GOLDBECK

Carbon Reduction Plan

2024/25

Introduction

The climate crisis represents not only an ecological challenge but also a significant business imperative. GOLDBECK is responding with a comprehensive decarbonization strategy aligned with the goals of the **Paris Climate Agreement**, with the **1.5°C target** at its core. Our primary focus: a robust **Carbon reduction strategy**.

We believe that a clear understanding of our current situation is essential for setting realistic goals and identifying effective pathways to achieve them. To ensure international comparability of our CO_2 emissions, we follow the **Greenhouse Gas Protocol (GHG)** – the globally recognized standard for greenhouse gas accounting. This framework categorizes emissions into three scopes, covering all major sources.

Current Status and Measurement Approach

Our data coverage is not yet as comprehensive as desired; therefore, we will not publish a **Project Carbon Footprint** this year. However, we have established strong capabilities in measuring and managing the CO_2 emissions of our products. Across Europe, we record project emissions using **Life Cycle Assessments (LCAs)** and aim to increase the LCA rate to **75% in the short term**. This goal is supported by the growing proportion of certified construction projects, where LCAs are becoming mandatory, and by the increasing demand for CO_2 footprint analyses.

A key point in this process is the proprietary **GOLDBECK Carbon Footprint Calculator (CFC)**. This tool allows us to forecast project-specific emissions as early as the concept phase, paving the way toward **net zero**.

Regional Perspective

In the UK, we adhere to the same standards while recognizing that the market faces distinct challenges compared to other regions in Europe. Nevertheless, we are implementing a carbon reduction strategy that contributes to overall emissions reduction across all GOLDBECK companies in Europe. This ensures consistency in our approach while allowing flexibility to address local market conditions.

Our Sustainability Roadmap

To guide our journey, we rely on two strategic tools:

- **The Sustainability Compass** – providing overarching direction.
- **The GOLDBECK Sustainability Roadmap** – our central management tool defining commitments, KPIs, and goals across eight focus areas for the 2025/26 financial year.

These areas include consistent decarbonization, enhanced diversity, and corporate governance rooted in integrity. Together, they form the foundation for achieving our sustainability ambitions at both company and product levels.

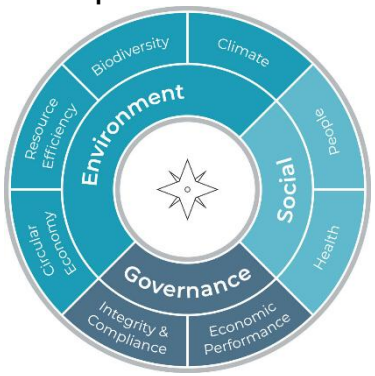


Figure 1 Sustainability Compass

Commitment to achieving Net Zero

By 2045 (in scope 1-3)

GOLDBECK is committed to reducing Scope 1 & 2 emissions by 50% in 2030 and by at least 90% by 2045. This is to be done via our reduction measures and our innovations across the eight focus areas of our sustainability compass.

GOLDBECK acknowledges the climate crisis as one of the most critical challenges facing the world today and recognizes that meaningful change must occur within this generation. As part of our sustainability strategy, we are committed to achieving **net zero**, focusing on the areas that contribute most to our overall carbon footprint and ensuring that every business unit plays a role in this transformation.

To reach this goal, we are taking several key steps:

// **Annual Sustainability Roadmap Updates**
Our in-house sustainability roadmap is updated annually to ensure alignment with our net zero objectives.

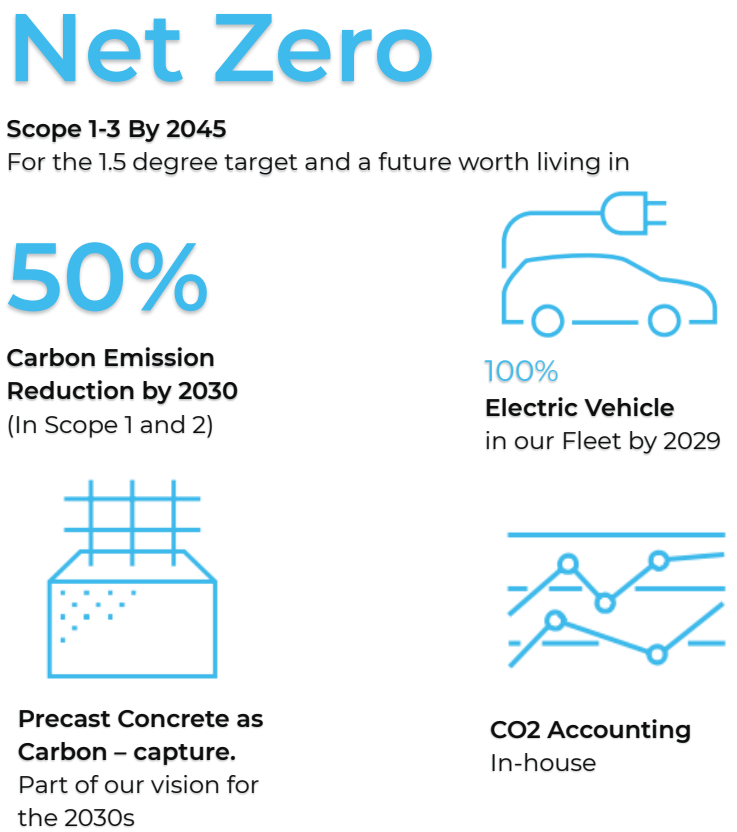
// **Reduction Targets**

- Achieve a **50% reduction in Scope 1 and Scope 2 emissions by 2030**.
- Achieve at least a **90% reduction by 2045**.

// **Action Plans with Realistic Timelines**
All initiatives are based on actionable plans with clear timelines and annual reviews to ensure progress and feasibility.

// **Supply Chain Engagement**
We actively educate and collaborate with our supply chain partners on the benefits of adopting net zero targets, supporting them throughout our carbon reduction journey

// **Fleet Electrification**
Transition our entire car fleet to electric vehicles by the end of **2029**.



Definition of 3 Scopes and how we allocate our Emissions
To ensure our CO_2 emissions are internationally comparable, we adhere to the Greenhouse Gas Protocol (GHG) – the globally recognized standard for greenhouse gas accounting. This protocol categorizes emissions into three scopes, representing different sources of greenhouse gas emissions:

Scope 1

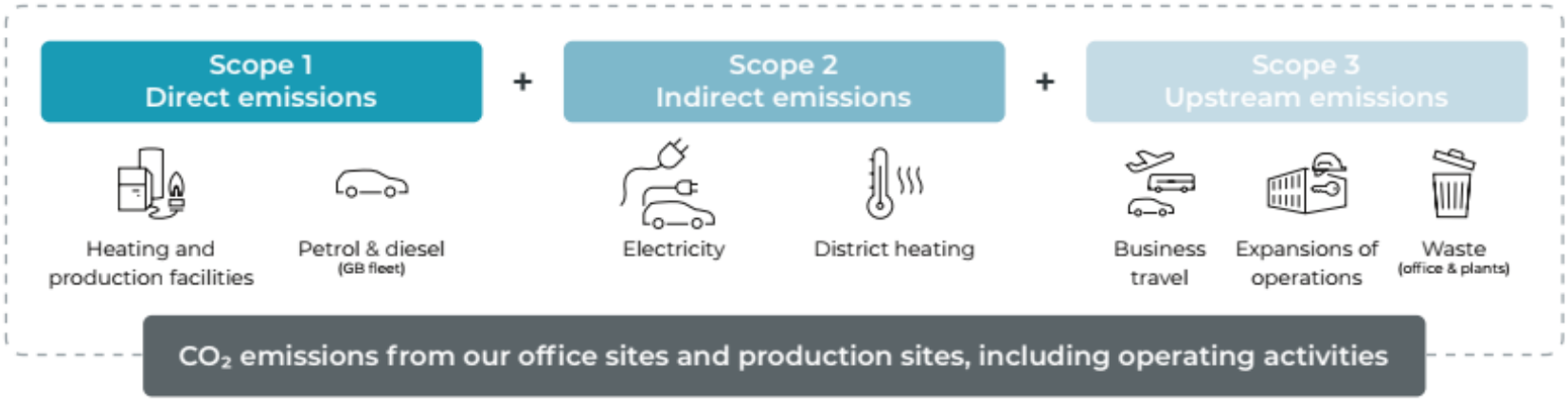
Direct emissions
Emissions generated directly by GOLDBECK, such as those from production and heating systems at our locations, as well as from our vehicle fleet (petrol and diesel).

Scope 2

Indirect emissions from energy procurement
Emissions resulting from the purchase of electricity or district heating – energy that we buy externally for our office and production buildings or our electric vehicle fleet.

Scope 3

Indirect emissions from the supply chain
Emissions associated with activities outside our direct control, including the production of building materials, transportation, waste, business travel, and the 50-year use phase of the projects we construct.



Baseline Emissions Footprint

Baseline emissions 2021/22

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured.

In order to be able to manage our contribution to climate protection at corporate level in a targeted way, we have been recording our locations' CO_2 emissions since the 2020/21 financial year – first in Germany and since the 2021/22 financial year also for all GOLDBECK Group's locations. Since 2025, this accounting has been carried out in-house using a newly implemented tool that enables precise and standardized analysis.

This in-house system provides the foundation for **targeted measures** and ensures **transparent progress monitoring**, both internally and externally.

GOLDBECK Group Scope 1, Scope 2, and Scope 3 Emissions (in tCO_2e)

	2021/22
Total (Scope 1+2 market-based)	**36,191**
o tCO2e per employee	**4.19**
Scope 1	**28,735**
o Business travel (own vehicles)	15,895
o Heating	12,840
Scope 2 (market-based)	**7,456**
o Electricity Consumption	7,316
o Heating	135
o Business travel (own e-vehicles)	5
Total Scope 3	**18,321**
o Energy Supply	8,266
o Waste	4,949
o Business travel	3,506
o Consumables	669
o Chemicals	403
o Purchased machinery	18
o Other (water, plant extension)	510

Current Emissions Reporting

GOLDBECK Group Scope 1, Scope 2, and Scope 3 Emissions (in tCO2e)

	2024/25
Total (Scope 1+2)	**37,054**
o tCO2e per employee	**2.82**
Scope 1	**28,537**
o Business travel (own vehicles)	19,161
o Heating	9,306
o Volatile emissions	70
Scope 2 (market-based)	**8,517**
o Electricity Consumption	6,689
o Heating	445
o Business travel (own e-vehicles)	1,383
Total Scope 3	**21,607**
o Energy Supply	10,785
o Waste	618
o Business travel	1,694
o Purchased goods and services	2,897
o Capital goods	5,612

Analysis
Operational Emissions: Scope 1 and 2

// **Slight Increase in Absolute CO_2 Emissions**
Due to business growth and improved data quality, absolute Scope 1 and 2 emissions have slightly increased. However, emissions **per employee** have continued to decline, reflecting efficiency improvements.

// **Growth Through New Locations**
The integration of new companies brings valuable expertise but also adds emissions to our overall balance sheet.

// **E-Mobility on the Rise**
The expansion of our electric vehicle fleet has increased electricity consumption, marking a significant step toward low-emission mobility.

// **Improved Data Quality**
Updating emission factors ensures more precise and reliable figures for reporting and analysis.

Corporate Emissions: Scope 3

// **Purchased Energy**
Nearly half of Scope 3 emissions are attributed to purchased energy. In the 2023/24 financial year, we expanded our headquarters in Bielefeld with a new factory building, multi-storey car park, and office building.

// **Emissions from Production Waste**
By switching to detailed recording of waste fractions, we can now calculate emissions with greater accuracy using specific emission factors for each fraction.

// **Purchased Goods and Services**
In France, essential office equipment and services were included in the emissions balance for the first time, improving completeness and transparency.

Corporate Carbon Footprint

Scope 1, Scope 2, and Scope 3 (Operational)
Since the 2020/21 financial year, GOLDBECK has been recording the CO_2 emissions of its sites, initially in Germany and, since 2021/22, internationally. Since 2025, this accounting has been carried out in-house using a newly implemented tool that enables precise and standardized analysis. This provides the foundation for targeted measures and transparent progress monitoring, including internal reporting.

Project Carbon Footprint

Scope 1, Scope 2, and Scope 3 (Project-related)
To calculate the CO_2 footprint of our turnkey construction projects, we use Life Cycle Assessment (LCA) methodology wherever possible. This approach is based on actual material usage and validated emission factors, delivering meaningful results—but it also requires high data quality and detailed information.

Our Influence on Carbon Footprints

We have **direct influence** on our **Corporate Carbon Footprint,** for example, through more efficient processes, switching to renewable energy, and electrifying our vehicle fleet.

For the **Project Carbon Footprint**, the scope for action is smaller. Here, individual customer requirements, project-specific conditions, and available market standards largely determine what is ecologically, technically, and economically feasible.

However, we have a strong lever to **indirectly influence the actual Project Carbon Footprint**: by reducing our **Product Carbon Footprint**, the CO_2 footprint of our products without special requests and under optimal conditions. This gives us significant influence on **Embodied Carbon** at the start of every customer project.

As a benchmark for the Product Carbon Footprint, we use our sustainable concepts, the **GOLDBECK Blue Buildings**. These are part of our strategic sustainability approach, **GOLDBECK Blue**, which combines ecological, economic, and social measures. They demonstrate what is already possible today and underline our goal of reducing the CO_2 footprint year after year.

-32.7%

2.82
tCO_2e

Operational Scope 1 and Scope 2 emissions per Employee

Emissions Reduction Targets

Our Goal:

Rapid Reduction of Scope 1 and Scope 2 Emissions

What Happens to Our Operational Emissions If We Do Nothing?
This scenario, known as the **business-as-usual scenario,** serves as our baseline for comparison. It shows that without action, CO_2 emissions will rise, primarily due to planned growth.

Our Strategy: We are deliberately setting a different course. In line with the **Paris Climate Agreement**, we aim to reduce our Scope 1 and Scope 2 emissions by at least **90% by 2045** compared to the baseline. By **2030**, we plan to achieve a **50% reduction**.

Key Focus Areas:

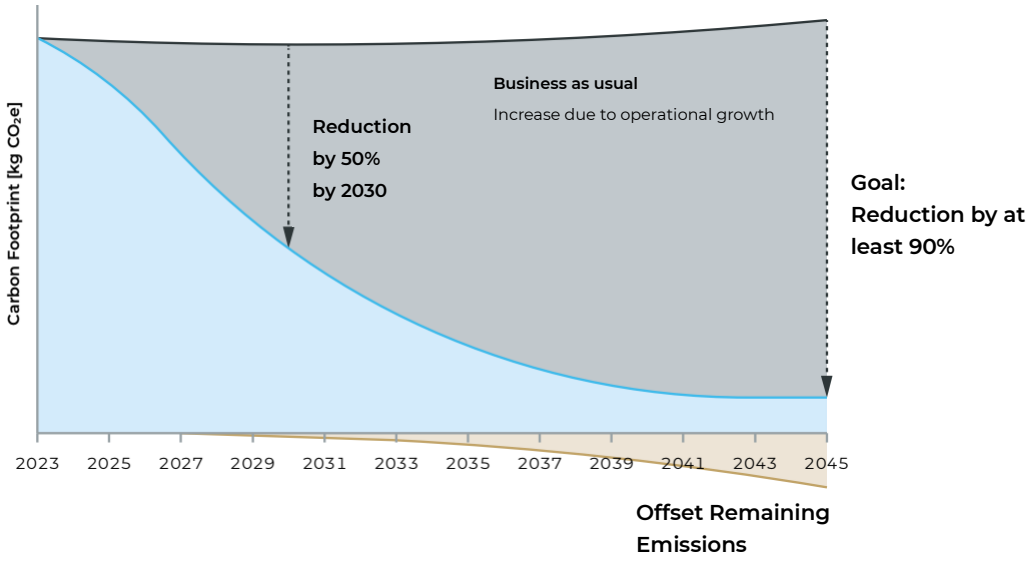
- **Electrification of Our Vehicle Fleet**
- **Supplying Our Sites with Renewable Energy**

In addition, we are investing in **innovative partnerships**, for example, with start-ups developing battery storage solutions from second-life batteries, to further contribute to emission reductions.

Our Principle:

Avoid before Reduce before Offset
Our approach is clear: first avoid, then reduce, and finally offset. Wherever possible, we prevent CO_2 emissions from the outset—for example, through efficient processes, resource-saving construction methods, and optimized energy use. Where emissions are unavoidable, we implement technical and organizational measures to reduce them. Only at the end of this process do we consider offsetting—done in a targeted, transparent, and as effective a manner as possible.

Decarbonization Path for Our Operational Scope 1 & Scope 2 Emissions



Carbon Reduction Projects

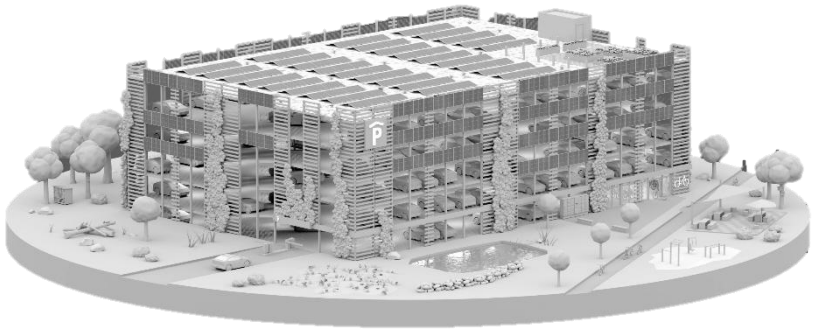
GOLDBECK Blue Buildings Concept

Blue is the new Green:

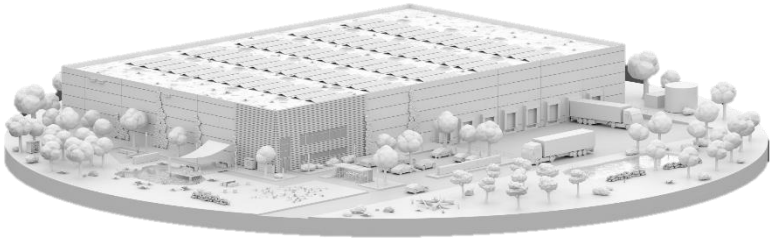
Sustainable buildings need to optimally meet the needs of their users while simultaneously offering high environmental quality and being economically viable. They must also meet the requirements of legislators and banks. And they should be future-proof – that is, not only stable in value but also able to adapt to changing usage and framework conditions. GOLDBECK Blue Buildings, based on the proven GOLDBECK system, reconcile these seemingly conflicting goals and provide a solution that is both scalable and customisable

Our thinking is product-centred in that we create systemic solutions that are firmly embedded in our product-service-ecosystem, which spans every stage of the lifecycle. This approach also guided us in the development of the Blue Buildings. Based on the proven GOLDBECK construction system, they are our “serving suggestion” for particularly sustainable buildings.

A set of pre-configured measures ensures compliance with defined targets in the areas of energy efficiency, resource efficiency, biodiversity, comfort & health, circularity and carbon footprint)



MSCP Blue Building Concept



Logistics Blue Building Concept

Our Blue Buildings meet the latest sustainability standards and thus the financing and ESG requirements of the market.

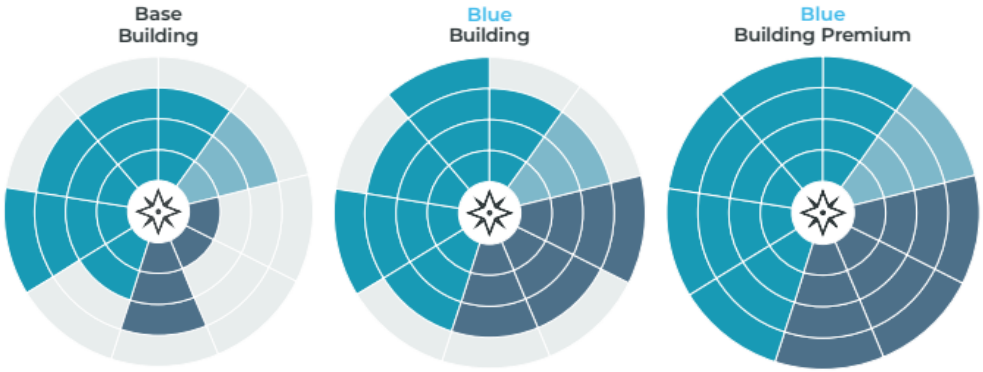
Blue Materials: Driving Impact Through Innovation

Our strongest lever for reducing embodied CO_2 emissions lies in the materials we use. Because we manufacture our own components, we can directly influence their carbon footprint.

In spring 2024, the first **GOLDBECK Blue Concrete** was poured at our Hamm plant, a concrete with up to 35% lower CO_2 emissions compared to the industry reference value (Concrete Sustainability Council, CSC), without compromising quality or durability.

Steel is also becoming more sustainable. A higher recycling content and the use of renewable energy in production routes significantly reduce its CO_2 footprint.
“Our Blue Materials are a commitment to responsibility, both on a large scale and in the details,” says Dr. Michael Six.

And we are going further: At our Hamm site, **the Concrete Innovation Centre** is being established, a hub for research and development where ideas become innovations, paving the way for the next generation of sustainable building materials.



For a Holistically Optimized Sustainability Performance

Starting from the economically optimized **Base Building**, we gradually enhance sustainability performance for our customers with the **Blue Building** and **Blue Building Premium** concepts, step by step.

Carbon Reduction Projects

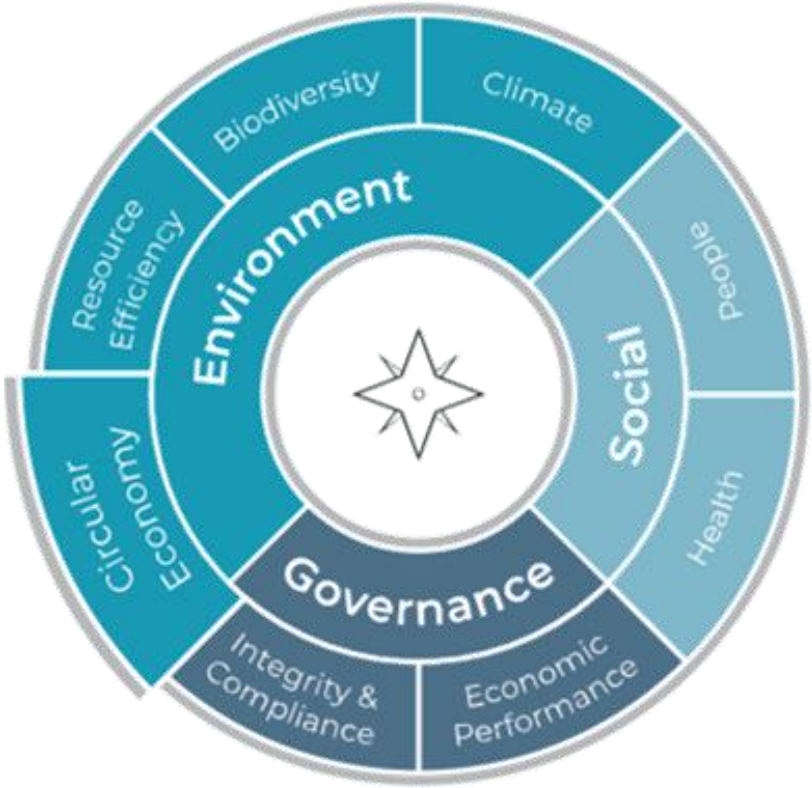
Circular Economy

GOLDBECK Supports Professorship

The circular economy is one of the eight focus areas of our sustainability strategy and is of central importance to us as a construction and service company. With GOLDBECK's building systems and our own industrial prefabrication, we have ideal conditions to put circularity into practice: from resource-efficient material use and the promotion of secondary raw materials to reducing primary resources, without compromising on quality or functionality.

Our main focus is on integrating circular strategies into the holistic system architecture of our buildings. From the very beginning, we design with circularity in mind, ensuring high-quality recycling, reusability, and the lowest possible waste rates.

Starting in 2025/26, we will significantly expand our commitment: Together with Schüco, GOLDBECK is funding an endowed professorship for **"Circular Economy in Construction"** at the Karlsruhe Institute of Technology (KIT). This tenure-track professorship will focus on circular-oriented planning and realization of buildings, modular construction approaches, circular value creation processes, and the development of market-ready business models and regulatory frameworks. In this way, we connect entrepreneurial practice with science, to deliver sustainable solutions with ecological impact and economic value.



Carbon Reduction Projects

Local Slabs Production

A significant milestone for the UK subsidiary: thanks to the partnership with ORANMORE Precast, floor slabs for British multi-storey car parks have been produced in the UK since August 2025

By producing locally, we can reduce transport for our projects, act more flexibly and independently, and are less affected by international supply chains and potential delays. This is an important step, especially as transport to the UK has become significantly more time-consuming and complicated since Brexit. Shorter transport routes also mean lower CO2 emissions.

The project was carried out through interdisciplinary collaboration between various central departments of the PG, Prefabeton in the Czech Republic, GOLDBECK Construction Ltd in the UK, and ORANMORE. The project was managed by a team from the Expansion department. This international cooperation demonstrates how, as a company, we grow together, share knowledge, and learn from one another.

One of the first projects to benefit from this local manufacturer is the Mermaid Quay car park in Cardiff Bay. The new split-level car park offers a total of 679 parking spaces across eight levels – almost twice as many as the previous car park. In this project, 775 of our concrete slabs, manufactured in Lound, are to be installed.

-50% CO_2

Reduction of CO2 emissions for the transports of MSCP slabs by at least 50% compared to the transport way as it was earlier 2025

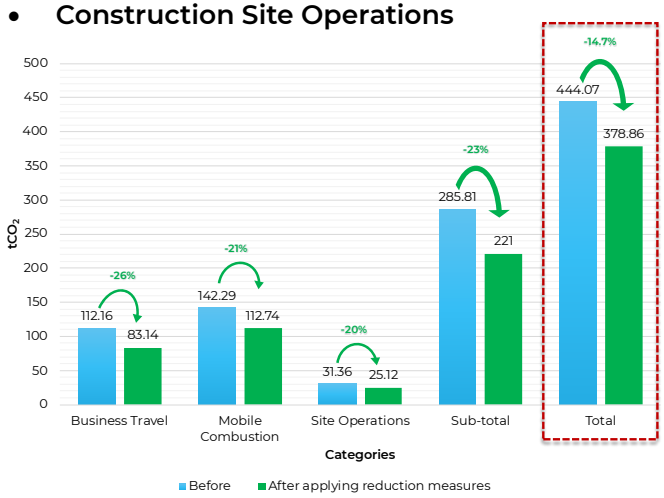
Carbon Reduction Projects

GOLDBECK Business Units

To achieve GOLDBECK's Net Zero target, all business units must reduce emissions across all three scopes. This will be accomplished by following the key reduction strategies outlined in our Sustainability Roadmap.

At **GOLDBECK Construction Ltd.**, the reduction measures focus on the three main categories that contribute most to emissions:

- **Business Travel**
- **Mobile Combustion**
- **Construction Site Operations**



Reduction Measures Example (UK Business Unit)

An action plan has been created for each category and will be monitored regularly to ensure progress toward the expected targets. These measures are reviewed periodically and updated as needed to maintain alignment with our sustainability goals.

To support this, GOLDBECK Deutschland GmbH started EcoVadis Sustainability rating journey and received an EcoVadis medal in October 2024. This achievement in one of the world's leading sustainability rankings demonstrates our commitment to transparent, standardized evaluation and comparability, helping us meet customer requirements and strengthen our market position.

To date, six GOLDBECK units have already received an EcoVadis medal including the UK, more than half of our nationwide operating units.

// GOLDBECK Deutschland – Silver
// GOLDBECK International – Gold
// GOLDBECK CEE North – Silver
// GOLDBECK CEE South – Silver
// **GOLDBECK Construction Ltd. – Silver**
// GSE – Platinum

Declaration and Sign Off

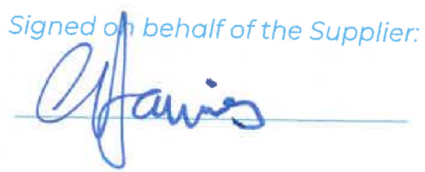
This Carbon Reduction Plan has been completed in accordance with PPN 006 and associated guidance and reporting standard for Carbon Reduction Plans.

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting .

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard .

This Carbon Reduction Plan has been reviewed and signed off by the board of the UK directors (Craig Davies and Michael Mißfeld).

Signed on behalf of the Supplier:



Date: 08.12.25

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