



# WE THINK GREEN

Calculating, reducing, offsetting emissions

**HÖRMANN**



# Responsibility for generations

As a family-owned company, we are aware of our responsibility to future generations and have therefore been active in the area of environmental and climate protection for many years. Our climate protection strategy follows the triad of calculation, reduction and compensation. Our aim is to steadily reduce our CO<sub>2</sub> emissions.



### **CALCULATING, REDUCING, OFFSETTING EMISSIONS.**

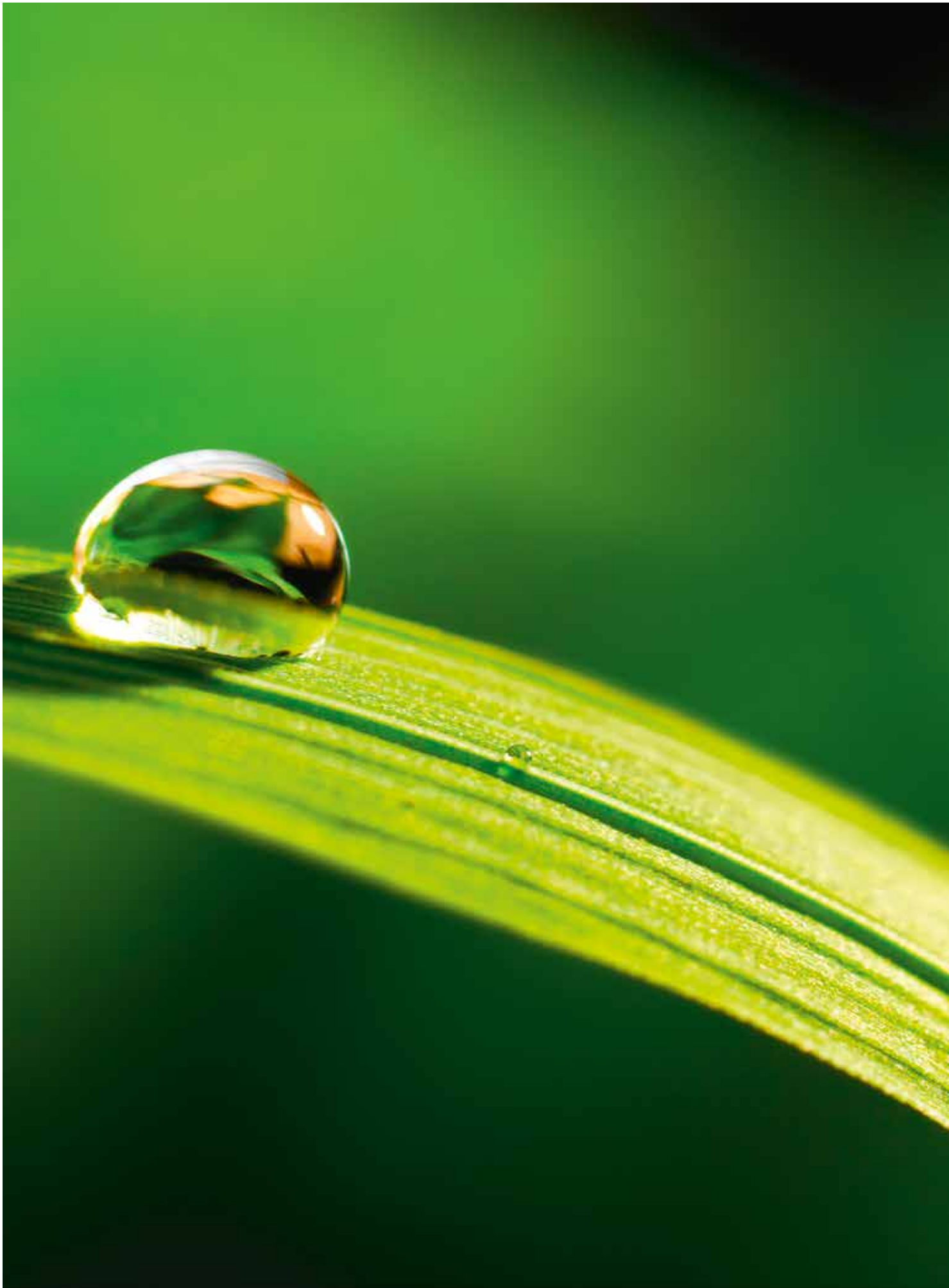
The annual calculation of CO<sub>2</sub> emissions is the basis for our climate protection strategy. Our focus is on reduction measures because we see this as the most sustainable way to reduce CO<sub>2</sub>. However, many of these measures are time-consuming. Furthermore, the technology to prevent all emissions does not yet exist today. For this reason, we have been offsetting the remaining CO<sub>2</sub>e emissions since 2021 in order to be able to offer our residential internal doors as well as our campaign doors completely climate-neutral for a start.



Of course, we cannot save the world by ourselves. That is why we motivate our employees and suppliers to find solutions for a more climate-friendly future. When everyone contributes something, it can make a big difference on the whole!



You can also find all information and many videos digitally at [www.hoermann.de/umwelt](http://www.hoermann.de/umwelt)





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# Calculating CO<sub>2</sub>

As the basis for our climate protection commitment, we calculate the CO<sub>2</sub>e emissions of our sites in all three scopes of the Greenhouse Gas Protocol each year. Thus, in addition to facility management, mobility and office supplies, the calculation also includes incoming and outgoing logistics, packaging and input materials for all manufactured products.



**CARBON FOOTPRINT.** The carbon footprint for our entire company, the Corporate Carbon Footprint (CCF), was ascertained in cooperation with the experts from Climate Partner. In the calculation, it was particularly important to us to record the consumption data as accurately as possible. For example, we calculated the emissions of our vehicle fleet via the fuel consumption. This consumption data was then multiplied by the official emission factors to calculate the CO<sub>2</sub> emissions. To be absolutely certain, a safety margin of 10 % was also added. The Product Carbon Footprint (PCF), which we have calculated for some products, considers all relevant factors, taking into account the three scopes. The annual calculation of the Corporate Carbon Footprint (CCF) is voluntary for us, i.e., it is not required by law. However, this way we know exactly where we stand in order to constantly develop our continuous improvement process further, and the effectiveness of climate protection measures can be tracked over time.

→ Further information on the three scopes can be found starting on page 10.





**GREENHOUSE GAS PROTOCOL.** We have calculated our carbon footprint according to the Greenhouse Gas Protocol (GHG) developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). This accounting standard for greenhouse gases, which is widely used internationally, observes five basic principles.

**RELEVANCE.** All significant sources of emissions are considered in the preparation of the Corporate Carbon Footprint (CCF) and are intended to serve decision-making inside and outside of the company.

**COMPLETENESS.** All relevant emission sources within the system boundaries must be taken into account.

**CONSISTENCY.** Accounting methodologies and system boundaries are recorded in order to compare results in subsequent years. Potential changes to the methodology and system boundaries must be identified and justified.

**ACCURACY.** Distortions and uncertainties are to be reduced as far as possible so that the results provide a sound basis for decision-making.

**TRANSPARENCY.** The results are to be presented in a transparent and clearly comprehensible manner.





**EMISSIONS.** CO<sub>2</sub> emissions refer to greenhouse gases produced by the combustion of various carbon-containing materials such as coal, diesel, wood or liquefied petroleum gas. During these processes, high amounts of CO<sub>2</sub> (carbon dioxide) are emitted, which accumulates in the earth's atmosphere in steadily increasing concentrations. CO<sub>2</sub> emissions play a major role in the so-called greenhouse effect. This leads to global warming with devastating consequences for the environment. Information on climate damage is standardised in tonnes of CO<sub>2</sub>. However, we take into account all relevant greenhouse gases and convert them into CO<sub>2</sub> equivalents (CO<sub>2</sub>e). The Greenhouse Gas Protocol (GHG) covers the greenhouse gases regulated under the Kyoto Protocol: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulphur hexafluoride (SF<sub>6</sub>) and nitrogen trifluoride (NF<sub>3</sub>). Methane, for example, is 30 times more harmful than CO<sub>2</sub>. In 1992, the international community declared in the Framework Convention on Climate Change its intention to stabilise greenhouse gas concentrations at a level that would prevent dangerous interference in the climate system. It agreed to limit and reduce its greenhouse gas emissions in the Kyoto Protocol (1997) and the Paris Agreement (2015).

**KYOTO PROTOCOL.** On 11 December 1997, in Kyoto, Japan, the United Nations adopted an additional protocol to shape the Framework Convention on Climate Change (UNFCCC). The agreement was signed by 193 countries and for the first time sets binding targets for greenhouse gas emissions in industrialised countries. The participating industrialised countries commit themselves to reducing their annual greenhouse gas emissions by fixed values, for example by an average of 5.2 percent compared to 1990 in the first commitment period from 2008 to 2012. In addition, the agreement aims to enable developing and emerging countries to achieve sustainable development.

**PARIS AGREEMENT ON CLIMATE PROTECTION.** In 2015, 196 nations committed to curbing global warming starting in 2020. Since then, for the first time, all the nations of the world have been pulling together to combat global warming – industrialised, emerging and developing countries. This is a major breakthrough, as previously only industrialised countries had committed to binding reduction targets. We find three goals of the agreement to be particularly important.

**Limiting global warming to a maximum of 1.5 degrees:** Until now, a warming of 2 degrees was considered to be a barely tolerable level of global warming. Due to new findings and political initiatives of many developing and newly industrialising countries (including island states whose existence is threatened), a maximum global warming of 1.5 degrees is now aimed at as a barely tolerable level.

**Climate-neutral global economy from 2050:** The net emission of greenhouse gases – i.e. the difference between emission and absorption – is to be zero in the second half of this century. The de facto goal is thus a climate-neutral global economy.

**Binding reduction targets every five years:** Part of the agreement are national plans for implementing the climate targets. These plans must be resubmitted every five years and successively intensified and adapted to technological progress. By the end of the conference, 186 countries had already submitted initial reduction plans, but these are far from sufficient.

# Scope 1

**DIRECT EMISSIONS.** These CO<sub>2</sub> emissions occur directly in our company and we can control them. They include the combustion of fossil fuels such as heating oil in heating systems as well as fuel consumption by our vehicle fleet, which includes cars for field staff as well as our own lorries and forklifts in the warehouse. In addition, CO<sub>2</sub> emissions from production plants and from chemical and physical processes, such as for example those that occur during painting or coating, are included, as well as refrigerant leakage from air conditioning systems.



## Percentage of the consolidated Corporate Carbon Footprint for 2019\*

- Heat: 1.0 %
- Refrigerants: 0.1 %
- Vehicle fleet: 0.7 %

\* CO<sub>2</sub> emissions can always only be calculated downstream, i.e. the emissions for 2019 were calculated in 2020.



# Scope 2

## INDIRECT EMISSIONS FROM EXTERNAL POWER SUPPLIERS.

These indirect CO<sub>2</sub> emissions result from the combustion of fossil fuels for the production of electricity, district heating/cooling and steam. By switching to 100 % green electricity, which produces no CO<sub>2</sub> emissions in Scope 2, we have already achieved the zero-tonne CO<sub>2</sub> target for all German sites in Scope 2. The remaining 0.3 %\* of CO<sub>2</sub> emissions are generated in countries where it is not currently possible to purchase green electricity that is comparable in terms of traceability to the green electricity from Naturstrom.



### Percentage of the consolidated Corporate Carbon Footprint for 2019\*

- Electricity: 0.3 %

\* CO<sub>2</sub> emissions can always only be calculated downstream, i.e. the emissions for 2019 were calculated in 2020.





# Scope 3

**INDIRECT EMISSIONS FROM THE VALUE ADDED CHAIN.** CO<sub>2</sub> emissions that are not subject to direct corporate control are reported in Scope 3. These emissions that are relevant for us arise in the upstream and downstream supply chain and are taken into account by us:

- Extraction and production of raw materials / input materials and auxiliary materials for our production as well as consumables in the office
- Production of fixed assets such as machinery and vehicles
- Electricity production with renewable energies such as e.g. wind turbine production
- Inbound and outbound logistics, whether commissioned by us or suppliers or customers – differentiated according to sea freight, air freight and transport by lorry incl. consideration of the vehicle size, e.g. 7.5 or 12 tonne lorry
- Business trips not taken with our own fleet (e.g. flights, rental cars, taxi rides, public transport)
- Employee travel, taking into account the distance travelled, working days and means of transport used (car, public transport, bicycle)
- Printed materials, such as e.g. sales brochures, operating and fitting instructions
- Packaging for our products such as e.g. Euro pallets, foils, cardboard boxes as well as reusable mesh boxes which we exchange between the sites
- Disposal of production waste, operational waste, recycling and landfilling



### Percentage of the consolidated Corporate Carbon Footprint for 2019\*

- Raw materials / input materials, auxiliary materials, consumables: 91.2 %
- Electricity production: 0.6 %
- Logistics: 3.1 %
- Business trips and employee commuting: 1.7 %
- Printed materials: 0.4 %
- Packages: 0.7 %
- Disposal: 0.2 %

\* CO<sub>2</sub> emissions can always only be calculated downstream, i.e. the emissions for 2019 were calculated in 2020.



In accordance with the requirements of the GHG Protocol, the reporting of CO<sub>2</sub> emissions is mandatory in the Scope 1 and Scope 2 categories but voluntary in the Scope 3 category. In addition, as a corporate group, we are not obliged to prepare a balance sheet, but we do so voluntarily.

**VALUE ADDED CHAIN.** With the voluntary inclusion of Scope 3, we also assume responsibility for all upstream and downstream emissions in the value added chain. The largest share of our carbon footprint, totalling 91.2%\*, consists of purchased raw materials, as most of these raw materials cannot yet be sourced in a climate-neutral way.

**Using steel as an example, the following emissions are taken into account:**

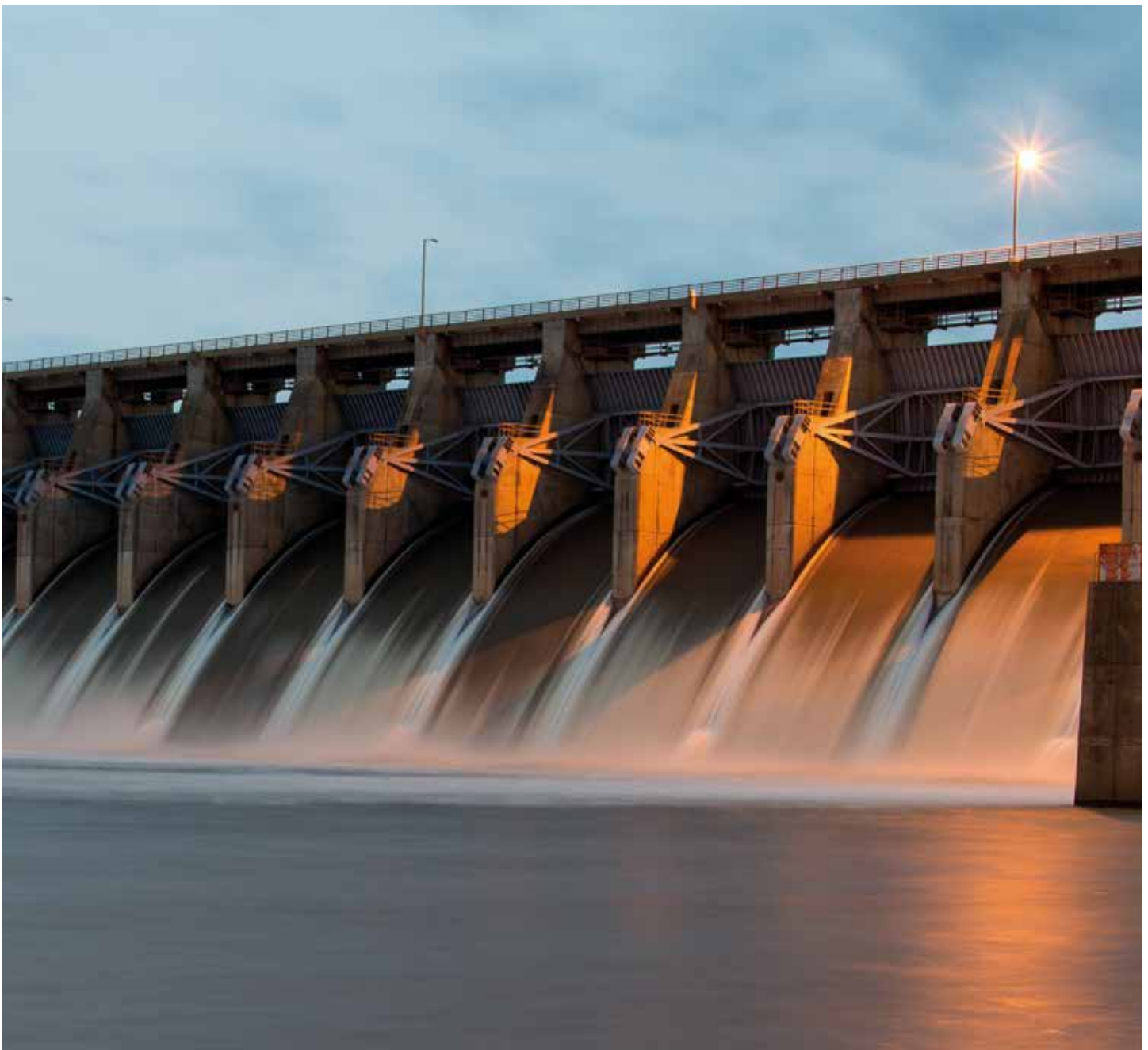
- Mining of iron ore (often in Scandinavia, Russia, Canada, South America, Africa or Australia)
- Pig iron production in the blast furnace
- Recycling of steel
- All transports in this value added chain
- All used raw and auxiliary materials





# Reducing CO<sub>2</sub>

We have been reducing CO<sub>2</sub> emissions for years by sourcing renewable energy. In addition, we are improving the energy efficiency of our buildings and facilities. In this way, we reduce our energy consumption and conserve resources. With other measures such as the use of recycled paper, CO<sub>2</sub>-neutral mail delivery and the recycling of transport packaging, we are also investing in a clean future.







**CO<sub>2</sub> reduction**  
Over 35000 t per year



**Climate protection effect**  
Over 2800000 beeches

**100 % GREEN ENERGY.** The entire electricity requirement of the Hörmann Group in Germany is covered by Naturstrom. This certified provider supplies 100 % genuine “green energy” that has been directly produced by medium-sized wind and water power stations primarily located in Germany. Since its foundation, this provider has focused on a future-oriented and sustainable energy supply and is independent of the nuclear and coal corporations. In addition, the green electricity is certified by the “Grüner Strom” (Green Electricity) label, where a fixed amount per kilowatt hour flows into the energy transition. The label is supported by German environmental organisations such as BUND and NABU. We have been purchasing green electricity from Naturstrom since 2017 and have saved over 110000 t of CO<sub>2</sub> to date.





## Reducing CO<sub>2</sub>



**CO<sub>2</sub> reduction**  
Over 360 t per year



**Climate protection effect**  
Over 28800 beeches



**CO<sub>2</sub> reduction**  
Over 1400 t per year



**Climate protection effect**  
Over 112000 beeches



**CO<sub>2</sub> reduction**  
Over 1700 t per year



**Climate protection effect**  
Over 136000 beeches

**ENERGY TRANSITION.** Switching from heating oil to natural gas at the Hörmann sites helps to improve our carbon footprint: 40 % less CO<sub>2</sub> is emitted by burning natural gas, the lowest emission fossil fuel, instead of crude oil.

**ENERGY-EFFICIENT.** In many of our plants, we use cogeneration units or fuel cell heating systems. These simultaneously generate electrical energy for the power network and heating energy for the heating system. Air filtration systems and energy concepts with temperature adjustments further contribute to reducing the primary energy demand. In addition, lighting systems with modern and highly efficient LED lighting reduce energy requirements and thus decrease CO<sub>2</sub> emissions.

**CERTIFIED ENERGY MANAGEMENT SYSTEM.** An energy management system in accordance with ISO 50001 is already being introduced throughout the Hörmann Group. Individual measures, such as intelligent building services management with central energy control and automatic energy regulation, also help to lower the power consumption of individual plants.



**ENVIRONMENTALLY FRIENDLY PACKAGING.**

Cardboard instead of plastic, recycling instead of disposal. Because the packaging also determines how sustainable a product is. That is why we are significantly reducing the amount of plastic and increasingly using cardboard packaging or recycled packaging materials.

**REUSABLE INSTEAD OF DISPOSABLE.** Less waste and more recycling – reusable production waste is reprocessed and added to the material cycle, used cardboard is processed into packaging material and, last but not least, we use reusable dishes and cups in our canteens, at meetings and for our coffee machines.



# Reducing CO<sub>2</sub>



**GREEN OFFICE.** Instead of traditional correspondence, we rely on e-mail and e-billing. And if something does need to be sent, the mail is sent CO<sub>2</sub>-neutrally via the “GoGreen” service from the Deutsche Post.



**CO<sub>2</sub> reduction**  
Over 150 t per year



**Climate protection effect**  
Over 9600 beeches



**CLIMATE-FRIENDLY PRINTING.** We print climate-friendly on 100 % recycled paper. This applies to all our offices as well as to the price lists for our sales partners and, in the near future, to all operating and fitting instructions for our products. Through user-friendly IT systems for our employees and sales partners, for configuring, calculating and ordering our products, we want to save even more paper in the future. In addition, we use PEFC-certified paper for our newspaper inserts, which comes from economical and at the same time environmentally friendly and socially responsible forest management.



**CO<sub>2</sub> reduction**  
Over 5600 t per year



**Climate protection effect**  
Over 448000 beeches





**NATURE PROTECTION.** In addition to reducing emissions, we also invest in natural CO<sub>2</sub> storage. For example, green roofs, bee meadows and pastures are created at many locations. We are also strongly committed to protecting biodiversity and support the INSECT RESPECT® initiative, which works to save insects.

# Offsetting CO<sub>2</sub>

In addition to avoidance and reduction, offsetting CO<sub>2</sub> emissions is an important step in holistic climate protection. Greenhouse gases such as CO<sub>2</sub> are distributed evenly in the atmosphere, and the greenhouse gas concentration is thus roughly the same everywhere on earth. Therefore, it is irrelevant where emissions are caused or avoided on the earth.





**CLIMATE PROTECTION PROJECTS.** As we are not yet able to avoid all emissions today, we compensate for the remaining emissions by supporting various climate protection projects in third countries. Climate protection projects demonstrably save greenhouse gases, e.g. through reforestation or renewable energies. When selecting projects, we were particularly interested in having a connection to the projects, in addition to a high standard. For example, employees from our plant in India visit the wind energy projects supported there.



**CO<sub>2</sub> offsetting**  
Over 100000 t



**Climate protection effect**  
Over 8000000 beeches

### **GOALS FOR SUSTAINABLE DEVELOPMENT.**

By promoting climate protection projects in emerging and developing countries, the 17 Sustainable Development Goals (SDGs) of the UN are always supported under the VCS standard. In addition to offsetting, all three projects we support pursue the goal of “quality education”, for example by distributing school packages to primary school pupils and organising local training programmes on topics such as agriculture or plumbing. In addition, all projects with the objective of “partnerships in achieving goals” are a bridge for us as a company from an industrialised country to the population in the poorest regions of the world. By providing modern, climate-friendly technologies in the project regions, the aim is also to generally promote clean development and “leap-frog” over climate-damaging technologies.

**VCS STANDARD.** All three projects in which we are investing are certified according to the Verified Carbon Standard (VCS). More than half of all voluntary emission reductions worldwide are validated and verified under this standard. The standard contains clear specifications for determining the CO<sub>2</sub> savings for the different types of projects, such as reforestation, wind power or cooking stoves. Projects must also be audited, transparent and conservatively calculated by independent third parties selected at random (such as TÜV) from the planning phase until the last certificates expire. The certificates generated from these projects are called Verified Carbon Units (VCU).

### **CLEAN DEVELOPMENT MECHANISM.**

The projects that we support follow the Clean Development Mechanism (CDM). The CDM is one of the flexible mechanisms proposed by the Kyoto Protocol for reducing greenhouse gas emissions. The CDM is used to implement climate protection projects in developing and emerging countries. Certified emission reductions (CERs) can be applied to reduction targets in industrialised countries. The CDM mechanism is thus an important driver for the transfer of clean technologies and the associated sustainable economic development in these countries.



## HÖRMANN WIND ENERGY CLIMATE PROTECTION PROJECT IN GUJARAT, INDIA

Project standard: Verified Carbon Standard (VCS)

Technology: wind energy

Region: Tuppadahalli, India

Annual volume: 128800 t CO<sub>2</sub>

Validated by: Bureau Veritas Certification Holding SAS







## HÖRMANN WIND ENERGY CLIMATE PROTECTION PROJECT IN MAHARASHTRA, INDIA

Project standard: Verified Carbon Standard (VCS)

Technology: wind energy

Region: Bhachau, India

Annual volume: 61360 t CO<sub>2</sub>

Validated by: Lloyd's Register Quality Assurance Ltd

Verified by: Applus+ LGAI Technological Center, S.A



## HÖRMANN REFORESTATION CLIMATE PROTECTION PROJECT IN GUANARÉ, URUGUAY

Project standard: Verified Carbon Standard (VCS)

Technology: reforestation

Region: Guanaré, Uruguay

Annual volume: 127416 t CO<sub>2</sub>

Validated by: Rainforest Alliance





# Sustainable construction components for projects that last

Sustainably produced and certified construction components are used in innovative construction projects. We have already been able to gain great expertise in projects for sustainable construction. We also apply this know-how to support your projects. We will be happy to provide you with documents required for a building certification according to e.g. DGNB or LEED for your project order.

