# Explanatory notes to the information published in the report “Sustainability at Infineon” – supplementing the Annual Report 2021

These explanatory notes refer to the sustainability information and data published in the report “Sustainability at Infineon” (hereinafter called Report). KPMG AG Wirtschaftsprüfungsgesellschaft, Munich (Germany), has provided independent limited assurance on this information in accordance with the “International Standard on Assurance Engagements 3000 (Revised)”. In addition, selected indicators were subject to a reasonable assurance audit. The assurance reports can be found in the Internet under: www.infineon.com/csr_reporting.

## Reporting standards

Infineon Technologies (hereinafter called Infineon) applies the GRI Standards, according to the Core option and as reporting criteria for the sustainability information published in the Report. This reporting standard is supported by internal guidelines, too.

For the determination of the Infineon carbon footprint, we have developed an own approach which we have continually further refined. This approach is generally oriented towards International Organization for Standardization (ISO) 14000 and substantiated by Publicly Available Specification (PAS) 2050, a guideline for product carbon footprints, issued by the British Standards Institution (BSI) as well as by the Greenhouse Gas Protocol (GHG Protocol).

For external reporting we follow the GHG Protocol classification of the scope 1, scope 2 and scope 3 emissions. The Scope 2 Protocol[1], issued by the World Resources Institute, has been considered, too.

For the determination of the indicator “$CO_2$ savings enabled through our products” we have used internal criteria.

## Reporting boundaries

Our reporting includes all our own production sites, our corporate headquarters Campeon (Germany), R&D sites, sites for service functions, and sales offices.

The information reported in the chapters “Protection of our employees” and “Environmental sustainability and climate protection” include the production sites Austin (USA), Bangkok (Thailand), Cavite (Philippines), Mesa (USA) as well as all production sites and our corporate headquarters Campeon (Germany), which are part of our certified IMPRES[2] management system as well as direct and indirect energy-related emissions by manufacturing service providers. It is based on data collected internally and publicly available conversion factors. This scope was selected based on the impact of the activities performed on those sites and comprises around 90 percent of the total Infineon employees worldwide.

External companies operating at some of our sites, in which Infineon has no operational control, and which have no influence on Infineon’s production, are not included in the reported key performance indicators.

With the completion of the acquisition of Cypress in April 2020, the company headquartered in San José (USA) became part of Infineon. In principle, the non-financial data of Cypress have been consolidated in this report. Where data from Cypress have not been included in the content of this report, this is explicitly disclosed in the relevant sections. Up to and including the fiscal year 2020, the data from Cypress are not included in key performance indicators disclosed in this report. However, data relevant to Cypress are included in the carbon neutrality goal we set with the 2019 calendar year as the base year.

1 GHG Protocol Scope 2 Guidance (2015).

2 IMPRES: Infineon Integrated Management Program for Environment, Energy, Safety and Health.

## Determination of the key performance indicators

### a. Occupational safety

Definition of terms:
The term employees includes the following group of persons: full-time employees (with full and with fixed-term work contracts), part-time employees (with full and with fixed-term work contracts), working students, apprentices and interns, external employees/temporary employees/employees working via a staffing agency, diploma candidates/master students, PhD students, employees in active partial retirement.

Accidents:
The calculations of the Injury Rate (IR) and the Lost Day Rate (LDR) are based on the GRI Disclosure 403-9 definitions.
Only work-related accidents with at least one day work-absence are considered. The day of the accident is not counted. The base for the determination of lost days is calendar days. Way-to-work accidents and near misses are not included.
The working hours are the weekly hours as stipulated in employee contracts. This includes holidays and public holidays. The reporting of lost days concludes at the end of each fiscal year.

Training hours:
The determination of the "training hours" is based on the training and continuing education for our specialized experts worldwide in the areas of occupational safety and health as well as in fire prevention.

### b. Energy

Energy consumption per revenue:
As a reference for the calculation of this key performance indicator we have used the GRI Standards definitions. We have taken into account all energy sources: Electricity, district heating, firewood, natural gas, LPG, gasoline/petrol, diesel and heating oil. The revenue figures used for the calculation are taken from respective financial reports of the last years.

Total energy consumption:
As a reference for the calculation of this key performance indicator we have used the GRI Standards definitions. We have taken into account all our energy sources:

- Infineon obtains its energy in the form of electricity, district heating, firewood, natural gas, LPG, gasoline/petrol, diesel and heating oil.
- The individual energy consumption of our production sites is included in our reporting tool quarterly and automatically converted into the energy reference unit by the tool itself. The conversion factors included in our reporting tool in order to calculate the final energy consumption originate from the following sources:
    - UK Carbon Trust
    - National Energy Board, Government of Canada
    - Claverton Energy Research Group
    - FNR (German: Fachagentur Nachwachsende Rohstoffe e.V.) – German central coordinating institution for research, development and demonstration projects in the field of renewable resources.
    - UK Ministry – Department for Environment, Food & Rural Affairs (DEFRA)

Specific electricity consumption:
Based on the normalization factor "square centimeter manufactured wafer", the electricity consumption's benchmark reported by the World Semiconductor Council (WSC) only includes the data of our frontend sites in Austin (USA), Dresden (Germany), Kulim (Malaysia), Regensburg (Germany), Temecula (USA) and Villach (Austria).

Energy consumption outside the organization:
Information is reported in $CO_2$ equivalents. The reporting was based on the definitions of the GRI Disclosure 302-2:

- Upstream emissions are the ones incurred in connection with external manufacturing services and the provision of materials (such as raw materials, supplies as well as other utilities).
- Downstream emissions are the ones directly derived from production processes, internal and external transportation as well as travel.

### c. Perfluorinated Compounds

Perfluorinated Compounds (PFC) are essential for the production of semiconductors in the frontend sites. These are used in wafer-etching processes for structuring wafers as well as for cleaning production equipment. This includes PFC, namely perfluorinated and polyfluorinated carbon compounds, sulfur hexafluoride ($SF_6$) and nitrogen trifluoride ($NF_3$). These greenhouse gases cannot be replaced by another class of substances and account for around 82 percent of the scope 1 emissions.

The reported PFC figures refer to the amounts consumed during the respective fiscal year by Infineon.

The conversion of PFC in $CO_2$ equivalents is based on a worldwide predetermined algorithm which must be used within the semiconductor industry. Its calculation methodology is based on the scientific assessments of the IPCC[1] and the calculations for GWP[2]. The algorithm is provided annually by the responsible associations.

The calculation of the normalized emission rate is carried out as a normalization of PFC emissions in $CO_2$ equivalents divided by the manufactured wafer surface.

### d. Other emissions

Under “other emissions” we considered the following emissions:

- Sulphur oxide ($SO_x$): $SO_2$ and $SO_3$ expressed as $SO_2$ equivalent
- Nitrogen oxide ($NO_x$): NO and $NO_2$ expressed as $NO_2$ equivalents
- Volatile Organic Compounds (VOC): organic compound having an initial boiling point not exceeding 250°C at a standard pressure of 101.3 kPa (Directive 2004/42/EC)
- Fine particulate matter (PM): Particles with a diameter of 10 or less micrometers (PM10)
- Carbon monoxide (CO): Carbon monoxide is produced from the partial oxidation of carbon-containing compounds with insufficient oxygen supply.

### e. Carbon neutrality and climate strategy

Infineon has set itself the target of becoming carbon-neutral by the end of the 2030 fiscal year with respect to the scope 1 and scope 2 emissions. We want to make an active contribution to global $CO_2$ reduction and to the implementation of the targets set out in the Paris Climate Agreement. Even before the end of the 2025 fiscal year, Infineon aims to have achieved 70 percent of this target (compared with the 2019[3] calendar year) in respect of its own emissions.
To achieve its targets, Infineon focuses in particular on avoiding direct emissions and increasing energy efficiency. The continuing expansion of its energy efficiency program and its efforts to achieve intelligent exhaust air abatement are playing a key role here and are contributing significantly to a reduction in GHG emissions. To reduce emissions even further, the company is planning to continue the purchase of green electricity. In future and to a lesser extent, it is also planned to offset emissions that cannot be avoided by purchasing $CO_2$ certificates that combine development aid and $CO_2$ avoidance.

### f. Infineon carbon footprint

We assessed the net ecological benefit on our carbon footprint considering both: environmental burden and environmental benefits. The data of GHG emissions are reported in metric tons.

<u>$CO_2$ burden:</u>
This includes the direct emissions such as PFC, emissions occurring during the deployment process of raw materials and consumables, manufacturing, chemicals, water/waste water, energy consumption and waste. Furthermore, it considers the transport of the products to other sites and to distribution centers, travel and own vehicles as well as

1 IPCC: Intergovernmental Panel on Climate Change.

2 GWP: Global Warming Potential - GWP is relevant for 100 years long.

3 In line with our carbon-neutrality goal, with the 2019 calendar year as the base year, the relevant data of Cypress are included.

direct and indirect energy-related emissions by manufacturing service providers. Direct and indirect emissions are based on source data from the 2021 fiscal year.

Not included here is the $CO_2$ emitted during the use-phase of the products and their disposal. Those $CO_2$ emissions are not determined due to the varying applications and fields of use Infineon products are subject to.

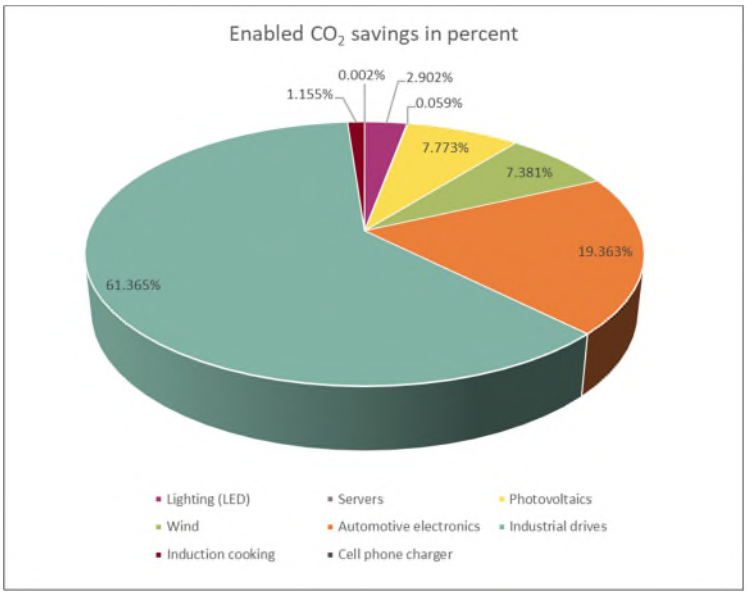
Infineon uses for its external reporting the final scope 2 emissions taking into account provider-specific emission factors of the energy sources used. This approach was selected in order to illustrate the implementations achieved so far in terms of regenerative energy supply.

The following official sources were used as data sources for $CO_2$ conversion factors:

- DEFRA Carbon Factors (energy, transport, waste, water)
- International Energy Agency - Carbon conversion factors (electricity)
- ProBas[1] Substance Database (raw materials and supplies)
- IPCC (PFC)

<u>$CO_2$ savings:</u>

Up to date, for semiconductor products, there is no established external framework or standard defining rules applicable for accounting and reporting of $CO_2$ savings enabled through products in the use phase. Therefore, we have developed an own methodology to determine the indicator $CO_2$ savings enabled through our products.




The calculation of the environmental benefit is based on the 2020 calendar year because the products sold in that calendar year enable reductions just in the use-phase of the end product (after being sold), and are then relevant for the Infineon carbon footprint 2021.

The methodology for the determination of the $CO_2$ emission reductions enabled is based on the framework conditions described here:

- Consideration of the following Infineon products: Automotive electronics, industrial drives, servers, lighting (LED), photovoltaics, cell phone chargers and wind as well as induction cookers.
- The calculation is based on the potential energy savings our semiconductors enable in the end technologies where they are installed.
- For the calculation, we consistently used worldwide average emission factors of the 2019 calendar year.
- For the calculation, we considered the market share of Infineon as well as the percentage of semiconductors in the end-products and the lifetime of the technologies which was based on internal and external expert estimations.

Life-cycle assessments can be subject to imprecision due to the complex issues involved. We continually strive to refine and improve the Infineon carbon footprint methodology.

1 ProBas: Process-oriented basic data for environmental management tools.

## g. Water

Water withdrawal:
The water withdrawal includes own well water as well as drinking and non-drinking water provided by third-parties (e.g. municipal waterworks).

Specific water consumption:
Based on to the normalization factor “square centimeter manufactured wafer”, such benchmark only includes the data of our frontend sites in Austin (USA), Dresden (Germany), Kulim (Malaysia), Regensburg (Germany), Temecula (USA) and Villach (Austria). In the water consumption’s benchmark reported by the WSC, cooling water is not considered.

Water reused and recycled:
Infineon defines water reused or recycled as the water which is used either without or with further treatment and which can be used in order to meet the water demand without using fresh water:

- The following water types are considered within reused waste water:
    - Recovered waste water for recycling in the same process
    - Recovered waste water from a different process but within the same facility
    - Waste water which is reused in another Infineon site

- The following water types are considered within reused ultrapure water:
    - Recovered ultrapure water for recycling in the same process
    - Recovered ultrapure water from a different process but within the same facility
    - Ultrapure water which is reused at another Infineon site

Water discharge:
The key performance indicators and targets related to water discharge include waste water and other water discharges. Municipal waste water and evaporated water are excluded.

Waste water is classified as follows:

- Direct discharge: effluent discharged by the site without the need of prior-external treatment.
- Indirect discharge: water which is not allowed to be directly discharged or which needs prior treatment.

Water-stress:
In this reporting year, we carried out an assessment of the potential risks of water stress, using the Aqueduct Water Risk Atlas with reference to Aqueduct 3.0 data released by the World Resources Institute. Areas with a high or extremely high risk of water stress can be identified. Our review revealed that only three of our sites are in such areas: Mesa (USA), Temecula (USA) and Tijuana (Mexico).

## h. Waste

Reported waste is classified in the categories “hazardous” and ”non-hazardous” as defined by the local or national regulations in that context. The information reported in the “Environmental sustainability and climate protection” chapter is based on the officially communicated treatment methods by the waste management companies. Per our definition waste is reported independently whether it is compensated or not.

Specific waste generation:
Based on the normalization factor “square centimeter manufactured wafer”, the waste generation’s benchmark reported by the WSC only includes our frontend sites in Austin (USA), Dresden (Germany), Kulim (Malaysia), Regensburg (Germany), Temecula (USA) and Villach (Austria).

## Data Quality

We continually strive to improve the quality of our data via the implementation of policies, systems, procedures and internal controls at Group and site level.

In case of business acquisitions/sales, the figures of those would be adjusted in conformity with the reporting boundaries mentioned above. In those cases, the numbers will not be retrospectively included in the Report.
In individual cases data of quarter four may be estimated in accordance with the internal estimation policies.

In case a significant error in the fiscal year (meaning greater than 5 percent at Group level) was found in the data, it would be corrected. In case a significant error which does not indeed affect the reporting period but still affects the information of the previous years was found, it would be corrected.

Published by
Infineon Technologies AG
85579 Neubiberg, Germany

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Date: 11 / 2021

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