Infineon on the way to CO₂-neutrality

Semiconductor solutions from Infineon promote sustainability and energy efficiency

The impact of changing climate conditions threatens regional ecosystems and presents those dependent on them with major challenges. The only way to master the climate change is when all stakeholders in our society act jointly, decisively and courageously. Comprehensive climate protection and sustainable action will be decisive for success.

New resource-efficient and low-emission technologies are vital to increased sustainability and the solution of climate-related challenges. “Making more out of less” is precisely the Infineon approach when it comes to helping better solve today’s challenges and actively creating a better future. Semiconductors from Infineon play a key role in e-mobility, renewable energy sources and energy efficiency. They support greener forms of transportation and make it possible to more efficiently generate, transmit, store and use electric energy. We also take sustainability and reduction of emissions very seriously in the manufacture of our products. For each square centimeter of wafer area we process, Infineon requires 17 percent less water, 44 percent less electricity and generates 67 percent less waste than the global average of the semiconductor companies organized in the World Semiconductor Council. In the years to come Infineon will continue to drive sustainable global development with products that are energy-efficient and save resources, as well as with binding goals on the reduction of CO₂ emissions. As a company, we accept social responsibility and help apply the possibilities of the digital transformation in the interest of people.

Infineon will be CO₂-neutral by 2030

Infineon is already making a valuable contribution to climate protection today. However, we know: we can do even better. This is why we as a company have set ourselves binding reduction targets since 2020. Infineon will be CO₂-neutral by 2030¹. The implementation of our climate strategy is already having an impact. By the end of the 2021 fiscal year, Infineon’s scope 1 and scope 2 emissions were 14.2 percent below the 2019 emissions level. Abatement concepts, energy efficiency programs, and the switch to 100 percent green electricity in Europe have contributed to this reduction. By as early as 2025, the following measures are to achieve a 70 percent reduction in emissions compared to 2019:

› Continue and improve voluntary measures to reduce greenhouse gas emissions by exhaust air purification
› Continue improvement of energy efficiency and migrate to the most modern process technologies in manufacturing
› Switch to 100 percent green electricity with guarantees of origin in the medium-term
› Purchase CO₂ certificates (for emissions which cannot be viably avoided) with a high quality standard, in support of projects with ecological and social benefits

¹ This goal applies to Infineon’s own greenhouse gas footprint and includes not only direct emissions (scope1), but also indirect emissions tied to electricity and heat (scope 2).
Infineon creates considerable ecological value

Semiconductors are an indispensable part of both today’s technologies and those of tomorrow. They are at the core of e-mobility, generation of electricity from renewable sources, automated factories and Smart City and Smart Home concepts. Here semiconductor products and solutions from Infineon can achieve CO₂ savings equivalent to 72.45 million tons during their lifetime, thus substantially contributing to the improvement of our society’s ecological footprint.

Power semiconductors enable climate-friendly power generation

In wind turbines, power semiconductors convert electricity and couple the generator to the grid. Stronger wind turbines require the most robust and reliable components because they have to function with low maintenance in harsh environments. Infineon’s power module, the PrimePACK™ supports a wide range of activities in the wind turbine nacelle during efficient wind power generation: feeding the generated electricity into the grid, ensuring grid stability, aligning the wind turbine and the rotor blades with the wind, protecting the wind turbine from overheating or freezing and shutting down the wind turbine in an emergency.

Regulatory measures need to create the framework for a sustainable and climate-friendly economy

› Promote microelectronics and power electronics in particular as enablers of a sustainable global energy industry
› Accelerate expansion of renewables to drive electrification of various sectors
› Create reliable relief regulations and safe investment conditions to safeguard the global competitive strength of climate-friendly companies
› Implement a stricter and more coherent CO₂ pricing system (e.g. tradable emission certificates)
› Enable technologically neutral research and development in pursuit of the most efficient solutions for emissions reduction
› Establish and support competitive markets for innovative and green technology solutions
› Accelerate the digitalization of industry and the use of artificial intelligence to quickly leverage untapped energy efficiency potentials

Learn more about Infineon’s sustainability concept and the net environmental benefit of our products here: www.infineon.com/cms/en/about-infineon/sustainability