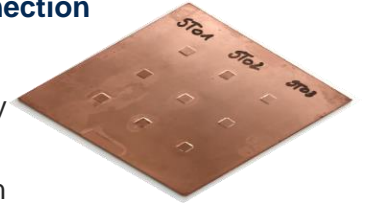
Embedding GaN on PolyAlN,
GaN & SiC - Semiconductors



High Power interconnection

Improvement in:

- Electrical conductivity
- Thermal conductivity
- Mechanical Adhesion



MANUFACTURING **OF THE FUTURE**

- Product performance prediction
- Product optimisation
- Process optimisation – digitalisation
- Sustainable manufacturing – disruptive approaches to reduce resource consumption

More than AT&S
Business Model Innovation

Digitalisation
New ways to optimize production processes

Sustainable manufacturing
New ways to optimize production processes

MODELLING THE FUTURE

Predicting Products and Processes

Toolset development for virtual Prototyping

- Product performance prediction & optimisation
- Product & process optimisation
- Digital twins for complex process lines

Material Characterization

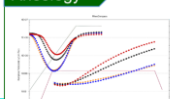
Setup and maintenance of high level material database featuring comprehensive, actual material behavior

- Mechanical properties
- Rheological and flow behavior
- Chemistry & Curing

Cure Kinetics



Rheology



Mechanics



Material

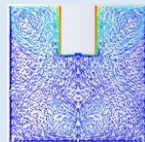
Physics

VirtualPCB

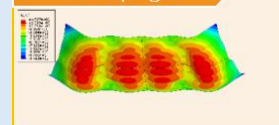
Finite elements simulation toolset
development on product and process level

- Life time prediction
- Warpage assessment
- Process simulation

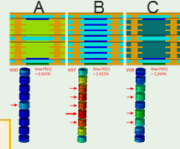
Etching Process



Warpage



Reliability



Prediction

Data Science meets simulation

Data driven process modeling for process prediction and optimisation

- Hybrid process models
- Deep learning
- Image Recognition and processing

Data

Process Modeling



Image Recognition



Neural Networks



SUSTAINABLE INNOVATION

Development for a sustainable future

Supporting the AT&S way into sustainability by pushing green development projects



Resource Optimisation

PCBs and packages with minimum resource consumption but full functionality

- Sustainable Design
- Virtual prototyping
- Resource optimized production processes



Sustainable development

Reduce environmental impact of production processes

- Green processes development for reduced impact
- Advanced process chains to avoid losses



Life Cycle assessment

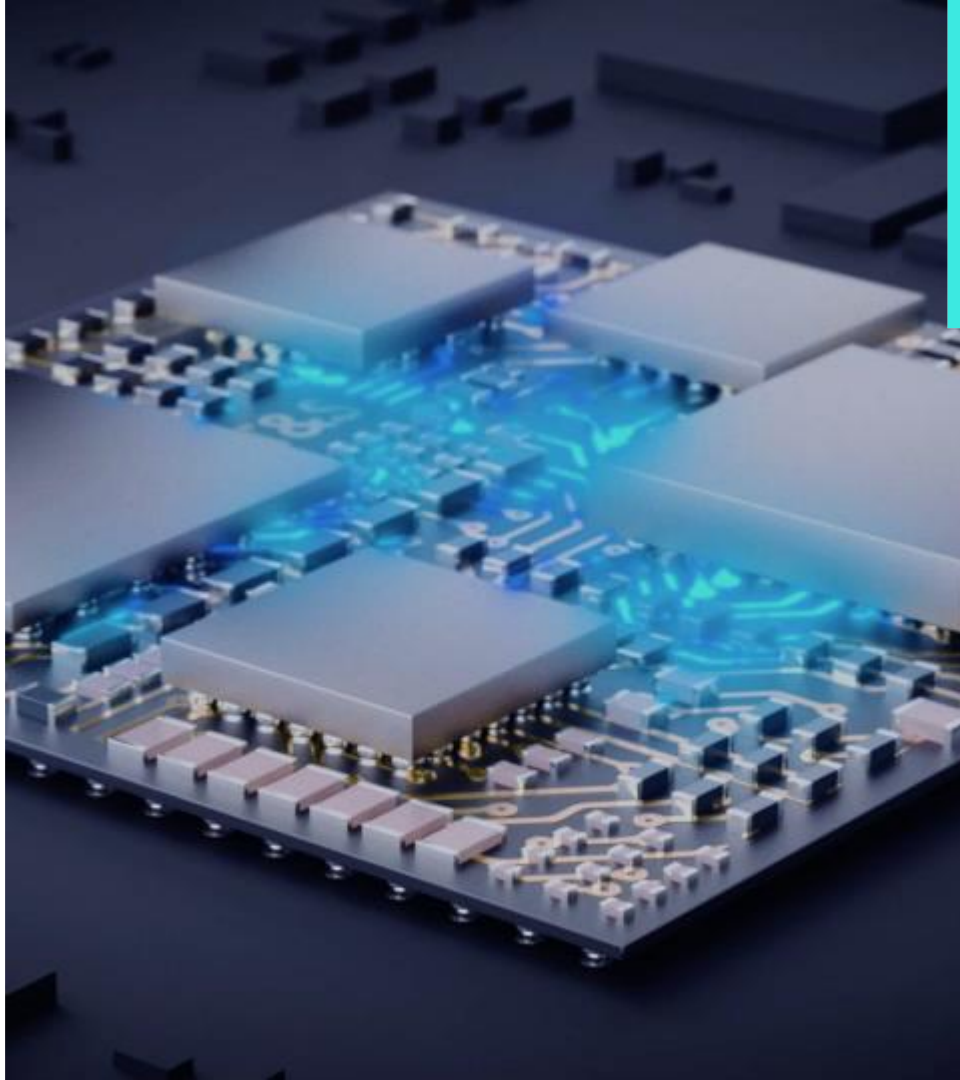
Real time access to the environmental impact of each single AT&S product

- Based on ISO14040
- Reflecting actual situation
- Real time availability



AT&S R&D AT A GLANCE

- Driving innovation and R&D is constantly strengthening the technological backbone of AT&S
- Core focus of activities on finding solutions for big challenges of digitalisation and ecologization.
- Global process and organisation for efficient execution of innovation (idea to product)





THANK YOU FOR YOUR ATTENTION

The background is a dark blue gradient with various financial and digital motifs. On the left, there is a green bar chart with a white line graph overlaid. In the center, there are stacks of silver coins. On the right, there are binary digits (0s and 1s) and a network diagram with red and green nodes and lines. The overall aesthetic is modern and tech-oriented.

AT&S

Q&A



AT&S

PEOPLE – PLANET – PROFIT

Our contribution to a sustainable future

Nadja Noormofidi
Sustainability Manager

April 14, 2021



HANDLING THE COVID-19 PANDEMIC

Sustainable business performance through effective crisis management



Save employees

- Efficient safety measures
- Body temperature measurements
- Testing infrastructure
- FFP2 masks for all employees
- Home office wherever possible



Strong communication

- Transparent and timely communication to all stakeholders
- COVID task force at all locations to ensure efficient exchange and steep learning curve
- Regular information to and contact points for all employees



Strong partnerships

- Reliable partners in the supply chain to ensure stable production and equipment up-time

AT&S STRONGLY COMMITTED TO



ISO (International Organisation for Standardization)



RBA (Responsible Business Alliance)



SDGs (Sustainable Development Goals)



ILO (International Labour Organisation)



Responsible Minerals Initiative



OECD guidelines

ESG RATINGS

Recognition from leading sustainability ratings

Environment

Social

Governance



19.2
Low Risk



+40 (worst) – 0 (best)
Top 10% in industry
Industry average: 20-30
Update: 2021



B-
Prime



D- (worst) – A+ (best)
Top 15% in industry
Industry average: C-
Update: 2020



BBB
Score: 5.0



CCC (worst) – AAA (best)
Top 50% in industry
Industry average: 4.2
Update: 2021



B- **B**
Climate Change Water



D- (worst) – A (best)
Industry average: climate change C, water B-
Update: 2020

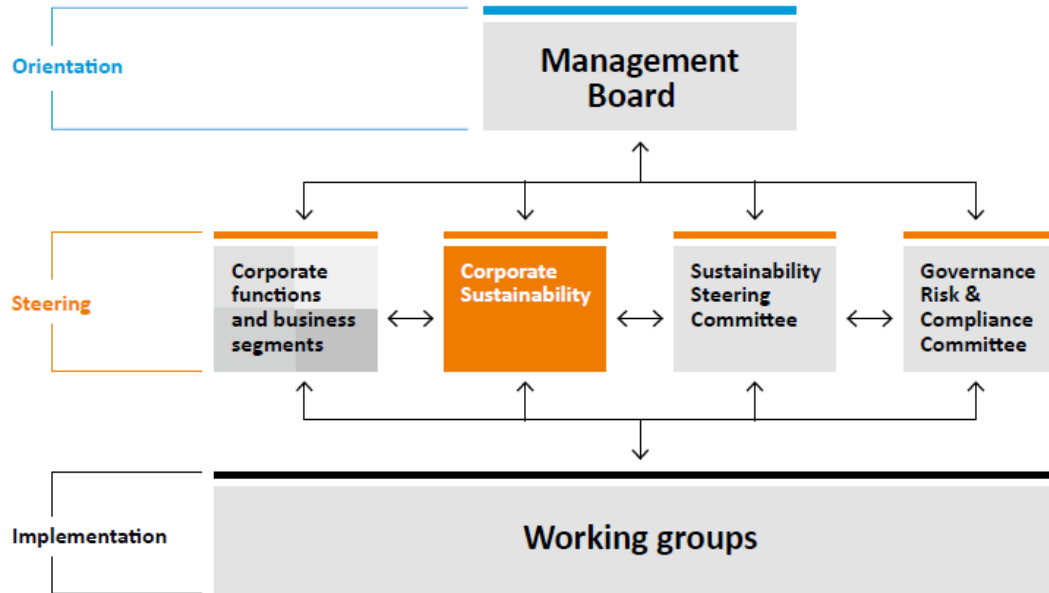


59
Silver

0 (worst) – 100 (best)
Top 15% in industry
Industry average: 25-45
Update: 2020

ANCHORING SUSTAINABILITY

Management Structure



AT&S SUSTAINABILITY STRATEGY



4 STRATEGIC FIELDS OF ACTION



Environment & Resources

Climate change
Water recycling
Energy & emissions
Resource efficiency



Renewable energy

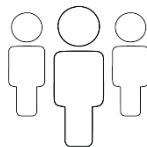


Sustainable Innovation

Life Cycle Assessment
Digitalisation
Green products
Data Security
Innovation Award



Life Cycle Assessment

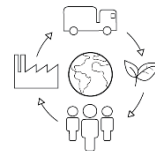


Employees & Society

Business ethics & anti-corruption
Health & safety
Diversity
Education & development



Diversity



Sustainable Supply Chain

Human rights
Working conditions
Business ethics & anti-corruption
Health & safety
Strong Partnerships
Environment
Audits



RBA Compliance

RENEWABLE ENERGY

Going beyond the EU green deal

- 80% renewable energy* by 2025
- Replace all fossil fuels within our production sides by 2030

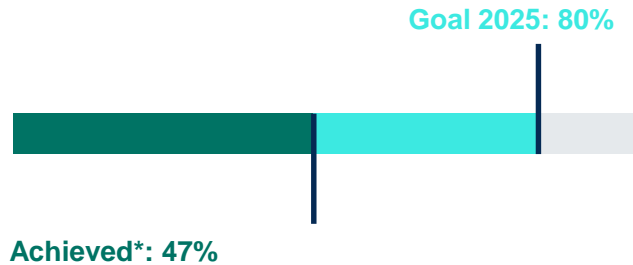
* including big hydro power



ENERGY STRATEGY

Holistic approach to achieve the target including water trade-off considerations

Share of renewable energies



Energy Management through efficiency on facility level

Energy Management through efficiency on process level

On-site and regional energy production

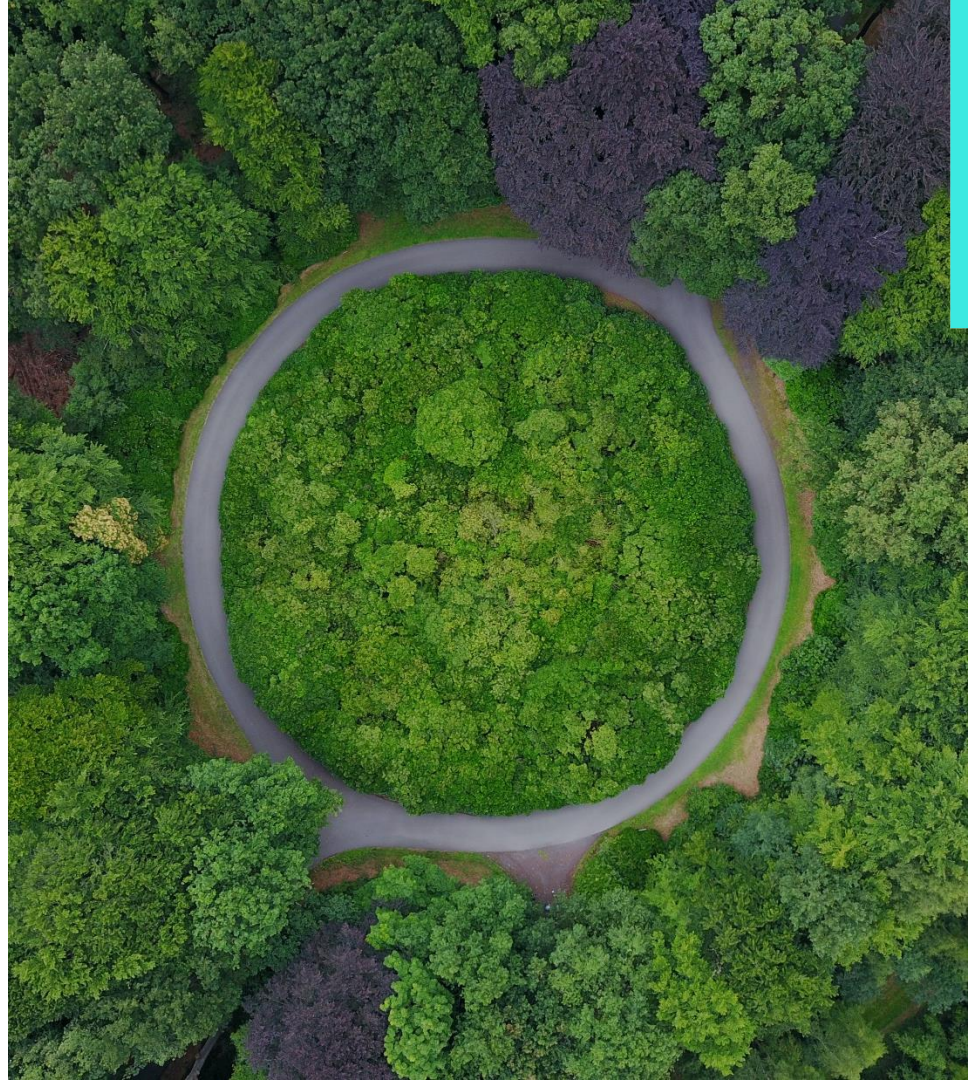
Purchase green energy

*as of 31.12.2020

LIFE CYCLE **ASSESSMENT (LCA)**

A big step towards circularity

LCA on product group level



LIFE CYCLE ASSESSMENT

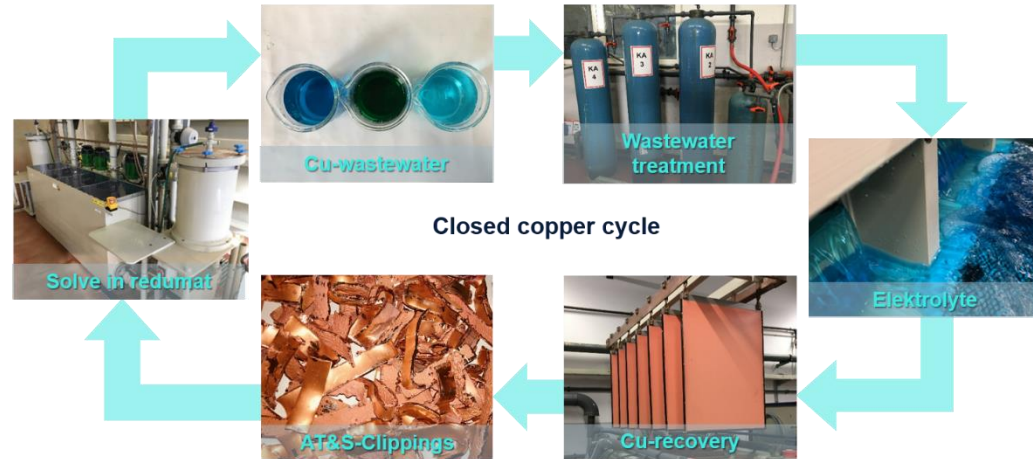
Copper recycling saves resources and transportation

6 patent applications filed

Savings out of the pilot project in Hinterberg

- 205 t Copper yearly
- 75 t hydrochloric acid yearly
- 82.5 t CO₂ transportation yearly

Big scaling potential

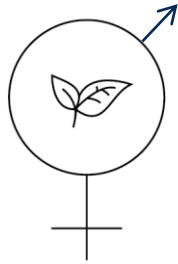


DIVERSITY

Targets until 2025

- 30% women in supervisory board
- 30% women in management positions
- 45% women in total workforce

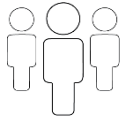




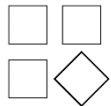
Gender



**Ethnicity &
Religion**



**Age &
Generations**



Ability

- ➔ 23% women in the supervisory board
- ➔ 25% women in management board
- ➔ 19% women in management positions
- ➔ 34% women in total workforce

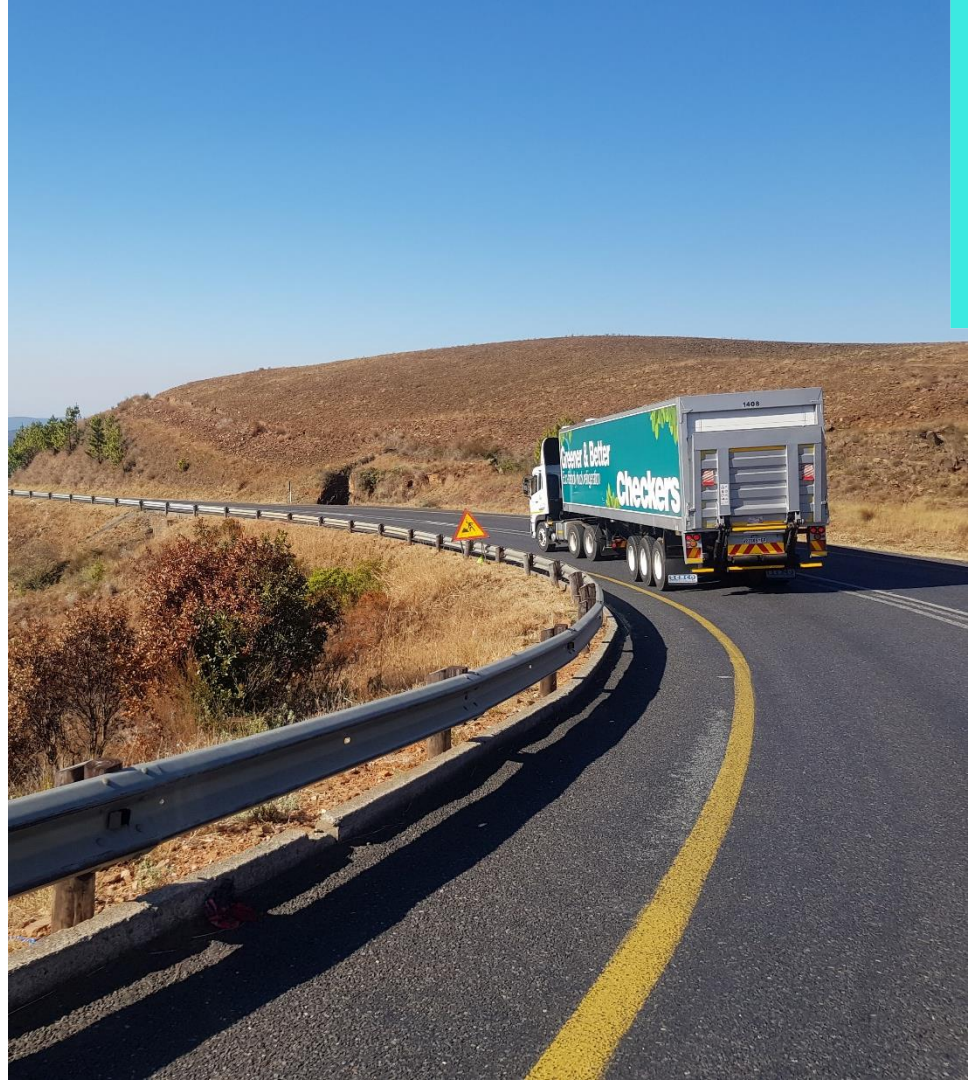
RBA COMPLIANCE

Targets until 2021

100% of top suppliers* signed the Code of Conduct

100% RMI compliance in our supply chain

* 80% of purchase value



RBA COMPLIANCE OF RELEVANT SUPPLIERS

Strong partnerships are key to success



95%* of top suppliers
signed the Code of Conduct



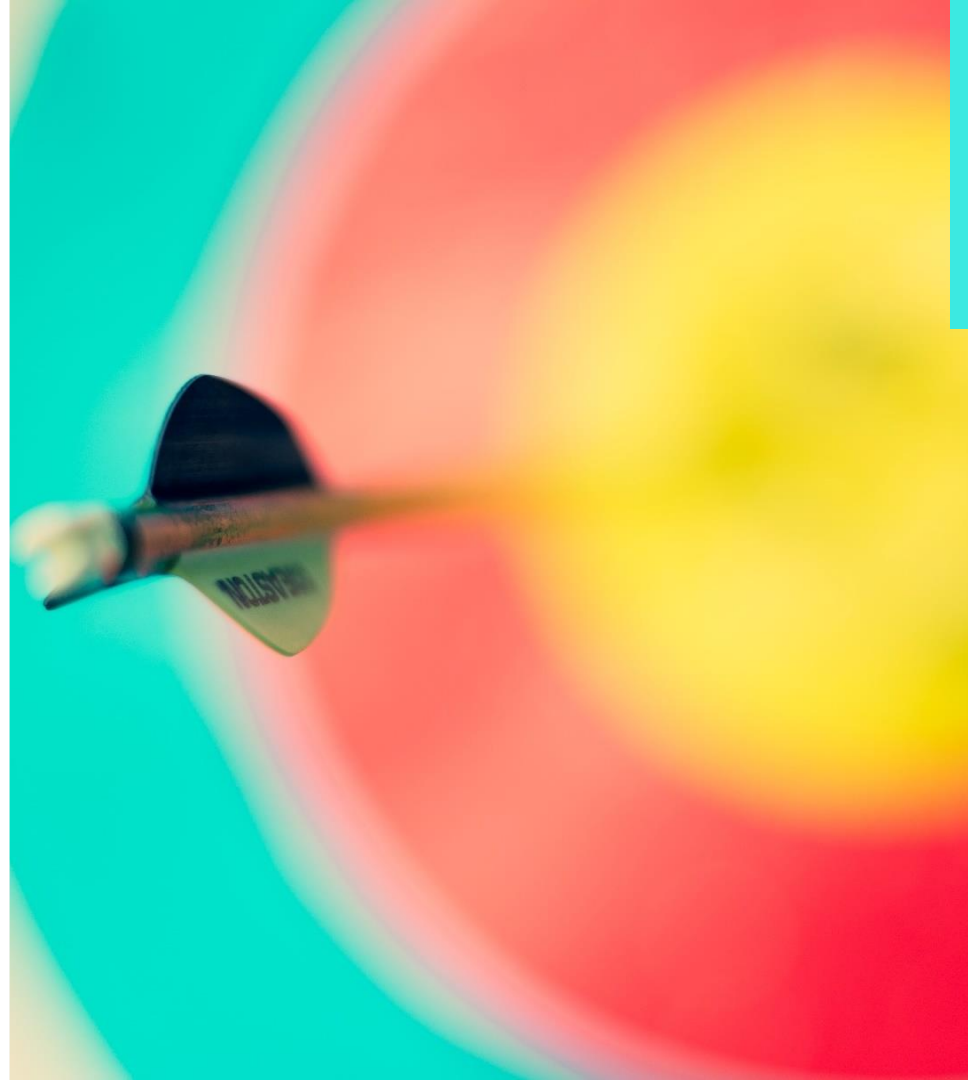
100% RMI compliance
in our supply chain



*as of 31.12.2020

EXECUTIVE SUMMARY

- Effective crisis management ensured stable business
- Strong recognition from leading sustainability ratings gives confidence for the future
- Holistic sustainability strategy developed and measures set to achieve ambitious targets





THANK YOU FOR YOUR ATTENTION

The background is a dark blue gradient with various financial and digital motifs. On the left, there is a green bar chart with a white line graph overlaid. In the center, there are stacks of silver coins. On the right, there are binary digits (0s and 1s) and a network diagram with red and green nodes and lines. The overall aesthetic is modern and tech-oriented.

AT&S

Q&A

The background is a dark blue gradient with various financial and technological motifs. On the left, there is a green bar chart with a white line graph overlaid. In the center, a white box contains the text 'AT&S'. To the right, there is a stack of silver coins. The bottom right features a network diagram with red and green nodes and lines. Binary code (0s and 1s) is scattered throughout the scene.

AT&S

TALK WITH THE BOARD

AT&S

SEE YOU AT OUR
NEXT EVENT

STAY IN TOUCH
WITH US

