

ESG Roadshow Presentation

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Driving decarbonization and digitalization. Together.



Semiconductors are crucial to solve the energy challenges of our time and shape the digital transformation.

This is why Infineon is committed to actively driving decarbonization and digitalization.

As a global semiconductor leader in power systems and IoT, we enable game-changing solutions for green and efficient energy, clean and safe mobility, as well as smart and secure IoT.

We make life easier, safer, and greener.
Together with our customers and partners.
For a better tomorrow.

Infineon at a glance

Global Leader

-  Power Management (e.g., consumer electronics)
-  Automotive (e.g., powertrain, safety, and autonomous driving)
-  IoT (e.g., connectivity, authentication, and encryption)
-  Energy efficient technologies (e.g., renewable energy)



Growth Areas



Energy
green and efficient



Mobility
clean and safe



IoT
smart and secure

Top Management Commitment

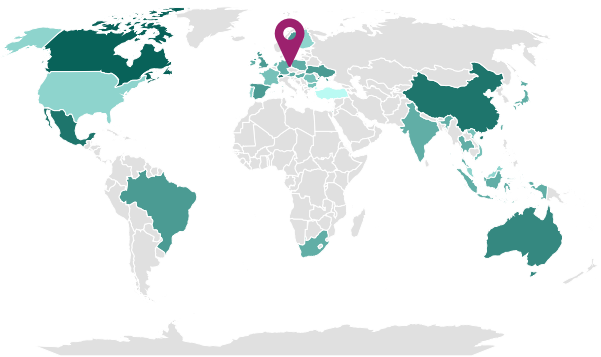
-  **Dedicated Sustainability Board Member:** A board member oversees Infineon’s sustainability efforts.
-  **Stronger ESG Commitment:** ESG target weighting in the Long-Term Incentive program ranges from **20% to 30%**

Infineon Worldwide

58,060
employees worldwide

69
R&D and

15
manufacturing locations¹



¹As of 1 August 2024

Infiniteon has exceeded its climate targets and is perceived in the market as a role model in terms of sustainability



≈ 90%

green energy
(Target 100% in 2025)



PCF¹ for 50%

of the product portfolio

-66% emissions

(Target -70% in FJ24/25)
compared to 2019 baseline



1:45

net ecological benefit went up
from 1:34

76%

highest waste recycling rate²



SBT-submission

12/2024

(Target 2025)

32%

water recycling rate

¹ Product Carbon Footprint

² Compared to past sustainability reports

Our sustainability performance is recognized by leading rating agencies and investors



Rating	Score/listing		
	2019	Latest Update	
MSCI ESG	A	AAA	↑
Dow Jones Sustainability™ Index	Sustainability™ Index listing 83 rd	Listed in DJSI World & Europe	↑
Sustainalytics	19.8 Low	13.4 Low	↑
CDP	Climate : B Water: B -	Climate: B Water: B	↑
Ecovadis	“Gold” award	“Platinum” award	↑
FTSE4Good Index	Index member	Index member	=
ISS ESG Corporate Rating	C+ Prime	C+ Prime	=
Moody's Analytics	60 ³ /100	60 ³ /100	=
WDI	69% ⁴	70%	NEW

¹ ESG: environmental, social and governance

² Update on the 13th of December after NY stock market closing

³ Sector average score: 39; due to methodological changes no score for 2024 published

⁴For our first time response in 2023

How we actively drive decarbonization: Our climate strategy is based on two main pillars

1

In our own operations



2

Through our products



Important momentum in the semiconductor industry to take decarbonization action and set science-based targets

Infineon climate strategy

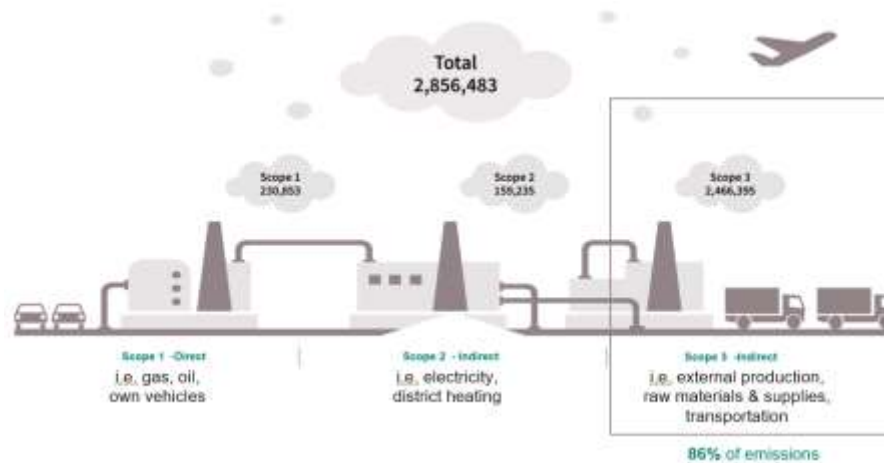


100% renewable electricity by 2025
70% reduction for scope 1+2 by 2025
from 2019 baseline
Carbon neutral by 2030



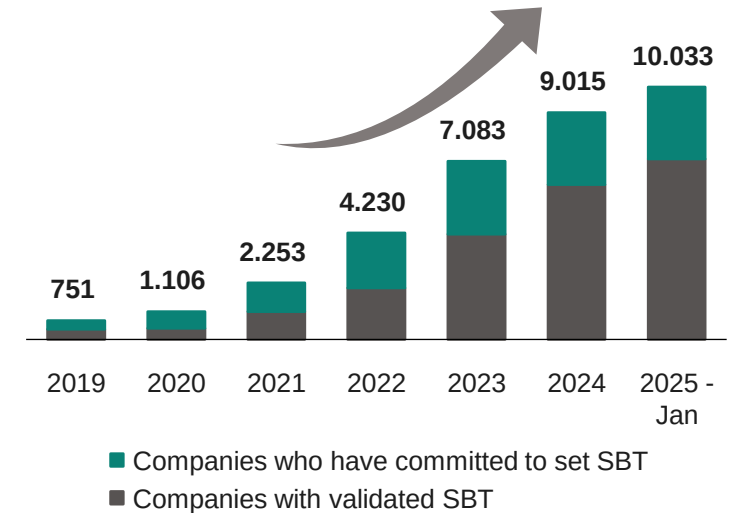
Infineon is leading by example:
Since 2019 we **halved our CO2 emissions**
while **doubling our revenue**

Supply chain innovation and collaboration is key



In December 2024, we handed in a **science-based target**, expanding our climate strategy to the **supply chain**.
We expect validation in Q2 2025.

Science-based targets as THE standard for climate action¹⁾



Companies worldwide are committed or have set SBT. We are collaborating with our **suppliers** and encouraging them to set **science-based targets**.

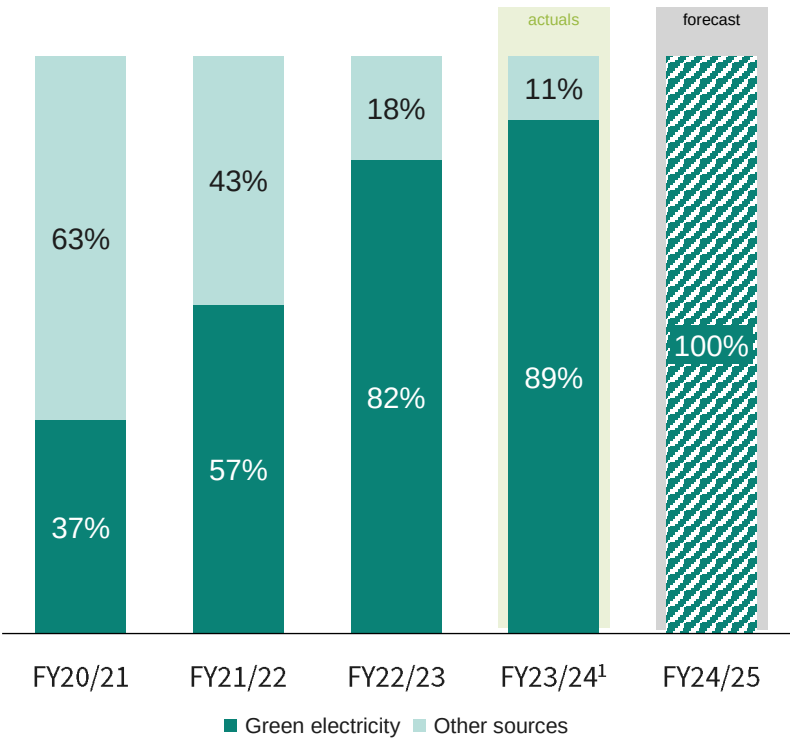
¹Science based target initiative: Monitoring report 2023 (published August 2023); SBTi homepage (January, 2024; September 2024)

Switch to green electricity significantly reduced scope 2 emissions

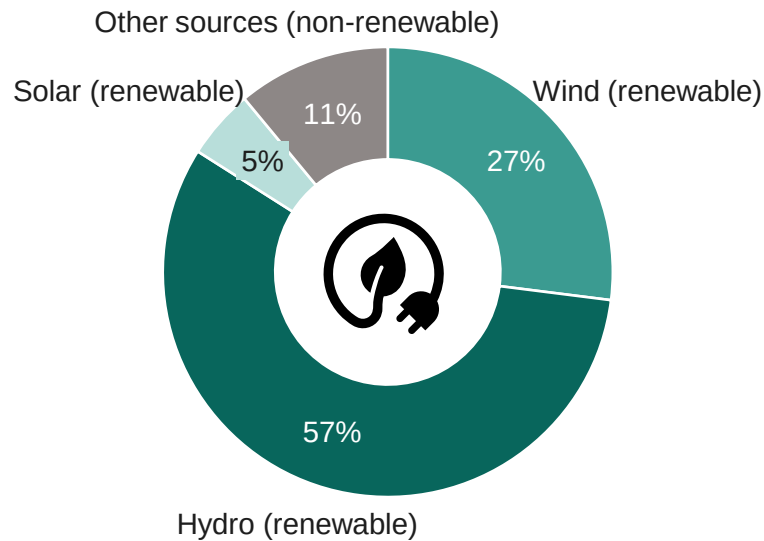


 Infineon is well on track to reach its ambitious target of 100% renewable electricity by FY 2024/25

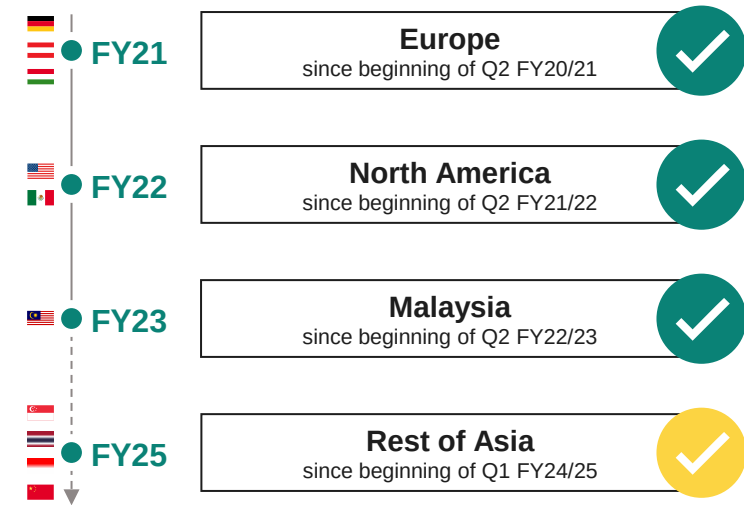
Share of green electricity in total consumption [in%]



Breakdown into individual technologies for FY23/24 [in%]



Green electricity strategy



RE100
CLIMATE GROUP | CDP

Infineon has been part of RE100 since 2021

This global initiative is bringing together many of the world's major businesses committed to 100% renewable energy.

¹Sustainability Report 2024 will be published on Nov 26, 2024

Environmental Sustainability and Climate Protection: We use our resources efficiently



Water management at Infineon



Implement projects and measures in the FY25 year with an annual recycling potential of **15 million cubic meters of water**. This corresponds to the average annual water consumption of over **340,000 inhabitants in Europe**.



Water consumption in the 2024 fiscal year per unit of revenue was around **0.30 liters per euro**.



Infineon reported for the first time its water recycling rate in the 2024 fiscal year. The total recycling rate was **32%**.



We are planning to make investments in our production sites in Dresden (Germany) and Melaka (Malaysia) to implement measures to increase their water recycling capacity.

Waste management at Infineon



Implement measures to enable the **recovery** and further **reuse** of **700 tons of solvents** in manufacturing.



The total waste generated per unit of revenue was **4.36 grams per euro**.



322 tons of the solvent cyclopentanone (CPT) and **578 tons** of the solvent propylene glycol methyl ether acetate (PGMEA) were recovered externally and reused in production, giving a recycling rate of **60%** and **72%** respectively – an important contribution to the **circular economy**.



Infineon was able to send **73.20%** of the non-hazardous waste and **77.87%** of the hazardous waste for reuse or recycling, resulting in an overall recycling rate of **76.13%**.

This data refers to the FY24.

Infiniteon awarded the first Supplier Sustainability Summit, further strengthening collaboration



Our **Supplier Engagement Program** allows a **structured approach** for driving adoption of SBTs in our supplier base



Trainings for supplier managers to confidently **discuss SBT** with suppliers



Supporting materials to help suppliers **advance** towards an SBT



Carbon scorecard **to track progress** of supplier



Collaborating with advanced suppliers in **jointly engaging** common suppliers and making SBTs the standard in the industry



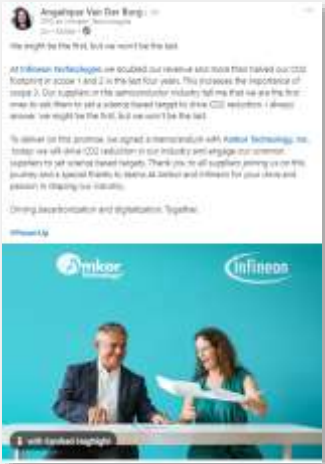
... **practical examples** of how we are collaborating with suppliers on sustainability



Recycling of wafers and chemicals



Team up with OSAT for supplier engagement



We hosted our first Supplier Sustainability Summit, and recognized top performing suppliers with a Green Award!

Our Occupational Safety and Health System ensures high safety & health standards

We protect our employees



Our Occupational Safety and Health Management System is certified in accordance with [ISO 45001](#)



We perform **Workplace-related risk assessments** worldwide using the Nohl¹ risk matrix and adopt measures based on the STOP² hierarchy



We established the **Seven Golden Rules of Safety**
We promote a **Behavior-based safety program**



We perform regular occupational safety audits



Regular safety training sessions and evacuation drills conducted

49,692 hours in training for our specialized experts worldwide in the areas of occupational safety and health as well as in fire prevention in 2024 fiscal year

¹ Nohl: A method used to evaluate and assess occupational safety risks devised by Jörg Nohl.

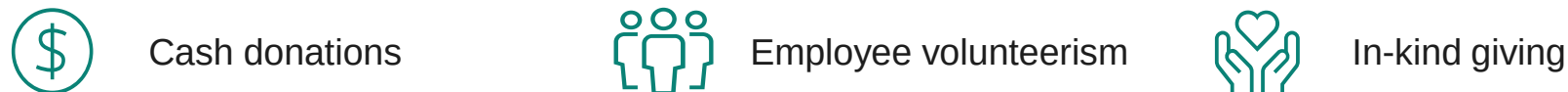
² STOP: Substitution, Technical Protective, Organizational Protective and Personal Protective Measures.



Infineon's Corporate Citizenship Program at a glance

Infineon's Corporate Citizenship Strategy is a key pillar of our broader Corporate Social Responsibility (CSR) framework, aimed at making a positive impact on the communities where it operates. Making difference!

The **engagement possibilities** of our Corporate Citizenship program are:



The **focus areas** of our Corporate Citizenship program are:



Environmental sustainability initiatives



Responding to natural and humanitarian disasters



Education for future generations



Answering to local social needs

Human Resources Management: Diversity is a pillar of our success

We progressed and are about to take the next step

Global longer-term goal of 20% by 2030



Gender

17.9% of women in middle and senior management positions



Age

Average Age: 39.7 years



Cultural

More than 115 nationalities

We take continuous measures to support diversity



Training & awareness building for leaders

0,43%

Global Gender Pay Gap



Support & motivation for talents



LGBTIQ+ Diversity



Diversity Days



Ability Diversity



How we actively drive decarbonization: Our climate strategy is based on two main pillars

1

In our own operations

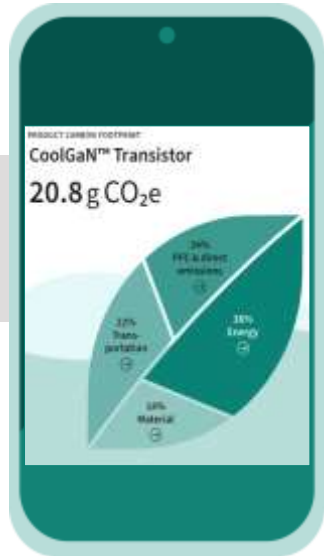


2

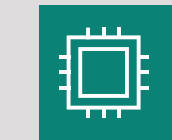
Through our products



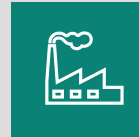
As early mover in the industry, Infineon provides Product Carbon Footprint data, enabling our customers to reduce emissions



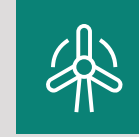
PCF: CO₂ emissions from cradle to gate →



Materials



Direct Emissions



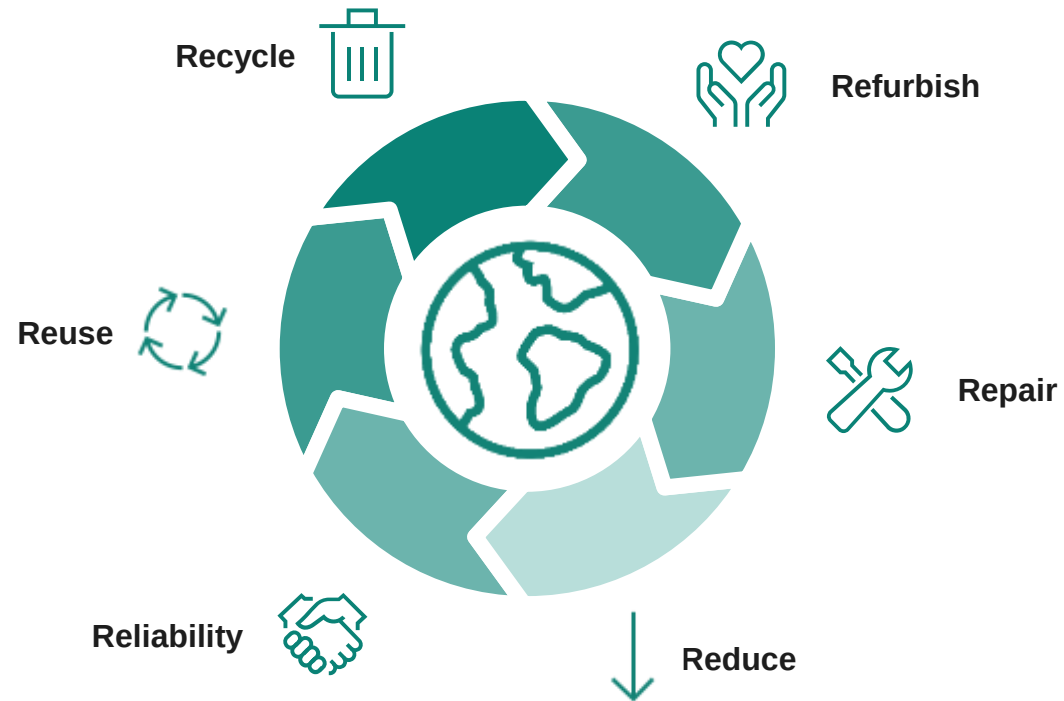
Energy



Transportation

- ~50% of our portfolio can be calculated already, 17 products are freely available at www.infineon.com/pcf
- For further details, please reach out to your established point of contact

From linearity towards circularity: Circular economy innovation is crucial to stay a role model in sustainability

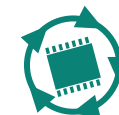


The circular economy is a model, which aims to **keep values as long as possible in the cycle** – along the value chain.

Why do we need to care about innovation around circular economy?

-  Changing consumer behaviour and regulations
-  Competitive advantage in emerging markets
-  New requirements from customers and shareholders
-  Talent attraction and employee motivation

Innovating in circular economy is crucial for Infineon along multiple dimensions

-  Better Products
-  Better Company
-  Better Business Models

With selected examples Infineon is showcasing that Circular Economy is a huge opportunity on three dimensions



Circular Products



- First product launches like SECORA™ Pay Green
- Up to 100% reduction in plastic waste
- Meeting increasing customer demand for sustainable products



Circular Company



- Pushing for circular economy within the own company
- Focus on topics beyond recycling (at a current rate of ~76% at own operations)
- Enabling closed loop systems e.g. for solvent recycling



Circular Business Models



- Infineon is exploring future hardware, software and service biz models to enable a circular economy at our customers
- First solutions available to enable a right to repair or a digital product passport



Infineon heads European research project (EECONE) for advancing the circular economy and sustainability of the electronics industry.

Our products save 45 times more CO₂ than emitted during their manufacturing

CO₂ burden

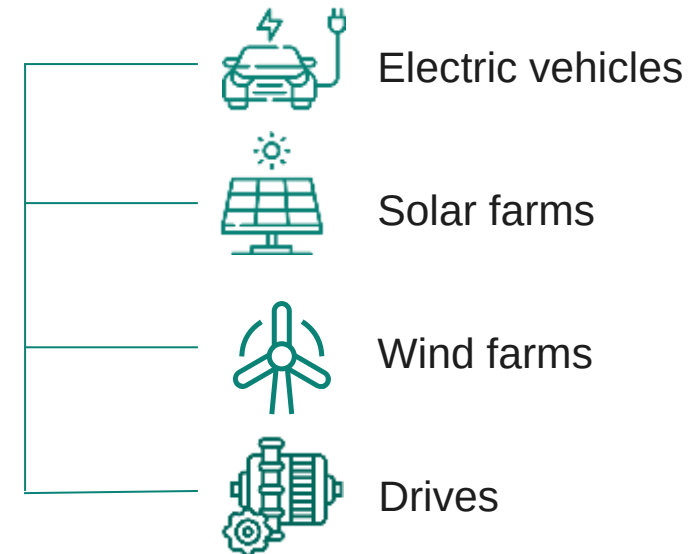
~2.9 million tons CO₂ equivalents emitted by us in 2024



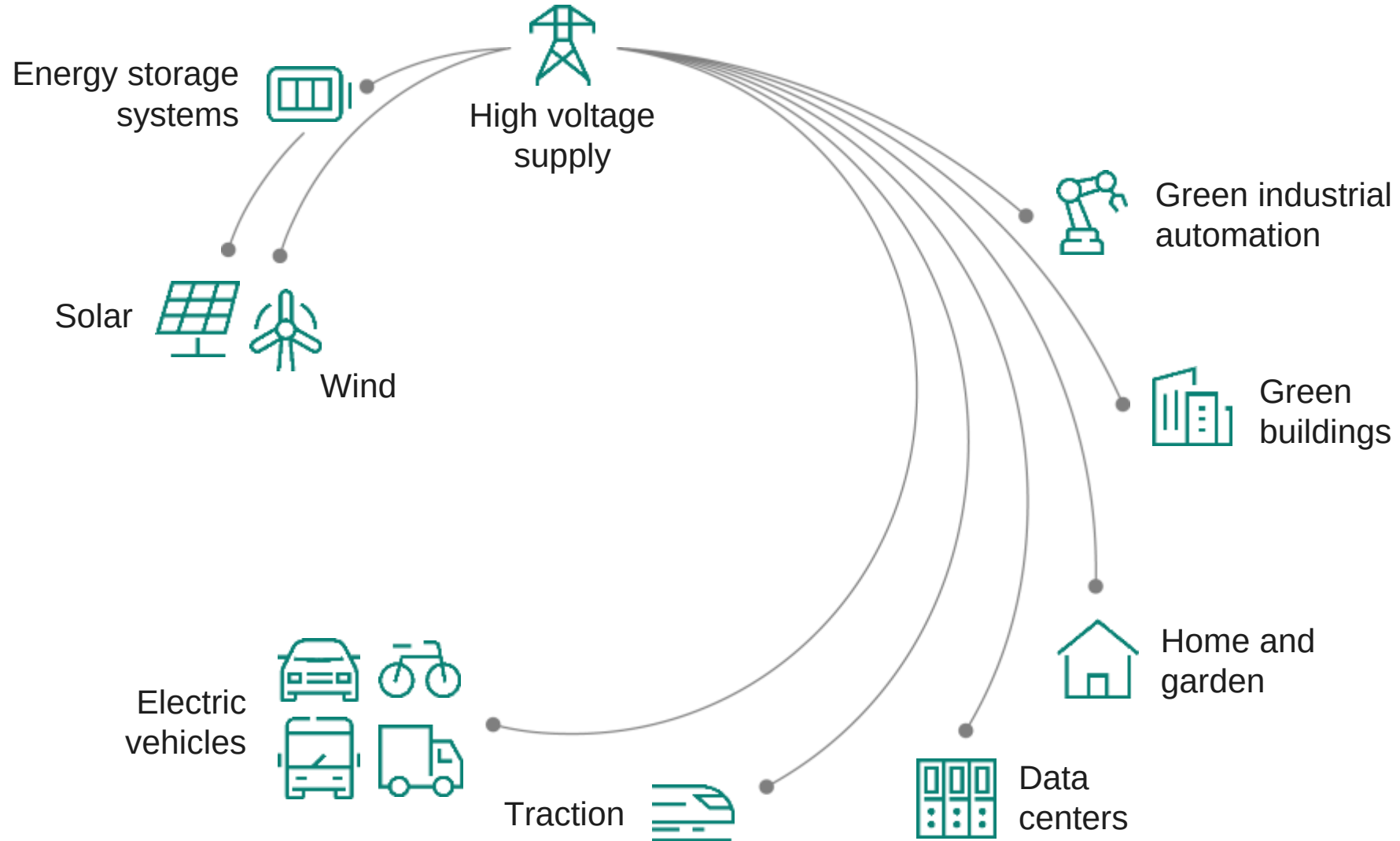
Decarbonization
multiplier of **45**

CO₂ savings

~130.3 million tons CO₂ equivalents saved through the use of our products in applications which support decarbonization

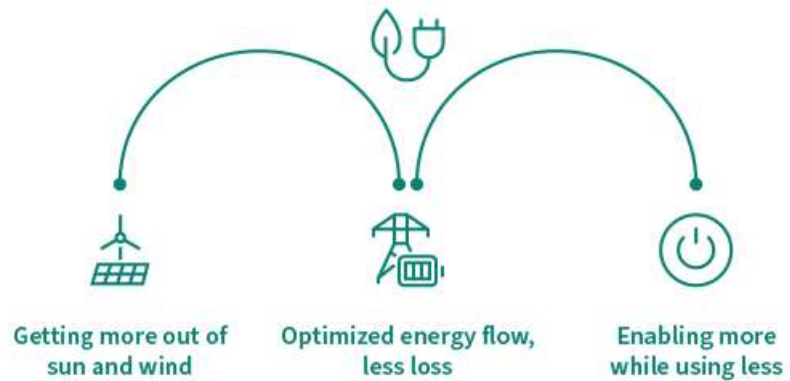


Infineon develops technologies that enable the optimization of energy efficiency along the energy conversion chain



Driving decarbonization

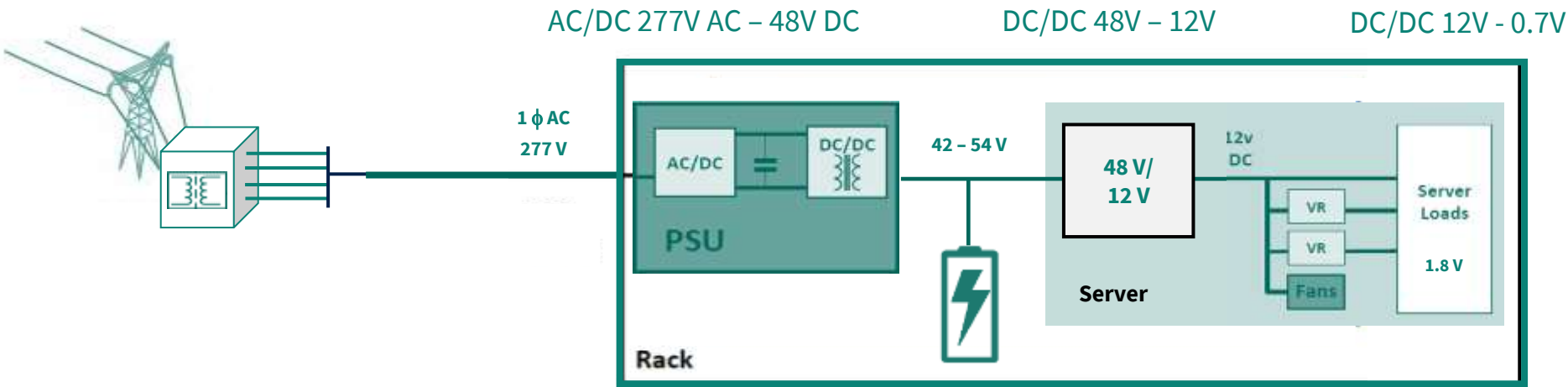
Selected use cases



Energy efficient power semiconductors - The green potential of AI data centers



Power delivery network losses in an average AI data center



Average data center
power flow efficiency
today

97%



98%

97.5%



98%

90%



94%

~85%



~90%*

Efficiency potential
from Infineon's leading
power semi solutions*

* Using GaN, SiC & vertical power modules

Chargers and adapters go green – with innovative power chips



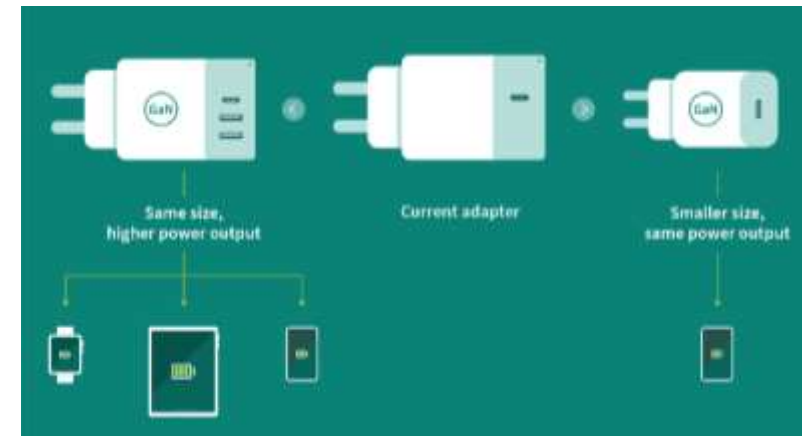
Smaller size, more power, less e-waste

- State-of-the-art semiconductor components can significantly **reduce waste heat**.
- The semiconductor technology **gallium nitride (GaN)** is particularly effective.



It enables:

- **higher switching frequency** in the voltage converter while keeping **losses at very low levels**.
- **higher power densities**. Devices become smaller without compromising on performance or charging time.
- **fast and green USB-C charging**
USB-C is supposed to save 11,000 tons of e-waste every year in the EU⁵



If every smartphone charger worldwide used **Infineon power components**¹, we would save the annual household electricity consumption of a big city like Munich²:

 **2.3³ GWh**

 **1.1 kt⁴ CO₂**

¹ Global Overview Report Digital (2022) | ² City of Munich, Statistics (Jan 2023); 1,500 kWh/ person | ³ Av. battery size 2 Ah, battery voltage 4 V, 5.31 bn devices, 180 charges/year, 3 p.p. efficiency gains | ⁴ IEA, Emission Factors (2022) | ⁵ European Parliament (2022) [Press room](#)

Energy generation – Getting more out of photovoltaic with Silicon Carbide



We make solar inverters smaller, lighter and more powerful

Our power solutions convert direct current (DC) produced by solar panels into alternating current (AC) that can be fed into a public grid or used in industrial, consumer, and mobility applications – with highest efficiency and less conversion loss.

CoolSiC™ MOSFETs allow for higher currents and reduced heat loss, enabling higher power density and smaller form factors for inverters, massively reducing cost in \$/Wp!



2008
90 W/kg
 $\eta_{\max}$ 97.1%



2011
330 W/kg
 $\eta_{\max}$ 97.8%



2016
710 W/kg
 $\eta_{\max}$ 98.5%



2020
~2100 W/kg
 $\eta_{\max}$ ~99%

Courtesy: Kaco new energy GmbH

Freight transport – Making heavy-duty vehicles green and smart



The functioning transport of goods to all parts of the world is the backbone of international trade and a prospering global economy.



Combustion engine

Trucks and buses with conventional internal combustion engines represent only 2.5% of vehicles on the road but generate 25% of the CO₂ emissions.



Decarbonization

Electrification of consumption areas previously dominated by fossil fuels.



The transport sector contributed to 22% of global CO₂ emissions, totaling 7.98 Gt CO₂. Within the transport sector, road vehicles accounted for approximately 75% of these emissions.

Source: <https://www.acea.auto/files/ACEA-report-vehicles-in-use-europe-2023.pdf>

Energy Efficiency

Green and intelligent buildings: Sensors are key



Time for innovative energy management

- The operation of buildings accounts for 30% of global final energy consumption¹
- In addition to effective power solutions, sensors, actuators and controllers are crucial for energy management and efficiency
- **The “sensorization” and digitalization of a smart building can save around 30% of energy² with:**

Occupancy and comfort monitoring

Sensors enable connected devices to intuitively understand their surroundings and to react accordingly (“contextual awareness”). As a result, devices are not always ON. They only run when needed.

→ Save energy, optimize inhabitants’ well-being, increase device’s lifetime

Predictive maintenance and condition monitoring

Sensors, microcontrollers, connectivity and security solutions monitor the condition of devices e.g. HVACs or luminaires. They prevent failures and inefficiencies.

→ Reduced down times, extended equipment lifetime, less energy consumption, efficient use of resources

¹ IEA (2023): [Buildings](#) | ² US department of energy (2020): [Innovations in Sensors and Controls for Building Energy Management](#)

Infiniteon's CoolSiC™ power module reduces energy consumption of streetcars by ten percent



Innovative semiconductor solutions for rail technology

In a joint field test by Siemens Mobility and Stadtwerke München, an Avenio streetcar **powered by Infineon silicon-carbide technology** was tested in passenger service for a year, covering around 65,000 km.

Test results with silicon-carbide technology replacing today's silicon IGBT modules:



- Reduced energy consumption **by 10 percent**
- Significant **reduction of motor noise**, an important factor for the acceptance of streetcars

New semiconductor material and connection technology

CoolSiC™ MOSFET and .XT technology in the XHP™ 2 package – tailored specifically to the requirements of rail services.

Image-Copyright: Stadtwerke München (SWM)/Münchner Verkehrsgesellschaft (MVG)

Eco-friendly Coil on Module (eCoM): a game-changer for payment card sustainability

- ✓ Replacing the traditional copper wire antenna embedded in payment cards
- ✓ Leads to more than 60% reduction in the CO2 emissions associated with the sourcing and logistics of the raw materials for card production
- ✓ Easily removed to allow for 100% recycling of the card body at end of life
- ✓ Offered as eCoM-based turnkey/all-in-one solution SECORA™ Pay Green

- ✓ Payment cards can be made from **one material** only, including biodegradable alternatives to plastics, such as wood



Module including antenna

Security controller & certified software

 eCoM replaces the copper wire antenna embedded in payment cards



With our products & PCF transparency, we enable our customers to meet their sustainability goals

- 1** We aim for... **technology leadership** and being a role model for sustainability
- 2** We offer... products & solutions for **green energy** and **energy-efficient electrification** of your application
- 3** We pioneer... **product carbon footprint data** based on a robust and transparent methodology
- 4** Value-add... **increased transparency** to effectively drive **sustainability** and **decarbonization goals**



