

2024

The Sustainability Report for BILSTEIN GROUP companies





Marc T. Oehler,
Chief Executive
and managing
partner
BILSTEIN GROUP

Dear Reader,

We're still living in times of great uncertainty. Whether it's the second Trump term in the US, the approaching elections in Germany or the increasingly hostile relationships between the West and Russia or China – all these factors, coupled with extremely challenging developments in European industry, especially in Germany, don't give much reason for optimism.

Here at the BILSTEIN GROUP, we are seeing the tangible effects of the cooling economy on almost all our customer segments, with some of our customers suffering in particular. And this, of course, has a direct impact on sustainability issues. Some of our customers are pushing back their rather ambitious climate-related goals or are outsourcing the testing of ESG-related key performance indicators, without really addressing them in detail. Unfortunately, it seems that the current geopolitical and macroe-

conomic circumstances are broadly leading to a considerable decrease in interest in sustainability. But, regardless of the legal requirements, this does not apply to the BILSTEIN GROUP. Although we're seeing a significant pull-back in demand from our customers for low-carbon steel products, our Management Board resolution of May 2021 remains in place:

by 2035, the (German) companies of the BILSTEIN GROUP will make their production, logistics and administrative processes carbon-neutral – provided that sufficient carbon-neutral (renewable) energy sources are available by then.

And we'll continue working hard to achieve this. Even if the failure of certain long-term projects like Future RuH2r sets us back a step or two – giving up on climate protection isn't an option for the BILSTEIN GROUP. We also remain committed to the "social" and "governance" aspects of ESG at the BILSTEIN GROUP; here, too, we will keep moving forwards. Initiatives like the cultural change project we launched more than two years ago, as well as the evolution of our company structure and transformation, are now crucial aspects. We're doing a lot and want you to accompany us on this journey.

At this point, I'd also like to make an appeal: reliable conditions are essential to the successful economic growth of industrial companies. But in recent years in Europe – and especially here in Germany – this has been a stumbling block. Whether it's the huge increase in grid utilization costs, extremely high energy costs or more stringent and

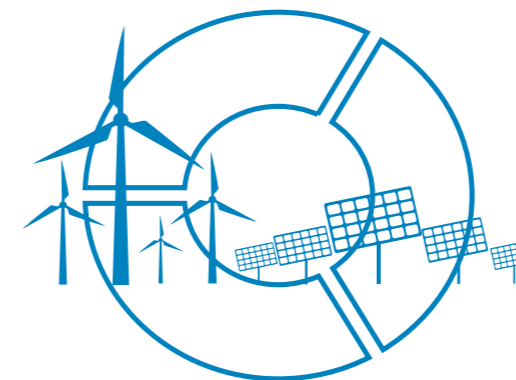
complex bureaucratic requirements compared to the rest of the world – we don't currently have a clear, reliable political framework.

As a company we are doing our part for climate protection and working to constantly improve our social standards and our monitoring and control processes. And all of this ensures we are a dependable and extremely innovative partner for our customers, suppliers, employees and other stakeholders.

On that note, I hope you enjoy reading the latest Sustainability Report of the BILSTEIN GROUP.

Kind regards, Marc T. Oehler

December 2024



Management Board resolution of 17 May 2021 on sustainability and climate neutrality in the BILSTEIN GROUP:

The BILSTEIN GROUP Management Board hereby resolves that, by 2035, the (German) companies in the BILSTEIN GROUP will make their production, logistics and administrative processes carbon-neutral – provided that sufficient carbon-neutral (renewable) energy sources are available by then (i.e. electricity/hydrogen as a substitute for fuel gas).

Furthermore, by 2035, depending on the availability of raw materials and customer expectations, the BILSTEIN GROUP commits to transition a large proportion of its raw material procurement to steel grades that have either been produced in a way that is carbon-neutral or that results in a significant reduction in CO₂ emissions compared with today.



Contents

Company & Philosophy

- 3 One path, one goal, one future
- 4 The BILSTEIN GROUP around the world
- 5 From foundations to gable: What makes up the BILSTEIN GROUP?
- 6 Transformation – because change is critical
- 7 Sustainability in focus

Key Figures & Certifications

- 10 Key figures: Energy usage in plants
- 11 Key figures: Our corporate carbon footprint (CCF)
- 12 Key figures: The product carbon footprint (PCF)
- 13 The carbon accounting model – passing on CO₂ savings to customers

Products & Innovations

- 15 Low-carbon cold-rolled strip has a name: BILCO₂
- 16 Technologies and climate protection: Groundbreaking innovations

Sustainable Procurement & Processes

- 19 Green steel: From vision to reality
- 20 Certified environmental management system: Supporting our ambitious goals
- 21 Putting waste heat to good use: A large-scale heat recovery system
- 22 Technology pioneers: Exploring new solutions with our partners
- 23 Finding alternatives to natural gas for a carbon-free future

Employees & Society

- 25 Honest, fair and sustainable: It's the only way we do business
- 26 Adhering to laws, regulations and ethics: Our compliance management system
- 27 Work & Family
- 28 Why our employees are the beating heart of our company
- 29 Creating community
- 30 Health and safety

One path, one goal, one future

Even in a challenging market environment like the one we're currently experiencing, climate protection and achieving the decarbonization of our production processes by 2035 remain key elements of our sustainability and growth-focused company strategy. After all, without the climate, there simply is no future.



HOW CLOSE IS THE BILSTEIN GROUP TO ACHIEVING ITS "GREEN STEEL" GOALS?



Georgio Alexopoulos: The biggest driver of our carbon footprint remains our raw material, where we do not have any direct influence over carbon emissions. We're working closely with our steel suppliers on this, which is already producing results, with an uptick in deliveries of low-carbon steel since 2023. And these volumes of low-carbon hot-rolled strip provide the basis for our new product, BILCO₂ – our cold-rolled strip with a significantly lower carbon footprint.

Georgio Alexopoulos,
Chief Sales Officer
(CSO)

Meik Forell: To allow us to meet the industry-wide demand for lower-carbon cold-rolled strip products, we have introduced the carbon accounting model, which offers our customers a transparent and intuitive solution for calculating emissions. It also forms the basis for BILCO₂. This approach to determining the carbon footprint of steel products is now established throughout the entire supply chain.

Michael Ullrich: We have always placed a huge amount of importance on making our processes energy efficient. We're using state-of-the-art technologies like energy recovery and converting waste heat into electricity, like in our annealing processes. We are constantly building on our comprehensive heat recovery system and our energy monitoring. And we always maintain a focus on avoiding CO₂ emissions. In our processes, this greenhouse gas is emitted during the combustion of natural gas. We're working hard to advance the technologies we use in this field. Our aim is to find alternatives to gas, which is a fossil fuel, and try to replace it with climate-neutral energy sources and production processes.

THE GERMAN STEEL INDUSTRY IS IN CRISIS. WHAT DOES THIS MEAN FOR THE FUTURE OF "GREEN STEEL"?



Meik Forell,
Chief Financial Officer
(CFO)

Meik Forell: Steel will always be an important raw material. At the same time, the steel industry is one of the biggest industrial emitters of CO₂. Which is why sustainability remains a key concern for the entire industry. We've already started on the road to low-carbon or carbon-neutral steel production, even if it's taking a little longer to get there in some places. The goal remains the same.

Michael Ullrich: Nobody can turn a blind eye to the current economic situation – but we can't ignore climate change either! That's why we're pressing ahead towards climate neutrality, even in this ever-changing environment, and continuing with related projects around raw material procurement and adapting our production technologies.

Georgio Alexopoulos: But we also understand that, because of the current crisis, our customers are postponing investments in this area. It's logical that cold-rolled strip with a significantly lower carbon footprint will cost more, because we're spending more on green electricity and low-carbon hot-rolled strip. Ultimately it's about spending additional money to conserve our planet for future generations. Sustainability is a critical success factor; without it, it's simply not possible to exist in this industry now or in the future.

WHAT DOES THE FUTURE JOURNEY LOOK LIKE FOR THE BILSTEIN GROUP?



Michael Ullrich,
Chief Technology Officer
(CTO)

Michael Ullrich: Sustainability is and will remain a key element of our company strategy, despite all the challenges we're facing right now. Since we don't have a connection to a hydrogen pipeline here in Lennetal, we're focusing our efforts on decarbonizing our thermal processes, exploring alternative solutions and concepts, and optimizing and developing the technology we're using.

Georgio Alexopoulos: By 2028/29, we want more than 50 per cent of the raw material we procure to be carbon-neutral or low-carbon. We've concluded a seven-year supply contract with the Swedish start-up H2 Green Steel, to the tune of several hundred million euros, which should hopefully guarantee additional volumes of green steel. This innovative company has found a way to produce steel with up to 95 per cent less carbon emissions than conventional steel production using blast furnaces.

Meik Forell: We can already model the market requirements that will one day become standard in our logistics and systems landscape. Broadly speaking we're taking an extremely innovative approach to ensure we're set up well for the future. All these are good examples of how systems and processes can effectively support the BILSTEIN GROUP's sustainable business models.

The BILSTEIN GROUP around the world

The BILSTEIN GROUP has developed and produced cold-rolled strip solutions for customers worldwide since 1911. As a full-service provider, the company has an extremely wide-ranging portfolio. This includes highly innovative, specialist steel grades and products, which occupy niches and set new trends. The company's future-centric approach is further highlighted by its increasingly highly automated and digitalized manufacturing activities, which result in resource-efficient production processes and above-average levels of process reliability and product quality.

The heart of the brand comprises three factors: closeness to customers and employees, the highest quality standards, and specialist technical expertise. This connects all companies within the BILSTEIN GROUP.

The BILSTEIN portfolio encompasses a range of specialist products and services for customers in the automotive and mobility industry. The BILSTEIN Advanced High-Strength Low-Alloy (AHSLA) grades meet particularly high demands in terms of component strength, which goes hand in hand with weight and cost benefits. BILSTEIN steel is used to make components such as fuel pressure regulators, seat rails, airbag housings, needle roller bearings, deep-drawn and fine-blanked parts, clutch plates, and much more.

HUGO VOGELSANG offers specialist cold-rolled strip products for customers in the sawing and cutting industry, including high-grade and tempered steel. Thanks to innovative control systems, the products comply with extremely tight tolerances. Products can be individually tempered in line with customer requirements and adapted specifically to the application in question. Among other things, HUGO VOGELSANG cold-rolled steel is used

to make circular saw blades, chainsaw links, band and gang saws, doctor blades, knitting needles, knives, hand tools and spring elements.

Based in the western Czech Republic, in Králův Dvůr, the cold-rolled strip manufacturer BILSTEIN CEE is the BILSTEIN GROUP's base in Eastern Europe. Its broad portfolio includes soft iron grades, micro-alloys and carbon steel grades. The company also has an adjoining hardening plant.

The USA-based BILSTEIN COLD ROLLED STEEL cold rolling plant has been part of the BILSTEIN GROUP since 2017, serving customers across North and Central America from its location in Bowling Green, Kentucky. The heart of the company's set-up is a state-of-the-art wide-strip rolling mill. BILSTEIN COLD ROLLED STEEL caters to the needs of the international automotive and tooling industry, as well as other sectors.

In December 2022, the BILSTEIN GROUP launched its highly innovative steel fibre STABILS and the associated production and sales company BILSTEIN STEEL FIBER GmbH, and in doing so established itself in an entirely new market segment. The development of this new type of steel fibre for reinforced concrete, an important composite material, is serving a fast-growing segment in the construction industry.

On 19 February 2024, the BILSTEIN GROUP founded a new sales company, BILSTEIN SPECIALTY STEEL MEXICO S. de R.L. de C.V. – BILSTEIN MEXICO for short – with a base in Mexico City. After successfully procuring a license to import, BILSTEIN MEXICO will serve as both a supplier and exporter for the Mexican market – and is ideally placed to capitalize on the exciting growth market that is Latin America.



1,400 EMPLOYEES



1,200 CUSTOMERS WORLDWIDE



approx. 500,000 TONNES IN ANNUAL PRODUCTION



approx. 700 MILLION EUROS IN REVENUE

9 LOCATIONS IN 6 COUNTRIES;
2 HOLDINGS IN 2 COUNTRIES



From foundations to gable: what makes up the BILSTEIN GROUP?

Seven supporting pillars, a strong foundation and a roof that covers it all – this is a house built for the future.



The compass
Strong social, ethical and environmental values dictate all decisions and actions at the BILSTEIN GROUP.



The vision
To be the preferred partner for our global customers, thanks to our individual cold-rolled strip solutions, service and sustainability.

The roof

Two complementary elements span all the BILSTEIN GROUP's activities:

firstly, our **international positioning** shapes the entire company. Thanks to the opportunities under this shared roof, the BILSTEIN GROUP is one of the strongest international partners for cold-rolled strip applications.

The BILSTEIN GROUP is a **full-service provider** offering an extensive range of grades and dimensions. All companies reside under this roof.

THE SUPPORTING PILLARS

MARKET PRESENCE

The BILSTEIN GROUP aims to achieve broad market coverage and high customer penetration through a number of market initiatives.

SERVICE

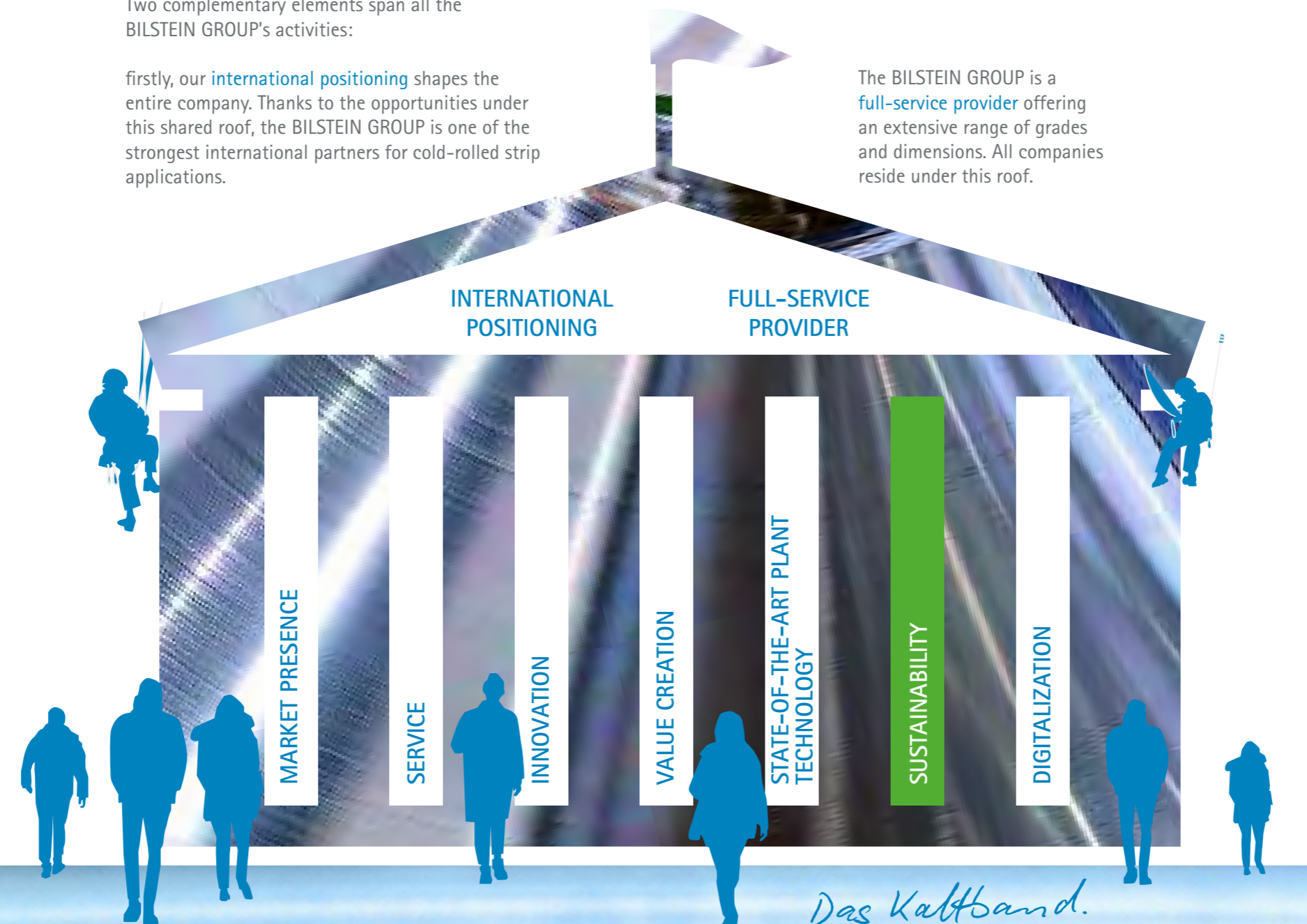
By digitalizing and standardizing its processes, the BILSTEIN GROUP will be able to uphold its outstanding levels of service quality in the dynamic environment of the future.

INNOVATION

With innovative projects like BILCUT® and STABIS, the BILSTEIN GROUP is building out its business model and penetrating new growth segments and regions. Innovation helps deliver ...

VALUE CREATION

... increased added value for cold-rolled strip. Which in turn stabilizes the BILSTEIN GROUP's underlying business model.



OUR PEOPLE

Our employees are the beating heart of our firm. After all, it's our people who breathe life into the BILSTEIN GROUP, by showing up for the company and working hard day in, day out. And they are back in the spotlight with our cultural transformation project, "BILSTEIN GROUP: facing the future together!"

THE FOUNDATION

Bespoke cold-rolled strip solutions and high-quality service throughout the product life cycle – this is the underlying foundation of the BILSTEIN GROUP. Our new slogan succinctly articulates this: cold-rolled strip.

DIGITALIZATION

Important digitalization projects and the launch of our UDINA customer service platform ensure high standards and make our processes more efficient and flexible.

SUSTAINABILITY

Whether it's focusing on topics like the decarbonization of our in-house processes, accelerating the production of cold-rolled strip with a significantly reduced carbon footprint (BILCO₂) or investing in the innovative Swedish steelmaker H2 Green Steel – for the BILSTEIN GROUP, investments in sustainable projects are investments in the future viability and success of our company.

STATE-OF-THE-ART PLANT TECHNOLOGY

Keeping pace with rapid technological change – this is the goal of our focus on cutting-edge plant technology and behind all our related investment decisions. This applies to the German locations of BILSTEIN and HUGO VOGELSANG, as well as the design and construction of state-of-the-art plants at BILSTEIN COLD ROLLED STEEL in the USA and BILSTEIN CEE in the Czech Republic.

Transformation – because change is critical

The European steel industry – and therefore the entire cold rolling sector – is facing huge challenges. But these challenges also present an opportunity for the BILSTEIN GROUP to help shape fundamental change.



The European steel industry is undergoing a fundamental shift – and not just in terms of the current crisis and economic weakness.

Carbon-neutrality and electric vehicles: catalysts for industrial transformation

The transition to a carbon-neutral industry is a key driver of this change, and is also shaping the future strategy of the BILSTEIN GROUP. It presents a particularly big challenge for companies involved in the steel supply chain. At present, the energy-intensive processes involved in steel production make up 30 per cent of all industrial CO₂ emissions. And while the massive decreases in sales volumes across the European steel industry, and the associated cost-cutting measures that entails, might trump everything else right now, sustainability and climate protection remain important strategic pillars of future success.

At the same time, the revolution underway in the automotive sector, with the uptake of electric vehicles, is of course having a massive impact on the business model of traditional cold rolling players, including the BILSTEIN GROUP: "As things stand now, from 2035 there will be a ban on new petrol cars in Europe. "In China, demand is already down significantly," says Marc T. Oehler, Chief Executive

and managing partner, BILSTEIN GROUP. "Electric vehicles are the future – and they are already having a huge impact on the entire steel value creation chain and the BILSTEIN GROUP."

Forging new paths: the transformation of the BILSTEIN GROUP

The BILSTEIN GROUP has been firmly focused on these two trends for many years, and will remain so – regardless of the current storm the steel industry is weathering. The situation we're in right now only determines at what point and to what extent the various elements are brought into play.

How can we procure the volumes of low-carbon raw material we need? How can we make our internal production processes carbon-neutral? How can we work together with customers to increase demand for carbon-neutral steel, even in difficult economic circumstances? These are the questions driving the BILSTEIN GROUP's strategy, in addition to the desire to support and help shape the huge changes underway. "In anticipation of combustion engines becoming obsolete, we have developed new, more sustainable processes like laser high-speed cutting and the innovative press hardening procedure," explains Marc T. Oehler. "And our steel fibre, STABILS, has opened up access to new application

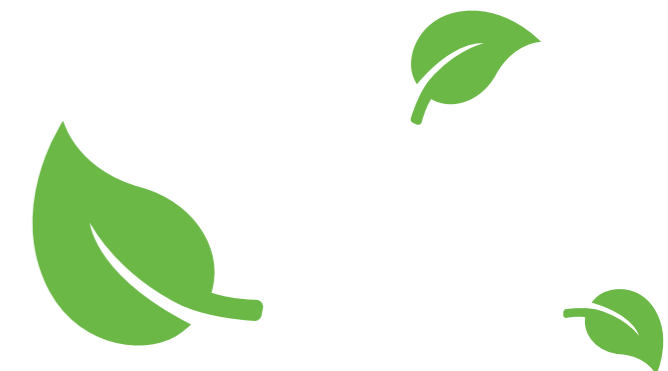
fields and market segments. These are all exciting new projects that we'll continue to pursue – although we'll be paying more attention to budgets than timelines in these current challenging times."

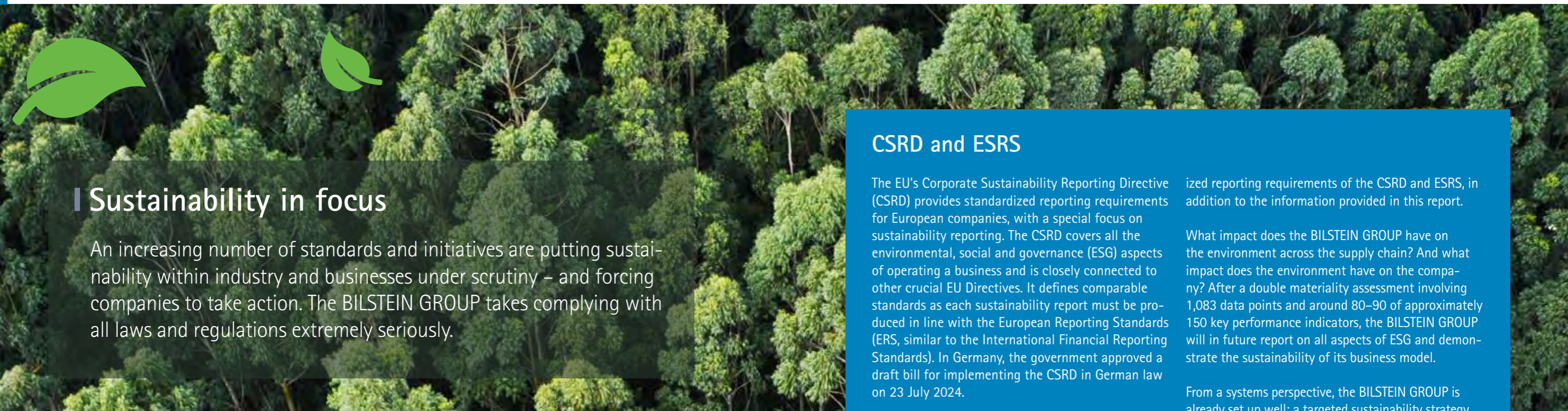
Adjusting to the new normal

In addition to tackling these long-term strategic goals, the company is also having to reckon with the fact that the structures established over a decades-long growth phase are no longer meeting the demands of the economic slump facing the European steel industry right now. "In Germany we are set up to produce significantly more than half a million tonnes of high-quality cold-rolled strip per year. We will be able to use 60 to 70 per cent of this capacity in the medium to long term, even if the economy recovers. The way things look now, we're talking about a maximum production level of between 350,000 and 400,000 tonnes per year," says Michael Ullrich, Chief Technology Officer at the BILSTEIN GROUP. "We need to adapt to these predicted volumes with all the cost structures that we have."

Marc T. Oehler emphasizes: "In this competitive environment, we still have a decent bottom line and a good, future-proof transformation strategy; but we can't pretend it's all sunshine and rainbows. Our workforce numbers are too high given the current and foreseeable production volumes. The anticipated sales volumes no longer justify the size of our organization."

To remain competitive, the BILSTEIN GROUP is therefore undertaking a restructuring – in a fair, transparent and socially responsible way, always keeping in mind that the economy might pick up again. The core structures are being retained in a way that allows any increase in volumes to still be supported. "The aim of all the measures we're implementing is to make sure the BILSTEIN GROUP is well positioned for the future," says Marc T. Oehler.





Sustainability in focus

An increasing number of standards and initiatives are putting sustainability within industry and businesses under scrutiny – and forcing companies to take action. The BILSTEIN GROUP takes complying with all laws and regulations extremely seriously.

Climate change and resource scarcity are global challenges that we must all deal with. Accordingly, it's down to each of us to help shape sustainable changes and find solutions that can protect our livelihoods and planet. Innovation and transparency are key prerequisites for this. Legal guidelines, standards and various initiatives can help us understand the environmental, social and economic repercussions of our own actions and make them more sustainable and transparent.

In order to implement effective sustainability management processes that lead to tangible improvements in the social, environmental and economic space, the BILSTEIN GROUP makes use of a whole host of methods, initiatives and platforms, in addition to complying with legal requirements.

The framework for a shared understanding of sustainability is provided by the 17 goals of the United Nations (UN), the Corporate Sustainability Reporting Directive (CSRD) and the European Sustainability Reporting Standard (ESRS). There is also a number of platforms where, via questionnaires, we can disclose information and gain certifications. These include the non-profit Carbon Disclosure Project (CDP), as well as various certification, network and sustainability platforms like EcoVadis, Supplier

Assurance Questionnaire (SAQ) and IntegrityNext, and customer-specific surveys. We're currently looking into assessment by the Science Based Targets initiative (SBTi), which would assess our targets against the Paris Agreement (an international treaty on climate change).

CBAM: a new way to offset CO₂

On 1 October 2023, the Carbon Border Adjustment Mechanism (CBAM) – a carbon offsetting policy – became effective in the EU. The mechanism is essentially a carbon tariff on carbon-intensive products that are imported from countries outside the EU.

The BILSTEIN GROUP has already implemented all CBAM requirements in its processes and keeps records of the corresponding data; nevertheless, we currently procure very small volumes of raw material from countries outside the EU.

CSRD and ESRS

The EU's Corporate Sustainability Reporting Directive (CSRD) provides standardized reporting requirements for European companies, with a special focus on sustainability reporting. The CSRD covers all the environmental, social and governance (ESG) aspects of operating a business and is closely connected to other crucial EU Directives. It defines comparable standards as each sustainability report must be produced in line with the European Reporting Standards (ERS, similar to the International Financial Reporting Standards). In Germany, the government approved a draft bill for implementing the CSRD in German law on 23 July 2024.

The BILSTEIN GROUP is among the companies that will be required to report from the 2025 fiscal year onwards. The BILSTEIN GROUP is currently making preparations to ensure all future information and disclosures comply with the more extensive, standardized reporting requirements of the CSRD and ESRS, in addition to the information provided in this report.

What impact does the BILSTEIN GROUP have on the environment across the supply chain? And what impact does the environment have on the company? After a double materiality assessment involving 1,083 data points and around 80–90 of approximately 150 key performance indicators, the BILSTEIN GROUP will in future report on all aspects of ESG and demonstrate the sustainability of its business model.

From a systems perspective, the BILSTEIN GROUP is already set up well: a targeted sustainability strategy is firmly embedded in the group's overall corporate strategy. And starting in fiscal 2025, sustainability reporting will be a permanent fixture of BILSTEIN GmbH & Co. KG's annual report and quarterly updates.

The 17 goals of the UN

As part of its Agenda 2030, the United Nations (UN) defined 17 Sustainable Development Goals (SDGs) that are intended for everyone, including governments, civilians, science and the private sector.

With the implementation of the ESRS, in future the UN's Sustainable Development framework will also be reflected in the sustainability reports of companies, and therefore in the annual reports of the BILSTEIN GROUP.



Carbon Disclosure Project (CDP) questionnaire

Founded in 2000, the London-based non-profit Carbon Disclosure Project (CDP) was established to help both companies and government authorities disclose their environmental impact data. This includes data related to greenhouse gas emissions, water consumption and the use of plastics.

The resulting CDP score, which is generated on the basis of a comprehensive questionnaire, allows companies to identify which areas require most attention in order for them to make progress towards their sustainability goals. Companies can then improve their own sustainability strategy and monitor its progress via benchmarking and direct comparisons with other entities.

The BILSTEIN GROUP has been completing the detailed CDP questionnaire – one of the most comprehensive of its kind – for both BILSTEIN and HUGO VOGELSANG since 2023, and is therefore a pioneer among its peers. 🌱

Science Based Targets initiative (SBTi)

The BILSTEIN GROUP is looking closely at projects like the Science Based Targets initiative (SBTi), which supports companies in defining their emissions reduction targets based on scientific findings, in accordance with the Paris Agreement.

SBTi is a joint initiative between the Carbon Disclosure Project, the United Nations Global Compact, the World Resources Institute, and the World Wide Fund for Nature. In October 2021 the SBTi developed the world's first net-zero standard, providing the framework for companies to define science-based net-zero goals. 🌱



Certification and sustainability platforms

The BILSTEIN GROUP is investing in a number of certification, network and sustainability platforms to manage, deliver and ensure transparency in processes and key data around climate protection and sustainability.

- EcoVadis
- Supplier Assurance Questionnaire
- IntegrityNext
- Assent
- JAGGAER One

Additionally, there are a number of customizable platforms like Pre-wave and Manufacture M2030.

EcoVadis

EcoVadis supports companies in managing ESG risks and compliance, achieving their sustainability goals and making positive contributions within the value chain.

Supplier Assurance Questionnaire (SAQ)

SAQ aligns with the global sustainability guidelines for the automotive industry and focuses on optimizing sustainability performance in the auto supply chain. It is applicable for suppliers worldwide, and encompasses procurement, manufacturing, logistics, assembly and retail.

IntegrityNext

Used by two million suppliers in 190 countries, the IntegrityNext platform is one of the leading solutions for supply chain sustainability management.

Assent

This sustainability platform helps stakeholders identify and mitigate risks in international, complex supply chains.

JAGGAER One

Procurement platform JAGGAER One simplifies and automates procurement processes, improves transparency, minimizes risks and supports companies in making their processes more sustainable.

I Key Figures & Certifications

Transparency, both internally and externally facing, is a prerequisite for making progress in sustainability and achieving improvements together with all key stakeholders. By publishing the energy and water usage of its plants, the corporate carbon footprint (CCF) and product carbon footprint (PCF), the BILSTEIN GROUP makes all key figures and data available. And with its certified carbon accounting model, the company also has at its disposal a reliable method for calculating carbon savings and passing them on to its customers.



Key figures:

Energy and water use in plants

An ongoing environmental and energy management initiative is in place to support the BILSTEIN GROUP to reduce carbon emissions and water use in its production, logistics and administrative processes.

CONSUMPTION AND KEY FIGURES IN 2021, 2022 AND 2023

	2021		2022		2023	
	BILSTEIN	HUGO VOGELSANG	BILSTEIN	HUGO VOGELSANG	BILSTEIN	HUGO VOGELSANG
Electricity (in GWh)	52	19	51	19	46	17
Natural gas (in GWh)	126	36	118	35	100	29
Heat recovery (in GWh)	6		5		5	
Groundwater (in m³)	1,715,971	28,913	1,718,058	25,762	1,652,759	17,603
Mains water (in m³)	7,839	5,710	8,968	7,265	7,178	7,976
Waste water (in m³)	23,064	13,650	26,287	15,979	24,039	13,385

Did you know?
 The proportion of renewable energy in the electricity mix at the BILSTEIN GROUP's German sites hit **33 per cent** in 2024 (preliminary numbers).



Certifications

BILSTEIN GROUP companies are continuously working to improve their quality, environmental and safety management systems. These are subject to ongoing review and certification by third parties, in accordance with international standards.

To view all the BILSTEIN GROUP's current certifications, visit <https://www.bilstein-gruppe.de/en/downloads-2/> or click here:

QUALITY MANAGEMENT

BILSTEIN + BILSTEIN SERVICE
 ISO 9001:2015
 Valid from 14 November 2023
 Expires 13 November 2026

BILSTEIN + BILSTEIN SERVICE
 IATF 16949:2016
 Valid from 14 November 2023
 Expires 13 November 2026

HUGO VOGELSANG
 ISO 9001:2015
 Valid from 28 January 2024
 Expires 27 January 2027

HUGO VOGELSANG
 IATF 16949:2016
 Valid from 18 January 2024
 Expires 17 January 2027

BILSTEIN CEE
 ISO 9001:2015
 Valid from 26 May 2024
 Expires 25 May 2027

BILSTEIN CEE
 IATF 16949:2016
 Valid from 23 May 2024
 Expires 22 May 2027

ENVIRONMENTAL & ENERGY MANAGEMENT

BILSTEIN + BILSTEIN SERVICE + HUGO VOGELSANG
 ISO 14001:2015 | ISO 50001:2018
 Valid from 14 December 2022
 Expires 13 December 2025


BILSTEIN CEE
 ISO 14001:2015 | ISO 50001:2018
 Valid from 16 April 2024
 Expires 15 April 2027

Key figures: our corporate carbon footprint (CCF)

What is the carbon footprint of the BILSTEIN GROUP's German locations? Every year the BILSTEIN GROUP calculates the corporate carbon footprint (CCF) of its German companies, BILSTEIN and HUGO VOGELSANG. This number is key to the sustainability strategy.

A corporate carbon footprint (CCF) takes into account both an organization's internal greenhouse gas emissions and external emissions that occur along the company's specific supply chain. In other words, it consists of both the direct and indirect emissions of the entire organization. Unlike the product carbon footprint (PCF), it also accounts for emissions

that arise outside the boundaries of a company, for example employee travel, shipments, etc.

In 2021, the BILSTEIN GROUP calculated its CCF for the first time in accordance with the Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard and ISO 14064, and it has been regularly updated since. 

AN OVERVIEW OF GREENHOUSE GAS EMISSIONS

Scope		Unit	2022	2023
Scope 1	BILSTEIN	t CO ₂ e	24,610	20,759
	HUGO VOGELSANG	t CO ₂ e	7,689	6,472
Scope 2 (location-based)	BILSTEIN	t CO ₂ e	21,617	16,381
	HUGO VOGELSANG	t CO ₂ e	7,874	6,002
Scope 2 (market-based)	BILSTEIN	t CO ₂ e	29,627	6,912
	HUGO VOGELSANG	t CO ₂ e	10,756	4,258
Scope 3 (location-based)*	BILSTEIN	t CO ₂ e	939,898	785,544
	HUGO VOGELSANG	t CO ₂ e	133,659	81,652
Scope 3 (market-based)*	BILSTEIN	t CO ₂ e	940,219	785,165
	HUGO VOGELSANG	t CO ₂ e	133,774	81,852
Total Scopes 1-3 (location-based)	BILSTEIN	t CO ₂ e	986,126	822,684
	HUGO VOGELSANG	t CO ₂ e	149,222	94,126
Total Scopes 1-3 (market-based)	BILSTEIN	t CO ₂ e	994,247	812,837
	HUGO VOGELSANG	t CO ₂ e	152,220	92,312

* incl. hot strip steel and upstream energy provision

To distinguish between direct and indirect emissions sources, the BILSTEIN GROUP uses the standards set by the Greenhouse Gas Protocol, with emissions broken down into Scopes 1, 2 and 3:

Scope 1

Direct greenhouse gas (GHG) emissions

Emissions from sources that are under the ownership or control of the BILSTEIN GROUP, including emissions from combustion in its own plants or those under its control (boilers, furnaces, vehicles, etc.; as well as emissions from production in processing facilities owned or controlled by the group). Scope 1 GHG emissions are calculated based on the volumes of commercial fuels purchased (such as natural gas and heating oil) using the professional emissions accounting software GaBi. The basis for emissions factors data is the Ecoinvent life cycle database (version 3.6).

Scope 2

Indirect GHG emissions from sourced energy

Indirect emissions under Scope 2 refer to greenhouse gas emissions resulting from energy generation. They include electricity that is bought into the organization – and therefore all the emissions produced during electricity generation.

Scope 2 GHG emissions are calculated based on the company's electricity consumption and the supplier-specific, local network, as well as other published emissions factors.

Scope 3


All other indirect GHG emissions

Scope 3 emissions are the result of the company's activities, but come from sources that are not under the direct ownership or control of the company. Hot strip steel is the most significant indirect source of emissions, with its production making up approx. 95 per cent of total Scope 3 emissions.

Key figures: our product carbon footprint (PCF)

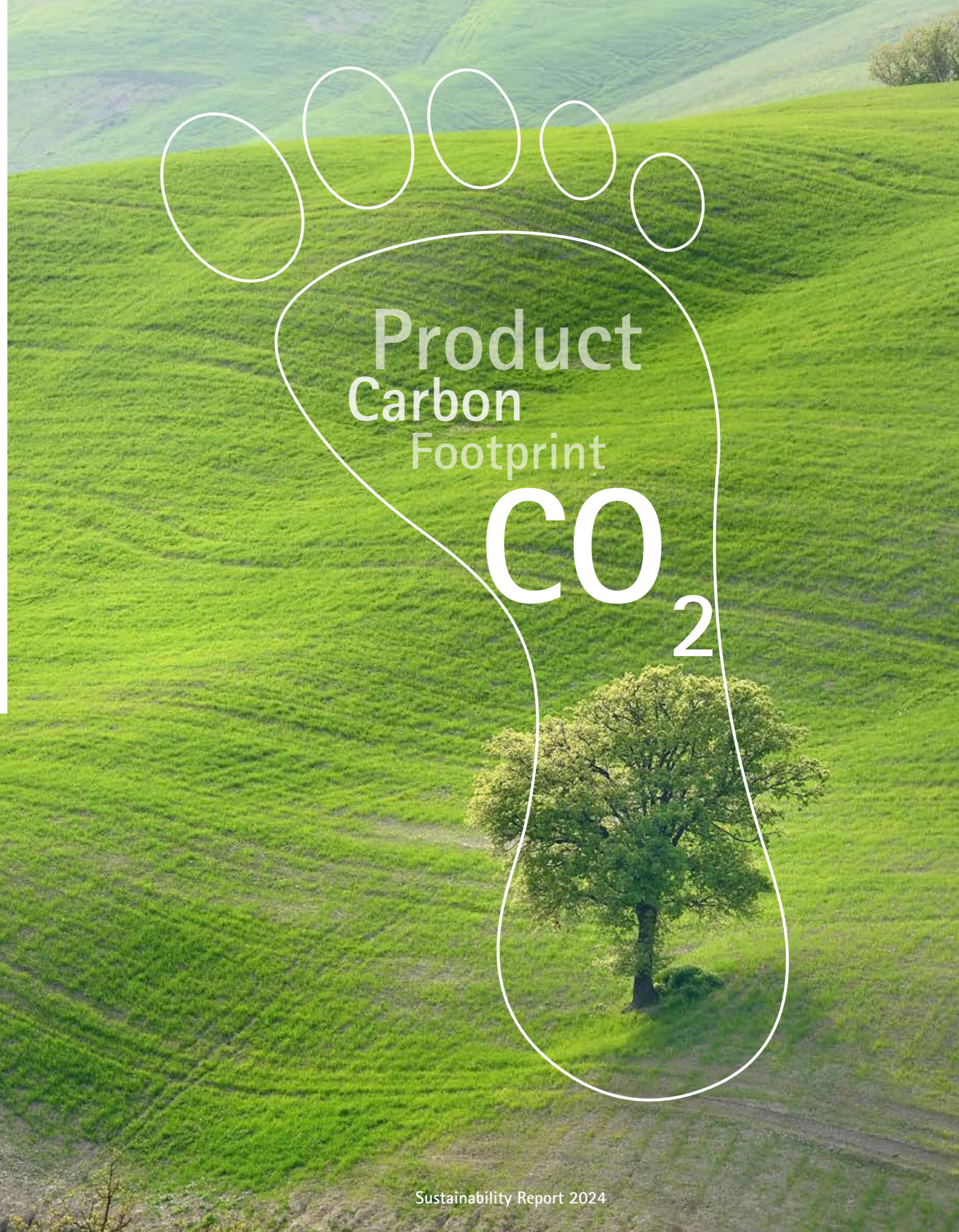
With over 7,000 cold-rolled strip products, is it even possible to calculate a PCF for each of them? Yes, of course! And we've been certified.

At which plant is it manufactured? How much green electricity is used? Which energy sources are used, and how much? All these factors influence the PCF, i.e. the product-specific carbon footprint. This is recalculated in November each year using the latest emissions factors.

The BILSTEIN GROUP has developed a validated tool to help it calculate the PCF for each of its more than 7,000 individual cold-rolled strip products. Validation of all the BILSTEIN GROUP's German plants, and the entire product portfolio, first took place in 2022 and was carried out by the accredited certifying body GUTcert. It is updated every year. The product-specific PCFs are calculated in accordance with the GHG Product Standard and ISO 14067. 

During the 2023 reporting year, there were ...

- ... a volume-weighted average of 2,452 kg CO₂equivalent per tonne across all BILSTEIN plants.
- ... a volume-weighted average of 2,734 kg CO₂equivalent per tonne across all HUGO VOGELSANG plants.
- ... a volume-weighted average of 2,696 kg CO₂equivalent per tonne for the steel fibre STABILS.



The carbon accounting model – passing on CO₂ savings to customers

One approach to reducing the carbon footprint of steel products that is rapidly gaining traction across the supply chain is the carbon accounting model. The BILSTEIN GROUP is among the companies to have implemented this model. It enables us to provide customers with low-carbon cold-rolled strip that can be easily reproduced, in as transparent a way as possible.

The carbon accounting model is currently the steel industry's solution of choice when it comes to reducing the CO₂ footprint of steel products along the process chain. "The model definitely has one or two weaknesses, but at present it's the best solution available for passing on CO₂ reductions to customers throughout the entire supply chain, with as much transparency as possible. Directly attributing CO₂ savings is so complex that it's almost impossible for us to do with a broad product portfolio like ours – and it doesn't work at all for recycled materials," says Marc T. Oehler, BILSTEIN GROUP Chief Executive and managing partner.

How does it work?


The basic principle behind the carbon accounting model is simple: it collects all the production-related CO₂ savings made along the process chain using various measures. The calculation should not include any improvements that would have been implemented anyway for economic reasons – the additional measures must be specifically implemented to reduce greenhouse gas emissions.

These savings are reviewed and virtually collected by an independent third party. The actual savings can then be mathematically extracted from this 'pot' and credited to the relevant products. Using the model, the true CO₂ savings achieved in actual processes across the supply chain can be allocated to any product.

Validation by an external certifying body

With more than 7,000 cold-rolled strip products that all vary in terms of strength and dimensions

and that undergo different energy-intensive processing steps in the BILSTEIN GROUP's plants, the carbon accounting model offers a reliable solution for calculating real CO₂ savings and passing them on to customers. The biggest benefit is that, if customers request specific grades that the steel manufacturer can't provide in a low-carbon variety, the BILSTEIN GROUP can use the accounting model to pass on the desired CO₂ savings anyway – because the savings have been achieved elsewhere during production.

The BILSTEIN GROUP's carbon accounting model was certified by the external body GUTcert and has been revalidated every year since 2022. 

Documentation

On 14 March 2024 the BILSTEIN GROUP's carbon accounting model, in use at its German companies BILSTEIN and HUGO VOGELSANG, was revalidated by the external certifying body GUTcert.


The relevant documentation can be viewed at <https://www.bilstein-gruppe.de/en/downloads-2/> or here:



Annual updates to the product carbon footprint

The carbon accounting model is always based on the respective product carbon footprint (PCF), i.e. the product-specific CO₂ footprint. And the BILSTEIN GROUP updates this every year – something that isn't common within the industry.



Christian Hagenkord, Head of Sustainability Projects and Energy Supply at the BILSTEIN GROUP, explains: "We're doing this to ensure that our carbon accounting model can provide calculations that are as precise as possible. If a customer requests savings, then the latest PCF for their product is used in the calculation. The more recent the PCF, the more precise and reliable the calculation of the CO₂ emissions the customer is generating with their products. Together with the certifying body that inspected our model, we determined that it's therefore best to update it annually. It makes sense for us." 

The journey to green steel



To reduce the carbon footprint of a cold-rolled strip coil, the BILSTEIN GROUP relies on three key measures:

- Using a low-carbon raw material with reliable external validations
- Using electricity from renewable sources
- In the medium term, replacing natural gas with biomethane

The actual CO₂ savings are tallied together in a virtual memory, using the accounting model, and later allocated to individual BILSTEIN GROUP products.

What this means in practice: the CO₂ savings from certified raw materials – in other words, proven low-carbon hot-rolled strip – are sent to a virtual memory. The same happens with CO₂ savings achieved through the use of electricity produced using renewable energies and, where available, carbon-neutral hydrogen (H₂). These savings can then be passed on to the BILSTEIN GROUP's customers.

Resource-efficient production

The efficient use of resources is also a key focus of the BILSTEIN GROUP. And the company is already setting benchmarks when it comes to making its own processes more energy efficient. The following strategic projects are underway:

- Working with customers to optimize production processes
- Developing production technologies with suppliers
- Expanding the company's in-house heat recovery system
- Continuing the decarbonization strategy, for example by potentially switching from using natural gas to hydrogen

While these factors are not taken into consideration in the carbon accounting model, they do have a positive impact on the underlying calculation, i.e. the PCF. Thanks to our strategic focus on resource-efficient production processes, the PCF is much higher than it would be without these efforts. This means that less of the CO₂ savings available in the virtual memory have to be used to achieve the final, desired emissions value for a given product.

Products & Innovations

At its site in Hagen-Hohenlimburg, the BILSTEIN GROUP operates the most cutting-edge cold-rolled strip plants worldwide. The company pursues its primary goal of producing innovative, climate-friendly steel by leveraging and constantly adding pioneering, sustainable technologies. The BILSTEIN GROUP is investing both in the development of environmentally and economically optimized processes and in innovative products.



The cold-rolled strip of the future



Das Kaltband.

Low-carbon cold-rolled strip has a name: BILCO₂


High-quality cold-rolled strip with a reduced carbon footprint: in late summer 2023, the BILSTEIN GROUP enhanced its portfolio with the cold-rolled strip of the future – with zero restrictions in terms of raw material origin, grade, volume and dimensions.

The carbon accounting model provides the basis for reducing the carbon footprint of a BILCO₂ cold-rolled strip coil, with the real CO₂ savings made along the supply chain passed on to the final product.

The BILSTEIN GROUP offers BILCO₂ for all its steel products and grades, at both BILSTEIN and HUGO VOGELSANG. Customers can choose from three classifications of low-carbon steel:

- 2,000 kg CO₂ equivalent per tonne
- 1,500 kg CO₂ equivalent per tonne
- 1,000 kg CO₂ equivalent per tonne

This innovative product connects the breadth and depth of knowledge we've developed since the founding of BILSTEIN & Co. (BILCO, for short) in 1911 with our ambitious vision: achieving a significant reduction in the carbon footprint of BILSTEIN GROUP steel products.

"Climate change affects us all. The faster the steel industry, one of the biggest emitters of greenhouse gases, makes progress here, the better it is for everyone. Ambitious projects like BILCO₂ will help us on this journey," explains Marc T. Oehler, Chief Executive and managing partner at the BILSTEIN GROUP. 

Technologies and climate protection: groundbreaking innovations

Achieving more resource-efficient production with innovative technology: the BILSTEIN GROUP is investing both in the development of pioneering production methods and in new cold-rolled strip grades.

STABLS – our new steel fibre

As the main construction material in Germany, more than 100 million cubic metres of reinforced concrete – a composite made from concrete and reinforced steel – are installed every year. The CE-certified steel fibre STABLS, which was launched on the market in September 2023, enables much more sustainable construction with a significantly lower carbon footprint: it reduces the volume of steel needed per unit of concrete compared with conventional reinforced steel, while also reducing the required wall thickness of concrete elements, and with it the amount of carbon-intensive cement.

At a time when resources are expensive and scarce, reducing material consumption is a key decision-making criteria in itself. Using less concrete also equates to a reduction in the transportation of materials, as well as the associated logistics costs and emissions. In this way, the new material can lead to savings on multiple fronts in terms of raw materials, time and CO₂ emissions.



Conventional reinforced concrete ...

Long bars of conventional reinforced steel are knotted or weaved together to create mesh, then added to a formwork before concrete is poured over it. But you can do the same thing with steel fibres; 25–70 mm long wires can be added directly to concrete and dramatically increase its overall load bearing capacity. The more evenly the fibres are distributed, the better. But mixing in the fibres that are currently on the market is relatively time-consuming and, because of their geometry, not always successful.

... versus the sustainable alternative: STABLS

This is where the high-grade steel fibre made from tempered strips by BILSTEIN STEEL FIBER GmbH comes in. "Each fibre is straight. And they are easy to mix into concrete and to distribute evenly," explains Jörg von Prondzinski, Head of Application Engineering/Development at the BILSTEIN GROUP and Chief Executive at BILSTEIN STEEL FIBER GmbH. Anywhere that wire fibres

are already in use, builders can switch over to the BILSTEIN GROUP's higher-quality and easier-to-handle product. STABLS also offers huge benefits over conventional reinforcement made from mesh: thanks to the fibre's excellent properties, reinforced concrete made with STABLS is also more malleable. This makes it ideal for challenging projects like building tunnels, as well as for traditional construction. Furthermore, thanks to the high degree of stability and improved malleability of reinforced concrete made with STABLS, less steel and much less concrete are required overall to achieve the desired result. 🌱



The PCF of our STABLS: 2,696 kg CO₂ equivalent per tonne

Using BILCO₂ and the underlying carbon accounting model, our high-strength steel fibres can be reduced to a residual 671 kg CO₂ equivalent per tonne of STABLS.

STABLS
Innovations
Semi-processed electrical steel strip
Environment



Semi-processed electrical steel strip

Electrical steel strip is a special alloy with a relatively high silicon and aluminium content. These components give the steel both metallic and, importantly, electromagnetic properties – in particular highly magnetic flux density and minimal core loss. The combination of these properties provides the levels of efficiency required in electric motors, be it in commercial vacuums or electric cars.

Supply shortages

Each strip undergoes three manufacturing steps to produce "fully finished" electrical steel strip, as it's called: cold rolling, annealing and coating. Only then can the required motor parts, the plates that make up the stator and rotor, be stamped. But the steelworks only have limited capacity for cold rolling and the subsequent processes of annealing and coating. In Europe alone, there is expected to be a supply deficit of around one million tonnes by 2030.

Increasing demand

As demand for electric vehicles grows across the globe, so are the demands on the performance of electric motors – and therefore on the product. The lower the core loss and the thinner the stator and rotor plates,

the more efficient a motor and therefore the range of an electric car. That's why so many engine makers are currently looking to see where they can procure the thinnest possible electrical steel strip.

"We can produce semi-processed electrical steel strip of the exact thickness the market is currently looking for, and in doing so offer additional rolling capacity in this hotly contested segment," says Christoph Dahnke, Head of Application Engineering at the BILSTEIN GROUP. Semi-processed electrical steel strip is of particular interest for customers who already possess their own plants for downstream processing or who are looking to invest in this kind of machinery.

New processes bring new benefits

It also makes sense for the final annealing and coating processes to take place on the customer side from an efficiency and sustainability perspective; for example, the plates required for electric motors can be stamped first and then annealed and coated. This means the plates retain better electromagnetic properties, and that far less coated electrical steel strip ends up in landfill after the stamping process. 🌱

BILCUT® high-speed laser blanking

Developed by the BILSTEIN GROUP in collaboration with the Fraunhofer Institute for Laser Technology (ILT), the BILCUT high-speed laser blanking procedure for the production of shaped blanks for the auto sector is truly a world first. The patented technology is highly innovative. For one, it allows for much higher speeds to be attained. Additionally, it means the manufacturing process for shaped blanks can be designed in a much more resource-efficient way. Thanks to the flexibility of the laser-cutting head, many more shaped blanks can be made from a single coil than would be possible with a conventional die cutter. This also results in significantly less waste.

"Every kilo of steel that we can save in the production of a component is now twice as important," says Michael Ullrich, Chief Technology Officer at the BILSTEIN GROUP. "Firstly because of the environmental impact, in particular the carbon footprint of steel products, and secondly because of the soaring costs for energy and raw materials."

The proof of concept took place in late 2023 using a 1:1 scale prototype. The BILSTEIN GROUP plans to build a dedicated line at its own site and start production in 2025. 🌱

One patent, one revolution: innovative press hardening

With an innovative new press hardening method, the BILSTEIN GROUP has successfully made a key manufacturing process in the auto supply industry more cost-effective and sustainable. The new process has opened the door for us to discover a new market previously dominated by other key players. It's been an exciting journey – and not just for the BILSTEIN GROUP.

What are press-hardened parts used for?

The auto supply industry uses press hardening to produce structural components for vehicle bodies that need to be able to withstand extreme forces. This includes the pillars that support the entire body of a vehicle, connecting the roof to the chassis. Around 4 million tonnes of steel are used globally in press-hardened parts each year.

A new take on conventional press hardening

In conventional press hardening, shaped blanks are heated to more than 900°C and then simultaneously pressed and hardened in a single step. But because the surface of unprotected steel immediately oxidizes at such high temperatures, the material is coated with a protective aluminium-silicon layer. This comes with disadvantages: firstly, there's the associated cost of coating. Secondly, it makes the entire process less energy-efficient because the protective layer reflects the heat. Furthermore, the patent/licence for this aluminium-silicon coating is held by two metal-working giants, which significantly restricts access to the market for other companies.

The BILSTEIN GROUP's new, patented press hardening method does away with the need for the usual coating because of the way in which it manipulates the temperature and uses a special protective atmosphere during pressing. This has the potential to open lots of new doors, especially in the current environment where all companies are interested in sustainability and reducing their carbon footprints. 🌱

Refreshingly different: Supermod®, Ultramod® and Extramod®

A growing number of customers are using the BILSTEIN GROUP's innovative cold-rolled strip grades with soft magnetic properties. Supermod®, Ultramod® and Extramod® already possess good electromagnetic properties at the point of delivery, which enables components to be manufactured straight away without any additional annealing necessary. This makes them great alternatives to electric strip made from aluminium-silicon alloy in both an environmental and economic context. 🌱

Flagship project: FlexHyBat

How can the various alternative motor concepts (e.g. battery, hydrogen pressure regulators) be integrated into vehicle structures as cost-efficiently as possible – and without significantly reducing vehicle payload? The FlexHyBat project, a lightweight vehicle body platform for light commercial vehicles based on 3D roll-formed profiles, offers an answer. For the first time ever, FlexHyBat combines high-grade steel with innovative production methods to enable a flexible and economical manufacturing process.

Working with five consortium partners (EDAG, CLOOS, Fraunhofer IWU, data M Sheet Metal Solutions and PROTOMASTER), the BILSTEIN GROUP played a crucial role in the EDAG-initiated project when it came to developing a lightweight vehicle body platform. This pioneering project was supported by the German Federal Ministry for Economic Affairs and Climate Action, and was led and overseen by TÜV Rheinland Consulting GmbH.

"Until now, manufacturing other types of motors was somewhat problematic – but light commercial vehicles make up more than 10 per cent of traffic-related carbon emissions," explain Michael Ullrich, Chief Technology Officer at the BILSTEIN GROUP, and Franz Lorey, Vice President Commercial Vehicles at EDAG. "So, we have to find more efficient, sustainable and economical ways of developing and manufacturing vehicle components."

Three BILSTEIN GROUP innovations played a role in the success of the FlexHyBat project:

- Material: BILSTEIN Advanced High-Strength Low-Alloy (AHSLA)
- BILCUT® technology: laser high-speed blanking (of shaped blanks)
- BILTIC® technology: high-grade cold-rolled strip partially softened with laser treatment 🌱

Supermod®
 Ultramod®
 Extramod®
 Innovative press hardening
 BILCUT®
 FlexHyBat



I Sustainable Procurement & Processes

Resource and energy efficiency are guiding principles for the BILSTEIN GROUP. All our strategic decisions aim to align our supply chain as closely as possible with the demand for CO₂ reductions and the transition to electric mobility. We set the bar high – both for our own processes, and for the suppliers we source our raw materials from. The BILSTEIN GROUP is investing in innovative technologies and undertaking a range of projects to ensure it can deliver sufficient volumes of low-carbon cold-rolled strip in future.



Green steel: from fantasy to reality

Both traditional smelting works and more modern start-ups are offering solutions to help sustainably reduce the carbon footprint of steel products. And this is crucial for BILCO₂, the BILSTEIN GROUP's innovative, low-carbon cold-rolled strip.

"We want to solidify our position as an innovative and sustainable partner in the industry and have carbon-neutral or reduced steel make up more than 50 per cent of the raw materials we use by 2028/29," explains Marc T. Oehler, BILSTEIN GROUP Chief Executive and managing partner. The BILSTEIN GROUP has come to supply agreements with several large steelmakers for the short- and long-term procurement of significant volumes of low-carbon steel grades.

Transformation: a driving force

The BILSTEIN GROUP's ambitious CO₂ reduction goals aim to anticipate the needs and expectations of customers and other stakeholders in an industry-leading way. Right now, it is not completely clear how much green

steel is available, but traditional suppliers have already made a lot of progress in this area. Whether it's electric arc furnaces or using "green" sponge iron, or the carbon accounting model, there are already solutions that will help to significantly reduce carbon emissions in steel production.

Pioneering initiatives like that of the Swedish start-up H2 Green Steel – which has a new name, Stegra, to reflect the progress of its project – are also helping to propel the transformation of the steel industry. The new steelmaker is guaranteeing a supply of mostly carbon-neutral steel – and as an early investor, the BILSTEIN GROUP was among its first customers to sign a purchase agreement. The first deliveries of green steel are expected in 2026.

Did you know?

Well over 90 per cent of the carbon footprint of a BILSTEIN GROUP cold-rolled coil occurs in upstream processes. The CO₂ content of a steel product is calculated across its entire life cycle, from initial extraction of iron to steel production and downstream processing, to finishing the final product.

Mission possible: decarbonizing heavy industry

The Swedish H2 Green Steel project launched in 2021 with the goal of reducing emissions from the steel industry within an ambitious time frame. The start-up wanted to prove that, even in industries that are thought of as hard to decarbonize, things can change, and quickly.

Having secured financing totalling 6.5 billion euros, the company is well on its way to becoming the world's first sustainable, large-scale steelworks (production is slated to start in 2026) and a leading global player. In mid-September 2024, the project name H2 Green Steel was replaced by a new name: Stegra. This is a play on the Swedish word for "elevate". It reflects the company's pioneering spirit and its ambitious goal to decarbonize energy-intensive heavy industry – not just in Boden, Luleå, but with projects around the world.

BILCO₂: the cold-rolled strip of tomorrow, available today

Purchasing CO₂-reduced hot-rolled strip is the most effective way for the BILSTEIN GROUP to sustainably reduce the carbon footprint of its products and to offer significantly lower-carbon cold-rolled strip with BILCO₂. The BILSTEIN GROUP has used technology to reduce CO₂ emissions in its own manufacturing processes for some time now, and with some success (see the following pages for more on this). All of this means there is a realistic chance for the company to supply largely carbon-neutral cold-rolled strip from 2030 onwards.



Three paths to low-carbon steel: approaches of traditional steelmakers

The BILSTEIN GROUP's suppliers are exploring different methods to provide steel with significantly smaller carbon footprints:

Electric arc furnaces

Çolaköglu and Salzgitter (SALCOS: SALzgitter Low CO₂ Steel-making) and other renowned German steel manufacturers are using electric arc furnaces and scrap to produce high-quality steel with a significantly smaller carbon footprint: it only contains around a quarter of the CO₂ of traditional blast furnace steel. However, there are just a handful of electric arc furnaces located across Europe. They are only used in

around 15–20 per cent of steel production – and some of them have been temporarily shut down due to high energy costs. It's a different story in the USA, where 60–70 per cent of steel is made in electric arc furnaces. Through BILSTEIN COLD ROLLED STEEL, the BILSTEIN GROUP has close connections to the American market and developments there.

Accounting model

The steel manufacturer thyssenkrupp Steel Europe is using an accounting model that enables it to offer steel with up to 70 per cent less carbon, as part of its bluemint® steel product family. The CO₂ savings have been made possible by techno-

logy where sponge iron is used to replace some of the coking coal in the blast furnace process.

Certificate sales

Meanwhile, ArcelorMittal is selling green steel certificates under its XCarb® brand to help its customers achieve CO₂ savings. The carbon reductions are achieved through various measures at ArcelorMittal's European production plants, for example by sourcing green electricity or increasing the use of scrap steel.

In future, the key variable that will potentially determine whether we can replace coke with hydrogen in the traditional blast furnace route, and thereby reduce carbon emissions, will be ensuring a reliable supply of hydrogen. The same goes for electric arc furnaces, where a direct reduction using hydrogen is important to be able to use low-carbon iron ore instead of or in addition to scrap.

A certified environmental management system: the basis for ambitious goals

Our resolution to make all our production, logistics and administrative processes carbon-neutral by 2035, provided sufficient renewable energy sources are available by then, is based on a deeply embedded, ISO-certified environmental management system alongside comprehensive energy monitoring.

At our Hagen-Hohenlimburg location, as well as at BILSTEIN COLD ROLLED STEEL in the USA and BILSTEIN CEE in the Czech Republic, the BILSTEIN GROUP deploys state-of-the-art plant and equipment that is designed with energy and resource efficiency top of mind.

Comprehensive energy monitoring

The BILSTEIN GROUP is taking every opportunity to make its processes and production steps as sustainable as possible. Comprehensive energy monitoring is helping the company to do this, especially at its German plants, where more than 700 meters and sensors send around 7,000 measurements to the system every 30 seconds. "In terms of the comprehensive capture, collection and analysis of data, we are well ahead of our competitors," says Michael Ullrich, Chief Technology Officer at the BILSTEIN GROUP.

In-house experts for ongoing process optimization

The BILSTEIN GROUP is also constantly scrutinizing its own processes: together with its customers, the company is optimizing its production steps to reduce electricity and gas consumption and minimize energy use and CO₂ emissions as much as possible. With its process optimization department, the BILSTEIN GROUP has an entire team available to advise customers in this area. "If we can work together with customers to improve our processes to the point where we can eliminate an entire annealing process or rolling procedure, then that has a positive impact on our overall footprint," explains Michael Ullrich.

Supporting the transformation

"Our strategy is all about aligning the BILSTEIN GROUP's supply chain with the goals of carbon neu-


trality and the transition to electric mobility," explains Michael Ullrich. To do this, the BILSTEIN GROUP is investing in adding value across its supply chain, in new technologies, in different materials; there are plenty of innovative ideas in the pipeline. The aim is to successfully support the transformation already underway in the automotive sector to electric vehicles, as well as to tap into new business segments.

Sustainability as a matter of principle

"If you only look at these kinds of investments through the lens of economic factors, then most of the time you'd probably come to a different decision. That goes for almost everything that we're doing. Until 2021/22, natural gas and electricity were simply too cheap in Germany," says Michael Ullrich. "We've always made sure our investments align with our corporate values; after all, resources are limited, and we want to help protect the climate and the environment. At the end of the day, I've got kids too, and I like living on this planet."

Innovative, climate-friendly steel

It's clear that something has to change. Right now, the entire supply chain, from steel production to the end product, makes up around 30 per cent of industrial CO₂ emissions.

At the same time, there's no doubt that, on account of its outstanding product properties and great recycling opportunities, steel will remain an important material going forward – especially in the wind power, automotive and construction industries. "That's precisely why it's so important to invest in carbon-neutral technologies and processes now, and to continue to be a pioneer in innovative, climate-friendly steel," says Michael Ullrich, confidently. 

What are the sustainability goals of the BILSTEIN GROUP companies?

- ✔ To reduce any avoidable environmental pollution caused by our production processes and employees
- ✔ To minimize unnecessary use of resources
- ✔ To continue to improve sustainability in all areas
- ✔ To implement yearly defined actions, incl. those from the energy management system in accordance with ISO 50001

How is the BILSTEIN GROUP helping to achieve these goals?

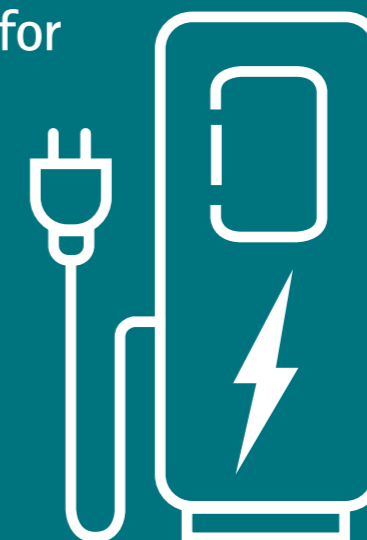
- ✔ Sustainable procurement
- ✔ Applying innovative methods and processes for conserving resources
- ✔ Refurbishing energy systems
- ✔ Implementing new technologies

Every small action counts:

- ✔ Reducing waste and scrap
- ✔ Lowering energy use by switching things off when not in use (lights, heating, air conditioning and ventilation systems)
- ✔ Eliminating pressurized air leaks
- ✔ Ensuring the workplace is clean and tidy to reduce hazards for workers and the environment
- ✔ Employee suggestions on how to reduce our environmental impact and improve energy use
- ✔ Waste separation for recycling purposes

Charging stations for electric vehicles ...

The electric vehicle charging points installed by the BILSTEIN GROUP are accessible to employees, customers, suppliers and other visitors so they can charge their vehicles while on the company premises. The charging points at the biggest plant are already in use, with between 100 and 150 charges being carried out monthly.



... and e-bikes

Living in the fast lane: since July 2023, 24 e-bike charging stations have been available to employees at our three locations in Hagen-Hohenlimburg, with more on the way.

Also since summer 2023, workers have had the opportunity to lease their own electric bike via the company – including insurance and warranty.





Putting waste heat to good use: a large-scale heat recovery system

Lots of processes and manufacturing steps produce waste heat – and the BILSTEIN GROUP is carefully harnessing and reusing this energy to heat its plants. Since 2012, the company has been strategically expanding its extensive heat recovery system.

Over the last few years, the BILSTEIN GROUP has brought to life its vision for resource-efficient production. In April 2020, its biggest plant in Hagen-Hohenlimburg became home to one of the most cutting-edge rolling mills in the world. In combination with the world's first fully automated annealing furnace, which is linked to a heat recovery system via an Organic Rankine Cycle (ORC), this means precious resources can now be saved at every step along the process chain.

The BILSTEIN GROUP's integration of an ORC system in its annealing process was innovative in every sense (see the next page for more information). As a result, a new, fully automated batch annealing system and an annealing line modernized in 2019 can be operated with a much smaller carbon footprint. The return of waste heat into the process cycle was always a key part of the overall concept. Now, a complex heat recovery system is helping to significantly reduce the company's CCF Scope 1 emissions, and therefore its carbon footprint.

Central heat recovery system and in-plant heat network

Waste heat from the annealing line is used to generate electricity, and some of it also feeds a water cycle. This is the backbone of the BILSTEIN GROUP's entire heat recovery system. One large centralized heat recovery system and an in-plant heat network were constructed and have been continuously expanded since 2012. In addition to the ORC system, a number of other plants and components where process heat occurs are already connected to this water cycle. Waste heat flows into the system from a total of 32 annealing bases in the two annealing plants, as well as the air compressors of the new rolling mill.

The energy is then used to heat several production halls, warehouses, a joinery and dispatch. The process heat is also used to bring the water-oil mixture in the emulsion plants in the new wide-strip rolling mill and the tandem mill up to the required operating tem-

perature: the rolling plant uses a cooling fluid that, paradoxically, must be heated and kept at a constant temperature of around 50°C. As a result, natural gas is only used when no waste heat is available.

Exploiting potential across all locations

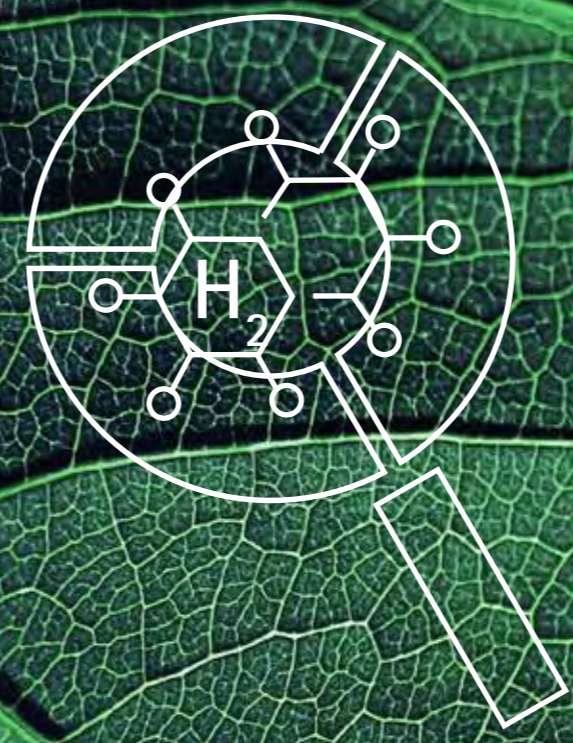
"At HUGO VOGELSANG and BILSTEIN CEE in the Czech Republic, we're also using the waste heat from the generation of compressed air, for example to provide heating or hot water," explains Christian Hagenkord, Head of Sustainability Projects and Energy Supply at the BILSTEIN GROUP. As well as the air compressors, the annealing plant at HUGO VOGELSANG is connected to the heat recovery system.

And as of this year, the smaller of the two BILSTEIN plants in Hagen has been partially heated using the process heat created during the production of compressed air. The heat is fed via a heat exchanger into a boiler that provides heating in the social areas and hot

water for bathrooms. This makes almost maximum use of the potential of heat recovery.

Reducing natural gas use to a minimum

The wide-strip rolling mill at BILSTEIN is one of the only plants within the group to use natural gas, outside of annealing. To operate as energy efficiently as possible, the rolls have a self-contained cooling system: the waste heat from electric motors, converters, pumps and other units that need to be cooled is used to pre-heat the fresh air flowing into the hall via a water-to-air heat exchanger. Air needs to be fed in from outside as steam and air are discharged during the rolling process. To prevent the hall from cooling down and having to be heated, warm air flows in. 🌱



Technology pioneers: exploring new solutions with our partners

Whether it's realizing carbon savings or replacing natural gas with alternative energy sources: for years the BILSTEIN GROUP has embarked on ambitious projects with its partners to advance existing technology.

The world's first zero-carbon heat treatment of 100 tonnes of cold-rolled strip in an annealing furnace

In 2023, the BILSTEIN GROUP achieved a technological milestone when an entire annealing furnace with 11 burners and a total heating capacity of 1,800 kW was converted from natural gas to hydrogen, in real production conditions and without any losses in output. The converted annealing furnace began operation after two years of research and

development work. Until that moment, this kind of technology was only available in the experimental space. "We're setting new global benchmarks!" exclaims Christian Hagenkord, Head of Sustainability Projects and Energy Supply at the BILSTEIN GROUP. This pioneering work was only possible thanks to close cooperation with various manufacturers: together with Kueppers Solutions, a leading manufacturer of industrial burners, the BILSTEIN GROUP was able to build on and develop the existing burner technology. Meanwhile, the Hagen-based company SCHLAGER Industrieofenbau GmbH installed the new technology, and Westfalen AG was able to provide the hydrogen volumes required for testing purposes. The Gas and Heat Institute Essen provided measurement and testing support over the course of the project. "It was uncharted territory for all the regional parties involved; but we did it together," says Christian Hagenkord. "And with great success: from the ignition of the burners through to the very end of the process, not a single gram of natural gas was burned, and we achieved outstanding process parameters. The smokestack emitted water vapour instead of CO₂."



Innovative burner technology

As part of a pilot project, the BILSTEIN GROUP worked with Kueppers Solutions, a leading manufacturer of industrial burners, to develop innovative burner technology for use in annealing hoods. A novel combustion technology in annealing hoods aims to help mix air and natural gas more effectively in the preheating of the combustion air supply. Second, it boosts heat recovery in the annealing hoods and, as a result, makes the process of preheating air more energy efficient. In turn, this helps cut gas consumption and carbon emissions.



ORC system

With the integration of an Organic Rankine Cycle (ORC) system in its annealing process, the BILSTEIN GROUP has developed a solution that is innovative in every sense. So innovative, in fact, that it was recognized with an award from KlimaExpo. NRW in 2016.

What are the benefits of the ORC system?
The electricity that the ORC system generates from the annealing plants' waste heat flows straight back into the plant. For each annealing operation – so every time the steel is heated to 400–700°C, depending on the material, and then cooled again – this saves at least 359 kg of CO₂. With several thousand annealing operations each year on a total of 32 annealing bases, this means a huge reduction in greenhouse gas emissions.

How does the ORC system work?
The core element of the system is a thermal oil cycle. During the annealing process, thermal oil absorbs the heat that is lost as the material cools. In the first step in the ORC system, when the material and the thermal oil are hot enough, this generates electricity – via a steam expansion motor and connected generator. This electricity is used to improve the efficiency of the annealing plant; in other words, it is used directly in the operation of the annealing lines, which means they require less electricity from outside the plant.

Once the material is no longer hot enough to feed into the thermal oil cycle and therefore the motor and generator, the annealing plant switches to a water cycle. Here, conventional heat exchangers are used to extract heat from the waste heat. This water cycle is the central element of the BILSTEIN GROUP's extensive heat recovery system.

The ORC plant was sponsored by the German Federal Ministry for the Environment as part of its Environmental Innovation Programme (www.umweltinnovationsprogramm.de).



Finding alternatives to natural gas: paving the way to a carbon-free future

The BILSTEIN GROUP is working intensively on transformational processes and solutions that will potentially enable the phaseout of natural gas (CH₄) in favour of alternative energy sources. A key factor in achieving carbon-neutral steel production is a sufficient supply of green energy, or hydrogen (H₂).

The main CO₂ emitter in hot industries is the generation of process heat in any step where material is annealed and needs to be softened for processing. At the moment, the BILSTEIN GROUP mainly uses natural gas to generate heat in its production processes.

Exploring all alternatives

"When it comes to the transformation of our processes, we had already made a lot of progress in making the switch from natural gas to more sustainable energy sources, i.e. hydrogen," explains Michael Ullrich, the BILSTEIN GROUP's Chief Technology Officer. To find the best possible solutions, the BILSTEIN GROUP has already invested a six-figure sum in research and development and has been building the necessary infrastructure. "Due to subsidies being cancelled and the lack of hydrogen infrastructure in our region in the foreseeable future, these efforts have largely hit an impasse. It's also unclear where in Germany sufficient quantities of green hydrogen can be procured from. So for the time being, we've put this issue on the backburner and are looking at using biomethane as a substitute for natural gas and to provide electricity for our processes," explains Michael Ullrich.

From a technological perspective, it's possible to retrofit our annealing lines for inductive heating –

even if that is extremely resource-intensive. The BILSTEIN GROUP is currently in discussions with plant manufacturers and working on relevant concepts. "We're looking at everything right now, testing other technical approaches and exploring a broad range of potential alternatives. Because it's still not clear what the best way is to produce process heat in a carbon-neutral way," says Michael Ullrich.

Overcoming obstacles

Even this work is taking place against a backdrop of uncertainty, since it's not yet clear where sufficient quantities of green electricity will be sourced from – or how much it will cost. Which is making a green transformation extremely challenging for all industrial companies in Germany. Because no matter which energy source is ultimately selected, it will require investments of millions of euros to make the transition. And given the current crisis facing the steel sector and other industries in Germany, companies simply cannot afford to make huge investments without financial support and supportive policies from government.

"This applies to all companies along the steel supply chain," explains Marc T. Oehler, Chief Executive and managing partner of the BILSTEIN GROUP. "Lots of


steelworks across Europe don't have the liquidity right now to implement the green transformation in the near term or push ahead with it. So, this means we need to look at procuring alternative solutions. In the USA, for example, the carbon footprint of the parts of the steel industry relevant to us is significantly lower than here in Germany – because electric arc furnaces are already common practice there."

Green steel remains the goal

While many companies in the steel industry must confront very different challenges in light of the current crisis, "Carbon-neutral steel is and will remain a key focus for us. As soon as we've overcome this crisis and the economy starts to pick up, the topic of green steel will once again gain momentum," says Michael Ullrich, confidently.

Since around 90 per cent of the carbon footprint of a BILSTEIN GROUP cold-rolled strip coil comes from upstream processes (also see p. 19), CO₂-reduced products can only be realized through collaboration with all stakeholders. Action is needed now: BILSTEIN's automotive customers have already communicated very specific requirements regarding how many kilos of CO₂ a tonne of steel can contain from 2030 and 2039 onwards, in order for BILSTEIN GROUP companies to

be able to continue to supply them. Although these goals have somewhat faded into the background in light of the current weak economy and demand, in setting these standards, automakers are implementing the requirements laid out by the European Union and the German government as part of the climate protection programme; and some are even going a little further.

"The green transformation of the steel industry and the related efforts to significantly reduce the carbon footprint of our products continues to be hugely important to us. We have set ourselves the goal of making our processes carbon-neutral by 2035 at the latest," explains Marc T. Oehler. "But in order to do that, we need sufficient quantities of renewable energies to be available." 



Employees & Society

Sustainability includes acting and behaving in a way that is aligned with our values in the wider context of our responsibility to society. As an international corporation, the BILSTEIN GROUP not only complies with all national and international laws; we also attach huge importance to ethical business principles. The BILSTEIN GROUP requires both its own companies and all suppliers and partners to comply with the relevant code of conduct. And for a family-owned business like the BILSTEIN GROUP, fair and value-driven behaviour includes lifting up and supporting people in the company and the local region.



	BILSTEIN SERVICE	BILSTEIN	HUGO VOGELSANG	Total in Germany	BILSTEIN CEE	SHEARLINE STEEL STRIP	BILSTEIN COLD ROLLED STEEL	BILSTEIN TRADING (SHANGHAI)	Total outside Germany	Total
Employees	349	578	221	1,148	126	23	113	6	268	1,416

Data correct as at December 2024

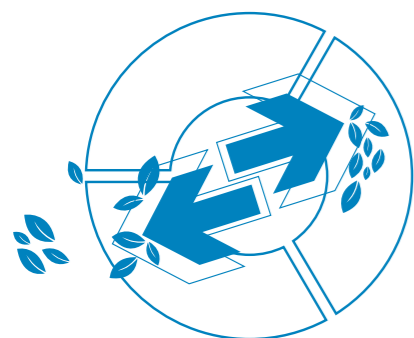


Honest, fair and sustainable: it's the only way we do business

High quality standards, sustainability and compliance with ethical principles – as a matter of principle, the BILSTEIN GROUP aspires to and applies these commitments both in its own company and throughout the supply chain.

As one of the world's leading cold-rolled strip providers, the companies of the BILSTEIN GROUP and their various production and service locations are fully aware of their responsibilities when it comes to complying with international rules and standards. Furthermore, when shaping their company policies, they are guided by robust ethical business principles.

And BILSTEIN GROUP companies also judge their suppliers by the same measure. All our suppliers must commit to upholding the BILSTEIN GROUP's high standards when it comes to complying with quality, environmental management and hazardous substance requirements.



- ✓ Quality management, certified to ISO 9001 and IATF 16949
- ✓ Environmental management system, certified to ISO 14001 or EMAS
- ✓ Energy management system, certified to ISO 50001 and/or energy audit pursuant to Section 8 of the German Act on Energy Services and Other Energy Efficiency Measure

RoHS II Suppliers must ensure their products comply with the EU's Restriction of Hazardous Substances Directive II, i.e. ensure they do not contain higher concentrations of certain substances than those listed in the RoHS.

REACH Suppliers must confirm that they understand and comply with the EU's REACH regulation ([EG] No. 1907/2006).

Questionnaire for suppliers, manufacturers and retailers

In addition to a code of conduct for suppliers, the BILSTEIN GROUP regularly reviews the environmental policies and certification of manufacturers and retailers, who provide information on their quality management and any concrete steps they're taking to reduce their environmental footprint. The questions they are asked relate to areas such as resource use in production, energy efficiency and occupational health and safety management in their company.

Code of conduct for suppliers and business partners

The comprehensive code of conduct for suppliers comprises 13 points. As well as ensuring compliance with applicable laws and regulations and the protection of employee rights, it encompasses a wide range of ethical obligations such as respecting and protecting human rights, and complying with environmental protection standards.

Like our own internal code of conduct, this code also forbids fraud, unfair competition through corruption, and money laundering.

- I. Compliance with applicable laws and regulations
- II. Respecting and protecting human rights
- III. Environmental protection and climate action
- IV. Anti-discrimination and employee rights
- V. Offering and granting benefits; conflicts of interest
- VI. Fair competition
- VII. Money laundering
- VIII. Data protection and confidentiality
- IX. Transparent financial reporting
- X. International trade
- XI. Product safety
- XII. Whistleblowing system
- XIII. Responsible supply chain management and risk management

CSR/sustainability requirements for suppliers

The BILSTEIN GROUP's corporate social responsibility (CSR) and sustainability requirements for suppliers cover the following:

- Human rights
- Child labour and underage workers
- Wages and benefits
- Working hours
- Modern slavery (i.e. slavery, exploitation and forced or compulsory labour)
- Freedom of association, incl. collective bargaining
- Harassment and discrimination
- Health and safety
- Environmental protection
- Corruption, bribery and extortion
- Privacy and data protection
- Export control
- Fair competition and antitrust law
- Conflicts of interest
- Responsible supply chain management
- Protection of whistleblowers

Terms and Conditions of Sale and Delivery

The BILSTEIN GROUP's General Terms and Conditions of Business also include sale and delivery conditions that list compliance requirements for suppliers.

You can find the General Terms and Conditions of Sale and Delivery here: <https://www.bilstein-gruppe.de/en/downloads-2/>

Adhering to laws, norms and ethics: our compliance management system

With around 1,200 customers located across every continent, the BILSTEIN GROUP is committed to upholding international laws and regulations. Additionally, all companies of the BILSTEIN GROUP are required to adhere to a binding code of ethical business principles.

Supply Chain Due Diligence Act (LkSG)

Independent of the extremely high standards that the BILSTEIN GROUP already requires of its suppliers, these obligations are now regulated by law in Germany following the passing of the Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz, or LkSG for short) on 1 January 2024. The LkSG's primary aim is to ensure that companies review their supply chains and check they are compliant with environmental and human rights obligations. To do this, the BILSTEIN GROUP has established a risk management system, risk analyses and corresponding prevention measures, as well as a complaints procedure to supplement the whistleblower system introduced in summer 2023.

A complaints procedure for issues relating to anti-trust and competition law has already been in place for many years at BILSTEIN GROUP companies. And since 2016, the BILSTEIN GROUP's compliance management system has provided an internal reporting channel via the group's compliance officers and an external channel via the Düsseldorf-based lawyer Glade Michel Wirtz for reports of (potential) infringements of guidelines.

Human rights officers



One recommendation in the LkSG that the BILSTEIN GROUP implemented as soon as the law became effective on 1 January 2024 is the appointment of a human rights officer. At the BILSTEIN GROUP, this role has been taken on by Miriam Rensinghoff, who is also our Compliance Officer and Head of Fundamental Principles/Legal.

Whistleblower Protection Act (HinSchG)

The companies in the BILSTEIN GROUP comply with all the requirements of the German Whistleblower Protection Act and the complaints procedure pursuant to the Supply Chain Due Diligence Act using software from tacto. Our website features a link to the software, where whistleblowers can anonymously report any risks to human rights or the environment or infringements of corresponding obligations, either in their own department or elsewhere in the supply chain.

Code of conduct

Clearly defined corporate ethics, rather than laws, are the basis for ensuring that employees, business partners and customers are all treated in an honest, fair, sustainable and safe way. And the BILSTEIN GROUP doesn't just set the bar high for itself; it also expects its suppliers and partners to adhere to these critical, fundamental ethical standards.

The company has defined all its important corporate ethics standards in a code of conduct that is binding for all companies and employees of the BILSTEIN GROUP. The code encompasses the central values of the BILSTEIN GROUP and serves as a guide for all shareholders, advisory board members, members of management boards, directors and employees on how to treat each other and their partners across the globe. Acting on the basis of these ethics, they are all important ambassadors of the BILSTEIN GROUP.



The three pillars of our compliance management system



Code of conduct

The code of conduct is one of the three pillars of the BILSTEIN GROUP's compliance management system. It consists of various sections and includes our policy on safeguarding human and employee rights, environmental protection pursuant to the LkSG and our general principles and rules of conduct.



Anti-corruption guide

As the second pillar of our compliance management system, the anti-corruption guide aims to help prevent and actively combat any form of corruption or bribery. BILSTEIN GROUP companies actively promote fair competition and do not tolerate any form of corrupt behaviour. Ultimately, corruption can have damaging effects on public welfare, the economy and individual companies.

The processes and rules set out in the guide are binding for all employees of the BILSTEIN GROUP and provide guidance on how to deal with gifts. Using a traffic light system, the aim is to reduce the risk of any such infringements of the law to an absolute minimum.



Guide to antitrust law

This guide is intended as a code of conduct to help employees identify any infringements of antitrust law. All BILSTEIN GROUP employees share responsibility for implementing these guidelines in their interactions with customers, suppliers and the general public.

The guide to antitrust law is the third pillar of the BILSTEIN GROUP's compliance management system.

You can learn more about the BILSTEIN GROUP's compliance management system on the group website:

www.bilstein-gruppe.de/cms/wp-content/uploads/2016/12/CMS_BILSTEIN_GROUP_2017.pdf



Work & Family

Balancing work and family is an enormous challenge faced by many workers every day. The BILSTEIN GROUP supports its workforce to the best of its ability in this area, as it recognizes that its employees' mental and physical health is a valuable asset that is worth protecting.

BUK Familienservice

In collaboration with the organization BUK Familienservice, the BILSTEIN GROUP provides independent and external professional services for all employees at its German locations to help with challenging or stressful life events and situations. The services have been available since January 2019 via phone hotlines, video consultations, email and one-on-one discussions.

1. Childcare

Personalized advice on childcare options and formats, including parental leave and benefits, childcare costs, support with contractual queries, and much more.

2. Nationwide services during school breaks

Selection and research of certified options for regular or short-term childcare, connecting with babysitters and au pairs, homework support or emergency childcare, BUK summer camp, etc.

3. Care for dependents

Personalized support for caring for dependents, including care availability, types and levels of care, costs and grants, organizing care, connecting with nationwide support or care services, communications and liaison, and much more.

4. External employee support

Health management through confidential advice and support on topics like work, career, personal life, mental health and addiction. Expert service for HR managers, connections to additional support services, and much more.

Family-friendly – it's in our DNA

The BILSTEIN GROUP recognizes that the well-being of its workforce isn't just about what happens in the workplace. After all, employees are first and foremost human beings. Thanks to its special service offering for employees, the BILSTEIN GROUP has already been designated a "Family-friendly company".

Work & Family

- ✓ Advice on parental leave and returning to work
- ✓ Flexible working hours
- ✓ Kid-friendly workspaces for emergency childcare situations
- ✓ Financial support for childcare
- ✓ Holiday activities and programmes for children of employees
- ✓ Company-wide agreement on remote working
- ✓ The opportunity for administrative staff to bring their dogs to work

Internal, personalized support

- ✓ External employee advice
- ✓ Family care: support with organizing care for dependents
- ✓ Rapid financial aid, particularly for family emergencies
- ✓ Support with addiction and money problems

Sustainable transport

- ✓ Employee bike leasing programme (from 2023)
- ✓ Charging stations for electric vehicles



Employee events

- ✓ Family festivals
- ✓ Meet-ups for retirees
- ✓ Workplace anniversary parties
- ✓ Christmas tree programme

Extras

- ✓ Funds for family occasions based on the Social Affairs Act (effective since 01.01.2015)
- ✓ Funds for social issues
- ✓ Benefits in the event of loss of life

Staying active together

- ✓ Participation in various corporate running events

External events

- ✓ Girls'/Boys' Day, Parents' Day
- ✓ Management AG
- ✓ Company visits for school classes
- ✓ Participation in Tec Days
- ✓ Presence at various training and careers fairs
- ✓ Participation in Hagen vocational training day
- ✓ Careers information days and internships

Culture, identification and diversity



In Germany, the average length of employment at the company is more than 15 years, which is significantly above the statistical average of around ten years.

What's more, the BILSTEIN GROUP has a presence on nearly all continents across the globe. Around 20 per cent of its workforce is based outside Germany. Altogether, BILSTEIN GROUP employees represent more than 50 nations, along with all their different cultures and values. This diversity is also reflected in employee promotion and development.

Careers built to last



As a leading cold-rolled strip company, we employ around 1,400 people in a strategically important industry worldwide:

karriere.bilstein-gruppe.de

Our employees are the heart of our company.



We consider the whole person; not just their job or role. We treat each other as equals and with respect, whatever their level of seniority. For us, a mutual give and take forms the basis for trust and growth.

Christmas tree party



Traditions are important. In 2024, all employees at our German sites, and their families, were once again invited to join us on 8 December to soak up the festive atmosphere in Gut Kuhweide, Volmetal, and choose a Christmas tree. A Christmas tree was reserved in advance for each employee. And of course there was mulled wine and hotdogs available to help people celebrate.

Workplace anniversaries

Every year, the BILSTEIN GROUP honours its longest-serving employees who have been with the company for 25, 38 or 45 years. Senior management are always delighted to have the opportunity to meet their guests of honour, who they invite to a local restaurant to celebrate the occasion.



Embracing cultural change

"A strong sense of teamwork and togetherness gives us the best foundation to tackle the challenges in these times of rapid change," says Marc T. Oehler, Chief Executive and managing partner at the BILSTEIN GROUP. "And to achieve that, we all need to continue to learn and grow, especially right now." Which is why cultural change remains a key initiative on our strategic agenda.



Events for retirees

Twice a year, the BILSTEIN GROUP organizes an event for the company's former workers. For the spring event, management invite the retirees for a meal at a local restaurant, while in autumn they join us for coffee and cake, together with their partners. Around 130 former workers enjoy these events.

OUR SELF-IMAGE

As an internationally active medium-sized family business, we work with a high degree of flexibility to satisfy our customers – our employees and our technological leadership form the basis for our company's success!

OUR VALUES

APPRECIATION

We are attentive and interested in each other, treat each other with respect, recognise performance, give each other constructive feedback and motivate each other to achieve top performance together!

TEAM ORIENTATION

We can only be successful as a group of companies – in this sense we focus our thinking and act as one team!

CUSTOMER FOCUS

Our customers are at the centre of our actions – their satisfaction is what drives us!

COMMITMENT

We take and respect decisions and agreements – we keep our promises!

INNOVATIVE SPIRIT

We are full of ideas and future-oriented – considering customers, products, systems, expertise and our own actions and behaviour!

WILLINGNESS TO CHANGE

We are open to new ideas – we actively promote necessary change and individual initiative!

SUSTAINABILITY

Our actions are sustainable and future-oriented in every respect – for our customers, for our current and future colleagues, for the well-being of the company, society and the environment!

TOLERANCE

We respect other opinions, views and cultures. We resolutely oppose intolerance and discrimination. We tolerate mistakes – we can learn from them in order to constantly improve!

Das Kaltband.

We are proud of this, we live it, demonstrate it and demand it continually!

Girls' Day

In 2024, the BILSTEIN GROUP once again hosted Girls' Day, building on the success of the event the year before. On 25 April, the BILSTEIN GROUP invited interested female students to Plant I to learn about the processes at a steelworking company and get a glimpse of what are traditionally thought of as "men's jobs". Employees from production gave the young guests a guided tour of operations and were on hand to answer their questions. Apprentices spoke to them about their day-to-day work. And in materials testing, the students were able to try their own hand at a practical task. "We see Girls' Day



as a valuable opportunity to give young women an insight into the world of work; and we also believe it makes a significant contribution to promoting diversity and equality in the workplace," explains Adriana Krasevec, HR Officer and Apprenticeship Manager. "Events like this help us get talented young people excited about the prospect of a career with our company. We're already looking forward to the next Girls' Day on 3 April 2025."

Hagen cold rolling museum

On 14 April 2024, after a temporary seven-year closure, the German Cold Rolling Museum reopened at its new location in the LWL Open-Air Museum in Hagen, in what was formerly the Haus Letmathe restaurant. An old rolling stand was too large to go on display at the new location. A team from the central workshop at BILSTEIN Plant I set about to change this, by shortening the motors together with the concrete bases. Other companies that had been approached weren't confident they could handle this task.



Stronger together: Iserlohn Roosters

The BILSTEIN GROUP will be sponsoring the professional ice hockey team Iserlohn Roosters for the first time in the coming season.



Promoting community

Which is why we have a responsibility to give something back to our local region.

Litter picking around Hohenlimburg

Since 2023, twice a year – in spring and autumn – BILSTEIN GROUP apprentices have been doing their bit for the environment and helping to clear the streets, squares and recreation areas around Hohenlimburg of rubbish and waste. Around one-third of apprentices take part each time, and they organize the event themselves.

On 16 April 2024, commercial apprentice Endrit got a collection up and running in the town centre. The next collection took place on 23 September, again focused on Hohenlimburg town centre. This one was led by Nicole Ehmann, a business management apprentice. "We're delighted that they're so engaged and they have our full support, including time off work for the event," says Adriana Krasevec, HR Officer and Apprenticeship Manager.



Hohenlimburg Canoe and Kayak Club

The BILSTEIN GROUP has been a loyal sponsor of Hohenlimburg Canoe and Kayak Club for many years – a fact highlighted by the images of the big blue coil emblazoned on the cover of the kayaks, and in the design of the white water rapids course at competitions.

Student exchange with China

This year the BILSTEIN GROUP supported an exchange programme between students from Hohenlimburg secondary school and its partner school in China. Programmes like this strengthen international ties and open up new perspectives for young people.

"Our support gives students access to valuable international experiences. The exchange programme not only promotes better understanding of other cultures; it also helps the participants develop their language and personal skills," explains Tina Prinz, Marketing & PR.



Regional support and sponsorships

In addition to sports clubs, local schools and Hagen Open-Air Museum, the following institutions receive regular support:

- The Association for the Technological Advancement of South-Westphalia
- The volunteer fire department
- The German Federal Agency for Technical Relief



SV Hohenlimburg 1910 and the "Soccer Girls" project

The BILSTEIN GROUP has been a long-term supporter of the football club SV Hohenlimburg 1910, and this year it got behind its "Soccer Girls" project. The project, which has been running since May 2024 and is sponsored by a number of Hagen-based companies, gives girls aged 6 to 17 the opportunity to train for free once a week at SV Hohenlimburg 1910 for an entire year, giving them an insight into the game. The goal is to get more girls and young women involved in football.



Health and safety

Automated processes boost workplace safety and protect workers against the risk of serious injury. But we don't stop there; we think about all the small details that help our employees stay safe and healthy at work too. At the end of the day, our health is our biggest asset.



Digitalization of workplace health and safety processes

To ensure our workplace health and safety processes are cutting-edge, the Health, Safety, Environment and Quality (HSEQ) team is currently using new software for training and instruction, incident management and reporting, as well as the capture and maintenance of medical check-up and aptitude test data.



PPE, made locally

Whether it's safety goggles, blue light glasses or earmoulds (custom-fit hearing protection that nestles snugly within the ear canal for a comfortable fit): every employee in Germany has access to a service that provides bespoke personal protective equipment (PPE) in their place of work. And the BILSTEIN GROUP covers the cost, or the majority of the costs, for each new piece of eyewear or protective hearing equipment. Representatives from a specialist company ensure eyewear and ear protection fit the user and their needs. In 2023, the programme was updated and the PPE is now sourced from suppliers in the local region.

To make some PPE items – for example, the special gloves and sleeves to provide protection against cuts – more comfortable, functional and even safer, the BILSTEIN GROUP carried out an analysis in 2023 and organized an in-house event with different suppliers and manufacturers, alongside tests where employees tried on the items in their respective areas of work.

The PPE is put through its paces in a thorough "head to toe" review. An initial assessment took place this year (analysis of different types of PPE, safety requirements, etc.), with procurement also assessing individual teams/departments. The project will continue in 2025.

Apprentice safety training

In particular, BILSTEIN GROUP spends a lot of time educating its young people on safety training, including fire safety.

First aiders and fire safety officers

The BILSTEIN GROUP's competent and well-trained team of first aiders and fire safety officers ensures the safety and well-being of staff at all times. Please join us in thanking all these dedicated workers for their commitment.

Employee bike leasing programme

A bike leasing programme is helping employees make the switch from car to bicycle. The BILSTEIN GROUP has offered the programme at its German sites since June 2023, and includes bike insurance and warranties.

Accident prevention

Over the last few years, occupational safety has evolved from a focus on simply avoiding accidents to more comprehensive prevention. At the BILSTEIN GROUP's German companies, this is now the responsibility of the HSEQ department, which was formed from a merger between the Quality Management (QM) and Health, Safety and Environment (HSE) teams. The department ensures that all employees in Germany are working in compliance with management systems certified to ISO 9001, ISO 5001 and ISO 14001.

Meet our healthy workplace team

Members of the healthy workplace team at the larger of BILSTEIN's two plants are dedicated to making the workspaces and social areas there safer, cleaner and more comfortable. In these volunteer roles, they support the plant's safety officers. A second healthy workplace team is expected to launch at the other BILSTEIN plant in Hagen-Hohenlimburg in 2025.

Safety and health awareness days

The annual health and safety awareness days took place in November this year to raise awareness of health and safety at work and the importance of environmental protection. As well as tackling everyday safety topics, the event addressed a number of health-related themes, including noise protection, ergonomic workspaces, balance training, ergonomic lifting and movement analyses. To deliver the event, the BILSTEIN GROUP also brought on external partners like AOK. All the booths and stations encouraged employees to get involved and try things out and were well attended. The event marked a continuation of the concept introduced in 2023, when the original Safety Days were expanded to also factor in personal health issues.

Staying fit together: great for health, happiness and team spirit

Our fitness-focused employees have started a weekly running club, with a route starting and ending at the company premises.

BILSTEIN GROUP employees also regularly enter teams in externally organized runs, including B2Run in Dortmund, the AOK company run in Hagen/Herdecke and – as of 2024 – the company run in Sauerland-park Hemer.

The BILSTEIN GROUP now also has its own active football team that regularly trains together and competes against other teams in amateur tournaments. Apprentices of the BILSTEIN GROUP also enjoy participating in different football tournaments.

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