BIRN GROUP

SUSTAINABILITY REPORT 2024

About the report

This is the BIRN Group's sustainability report for 2024. The report covers the 1 January to 31 December 2024 financial year and all production units in the group. The report will also be included as part of the management report in the Group's annual report for 2024, to be published in May 2025.

The report brings us another step closer to meeting the EU directive, under which all large companies have to be able to report on the positive and negative impacts of their activities on society, the climate, and the environment (CSRD).

The report therefore follows the ESG structure, describing climate, environmental, social and governance matters.

BIRN Group's work with sustainability is based on the principles of the UN global goals. The group has also partnered with the ReFlow eco-tech company, which helps create an overview of environmental data and calculate total carbon emissions.

This report was completed in April 2025. Errors and omissions excepted.

BIRN GROUP SUSTAINABILITY REPORT 2024

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FOCUSED EFFORTS WHERE THEY ADD MOST VALUE

This is the third sustainability report produced for the BIRN Group, and it has clearly been the right choice to begin reporting on our Environment (E), Social (S) and Governance (G) efforts, well ahead of having to comply with the regulatory requirements. Based on the latest proposals from the European Commission to simplify the EU Corporate Sustainability Reporting Directive (CSRD), we do not expect to be covered by this until the 2027 financial year. However, it has been an instructive and necessary process for our organisation to gain an overview of our data and ESG initiatives before we are required to.

Reporting on climate, environmental, social and governance initiatives is a complex task, as is working out how to use the reporting constructively on the road to becoming a more sustainable group. But it has definitely been worth all the effort.

Our main focus in 2024 has been on undertaking a double materiality analysis. The analysis gives us a general overview of how we as a group affect the outside world, and how the outside world affects us. BIRN Group has taken an increasingly data-driven approach in recent years, and the double materiality analysis gives us a complete overview of the key areas for us to address.

Energy and resource consumption are among the most significant areas in relation to our climate and environmental impacts, while employee turnover rate, age distribution and health and safety are key areas in the social sphere. Cybersecurity and supplier relationships are two areas with major impacts on our business operations, and are therefore crucial for us to address.

We spent a lot of time at BIRN Group in 2024 on defining a new strategy for 2025 and 2026. Having updated our group strategy and developed a sustainability strategy, we now have a clear picture of which initiatives we need to focus on in the coming years in order to move in an even more sustainable direction.

The demand for documented initiatives that promote sustainability is steadily increasing in the market in general from both existing and new customers. The BIRN Group is one of the strongest players in our sector in this regard. This is undoubtedly due to our ability as a group to see the importance of working with sustainability, and making our efforts visible and understandable to employees, customers and suppliers.

Our aim is for all BIRN Group companies to be able to offer Product Carbon Footprint on all products by the end of 2026 – an initiative that started at BIRN in Holstebro, one of the very first companies in the foundry sector to offer carbon footprints on all products.

As a group, we excel in our work with sustainability. We have a clear direction, and we look forward to continuing the positive changes for the benefit of the world around us, our customers and our employees.

Enjoy the read.

Claus Beier
Group CEO, BIRN Group

ABOUT BIRN GROUP

BIRN Group is one of Northern Europe's largest iron foundry groups. BIRN Group represents seven companies specialising in different areas of the production, machining and sale of cast iron solutions. The group has 735 employees, with companies in Denmark, Germany, Sweden and Italy. Each company in the BIRN Group specialises in different areas, this means we can always offer our customers the best and most broadly-based solution in the sector.

Circular business model

At BIRN Group, a circular business model is embedded in our core values. We continuously work to integrate sustainability into our business practices, for example by considering how surplus materials can be recycled, how we can recycle our own materials in closed loops and how we can develop products with a long service life.

For us, sustainability is about balancing economic growth with corporate social responsibility and reducing our negative environmental impacts. We regard sustainability as an important driver in ensuring the future success of our business, long-term cooperation with our customers and the development of the societies in which we operate. For us, sustainable growth is both a responsibility and essential to our continued existence. It is not only the right path to take, but also something that is expected by our customers, business partners and current and future employees.

As one of Northern Europe's largest foundry groups, we have a responsibility to work proactively to reduce the negative environmental impacts connected with our operations. Achieving this while also meeting our ambitious growth targets is a challenge we are happy to take up.

EUR 162 million
Revenue
EUR 192 million (2023)

113 GWh
Electricity consumption
123 GWh (2023)

16,980 MWh
Natural gas consumption
20,035 MWh (2023)

735
Employees
802 (2023)

618 / 117
Men/Women
676 / 126 (2023)

7
Companies
7 (2023)

VALD. BIRN A/S Holstebro, Danmark	BIRN in Holstebro was founded in 1896 and has become one of Northern Europe's largest foundries, with 478 employees. The company specialises in developing and supplying customised cast iron solutions and is a turnkey supplier of all design, casting, precision machining and surface treatment – solutions used in the automotive, pump, hydraulics and other sectors, both in Denmark and abroad.
VALD. BIRN GMBH Mülheim, Tyskland	BIRN Germany is located in Mülheim an der Ruhr, in the centre of Germany's industrial Ruhr district. The company primarily supplies transmission elements and other machined cast iron components to German industry. With its specialised machining plant, BIRN Germany offers custom solutions.
ULDALLS JERNSTØBERI A/S Vejen, Danmark	ULDALL was established in 1944 in Vejen and has become a flexible, modern foundry specialising in customised cast iron solutions. With a focus on quality and innovation the company supplies products to a wide range of sectors including food, manufacturing, agriculture and energy.
VELAMP A/S Vejen, Danmark	VELAMP, owned by ULDALL, is Denmark's only supplier of classic cast iron lamps, benches and windows with 100% Danish production. Founded in Vejen in 1944, the foundry focuses on quality and lasting solutions for public and private sector customers.
TASSO A/S Odense, Danmark	TASSO was founded in 1856 and is Denmark's oldest active iron foundry today. TASSO specialises in the entire process of manufacturing continuous cast iron bars in various dimensions and grades. In addition to casting they offer in house heat treatment along with pre machining and bar peeling. Customer base is worldwide with many applications served including Hydraulics.
BERNAREGGI S.r.l. Castano Primo, Italien	TASSO BERNAREGGI, owned by Danish company TASSO, is situated in Castano Primo near Milan, Italy. With over 40 years of experience, the company supplies high-quality cast iron and bronze bars and billets and offers specialised machining. TASSO BERNAREGGI serves both Italian and international customers, with a focus on precision and reliability.
KOCKUMS MASKIN AB Kallinge, Sverige	KOCKUMS MASKIN, which has roots going back to 1742, is one of Scandinavia's leading manufacturers of machined castings. The company produces machined cast iron components for both Swedish and international customers, primarily in the marine, automotive, and machinery equipment sectors.

DOUBLE MATERIALITY ANALYSIS

BIRN Group expects to be covered by the new EU Corporate Sustainability Reporting Directive (CSRD) from the 2027 financial year. An important step towards meeting the new requirements is to produce a double materiality analysis. This aims to identify how a company impacts the outside world in terms of climate, environment and people (Impact Assessment) and how the outside world impacts a company from a financial perspective (Financial Assessment).

"We spent much of 2024 producing the double materiality analysis. The analysis gives us a 360-degree view of the entire group in relation to the impact we have on the outside world, and how external factors impact us as a group. It's a powerful starting point for defining concrete goals for how we can minimise our negative impact on the climate and environment, and identifying focus areas that are beyond our own control but which we need to take into account in our business operations," says Mads Rasch Frandsen, ESG Automation Specialist at BIRN Group.

When companies report on sustainability under the CSRD, they only have to report on areas where they have a material impact on climate, environment and social matters, or where they are materially impacted by factors within these areas. This creates a common understanding of what it is important to report on and work with on a comparable basis.

This allows the company – and investors and customers – to understand the company's sustainability performance and follow its progress, within the given company and in comparison with others.

Overview of key areas

BIRN Group's double materiality analysis was produced in close collaboration with PwC, and the analysis now provides a clear picture of the areas that are most important for BIRN Group to report on and thus to actively target.

"In relation to the climate and environment, it is particularly the group's consumption of electricity, natural gas and resources and our production waste that have a significant impact on our surroundings, making these also the key areas to work with to minimise negative impacts," says Mads Rasch Frandsen.

In the social area, we have identified three key factors – health and safety in the workplace, employee turnover rate and age distribution among our employees.

In relation to governance, our supplier relationships, cyber security and whistleblower scheme are the most important areas for BIRN Group.

"When we talk about factors relevant to BIRN Group's financial materiality, the prices of electricity and the various resources such as iron, scrap and alloy materials that we use in our production have the greatest financial impact," explains Mads Rasch Frandsen.

Double materiality analysis for BIRN Group

BIRN Group produced a double materiality analysis in 2024 as an important step towards sustainability reporting that complies with the EU Corporate Sustainability Reporting Directive (CSRD).

The analysis provides an overview of the areas in which the group impacts the outside world (Impact Assessment) and the areas in which the outside world impacts the group (Financial Assessment). These are the areas that are relevant and material for BIRN Group to report on and thus to seek to minimise negative impacts on both the outside world and the group.

The table shows the most material points from the two perspectives, divided into Environment (E), Social (S) and Governance (G) categories. Severity and likelihood indicate the severity of the impact and how likely it is to occur, on a scale from 1-5. The listed ESRS data points show which CSRD requirements the area is covered by.

ESRS (European Sustainability Reporting Standards) are the sustainability reporting standards that apply to all companies covered by the Corporate Sustainability Reporting Directive (CSRD).

	Impact Assessment	Severity	Likelihood	ESRS data point
Environment	Electricity	●●●●	●●●●●	E1 Climate Change
	Natural gas	●●●●	●●●●●	E1 Climate Change
	Resource consumption	●●●●●	●●●●●	E5 Circular economy
	Waste materials from production	*	*	E5 Circular economy
Social	Health and safety	●●●●	●●●●●	S1 Own workforce
	Age distribution	*	*	S1 Own workforce
	Employee turnover rate	*	*	S1 Own workforce
Governance	Cyber security	*	*	G1 Business conduct
	Supplier relationships/security	*	*	G1 Business conduct

	Financial Assessment	Alvorsgrad	Sandsynlighed	ESRS-datapunkt
Environment	Electricity	●●●●●	●●●●	E1 Climate Change
Social	Resource consumption	●●●●●	●●	E5 Circular economy
Governance	Whistleblower scheme	●●●●●	●	G1 Business conduct

* Areas we have chosen to focus on even though they did not score as relevant in terms of severity and likelihood during the double materiality analysis.

SUSTAINABILITY STRATEGY FOR 2025-2026

Working in a resource-conscious manner is part of the BIRN Group's DNA. Optimising processes, materials and energy to minimise the climate impact is the foundation of our approach. We strive to be a leader in sustainability in our sector, and to reduce our total climate footprint. We are leading the way in showing how resources can be used efficiently and how we can inspire positive change.

"We passed a number of key milestones in our sustainability work during 2024, including the digital transformation of our casting processes. At BIRN in Holstebro, natural gas consumption for comfort heating has been reduced by over 50 per cent, and in collaboration with IBM, BIRN is contributing to maintaining balance in the electricity grid by participating in the regulation market. The search for alternative scrap sources and better utilisation of surplus sand from the casting processes is also continuing," notes Emil Husted Brodersen, Group Sustainability Manager at BIRN Group.

Strategic Environment, Social and Governance goals

BIRN Group has defined a number of goals in a sustainability strategy for 2025 and 2026. The goals are relative to the baseline year (2022), and cover the general group level, as well as key initiatives for each company in the group.

Environment focus areas

In the Environment category, we have a particular focus on resource efficiency, reducing emissions and calculating the carbon footprint of our products. As a group, we have an aim of achieving net zero carbon emissions in scope 1, 2 and 3 in line with our customers' expectations. By 2026, the goal is to have reduced CO_2e emissions by 20 per cent compared to the baseline year (2022). We also want to phase out natural gas consumption.

Social focus areas

In terms of social initiatives, employee turnover rates, health and safety and age distribution will be in focus in the coming years.
BIRN Group has a general focus on reducing the employee turnover rate in the various companies.

"It's crucial for us to reduce the employee turnover rate, so we can build stable teams and prevent the loss of valuable knowledge and skills. But we also have to handle the coming generational change in departments with an aging workforce," says Group HR Business Partner Maria Mohr Holst.

		Goals
Environment	Electricity	Reduce scope 2 impact by 40 per cent by 2026. This initiative aims to make energy consumption more efficient while also promoting renewable energy production.
	Natural gas	Reduce use of fossil fuels, such as natural gas, to reduce scope 1 impact by 50 per cent by 2026.
	Resource consumption	Streamline material consumption in production processes to improve costs and efficiency and reduce the scope 3 impact.
	Waste materials from production	Reduce waste going to landfill by 30 per cent by 2026 by establishing or expanding circular economy initiatives.
Social	Employee turnover rate	Reduce the employee turnover rate in each company by looking at recruitment, onboarding, upskilling and offboarding (including reasons for departure).
	Health and safety	Improve the working environment and increase employee safety through prevention, protective equipment, employee involvement and utilisation of data.
	Age distribution	Build a sustainable workforce in terms of age, skills, experience and responsibilities. This is to be achieved through recruitment, mentoring, workforce planning and upskilling.
Governance	Cyber security	Strengthen our resilience to cyber threats through technology, processes and employee training.
	Supplier relationships/security	At least five per cent of our raw materials must come from suppliers with recognised sustainability certifications by 2026.

SUSTAINABILITY STRATEGY – CONTINUED

Sustainable workforce

There are no specific goals defined for the optimal age distribution in each company, but the aim is to build a sustainable workforce in terms of age, skills, experience and responsibilities.

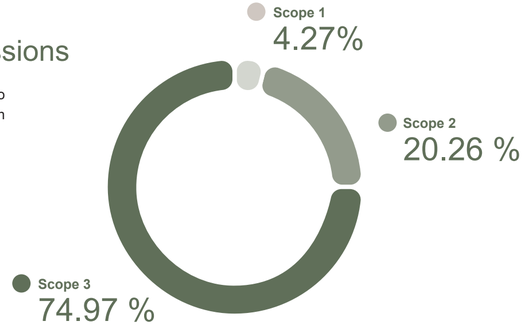
Health and safety is also a high priority for BIRN Group, and initiatives are regularly evaluated and launched to improve the working environment and employee safety. During 2024, there has been an extra focus on promoting awareness of the importance of safety and of using protective equipment in production, which is working environment where there is exposure to risk.

A digital safety management system will also streamline and improve safety work throughout the BIRN Group. The system will initially be tested at BIRN in Holstebro, and then implemented at TASSO and ULDALL. The other companies in the group will then follow.

"A key element of the digital safety management system is to understand the patterns that recur in the various departments and then initiate preventive actions," says Ronnie Rahbek, HS Manager at BIRN in Holstebro.

Zero carbon emissions

BIRN Group aims to achieve net zero carbon emissions across the group in scope 1, 2, and 3 in line with our customers' expectations.



Governance focus areas

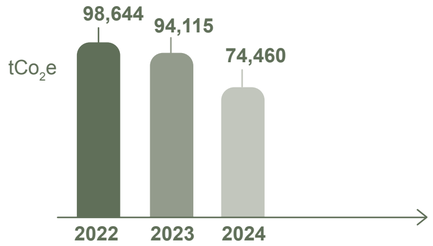
In the Governance category, we are increasing our focus on cyber security and supplier relationships. Like the rest of the business community, BIRN Group is experiencing a heightened risk of cyber attacks. This means we have to increase our cyber security – at the technical level, but also in the awareness of our employees.

We have a major responsibility to choose the right suppliers, so we can support greater sustainability through these choices. We therefore have a goal of sourcing at least five per cent of our raw materials from suppliers with recognised sustainability certifications by 2026. We also aim to collect detailed data on emissions and sustainability from at least half of our primary suppliers by 2026.

"As we sharpen our focus on sustainability, we are also placing new demands on our suppliers. For example, our carriers must be able to document their carbon footprint through accounting practices, in order to support the group's contribution to the green transition," says Jesper Astrup, Group Purchase Manager at BIRN Group.

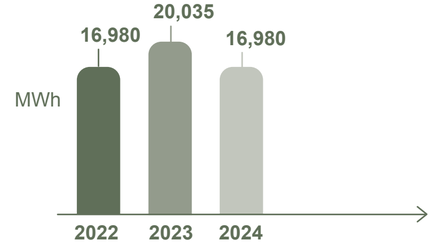
CO_2 equivalents

BIRN Group aims to reduce greenhouse gas emissions by 20 per cent by 2026 compared to the baseline year (2022). This was already achieved in 2024.



Natural gas

BIRN Group aims to phase out natural gas consumption.



ENVIRONMENT

At BIRN Group, we have a focus on continually minimising our impact on the climate and environment. The circular mindset therefore drives our production – for example,how we can optimise the recycling of raw and residual materials, how we can minimise energy and natural gas consumption and how we can contribute to our physical surroundings. In this section, we take a closer look at how electricity, natural gas and resource consumption and waste materials from production impact our surroundings.

Goals

Electricity

Reduce scope 2 impact by 40 per cent by 2026. This initiative aims to make energy consumption more efficient while also promoting renewable energy production.

Natural gas

Reduce use of fossil fuels, such as natural gas, to reduce scope 1 impact by 50 per cent by 2026.

Resource consumption

Streamline material consumption in production processes to improve costs and efficiency and reduce the scope 3 impact.

Waste materials from production

Reduce waste going to landfill by 30 per cent by 2026 by establishing or expanding circular economy initiatives.

POWER REDUCTION AT THE FURNACES WITHOUT LOSS OF PRODUCTION

Electricity consumption is rising throughout society, and one way to cater to the increased demand is to improve the balance between demand and production. Regulating power, whereby electricity consumption and production can be adjusted, plays a major role In this context. It is based on the fact that large consumers, such as industrial and production companies, are able to reduce their power needs and thereby help to better balance the electricity grid.

BIRN in Holstebro joined the Flex Platform in 2024. This is a technological solution developed by IBM and Andel Energi that signals electrical installations in real-time to adjust power consumption during periods when the grid is under high load. This allows power to be diverted from BIRN when it is needed in the rest of the grid, without affecting production at BIRN.

About Flex Platform

Flex Platform is a Danish technological solution created in a partnership between Andel Energi and IBM Danmark. The solution is based on artificial intelligence (AI) and the Internet of Things (IoT), and is designed to support the green transition through intelligent predictions and more flexible energy consumption. A number of both private and public sector participants are connected to the platform.

This automated regulation relieves coal and gas-fired backup power plants, which otherwise supply power in situations where stable and high energy supply is necessary for production capacity and quality – i.e. when there is peak demand for power on the electricity grid. Companies like BIRN in Holstebro thereby contribute to reducing the use of fossil fuels and lowering carbon emissions.

The iron foundry also helps increase the security of electricity supply for neighbours and other companies in and around Holstebro, by offsetting some of the renewable energy shortfall in the electricity grid that Denmark's focus on green power may lead to.

Flexible consumption with no impacts

The electricity regulation collaboration was put to the test at BIRN in Holstebro in 2024. Adjustments to power consumption have been activated in the iron foundry's melting furnaces several times, and according to Emil Husted Brodersen, Group Sustainability Manager at BIRN Group, this has not impacted production:

"Our initial experiences with power regulation have been 12-30 minutes on average. None of the reductions in electricity consumption have had an impact on production. We can always disable the system manually if we really need to, but this has not been necessary so far."

Even the relatively few adjustments that have been activated so far at BIRN in Holstebro have contributed positively to the overall energy balance. The amount of power that has been reserved at BIRN as regulating power corresponds to the annual consumption of about 1,500 households.

"We want to support the stability of the grid, so it makes sense to contribute in this way, where we can reduce our power usage during periods when it has no impact on production. We therefore look forward to being able to contribute even more in the coming years," says Emil Husted Brodersen.

Three of the foundry's melting furnaces are connected to the Flex Platform. This continuously collects data that is processed and analysed using artificial intelligence. The platform makes it possible to accurately predict electricity consumption and adjust it at times when the available renewable energy can be optimally utilised without compromising the operation of the melting furnaces.

1,024 MWh total reserved flexibility

40 MWh total delivered flexibility

1,500

households' annual electricity consumption

Adjustable power consumption at BIRN in Holstebro corresponded to the annual electricity consumption of approx. 1,500 households in 2024.

We have a high energy consumption due to our melting furnaces. Therefore, even the slightest electricity adjustment can have a significant impact.

Emil Husted Brodersen, Group Sustainability Manager, BIRN Group

MELTING FURNACES TO HELP IMPROVE ENERGY EFFICIENCY

Melting scrap iron and additives into new castings is a very energy-intensive process, with temperatures reaching over 1,500 degrees Celsius. It is therefore an area where even minor adjustments can have a big impact on reducing energy consumption.

Foundries within the BIRN Group are continually seeking to optimise the melting processes, and BIRN in Holstebro has increased the digitalisation of operator functions in recent years. With a digital tool in the form of tablets that use data and advanced algorithms to calculate the current temperature in the melting furnaces, the operators of the melting furnaces in the iron foundry can see exactly when to add new materials in order to maintain a stable furnace temperature.

BIRN's annual energy consumption is over 100 GWh, 53 per cent of which goes to the melting furnaces alone, and the company is constantly striving to achieve the most energy-efficient production possible.

"Our greater focus on automation and digitalisation is a crucial factor in this. The more data we have, the better informed our response is," says Emil Husted Brodersen.

Dashboard solution highlights energy consumption

"During 2024, we continued to develop even better data insight and the ability to react immediately to any changes or fluctuations. Using a dashboard solution that is visible at both management and operator level, and for the melting and holding furnaces, we can continuously monitor operation of the furnaces. We can also use it for maintenance by seeing exactly where, for example, a mistake has been made and what has to be done to fix it," explains Emil Husted Brodersen, Group Sustainability Manager at BIRN Group.

NATURAL GAS PHASE-OUT WELL UNDERWAY

BIRN Group has a goal of using no natural gas, in line with our customers' expectations. This means that natural gas will eventually no longer be used for domestic hot water and heating offices, or for process heating in production. The group is already well on its way to achieving this. At BIRN in Holstebro, natural gas is currently used predominantly for heating offices and hot water for bathing facilities, as well as process heat for cast iron production.

"The reduction in natural gas consumption is a direct result of our investments in heat recovery systems in recent years. These systems allow us to recover the surplus heat from casting production and use it to heat the rest of the company. We invested in two more systems in 2024, bringing the total to four heat recovery systems at BIRN in Holstebro. These four systems have enabled us to halve our consumption of natural gas for comfort heating in just three years," says Emil Husted Brodersen, Group Sustainability Manager at BIRN Group.

Heat recovery is an excellent solution

The gradual introduction of heat recovery systems that started in 2022 has resulted that natural gas consumption for comfort heating has been heavily reduced. Natural gas consumption was 18,700 MWh in 2021, and had dropped to just 8,580 MWh in 2024, a reduction of over 50 per cent in three years.

"The results in terms of reducing natural gas consumption speak for themselves, and we are very happy and proud of that. We are confident that we will reach our goal of phasing out natural gas completely," says Emil Husted Brodersen.

"We therefore plan to make further investment in heat recovery. It's an excellent solution for a foundry, where we have a relatively large amount of surplus heat that we can utilise to meet our own heating needs, while reducing natural gas consumption."

Updating air handling unit saves natural gas

ULDALL in Vejen also installed a heat recovery system in 2024, along with a new and much more efficient air handling unit. This allows the company to also use its own heat from casting production for comfort heating.

50%

BIRN in Holstebro has more than halved its natural gas consumption for comfort heating in three years.

"The reduction in natural gas consumption is a direct result of our investments in heat recovery systems in recent years. These systems allow us to recover the surplus heat from casting production and use it to heat the rest of the company.

Emil Husted Brodersen,
Group Sustainability Manager, BIRN Group

> ***The collaboration with Y-MatTec is a good example of how we can rethink our residual products, and find innovative solutions that create value for both ourselves and our partners.***
>
> Lars Chr. Kongerslev,
> Environmental Manager, BIRN i Holstebro

FROM WASTE TO RESOURCE:
WASTE SAND UTILISED IN NEW COLLABORATION

Even though BIRN in Holstebro already recycles 98 per cent of the casting sand in production, the company is always looking for new recycling options for the two per cent of the sand that it cannot reuse. BIRN therefore launched an exciting partnership in 2024 with Y-MatTec, a local high-strength concrete manufacturer, to recycle surplus sand.

BIRN presented a case at Sustain Week in Holstebro Municipality in autumn 2023. The aim of the case was to gather ideas for how to optimise the recycling and use of foundry sand, so that it can continue to be a valuable resource for other companies at the end of its useful life at BIRN. This led to many interesting conversations, and interest from companies that saw potential benefits from using surplus sand from BIRN in their production.

One of these was Y-MatTec, a local Holstebro company, with whom BIRN launched an innovative partnership in 2024 to utilise surplus sand. Using patented technology, Y-MatTec specialises in the development of high-strength concrete – a product that lies between normal concrete and steel in strength and is used in foundations for onshore and offshore wind turbines. Y-MatTec sees exciting potential in using casting sand in its product development:

"We see great potential in BIRN's surplus sand. While sand can be a challenging material to work with, we have already completed the first tests and look forward to developing a finished product that can make a difference in the market," says Elo Yde, CEO of Y-MatTec.

Y-MatTec expects to be able to use around 10 per cent of BIRN's surplus sand in their high-strength cement. The process seals the constituents in the sand, making it safe to use, while also helping to reduce the carbon footprint in production by replacing virgin raw materials.

First product ready in 2025

The project is still in its early stages, but aspirations are high. Y-MatTec is working on finalising cement products based on BIRN's surplus sand, and expects to have the first product ready in 2025. BIRN also sees the project as an opportunity to reduce the need for landfill, and strengthen the company's focus on sustainability.

"The collaboration with Y-MatTec is a good example of how we can rethink our residual products, and find innovative solutions that create value for both ourselves and our partners. Discussions are ongoing with other potential partners regarding use of our surplus sand in production, so we look forward to continuing this focus area going forward," says Lars Chr. Kongerslev, Environmental Manager at BIRN in Holstebro.

Y-MatTec

Y-MatTec is a Holstebro-based company, founded in 2021, that develops high-strength concrete for onshore and offshore wind turbine foundations. With a focus on innovation and sustainability, Y-MatTec uses patented technology to sequester CO_2 in high-strength concrete and integrate residual materials such as BIRN's surplus sand. The company's solutions are already in use in thousands of wind turbines globally.

ON THE LOOKOUT FOR NEW AND BETTER SCRAP SOURCES

90,000 tonnes of iron are melted at BIRN in Holstebro each year. 93 per cent of this comes from recycled material such as scrap steel from old cars, discarded refrigerators and tyre wire from used car tyres. But even more scrap is needed. So the foundry group is constantly on the lookout for new and better sources of scrap, business models and partnerships throughout the entire value chain.

In 2024, BIRN in Holstebro took part in Sustain Week, an initiative of ErhvervsForum Holstebro, for the second year running. The event brings together companies, researchers and world-leading specialists to discover and develop innovative sustainable solutions in a number of specific cases. One of the aims of participating in 2024 was to identify alternative materials and technologies that can increase the company's recycling of iron and steel scrap, and ensure that the scrap purchased has the lowest possible climate impact.

"We are very pleased with our participation in Sustain Week and the valuable insights we have gained. It gave us the opportunity to engage in many good conversations about future collaborations with companies that have surplus scrap, while increasing our awareness of the alternative scrap sources available," says Lars Jørgensen, Group COO at BIRN Group.

Sustain Week is a forum where companies can meet in a more informal setting. This element, in particular, led to many good conversations with current and potential suppliers about the requirements and expectations they are encountering from customers and business partners, especially with regard to sustainability, Lars Jørgensen explains:

"We are considering all options in our quest to lower our carbon footprint. With scrap being one of our absolute most important materials, it is extremely relevant for us to consider where the scrap we use comes from and its climate footprint. Following on from our participation in Sustain Week, we have therefore conducted a supplier assessment to help us choose suppliers who are committed to sustainability.

Alternative scrap sources

One of the successful recycling solutions that BIRN in Holstebro already uses is tyre wire briquettes, which primarily consist of metal wire from end-of-life car tyres and cast iron shavings. These briquettes make a key contribution to the company's recycling efforts and support the goal of increasing the use of alternative scrap sources:

"Tyre wire briquettes are a textbook example of what we need even more of: alternative sources and materials for scrap – and perhaps from new places we cannot even imagine. In addition to supporting the circular economy, we have also found that briquettes have become an economic advantage, while meeting the rising demand we are seeing for more sustainable solutions," notes Lars Jørgensen.

One of the other opportunities that BIRN in Holstebro is exploring is participation in take-back schemes. Under these schemes manufacturers of products, such as trucks – to whom BIRN supplies cast iron components – enter into agreements with their customers to take back end-of-life products, with the aim of recycling as much of the materials as possible. Take-back schemes support the circular economy by ensuring that resources are optimally utilised and reintroduced into the production chain, reducing the need for new raw materials.

ONSITE WELL SECURES WATER SUPPLY AT BIRN IN HOLSTEBRO

Water is an essential resource at BIRN that plays a crucial role in production. To maintain security of supply and optimise water management, BIRN in Holstebro has its own well and a general focus on minimising water consumption and future-proofing the use of water resources.

BIRN in Holstebro has annual consumption of around 90,000 cubic metres – equivalent to the consumption of about 2,400 people. Water is an essential resource for cooling equipment used for cast iron production and for other processes in the factory's daily operations.

BIRN has had its own well since the 1970s, to secure the water supply at the factory. This is operated in the same way as municipal waterworks, with controls and approvals. Water is pumped up, filtered and purified before it is used in production or as drinking water.

"We are 100 per cent self-sufficient in relation to water, which is a great advantage for our production. It gives us high security of supply, which is crucial for our operations," notes Lars Chr. Kongerslev, Environmental Manager at BIRN in Holstebro.

Having an onsite well is not only good for security of supply, but also for general safety in production. Water is needed to cool melting furnaces, holding furnaces and casting machines. In the event of a power outage, an emergency generator can ensure the water plant continues to operate and prevent meltdowns or fires. As an additional safety measure, BIRN is also connected to the municipal water supply as a backup.

Focus on responsible water management

Even though BIRN has its own water supply, there is still a strong focus on minimising water consumption and optimising processes.

"We are constantly striving to reduce water consumption. This means having the right measuring instruments and processes in place so we can act quickly and effectively," says Lars Chr. Kongerslev.

> ***"We are 100 per cent self-sufficient in relation to water, which is a great advantage for our production. It gives us high security of supply, which is crucial for our operations.***
>
> Lars Chr. Kongerslev, Environmental Manager, BIRN i Holstebro

NEW WATER RESERVOIR IMPROVES SURFACE WATER TREATMENT

BIRN in Holstebro took a major step towards better environmental protection and increased biodiversity in 2024. A large new water reservoir has been excavated at the factory. This will ensure that rainwater is effectively treated before it is released into the environment.

With a capacity of 4,000 cubic metres, the new water reservoir is eight times larger than its predecessor, and will ensure that BIRN continues to meet new, stricter environmental requirements. The stricter requirements for treatment of heavy metals, especially zinc, have meant that we had to find new solutions for optimised water treatment, so we continue to meet all applicable requirements. The water reservoir also contributes to the surrounding environment.

At the factory in Holstebro, which covers almost 10 hectares, rainwater from roofs, parking lots and other surfaces is collected in a separate rainwater system. This rainwater could contain industrial residues such as iron particles and zinc, but the new reservoir ensures that the water undergoes thorough treatment before it is discharged into Storåen, which is Denmark's second longest river, 104 kilometres in length, and runs right past BIRN's factory in Holstebro.

"*All surface water is now collected and treated in one place in the large reservoir. The long holding time ensures that the water is effectively treated and that any particles are removed and properly handled before the water reaches Storåen,"* explains Lars Chr. Kongerslev, Environmental Manager at BIRN in Holstebro.

> ***We have established an open, nature area around our new water reservoir at BIRN in Holstebro, with various grass species that help enhance biodiversity. It's no longer just a functional area, but also a scenic place that both employees and visitors can enjoy.***
>
> Lars Chr. Kongerslev, Environmental Manager, BIRN i Holstebro

Promotes biodiversity

The new reservoir is not only a technical facility, it will also contribute to greater biodiversity in the surrounding environment by promoting the growth of aquatic organisms and plants:

"We have established an open, nature area around the reservoir with various grass species that help enhance biodiversity. It's no longer just a functional area, but also a scenic place that both employees and visitors can enjoy," says Lars Chr. Kongerslev.

In addition to improving water treatment and biodiversity, the new reservoir is an important part of BIRN's overall sustainability strategy. The reservoir will ensure that the company can continue to meet new and stricter requirements for rainwater and surface water management in the future.

PRODUCT CARBON FOOTPRINT FOR ALL PRODUCTS

BIRN Group is continually working to meet the increasing demands for carbon reporting in the sector, and thus the growing demand from our customers for clarity about the carbon footprint in their supply chains. As part of this effort, BIRN in Holstebro is one of the very first companies in the foundry sector to offer Product Carbon Footprint (PCF) on all its products. The aim is for all the BIRN Group companies to be able to offer PCFs on all products by the end of 2026.

The system for declaring each product's carbon footprint was developed in partnership with the ReFlow eco-tech company, which works within ISO 14040 and ISO 14044. Primary data from suppliers and internal production data is also used, drawing on information from BIRN's CRM and ERP systems, and covers the entire value chain – from casting and cleaning to machining and surface treatment.

Three different options for customers

Customers can choose either an indicative estimate for a quick overview, or a more precise and detailed calculation for a small charge per product number. For a full overview for purchased tonnages, tailor-made solutions are available that offer full transparency for the whole delivery.

"We want to make it as easy as possible for our customers to document each product's carbon emissions. BIRN in Holstebro therefore became one of the very first companies in the sector to offer several flexible Product Carbon Footprint documentation solutions that match the various needs we see among our customers," explains Emil Husted Brodersen, Group Sustainability Manager, BIRN Group.

TASSO and ULDALL follow suit

PCF calculations will be gradually rolled out to other BIRN Group companies over the next few years, with the two other Danish companies – TASSO in Odense and ULDALL in Vejen – being next in line.

"Product Carbon Footprint is a strategic priority for us, in part because customer demand is increasing for documentation of carbon emissions for individual products and components. We have the advantage of being one of the very first companies in the foundry sector to offer it. This is clearly a position we must exploit in relation to the roll-out to the entire group," says Emil Husted Brodersen

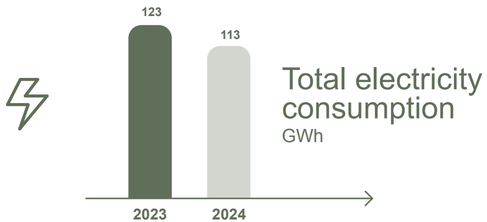
Product Carbon Footprint in brief

Product Carbon Footprint measures emissions of CO_2 equivalents during the life cycle of a product. BIRN works based on the principle of 'Cradle-to-Grave' – from material procurement to pre-processing, production and distribution.

> ***"Product Carbon Footprint is a strategic priority for us, in part because customer demand is increasing for documentation of carbon emissions for individual products and components.***
>
> Emil Husted Brodersen,
> Group Sustainability Manager, BIRN Group

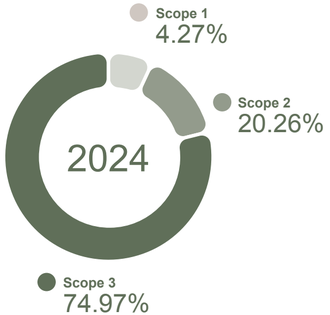
BIRN GROUP KEY FIGURES

Air and soil pollution		2023	2024
Total weight of air pollutants	tonnes	**6,218**	**5,047**
Energy			
Total electricity consumption	MWh	**123,263**	**113,145**
Percentage of electricity purchased from renewable energy sources	%	**64**	**74**
Consumption of other purchased or acquired energy from fossil sources	MWh	**20,167**	**17,102**
Consumption of other purchased or acquired energy from renewable sources	MWh	**2,040**	**2,085**
Consumption of self-produced non-fuel renewable energy	MWh	**0**	**0**
Fuel consumption from other fossil sources	MWh	**2,977**	**2,816**
Fuel consumption from renewable sources: Biomass	MWh	**0**	**0**
Percentage of energy consumption from fossil sources	%	**36**	**26**
Percentage of energy consumption from renewable sources	%	**64**	**74**
Total energy consumption	GJ	**534,411**	**486,531**
Total energy production	GJ	**433**	**378**
Total energy consumption from fossil sources	MWh	**65,213**	**47,248**
Total non-renewable energy production	MWh	**0**	**0**
Total renewable energy consumption	GJ	**299,644**	**316,436**
Total renewable energy production	GJ	**433**	**378**

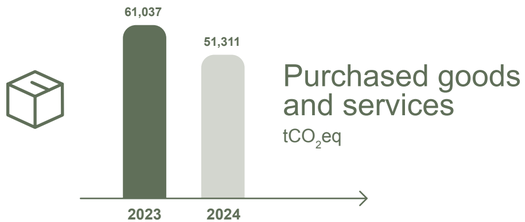


Scope

The charts show the percentage distribution of CO_2-equivalent emissions.



Greenhouse gas emissions and reduction targets		2023	2024
Percentage of scope 1 GHG emissions from regulated emissions trading schemes	%	**0**	**0**
Scope 3: 1 – Purchased goods and services	tCO_2eq	**61,037**	**51,311**
Scope 3: 4 – Upstream transportation and distributiont	tCO_2eq	**z4,903**	**3,598**
Scope 3: 5 – Waste generated from operations	tCO_2eq	**386**	**304**
Scope 3: 6 – Business travel	tCO_2eq	**48**	**54**
Scope 3: 7 – Employee commuting	tCO_2eq	**482**	**423**
Total gross scope 1 GHG emissions	tCO_2eq	**3,745**	**3,179**
Total gross scope 2 GHG emissions (based on location)	tCO_2eq	**21,728**	**19,992**
Total gross scope 2 GHG emissions (based on market)	tCO_2eq	**23,535**	**15,461**
Total gross scope 3 GHG emissions	tCO_2eq	**66,835**	**55,821**
Waste			
Total weight of hazardous waste	tons	**22,617**	**19,487**
Total weight of non-hazardous waste	tons	**1,808**	**1,710**
Water			
Total water consumption	m^3	**120,000**	**99,000**
Total amount of pollutants discharged to water	m^3	**28,400**	**22,600**



SOCIAL

BIRN Group's hundreds of employees constitute our most important resource. This means that health, safety and well-being are high priorities in both the mental and physical working environment at the group's companies. We must do our best to attract and retain the right people and continuously develop their knowledge and skills. We must also stay one step ahead in the coming generational change, and ensure a sustainable workforce, equipping younger candidates to take over.

Goals

Employee turnover rate

Reduce the employee turnover rate in each company by looking at recruitment, onboarding, upskilling and offboarding – including reasons for resignation.

Health and safety

Improve the working environment and increase employee safety through prevention, protective equipment, employee involvement and utilisation of data.

Age distribution

Build a sustainable workforce in terms of age, skills, experience and responsibilities. This is to be achieved through recruitment, mentoring, workforce planning and upskilling.

A MORE SUSTAINABLE WORKFORCE

The Danish labour market is facing major challenges, due in part to the tendency among the younger generations to change jobs more frequently, leading to a higher employee turnover rate. At the same time, the demographic trend is that a large portion of the workforce is approaching retirement age, exacerbating the shortage of skilled labour. For the BIRN Group this means that we need to take a long-term approach in order to maintain a competent and sustainable workforce.

Reducing employee turnover is a key part of the strategy in the group to create a sustainable workforce. At BIRN in Holstebro the employee turnover rate in 2024 was 28 per cent - 18 per cent compared to 26 per cent in 2023 after adjusting for organisational changes. This focus on employee turnover will be rolled out to the rest of the group during 2025.

"It is crucial for our group to reduce employee turnover, so we can build stable teams and avoid losing valuable skills. We face challenges such as short periods of employment, creating a need for rapid training, while also having to deal with generational change in departments with an aging workforce. It is also important to retain the experience and expertise of our older employees," notes Maria Mohr Holst, Group HR Business Partner.

Better recruitment means better retention

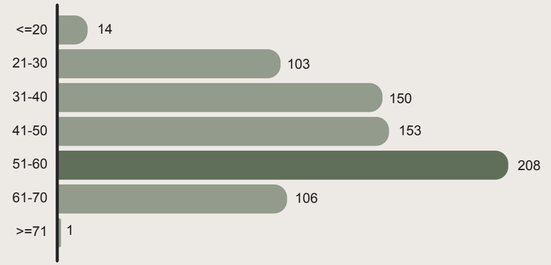
The relatively high employee turnover has led to a stronger focus on recruitment. How do we ensure the right people are hired and thereby reduce employee turnover?

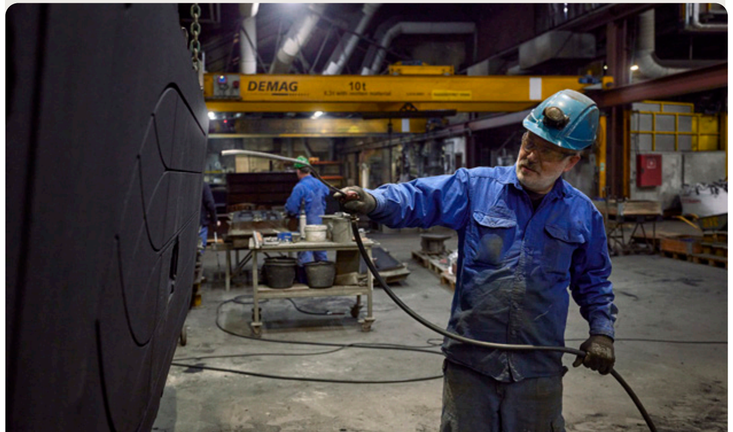
"In our work to build a more sustainable workforce, we are looking at several initiatives. These include implementing an improved HR system that not only ensures GDPR compliance, but also gives us insight into why employees choose to leave us. We will also work with clearer job profiles in future, so we find the right candidates for our positions from the outset," says Maria Mohr Holst.

Across the group, we are committed to creating a workplace where both experienced employees and new talent can develop and contribute to the company's future success.

Age distribution in BIRN GROUP

Number of employees by age





Employee turnover rate

The employee turnover rate is calculated by dividing the number of employees who leave the company within a certain period – for example, 12 months – by the average number of people employed during the given period.

BIRN Group has a general focus on reducing the employee turnover rate in the various companies. Some of the companies have set specific goals for this in 2025-2026:

BIRN in Holstebro has set a specific goal for 2025-2026 of getting the employee turnover rate below 20 per cent.

ULDALL has a goal for 2025-2026 of getting the employee turnover rate below 15 per cent. ULDALL will look at recruitment and onboarding initiatives from BIRN in Holstebro, and monitor resignation patterns closely in order to implement initiatives that can contribute to a lower employee turnover rate.

BIRN GERMANY has a goal for 2025-2026 of getting the employee turnover rate below 10 per cent.

UPSKILLING IMPROVES QUALITY

The foundry sector is closely tied to some unique skills that help ensure the high and continuous quality that characterises the BIRN Group. Upskilling is therefore a key point in BIRN's group strategy for 2025-2026.

"We have many talented employees who possess skills and in-depth knowledge of our products and sector, and we must take advantage of this fact. In addition to knowledge sharing, we must therefore also focus on developing these skills, to keep up with the latest trends in areas such as production processes," explains Maria Mohr Holst, Group HR Business Partner.

The foundry sector is rapidly evolving, driven in part by the increased focus on sustainability. For Maria Mohr Holst, this is why upskilling is an essential part of BIRN's strategy:

"It's not only the newest employees who can benefit from upskilling. Even our most experienced employees can still broaden their horizons, for example with the latest knowledge in foundry technology and melting processes."

New HR system supports upskilling

At BIRN in Holstebro, BIRN Germany, ULDALL in Vejen and TASSO in Odense, a new HR system, CatalystOne, has been implemented to create a better overview of employee upskilling opportunities. The system will help managers identify which employees could benefit from expanding their skills. The system will in time also be rolled out to KOCKUMS MASKIN in Sweden and TASSO BERNAREGGI in Italy.

"It is crucial for our employees that they have the opportunity for regular upskilling. This not only ensures high quality, but also helps us retain our talented employees. CatalystOne, which includes a skills matrix, makes it easy to identify skills gaps and training needs in the various departments. This makes it easier for our managers to target upskilling that meets the needs of both the company and the employee," says Maria Mohr Holst.

> ***It is crucial for our employees that they have the opportunity for regular upskilling. This not only ensures high quality, but also helps us retain our talented employees.***
>
> Maria Mohr Holst, Group HR Business Partner

About CatalystOne

CatalystOne Solutions is a leading Nordic provider of HR software for Human Capital Management (HCM) and user-friendly solutions for HR processes such as master data, performance, talent and learning management.

STRUCTURED TRAINING SYSTEM ENSURES POSITIVE TRAINING EXPERIENCE AND HIGH QUALITY

TASSO is one of the first iron foundries in Denmark to start using a method that ensures quality and efficiency in production, but most importantly, gives new employees a positive training experience. The iron foundry in Odense uses Training Within Industry, a recognised and structured training system that focuses on standardising working methods, minimising training time for new employees.

"The basic idea is to get an overview of and standardise our processes so we can optimise from there. By breaking down each work process into individual steps, we draw out the tacit knowledge that our very experienced employees possess about why we do things in a certain way. We also create an understanding of what each step in the process means for the finished product," notes Annas Chaoui, Lean and process supporter at TASSO.

The new, thorough and systematic approach to production processes has allowed TASSO to significantly optimise training for new employees. It now takes just 14 days compared to months previously.

"This means that new employees become self-sufficient faster, and also have the positive experience of a well-organised training programme," says Annas Chaoui.

Hard work pays off

While the system has led to several positive effects, there has also been a lot of work involved in implementation. Training within Industry requires that every step in the production process is carefully documented.

"In production systems where there are many similar processes leading to the final result, this method is well suited and will have a strong payoff, but it is an intensive process to embark on. Even though it takes time to see the results, it's worth it and benefits productivity, safety, quality and job satisfaction," says Anders Schmidt Dideriksen, Production Manager at TASSO.

What are the effects of Training Within Industry?

Training Within Industry is an effective tool for ensuring consistent working methods and sustaining improvements made. The biggest effects are typically:

Quality is no longer person-dependent – all relevant employees perform a task almost identically.

Systematised training and standardised workflows reduce variations in productivity and quality.

Training time is often significantly reduced, which benefits new employees and also has a positive financial impact.

"The new, thorough and systematic approach to production processes has allowed TASSO to significantly optimise training for new employees. It now takes just 14 days compared to months previously.

Annas Chaoui,
Lean- og processupporter
hos TASSO

MENTORING PROMOTES WELL-BEING AND SECURITY

BIRN in Holstebro has introduced a special mentoring scheme to ensure better training and reduce the number of mistakes and accidents in production. The scheme has already led to positive results and is now being rolled out to more departments.

Thorough training, clear instructions and social involvement are essential in order to create a healthy and secure work culture. BIRN in Holstebro has therefore introduced a special mentoring scheme, to equip current and new employees to work efficiently and safely at the foundry while also promoting their well-being.

BIRN in Holstebro developed the mentoring scheme inhouse. It was introduced for the first time in 2022 in the cleaning section, where grinding and cleaning tasks are performed on the castings. Currently, work is being carried out to roll out the scheme to the casting line and the control department..

"Our experience shows that peer training alone is not enough to ensure that employees are adequately equipped for their tasks. We therefore wanted to create a more structured framework with clear processes and dedicated mentors who take responsibility for the training and introduce new employees to the workplace and safety rules," explains René Poulsen, Supervisor at BIRN in Holstebro.

Fewer accidents

Nine employees in the cleaning section have been selected as mentors, and have all completed courses in peer training, working environment and conflict management. The mentors support new colleagues and make sure they are well integrated into the work processes and the social environment in the workplace.

"The role of the mentors is not just to ensure proper training and go through all the safety rules. They also take care of new employees and make sure they become part of the workplace community. Since we introduced the scheme, we have found employees are happier in the department, and we have higher a retention rate," says René Poulsen.

The number of workplace accidents in the cleaning section has been reduced from 26 in 2023 to 9 in 2024. The scheme has also had a positive effect on employee turnover.

Following the positive experiences with the mentoring scheme at BIRN in Holstebro, the plan is to roll out the scheme to the other companies in BIRN Group.

> ***"The role of the mentors is not just to ensure proper training. They also take care of new employees and make sure they become part of the workplace community.***
>
> René Poulsen, Supervisor, BIRN in Holstebro

CLEAR JOB DESCRIPTIONS: THE FOUNDATION FOR TEAMWORK AND GROWTH

Clear job descriptions play a key role in creating structure and promoting trust in an organisation. For BIRN Group, the aim is not just to define roles and responsibilities, but also to promote peace of mind.

> ***"When the framework is clear, employees dare to ask for help or admit mistakes without fear of negative consequences. This builds trust and ensures that we are all pulling in the same direction.***
>
> Maria Mohr Holst,
> Group HR Business Partner, BIRN Group

"We have focused on creating clear job descriptions for our salaried employees. The aim is to achieve strong results for BIRN, while ensuring peace of mind for our employees. When the framework is clear, employees ask for help or admit mistakes without fear of negative consequences. This builds trust and ensures that we are all pulling in the same direction," explains Maria Mohr Holst, Group HR Business Partner.

A mix of framing and involvement

At BIRN in Holstebro, the process behind the creation of functional descriptions has been a combination of framing and involvement. The aim is not just to get the descriptions down on paper, but also to create a common understanding of expectations and responsibilities.

"When we create job descriptions, the aim is for employees to be able leave at the end of the day, knowing that they have met the expectations set for them. It's an ongoing process that we are continuously working to implement," notes Maria Mohr Holst.

As part of the HR strategy towards 2026, the work with job descriptions in BIRN Group will continue and be used to examine and support necessary upskilling. The work is underway in several BIRN Group companies, including TASSO in Odense, where the job descriptions have already led to good results.

25

apprentices and trainees at BIRN Group

There were a total of 25 apprentices and trainees across all BIRN Group companies in 2024, 20 in production and five in administration.

BIRN GROUP NURTURES THE NEXT GENERATION OF EMPLOYEES

It is crucial for the foundry sector to ensure there is a continuous influx of skilled employees. Apprentices and trainees are therefore a central pillar of the BIRN Group's group strategy. BIRN Group companies offer apprenticeships and trainee positions in production and administration, supporting a broad focus on building skills in the individual companies and across the whole organisation.

There were a total of 25 apprentices and trainees across all BIRN Group companies in 2024. Maria Mohr Holst, Group HR Business Partner, notes that actively seeking to attract the workforce of the future leads to several benefits:

"We want to welcome apprentices, trainees and business interns at BIRN Group. Our aim is broader than to simply procure labour. We want to showcase the various companies, promote pride in our profession, and also demystify what our sector has to offer," explains Maria Mohr Holst.

"Many people don't realise that a company like BIRN in Holstebro, which is one of the largest workplaces in the municipality, not only has skilled employees in the foundry but also a large administration including finance, IT and development. The same is true of our other BIRN Group companies. We regularly need manpower and new skills in both administration apprentices and trainees are important in the continuous flow of new employees."

> ***"The new apprentices and trainees bring a fresh perspective and valuable learning that is incredibly beneficial to our sector. Combined with the vast experience we have built up in all our companies, we are creating a strong foundation for a sustainable and skilled workforce.***
>
> Maria Mohr Holst, Group HR Business Partner

Focus on a sustainable workforce

BIRN Group's efforts to attract apprentices and trainees also support the long-term goal of creating a sustainable workforce. This workforce will play a key role in shaping and securing the future of the group.

"The new apprentices and trainees bring a fresh perspective and valuable learning that is incredibly beneficial to our sector. Combined with the vast experience we have built up in all our companies, we are creating a strong foundation for a more sustainable and skilled workforce," says Maria Mohr Holst.

The aim is for all subsidiaries to continue to have apprentices or trainees in production and/or administration.

FOUNDRY TECHNICIAN STUDY PROGRAMME IN DENMARK: – WE MUST ACTIVELY SECURE FUTURE FOUNDRY

In 2021, Uddannelsescenter Holstebro (UCH) opened its doors to the first, and as yet only, foundry technician study programme in Denmark. BIRN in Holstebro was one of the key players driving the initiative, and ensured that the programme was placed in Holstebro. In early 2024, the first students in the programme received their certificate of apprenticeship and were able to join a sector where their skills are in high demand.

”I have learned so much on the programme, and there is still so much knowledge waiting ahead. Being a foundry technician is truly a profession where you can continue to learn and grow.

Kathrine Laursen, foundry technician apprentice at BIRN in Holstebro

“For a company like ours, it’s a great advantage to have a foundry technician study programme nearby. Our customers have high expectations of quality, processes and agility, which means we need employees who have an in-depth understanding of our specialty. The foundry technician study programme offers exactly the knowledge and skills we need,” says Maria Mohr Holst, Group HR Business Partner.

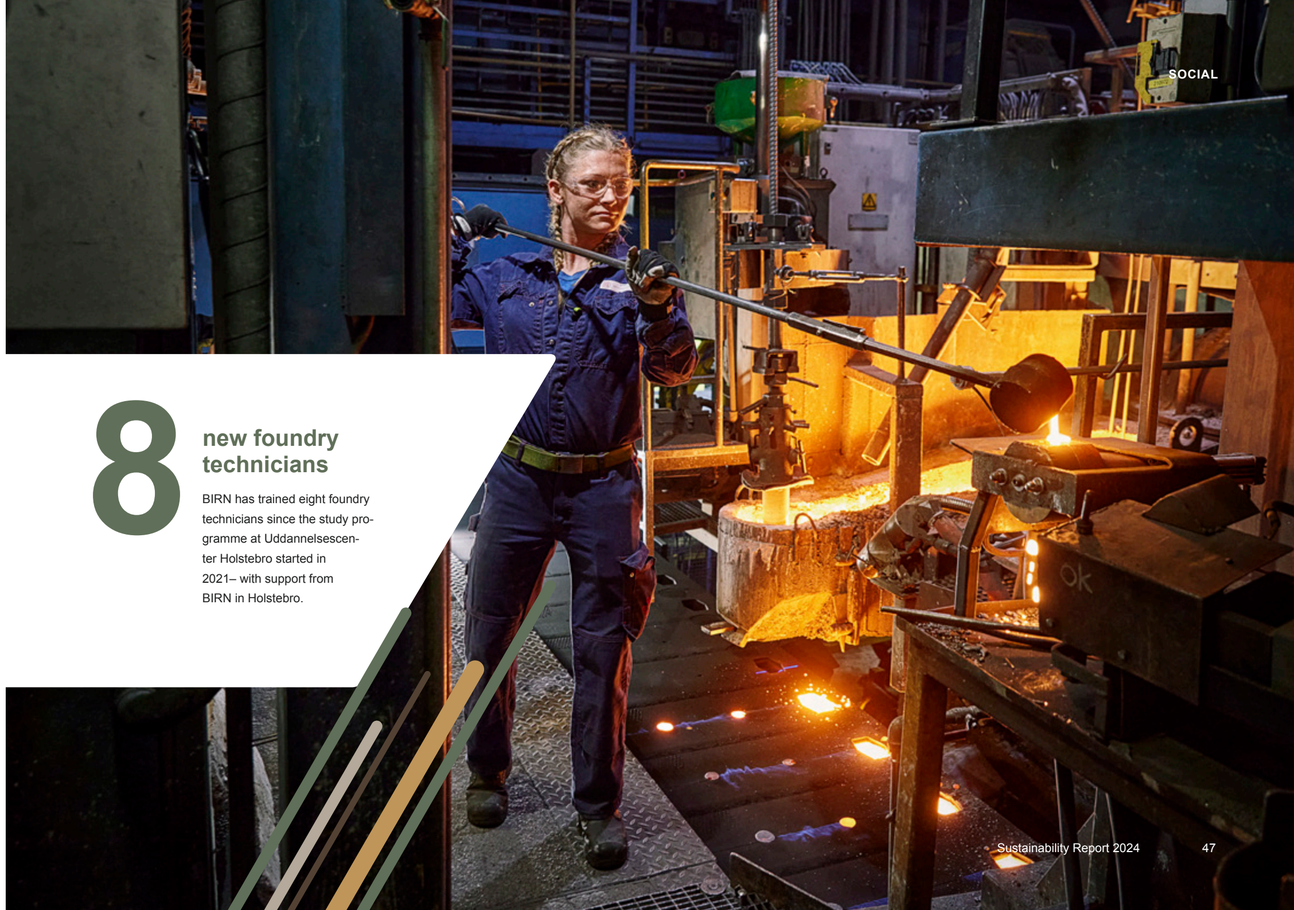
Desire to upskill in the profession

One of the people currently completing the foundry technician programme at UCH is Kathrine Laursen, an apprentice foundry technician at BIRN. Kathrine chose the study programme, motivated primarily by the desire to improve her skills in a profession where you can constantly learn something new:

“Before I started as an unskilled worker at BIRN, I didn’t know much about the sector or foundry work as a profession. However, I soon wanted to learn more about the foundry. One day I heard that BIRN was looking for candidates to enrol in the foundry technician study programme, and I applied soon after. I have learned so much on the programme, and there is still so much knowledge waiting ahead. It is truly a profession where you can keep learning and growing,” says Kathrine Laursen.

The foundry technician study programme teaches not only how to create products using iron and metals, but also builds knowledge that supports an understanding of circular economy and more climate-friendly production methods.

“As a sector, we are in the situation where we need to actively contribute to securing the future of foundries. That’s one of the reasons why we have worked to establish the foundry technician study programme in Denmark and Holstebro. But it’s also important to emphasise that our work is not just about foundry skills. We also focus on maintenance, industrial engineering, computer engineering and several other fields. But overall, the initiative is about taking responsibility for helping to train the workforce of the future. We have succeeded in getting the entire sector behind us. This paves the way for apprentice exchanges within Denmark and abroad, and makes the training broader and more international,” says Dion Brun, Sales Director at ULDALL and Chairman of the Association of Danish Foundries (DSBF).



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new foundry technicians

BIRN has trained eight foundry technicians since the study programme at Uddannelsescenter Holstebro started in 2021– with support from BIRN in Holstebro.

FEWER ACCIDENTS AND STRONGER SAFETY CULTURE

BIRN Group intensified its efforts to strengthen the safety culture across the companies in 2024. The group has managed to significantly reduce the number of accidents through a greater focus on prevention, protective equipment, employee involvement and the use of data.

A high level of safety is essential in a sector like ours where employees work with large machines in an often hectic work environment with heavy objects and molten iron. It is therefore a high priority at BIRN Group to continually evaluate and launch initiatives to improve the working environment and employee safety.

One of the major initiatives in 2024 was the development of a digital safety management system, which aims to streamline and strengthen safety work throughout the BIRN Group. The system is currently being tested at BIRN in Holstebro and is expected to be rolled out to all companies in 2025.

"The aim of the system is to make safety observations and risk assessments more efficient and data-based. Safety observations used to take 12 minutes, but can be completed in just 30 seconds using the new system. A key element of the initiative is to understand the patterns that recur in the various departments and then initiate preventive actions," notes Ronnie Rahbek, HS Manager at BIRN in Holstebro.

Risk assessment for each change

KOCKUMS MASKIN in Kallinge, Sweden also has strong focus on risk assessments. The company has implemented a digital tool to initiate risk assessments prior to each change, such as a new project, machine relocation or organisational change. This helps to proactively identify and manage risks and thus prevent potential accidents.

"The tool allows us to detect risks that could impact quality, the environment or the working environment at an early stage, leading to a more robust and safe way of working. These early interventions have given us invaluable information and helped us to create a safer working environment for everyone involved," says Johan Brengesjö, Managing Director at KOCKUMS MASKIN.

Better safety understanding paves way for zero accidents

In 2024, the machine factory at BIRN in Holstebro and ULDALL in Vejen both saw zero lost-time accidents at work. This is largely due to heightened attention to safety and prevention.

At BIRN in Holstebro, all health and safety representatives completed a training course in 2024 to equip them to perform safety observations and risk assessments at the various workstations, so that potentially dangerous situations can be spotted and changed before things go wrong. The BEE SAFE safety campaign is also helping raise employee awareness of the importance of safety and of using of protective equipment.

"At the machine factory in Holstebro, we have received far more safety observations from employees. Annual follow-up training in areas such as crane handling has also helped maintain a high level of safety," says Christian Kjeldsmark Lind, who was factory manager at the machine factory in 2024.

There has also been an extra focus at ULDALL in Vejen during 2024 on ensuring that all employees understand why it is important to use protective equipment and following up on its use.

"Due in part to the heightened focus across the board, we can look back proudly on 2024 as a year with no lost-time accidents at work," says Dion Brun, Sales Director at ULDALL.

32 per cent

The number of accidents at BIRN in Holstebro was reduced by 32 per cent in 2024 compared to the previous year. The severity of accidents has also decreased.

BEE SAFE is a safety campaign in Holstebro that raises awareness about using protective equipment such as hearing protection, safety glasses and safety shoes. The working environment at the foundry is demanding with high heat, noise and heavy equipment.

> ***A key element of the initiative is to understand the patterns that recur in the various departments and then initiate preventive actions.***
>
> Ronnie Rahbek, HS Manager, BIRN in Holstebro

LOYALTY AND JOB SATISFACTION REMAIN HIGH

BIRN Group surveys employee satisfaction every year, and 2024 was no exception. Scores for parameters such as loyalty and job satisfaction remain high, and well above benchmarks for comparable companies.

Employee well-being is a high priority at the BIRN Group. We therefore ask all 700 employees about their job satisfaction once a year in an anonymous survey. The 2024 survey results match previous years in relation to job satisfaction and loyalty, with scores of 76 and 81 points, respectively, out of 100. The response rate is also high at 92 per cent.

"It's very positive that job satisfaction and loyalty remain so high throughout the group. Both are key factors for employee well-being. It's very important to the group to have employees who look forward to going to work and proud when they return home, and the results indicate that this is the case. We are also pleased that 92 per cent took the time to respond to the survey. This gives us a strong foundation for following up on the results," says Claus Beier, Group CEO.

BIRN Group's satisfaction survey is carried out by the Ennova analysis agency, which also conducts surveys for similar companies. According to their benchmark, many of BIRN Group's scores lie above the sector average.

Special focus on safety and collaboration

BIRN Group follows up on the satisfaction surveys by formulating concrete action plans to address any challenge areas. There has particularly been a strong focus on safety in the various companies in 2024. This led to improvement on this parameter in the survey, for which the score at group level was 84 out of 100. All companies lie above the benchmark for comparable companies.

"Safety is naturally a key focus area in a foundry group. All companies have been working hard to improve safety and raise awareness of why it is so important to take safety seriously. It is therefore positive to see that this is an area where the group has made progress and scores well above the average across the board," says Claus Beier.

Collaboration is another area where the group-wide and individual company scores are higher than both the previous year and for comparable companies.BIRN Group scored 82 out of 100 – two points more than the previous year and five points more than the benchmark. Collaboration is especially important to the well-being of younger employees, so this area will continue to receive much attention.

"We have a strong focus on collaboration. Both on internal collaboration within the department and with others.The positive results therefore reflect the high level of respect, trust and initiative in each department. Following the 2023 satisfaction survey, the highest number of action plans were in the area of collaboration, so it's pleasing to see progress. We are a single team at BIRN Group, and I'm pleased to see that reflected in the survey," says Claus Beier.

The results of the satisfaction survey are discussed at various management levels in both the group and the individual companies. One of the areas that will be looked at is employees under the age of 40. While scoring well on collaboration, this group scores slightly lower on several parameters compared to other age groups.

"Younger employees largely represent our future, and we must therefore have a special focus on improving their well-being. It's important in this regard to continue to develop and improve the strong collaboration within and across departments. In general, the well-being of younger employees is an area that is given priority in the various companies, and we are also working to improve our onboarding for new employees," notes Maria Mohr Holst, Group HR Business Partner.

The annual satisfaction survey was answered by 92 per cent of the more than 700 employees at BIRN Group.

Job satisfaction among employees of BIRN Group again scored 76 out of 100 in 2024. The benchmark for comparable companies is 72.

Loyalty among employees of BIRN Group again scored 81 out of 100 in 2024. The benchmark for comparable companies is 79.

> ***We have a on collaboration. Both on internal collaboration within the department and with others. The positive results therefore reflect the high level of respect, trust and initiative in each department.***
>
> Claus Beier, Group CEO

BIRN GROUP KEY FIGURES

Full-time workforce and gender diversity

Employees

	Men	Women	Total
2023	676	126	802
2024	618	117	735

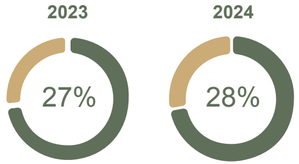
Managers

	Men	Women	Total
2023	68	10	78
2024	67	9	76

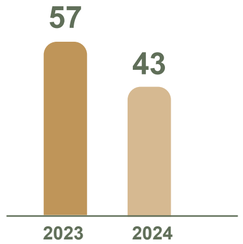
Salaried and production workers and apprentices

	Salaried employees	Production	Apprentices
2023	201	601	30
2024	209	526	25

Employee turnover rate



Lost-time accidents at work



GOVERNANCE

We are a single team at BIRN Group. The group is made up of different companies, but there are common areas that span the group and ensure synergies, collaboration and common guidelines across the group. Sound corporate governance is our common foundation, and with general frameworks for issues such as cyber security and supplier relationships, we create the best conditions to run the business optimally.

Goals

Cyber security

Strengthen our resilience to cyber threats through technology, processes and employee training.

Supplier relationships/security

At least five per cent of our raw materials must come from suppliers with recognised sustainability certifications by 2026.

CUSTOMER SATISFACTION SURVEYS ARE A STRATEGIC PRIORITY

Customer satisfaction surveys are a great way to get a clear picture of how customers perceive a company. This has therefore become a priority area at the BIRN Group, that not only helps build loyalty between customers and salespeople, but also plays an important role in maintaining a responsible and profitable business.

BIRN in Holstebro has used customer satisfaction surveys for many years to gain insight into how various initiatives affect customers. While the surveys were originally implemented as part of a certification process, they have quickly evolved into a key element of the company's strategy to create a sustainable and responsible business.

"We see customer satisfaction surveys as an important tool – to show our customers that we take responsibility for our stakeholders, and to systematically understand and improve the customer experience. They are central to ensuring that we operate our business responsibly," notes Peter Frost Jepsen, Group CSO at BIRN Group.

The surveys are used as an objective sales check for the salespeople. Peter Frost Jepsen sees them as providing a concrete appraisal benchmark. The latest survey from BIRN in Holstebro showed that customers value the transparent and competent dialogue they have with their contact at BIRN. BIRN is also highlighted as being among the leading foundry suppliers in relation to sustainability, and as being capable of supporting customers' sustainability requirements.

"The customer satisfaction survey provides valuable insight into how our customers perceive us as a business partner. It shows us where we are doing well and what we can do better, so we can focus our resources where they are most beneficial to our customers," says Peter Frost Jepsen.

"It's also important for us to show that we are a company that is not only interested in the bottom line. The quality of our products is central to our ability to create value for our customers. A strong customer focus is a key part of building long-term customer relationships and business stability."

BIRN in Holstebro has conducted customer satisfaction surveys every two years since 2007. The next survey will be held in 2025. BIRN Group subsidiaries also do regular follow up on customer collaboration, and both KOCKUMS and TASSO plan to develop a customer satisfaction survey in 2025, similar to the one used by BIRN in Holstebro.

> ***We see customer satisfaction surveys as an important tool – to show our customers that we take responsibility for our stakeholders, and to systematically understand and improve the customer experience. They are central to ensuring that we operate our business responsibly.***
>
> Peter Frost Jepsen, Group CSO at BIRN Group

86.8 out of 100

In the latest customer satisfaction survey, BIRN in Holstebro scored 86.8 out of 100 on the question: *"BIRN has the necessary competencies to support my sustainability requirements."*

RESPONSIBLE SUPPLIER PARTNERSHIPS BOLSTER SECURITY OF SUPPLY

At the BIRN Group, working with suppliers is a cornerstone of the Group's strategy. Therefore, it is crucial to have strong and responsible supplier collaborations that comply with our Code of Conduct and contribute to stable security of supply across the companies.

Our Code of Conduct is a central part of the process when the BIRN Group selects new suppliers. This entails that all suppliers commit to observing the Group's ethical and environmental guidelines and must document this as part of the collaboration.

For suppliers who provide critical components and materials, physical audits and factory approvals are also performed to ensure compliance.

"As we sharpen our focus on sustainability, we are also placing new demands on our suppliers. For example, our carriers must be able to document their carbon footprint through accounting practices, in order to support the group's contribution to the green transition," notes Jesper Astrup, Group Purchase Manager at BIRN Group.

BIRN Group works closely with suppliers to ensure a stable supply chain. A key element of the group's procurement strategy is dual sourcing, whereby key materials and components are supplied by multiple suppliers, to reduce the risk of dependence on one source.

"We actively use quarterly agreements, to ensure that our suppliers have the necessary quantities in stock to create a more robust supply chain. Close dialogue with suppliers is crucial, and if there are any deviations in the forecasts, the close collaboration ensures quick and efficient resolution," says Jesper Astrup.

Synergies and common systems across the group

Cooperation between BIRN Group companies is a key part of the group's procurement strategy. Work is currently being carried out on a common procurement system, that will ensure a better overview and uniform agreements across the companies.

"A centralised portal will give us a more efficient way of sharing supplier agreements, so all companies can benefit from the best prices and solutions. For example, if an employee needs safety shoes, the portal can quickly show them which suppliers offer the best solutions. This not only saves costs, but also strengthens collaboration within the group," says Jesper Astrup.

As part of the strategy, a procurement portal has already been implemented at BIRN in Holstebro, and a similar solution will be rolled out to the subsidiaries during 2025.

BIRN Group's Code of Conduct

BIRN Group's Code of Conduct establishes clear guidelines for supplier collaboration, with a focus on human rights, anti-corruption, combatting child labour and the environment, in line with the Group's ethical and environmental principles.

> ***"As we sharpen our focus on sustainability, we are also placing new demands on our suppliers. For example, our carriers must be able to document their carbon footprint through accounting practices, in order to support the group's contribution to the green transition.***
>
> Jesper Astrup, Group Purchase Manager, BIRN Group

FROM THREAT TO CONFIDENCE:
GREATER FOCUS ON CYBERSECURITY

Cyber attacks and digitalised crime are becoming more frequent and complex. This places high demands on companies to build resilience to cyber threats and protect critical devices and services from attack. At the BIRN Group, it is a strategic imperative to invest in technology, processes and training that increase our resilience. This means that cyber security has been an extremely high priority at the BIRN Group, especially during the past year.

"As part of our efforts to improve our cyber security across the group, we have thoroughly reviewed our information systems and contingency plans and made adjustments where necessary. We have also made it easier for our employees and internal system users to identify and respond effectively to cyber threats and risks," says David Stampe Grønborg, Group IT Manager at BIRN Group.

Nearly 400 employees with access to internal IT systems have completed an online course focusing on cyber security. The course, which ends with an exam, ensures that everyone has the necessary knowledge to act quickly and correctly if they detect a cyber threat or attack. However, David Stampe Grønborg adds:

"The challenge remains to find an appropriate level of awareness of the potential security threats our employees may face, without bewildering them or stifling their desire to explore the possibilities offered by the digital transformation."

Use of AI increases opportunities – also for attacks

Increasing digitalisation has opened the door to the use of artificial intelligence (AI), which has led to significant benefits at the BIRN Group, especially in production.

"AI allows us to efficiently analyse data and make accurate predictions, leading to greater efficiency and productivity. But digitalisation and automation come at a price. They also increase the risk of cyber attacks, data leaks, IT failures and downtime. A proactive approach to cybersecurity is therefore essential, to ensure the right balance between utilising the potential of the technology and protecting our systems against vulnerabilities and threats," says David Stampe Grønborg.

Demand for greater IT security from customers

The heightened focus on cybersecurity is also evident among BIRN Group's customers. BIRN in Holstebro has therefore chosen to join the TISAX scheme. TISAX (Trusted Information Security Assessment eXchange) is a global standard for information security in the automotive sector, and aims to protect design information, prototypes, process data, etc.

"Cyber security is essential in order for our customers to feel they are in safe hands. With large customers, such as in the automotive sector, it is crucial that we have our IT systems and data under control, and that is why we have chosen to become TISAX certified. This means we are recognised by the automotive manufacturers, gain customer trust and generally contribute to secure information exchange in the long and complex supply chains," says David Stampe Grønborg.

CERTIFICATIONS

BIRN Group companies hold a number of certifications, including ISO certifications, IATF and EcoVadis. These certifications contribute to quality assurance in the BIRN Group companies and support responsible routines and workflows in the various companies. All certificates are regularly updated in line with current requirements and regulations, so we constantly ensure we are up-to-date and meeting current standards.

ISO certifications

BIRN Group holds ISO certifications under the 14001, 45001 and 50001 standards, awarded for our implementation of environmental management and energy policy, among other things. These certifications aim to ensure that we continuously improve our companies and maintain high climate standards, meeting environmental regulatory requirements and taking care of our employees.

ISO 14001

The ISO 14001 certification ensures that we work systematically to minimise environmental impact and meet applicable legal requirements through risk management, environmental mapping and control measures. We manage the environmental impacts of our activities, services and products, and the certification includes a clear environment policy, objectives and documentation for eco-management.

ISO 45001

The ISO 45001 certification ensures that we observe current health and safety legislation and systematically improve health and safety to remain a healthy and safe workplace. We identify material risks, work on improvements and have a defined health and safety policy and objectives. The certification also requires documentation for management of safety and health factors.

ISO 50001

The ISO 50001 certification entails having a defined energy policy and objectives, and mapping energy-consuming units. We are constantly working to reduce energy consumption and environmental impact through our energy management system, as certification also requires energy improvements and thus increased profitability. This work is supported by measuring, documenting, reporting and benchmarking energy consumption.

ISO 9001

The ISO 9001 certification of our quality management system demonstrates our commitment to consistency, continuous improvement and customer satisfaction. The certification is based on principles such as customer focus, management involvement, motivation, a process approach and improvements. It ensures greater efficiency and fewer product defects through structured management and dialogue.'

IATF 16949

The IATF 16949 standard is specific to the automotive sector and sets process requirements for quality management systems, with a focus on regular improvements, preventing defects and reducing variation and waste in the supply chain. The standard builds on ISO 9001 and national automotive quality standards and addresses customer-specific requirements. It supports a continuous process for identifying, reporting and improving management systems and business processes.

TISAX

TISAX (Trusted Information Security Assessment eXchange) is an international standard for information security in the automotive sector. It applies a maturity-based approach to evaluate information security and is tailored to the specific needs of the sector. The standard is primarily aimed at first and second tier suppliers, but can also be used in more complex supply chains and is a requirement of some original equipment manufacturers (OEMs).

BV Mode II and Marine Mode 2

The marine and offshore sector imposes special requirements on the certification of ships and their components. During the certification, Bureau Veritas reviews how companies conduct and analyse various tests on cast iron grades and how material certificates are subsequently issued if the customer requests this. With these certifications, the companies are approved by Bureau Veritas to provide material certificates for their cast products.

EcoVadis

EcoVadis is a world leader in sustainability analyses and recognised for its detailed assessments of companies' performance in relation to the climate, environment, labour and human rights, ethics and procurement. The entire BIRN Group successfully renewed its EcoVadis certification in 2024, which assesses our performance in the E, S and G areas. BIRN Group has achieved a bronze certification in EcoVadis. The certification is based on the premise that the companies in BIRN Group are a single team and therefore work according to the same values. The overall EcoVadis score has therefore not been broken down by company.

SAQ

The Self-Assessment Questionnaire – better known as SAQ – is an initiative of the Drive Sustainably sector association, and aims to improve the sustainability of automotive supply chains. SAQ contains questions on sustainability management, the environment, human rights and working conditions, which help to measure performance in the automotive sector.

Overview of certifications	ISO 14001	ISO 45001	ISO 50001	ISO 9001	IAFT 16949	BV MODE II	MARINE MODE 2	ECO-VADIS	SAQ	TISAX
BIRN	✓	✓	✓		✓	✓		✓	✓	✓
BIRN Germany				✓				✓		
ULDALL				✓		✓	✓	✓		
TASSO	✓			✓				✓		
TASSO BERNAREGGI				✓				✓		
KOCKUMS MASKIN	✓			✓	✓			✓		

COMPANIES IN BIRN GROUP

BIRN

Since its foundation in 1896 until today, Vald. BIRN A/S in Holstebro, Denmark, has grown into one of Northern Europe's largest foundries, with 478 employees. BIRN develops and supplies customised cast iron solutions and is a turnkey supplier of all design, casting, precision machining and surface treatment solutions used in the automotive, pump, hydraulics and other sectors, both in Denmark and abroad.

Location:

Holstebro

Denmark

Employees:

478

Annual production volume:

39,625 tonnes

Regulating electricity consumption and production

Given its relatively large electricity consumption, BIRN in Holstebro has good opportunities for reducing its power demand when the need for power is high elsewhere on the grid. This automated adjustment means coal and gas-fired backup power plants are relieved when a stable and high energy supply is needed. To date, power equivalent to the annual consumption of around 1,500 households has been reserved at BIRN.

Heat recovery reduces natural gas consumption

With a total of four heat recovery systems, BIRN in Holstebro reuses surplus heat for heating in the rest of the company. The systems have helped to halve natural gas consumption in just three years.

More sustainable workforce

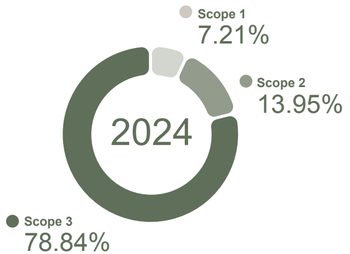
Like the rest of BIRN Group, BIRN in Holstebro is seeking to reduce the employee turnover rate, to ensure a more sustainable workforce. The company has implemented an improved HR system that will provide insight into why employees choose to leave the workplace. Work is also being done on clearer job profiles, to ensure that the right candidates are hired from the outset.

KEY FIGURES

Air and soil pollution		2023	2024
Total weight of air pollutants	tonnes	6,218	5,047
Energy			
Total electricity consumption	MWh	103,020	93,777
Percentage of electricity purchased from renewable energy sources	%	65	90
Consumption of other purchased or acquired energy from fossil sources	MWh	18,653	15,178
Consumption of other purchased or acquired energy from renewable sources	MWh	0	00
Consumption of self-produced non-fuel renewable energy	MWh	0	0
Fuel consumption from other fossil sources	MWh	1,131	627
Fuel consumption from renewable sources: Biomass	MWh	0	0
Percentage of energy consumption from fossil sources	%	45	23
Percentage of energy consumption from renewable sources	%	55	77
Total energy consumption	GJ	442,091	394,493
Total energy production	GJ	0	0
Total energy consumption from fossil sources	MWh	55,531	25,581
Total non-renewable energy production	MWh	0	0
Total renewable energy consumption	GJ	242,179	302,400
Total renewable energy production	GJ	0	0
Waste			
Total weight of hazardous waste	tons	22,613	19,485
Total weight of non-hazardous waste	tons	521	426
Water			
Total water consumption	m^3	109,578	87,136
Total amount of pollutants discharged to water	m^3	28,400	22,600

Scope

The charts show the percentage distribution of CO_2-equivalent emissions.



Greenhouse gas emissions and reduction targets		2023	2024
Percentage of scope 1 GHG emissions from regulated emissions trading schemes	%	0	0
Scope 3: 1 – Purchased goods and services	tCO_2eq	34,904	28,824
Scope 3: 4 – Upstream transportation and distributiont	tCO_2eq	2,920	1,600
Scope 3: 5 – Waste generated from operations	tCO_2eq	96	66
Scope 3: 6 – Business travel	tCO_2eq	12	13
Scope 3: 7 – Employee commuting	tCO_2eq	317	268
Total gross scope 1 GHG emissions	tCO_2eq	3,459	2,815
Total gross scope 2 GHG emissions (based on location)	tCO_2eq	16,772	15,267
Total gross scope 2 GHG emissions (based on market)	tCO_2eq	19,926	5,449
Total gross scope 3 GHG emissions	tCO_2eq	38,307	30,790

Diversity, fairness and inclusion		2023	2024
Number of employees	Employees	544	478
Employees – women/men	Employees	96/448	81/397
Managers – women/men	Employees	7/44	4/37
Salaried employees/production	Employees	128/416	129/349
Apprentices	Employees	19	18
Employee turnover rate	%	27	28
Lost-time accidents at work	total amount	37	26

Governance		2023	2024
Whistleblower cases	cases	0	4

We handle all whistleblower cases professionally and in accordance with our policy, which ensures anonymity and independent handling, via PwC.

BIRN GERMANY

Vald. Birn GmbH is located in Mühlheim an der Ruhr, in the centre of Germany's industrial Ruhr district. The company primarily supplies transmission elements and other machined cast iron components to German industry. With its specialised machining plant, BIRN Germany can also offer mechanical machining of custom solutions.

Location:

Mühlheim

an der Ruhr, Germany

Employees:

35

New compressor reduces 20% electricity consumption

BIRN Germany recently replaced a compressor with a new, more energy-efficient model. The German Ministry for Economic Affairs and Climate Action recognised the energy saving initiative of BIRN Germany, with a financial contribution covering 25 per cent of the cost. The compressor enhances our operational efficiency, and will contribute to a reduction of its electricity consumption of over 20 per cent compared to the old compressor. The old compressor is being kept as a backup, so operation can continue during maintenance periods.

From diesel to hybrid and electric

BIRN Germany is in the process of replacing its diesel company cars with hybrid or fully electric vehicles. The plan is to replace the entire fleet with hybrid or electric vehicles over the coming years.

Trainees as the future workforce

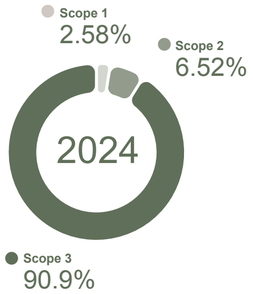
BIRN Germany is committed to finding the right employees, and identifying potential upskilling opportunities for employees. As part of its efforts to build the right workforce, BIRN Germany currently has five trainees, whom it hopes to eventually hire on a permanent basis.

KEY FIGURES

Air and soil pollution		2023	2024
Total weight of air pollutants	tonnes	0	0
Energy			
Total electricity consumption	MWh	155	144
Percentage of electricity purchased from renewable energy sources	%	0	0
Consumption of other purchased or acquired energy from fossil sources	MWh	121	123
Consumption of other purchased or acquired energy from renewable sources	MWh	0	0
Consumption of self-produced non-fuel renewable energy	MWh	0	0
Fuel consumption from other fossil sources	MWh	0	0
Fuel consumption from renewable sources: Biomass	MWh	0	0
Percentage of energy consumption from fossil sources	%	100	100
Percentage of energy consumption from renewable sources	%	0	0
Total energy consumption	GJ	995	964
Total energy production	GJ	0	0
Total energy consumption from fossil sources	MWh	276	268
Total non-renewable energy production	MWh	0	0
Total renewable energy consumption	GJ	0	0
Total renewable energy production	GJ	0	0
Waste			
Total weight of hazardous waste	tons	3	1
Total weight of non-hazardous waste	tons	89	98
Water			
Total water consumption	m^3	235	293
Total amount of pollutants discharged to water	m^3	0	0

Scope

The charts show the percentage distribution of CO_2-equivalent emissions.



Greenhouse gas emissions and reduction targets		2023	2024
Percentage of scope 1 GHG emissions from regulated emissions trading schemes	%	0	0
Scope 3: 1 – Purchased goods and services	tCO_2eq	1,925	1,352
Scope 3: 4 – Upstream transportation and distributiont	tCO_2eq	0	0
Scope 3: 5 – Waste generated from operations	tCO_2eq	2	2
Scope 3: 6 – Business travel	tCO_2eq	1	2
Scope 3: 7 – Employee commuting	tCO_2eq	20	20
Total gross scope 1 GHG emissions	tCO_2eq	39	39
Total gross scope 2 GHG emissions (based on location)	tCO_2eq	60	56
Total gross scope 2 GHG emissions (based on market)	tCO_2eq	106	99
Total gross scope 3 GHG emissions	tCO_2eq	1,953	1,378

Diversity, fairness and inclusion		2023	2024
Number of employees	Employees	34	35
Employees – women/men	Employees	4/30	4/31
Managers – women/men	Employees	2/3	2/4
Salaried employees/production	Employees	15/19	16/19
Apprentices	Employees	4	5
Employee turnover rate	%	6	18
Lost-time accidents at work	total amount	3	2

Governance		2023	2024
Whistleblower cases	cases	0	0

We handle all whistleblower cases professionally and in accordance with our policy, which ensures anonymity and independent handling, via PwC.

ULDALL

VELAMP

Uldalls Jernstøberi A/S was established in 1944 in Vejen and has become a flexible, modern foundry specialising in customised cast iron solutions. With a focus on quality and innovation, the company supplies products to a wide range of sectors including food, manufacturing, agriculture and energy.

ULDALL also owns Velamp A/S, which is Denmark's only supplier of classic cast iron lamps, benches and windows with 100% Danish production, and has a focus on quality and lasting solutions for public and private sector customers.

Location:

Vejen
Denmark

Employees:

55

Annual production volume:

1,224 tonnes

Quest for the Golden Batch

ULDALL is in the process of optimising its primary power consumption, which derives from the foundry's melting furnaces. This means the quest for the Golden Batch is in full swing. Through data collection and analysis, the aim is to find the exact amount of energy required to melt the iron without waiting time and without the need to adjust the alloy after the metal is molten.

New regeneration plant for sand

ULDALL invested in a brand new sand regeneration plant in 2024. The new plant aims to ensure that ULDALL can recycle at least 95 per cent of all sand from the casting processes in its own production.

Good neighbour

ULDALL is committed to being a good neighbour and contributing to the local community. The company regularly hosts open house events, and also collaborates with career advice counsellors, who seek to guide young people towards a meaningful working life. Secondary schools and higher education institutions also make annual visits, so students can understand the importance of having foundries in Denmark and Europe.

KEY FIGURES

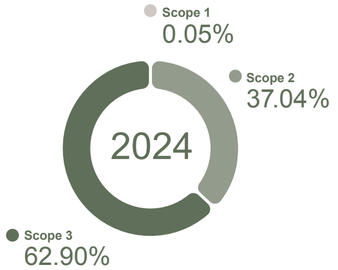
ULDALL

VELAMP

Air and soil pollution		2023	2024
Total weight of air pollutants	tonnes	-	-
Energy			
Total electricity consumption	MWh	3,518	3,181
Percentage of electricity purchased from renewable energy sources	%	67	0
Consumption of other purchased or acquired energy from fossil sources	MWh	4	10
Consumption of other purchased or acquired energy from renewable sources	MWh	904	789
Consumption of self-produced non-fuel renewable energy	MWh	0	0
Fuel consumption from other fossil sources	MWh	155	156
Fuel consumption from renewable sources: Biomass	MWh	0	0
Percentage of energy consumption from fossil sources	%	29	81
Percentage of energy consumption from renewable sources	%	71	19
Total energy consumption	GJ	16,490	14,891
Total energy production	GJ	0	0
Total energy consumption from fossil sources	MWh	1,330	3,348
Total non-renewable energy production	MWh	0	0
Total renewable energy consumption	GJ	11,700	2,840
Total renewable energy production	GJ	0	0
Waste			
Total weight of hazardous waste	tons	1	1
Total weight of non-hazardous waste	tons	27	25
Water			
Total water consumption	m^3	955	822
Total amount of pollutants discharged to water	m^3	0	0

Scope

The charts show the percentage distribution of CO_2-equivalent emissions.



Greenhouse gas emissions and reduction targets		2023	2024
Percentage of scope 1 GHG emissions from regulated emissions trading schemes	%	0	0
Scope 3: 1 – Purchased goods and services	tCO_2eq	3,522	3,055
Scope 3: 4 – Upstream transportation and distributiont	tCO_2eq	69	71
Scope 3: 5 – Waste generated from operations	tCO_2eq	90	78
Scope 3: 6 – Business travel	tCO_2eq	1	3
Scope 3: 7 – Employee commuting	tCO_2eq	46	31
Total gross scope 1 GHG emissions	tCO_2eq	0	3
Total gross scope 2 GHG emissions (based on location)	tCO_2eq	728	654
Total gross scope 2 GHG emissions (based on market)	tCO_2eq	705	1,910
Total gross scope 3 GHG emissions	tCO_2eq	3,644	3,243

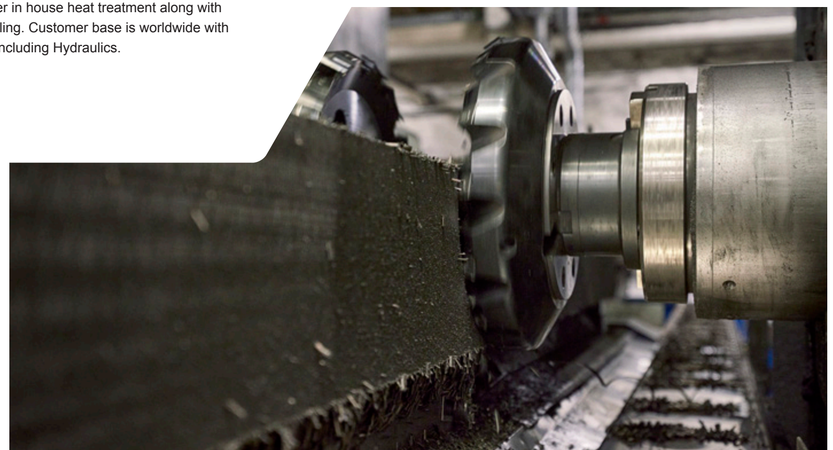
Diversity, fairness and inclusion		2023	2024
Number of employees	Employees	60	55
Employees – women/men	Employees	7/53	5/50
Managers – women/men	Employees	0/5	0/4
Salaried employees/production	Employees	7/53	10/45
Apprentices	Employees	1	0
Employee turnover rate	%	35	30
Lost-time accidents at work	total amount	7	0

Governance		2023	2024
Whistleblower cases	cases	0	0

We handle all whistleblower cases professionally and in accordance with our policy, which ensures anonymity and independent handling, via PwC.

TASSO

TASSO was founded in 1856 and is Denmark's oldest active iron foundry today. TASSO specialises in the entire process of manufacturing continuous cast iron bars in various dimensions and grades. In addition to casting they offer in house heat treatment along with pre machining and bar peeling. Customer base is worldwide with many applications served including Hydraulics.



Location:

Odense

Denmark

Employees:

56

Annual production volume:

11,703 tonnes

Golden Batch at TASSO

TASSO is working to improve and standardise production start-up and thereby reduce energy consumption by ensuring uniform process parameters and quality, to improve the process and increase productivity. The project is based on solid data collection and analysis.

Training Within Industry

Adoption of the Training Within Industry structured training system makes TASSO one of the first iron foundries in Denmark to start using a method that ensures quality and efficiency in production. Most importantly, the method helps give new employees quality training and a positive experience, and trains foundry operators. The thorough and systematic approach to the production processes has also helped to reduce learning times.

Social responsibility in partnership with Odense Værksteder

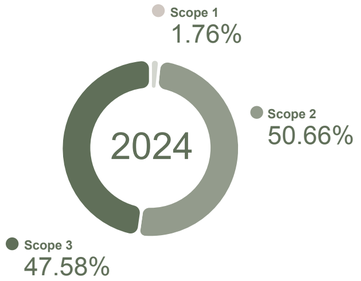
TASSO has worked with Odense Værksteder for almost ten years, a valuable and visionary municipal initiative that employs citizens who face mental or physical challenges. Odense Værksteder is a regular supplier to TASSO, and assists with tasks such as repairing the foundry's equipment for removing slag from molten iron.

KEY FIGURES

Air and soil pollution		2023	2024
Total weight of air pollutants	tonnes	0	0
Energy			
Total electricity consumption	MWh	14,463	14,046
Percentage of electricity purchased from renewable energy sources	%	66	0
Consumption of other purchased or acquired energy from fossil sources	MWh	1,162	1,552
Consumption of other purchased or acquired energy from renewable sources	MWh	430	435
Consumption of self-produced non-fuel renewable energy	MWh	0	0
Fuel consumption from other fossil sources	MWh	1,668	2,015
Fuel consumption from renewable sources: Biomasse	MWh	0	0
Percentage of energy consumption from fossil sources	%	43	98
Percentage of energy consumption from renewable sources	%	57	2
Total energy consumption	GJ	63,803	64,974
Total energy production	GJ	0	0
Total energy consumption from fossil sources	MWh	7,681	17,613
Total non-renewable energy production	MWh	0	0
Total renewable energy consumption	GJ	36,152	1,567
Total renewable energy production	GJ	0	0
Waste			
Total weight of hazardous waste	tons	0	0
Total weight of non-hazardous waste	tons	101	94
Water			
Total water consumption	m^3	4,362	5,176
Total amount of pollutants discharged to water	m^3	0	0

Scope

The charts show the percentage distribution of CO_2-equivalent emissions.

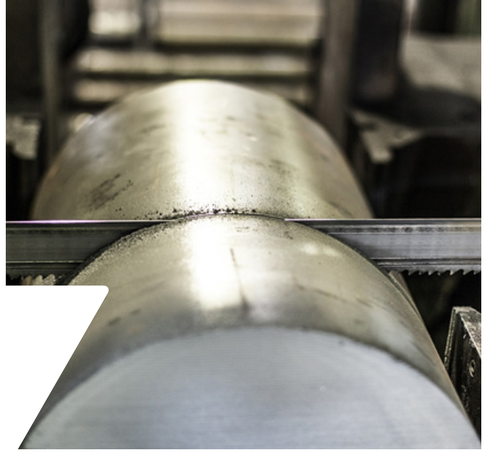


Greenhouse gas emissions and reduction targets		2023	2024
Percentage of scope 1 GHG emissions from regulated emissions trading schemes	%	0	0
Scope 3: 1 – Purchased goods and services	tCO_2eq	7,397	5,976
Scope 3: 4 – Upstream transportation and distributiont	tCO_2eq	1,055	1,192
Scope 3: 5 – Waste generated from operations	tCO_2eq	176	142
Scope 3: 6 – Business travel	tCO_2eq	1	1
Scope 3: 7 – Employee commuting	tCO_2eq	36	31
Total gross scope 1 GHG emissions	tCO_2eq	203	276
Total gross scope 2 GHG emissions (based on location)	tCO_2eq	2,442	2,377
Total gross scope 2 GHG emissions (based on market)	tCO_2eq	2,733	7,920
Total gross scope 3 GHG emissions	tCO_2eq	8,569	7,296

Diversity, fairness and inclusion		2023	2024
Number of employees	Employees	61	56
Employees – women/men	Employees	4/57	6/50
Managers – women/men	Employees	0/6	1/8
Salaried employees/production	Employees	15/46	16/40
Apprentices	Employees	4	1
Employee turnover rate	%	24	41
Lost-time accidents at work	total amount	6	12

Governance		2023	2024
Whistleblower cases	cases	0	0

We handle all whistleblower cases professionally and in accordance with our policy, which ensures anonymity and independent handling, via PwC.



TASSO BERNAREGGI

Bernareggi s.r.l, owned by Danish TASSO, is situated in Castano Primo near Milan, Italy. With over 40 years of experience, the company supplies high-quality cast iron and bronze bars and billets and offers specialised machining. TASSO BERNAREGGI serves both Italian and international customers, with a focus on precision and reliability.

Location:

Castano Primo

Milan, Italy

Employees:

44

Annual production volume:

9,171 tonnes

Solar cell plant expansion

TASSO BERNAREGGI has a large solar cell plant on top of the company's 5,600 square metre warehouse, and the aim is to expand this with a 100 kW plant in the future. The expansion will allow the company to save 60 tonnes of CO_2 every year.

Biodegradable plastic replaces anti-corrosion oil

A special type of anti-corrosion oil has been used in production at TASSO BERNAREGGI to protect cast iron rods during transportation. This anti-corrosion oil has now been replaced with biodegradable plastic packaging, which provides more eco-friendly protection for the cast iron bars and billets.

Italian and English language courses

To promote employee well-being and development and a better working environment, TASSO BERNAREGGI has restarted language courses in Italian and English, as well as internal technical courses. The courses are designed to improve language skills and promote more effective communication, internally and externally, while giving employees a better technical understanding.

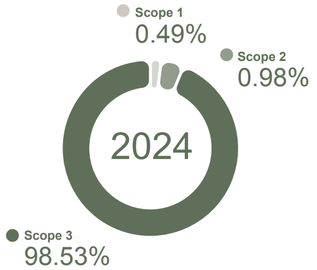
KEY FIGURES

TASSO BERNAREGGI

Air and soil pollution		2023	2024
Total weight of air pollutants	tonnes	0	0
Energy			
Total electricity consumption	MWh	264	287
Percentage of electricity purchased from renewable energy sources	%	46	50
Consumption of other purchased or acquired energy from fossil sources	MWh	213	222
Consumption of other purchased or acquired energy from renewable sources	MWh	0	0
Consumption of self-produced non-fuel renewable energy	MWh	0	0
Fuel consumption from other fossil sources	MWh	23	18
Fuel consumption from renewable sources: Biomass	MWh	0	0
Percentage of energy consumption from fossil sources	%	76	80
Percentage of energy consumption from renewable sources	%	24	20
Total energy consumption	GJ	1,802	1,893
Total energy production	GJ	433	378
Total energy consumption from fossil sources	MWh	380	421
Total non-renewable energy production	MWh	0	0
Total renewable energy consumption	GJ	433	378
Total renewable energy production	GJ	433	378
Waste			
Total weight of hazardous waste	tons	0	0
Total weight of non-hazardous waste	tons	564	555
Water			
Total water consumption	m^3	224	788
Total amount of pollutants discharged to water	m^3	0	0

Scope

The charts show the percentage distribution of CO_2-equivalent emissions.



Greenhouse gas emissions and reduction targets		2023	2024
Percentage of scope 1 GHG emissions from regulated emissions trading schemes	%	0	0
Scope 3: 1 – Purchased goods and services	tCO_2eq	8,097	7,678
Scope 3: 4 – Upstream transportation and distributiont	tCO_2eq	722	573
Scope 3: 5 – Waste generated from operations	tCO_2eq	12	6
Scope 3: 6 – Business travel	tCO_2eq	33	36
Scope 3: 7 – Employee commuting	tCO_2eq	24	25
Total gross scope 1 GHG emissions	tCO_2eq	40	41
Total gross scope 2 GHG emissions (based on location)	tCO_2eq	0	0
Total gross scope 2 GHG emissions (based on market)	tCO_2eq	66	83
Total gross scope 3 GHG emissions	tCO_2eq	8,981	8,322

Diversity, fairness and inclusion		2023	2024
Number of employees	Employees	35	44
Employees – women/men	Employees	8/27	12/32
Managers – women/men	Employees	0/2	1/6
Salaried employees/production	Employees	16/19	16/28
Apprentices	Employees	0	0
Employee turnover rate	%	20	16
Lost-time accidents at work	total amount	1	1

Governance		2023	2024
Whistleblower cases	cases	0	0

We handle all whistleblower cases professionally and in accordance with our policy, which ensures anonymity and independent handling, via PwC.

KOCKUMS MASKIN

Kockums Maskin AB, which has roots going back to 1742, is one of Scandinavia's leading manufacturers of machined castings. The company produces machined cast iron components for both Swedish and international customers, primarily in the marine, automotive, and machinery equipment sectors. KOCKUMS MASKIN is also a dedicated development partner which can take care of the entire production process – from design to delivery.

Location:

Kallinge

Sweden

Employees:

67

Annual production volume:

2,460 tonnes

Fewer defects and less resource consumption

KOCKUMS MASKIN is committed to reducing resource consumption. More specifically, the company aims to reduce the defect rate by 25 per cent over the next two years via initiatives such as training operators to quickly identify faults, collaborating with suppliers on improvement projects and regularly monitoring progress at weekly and monthly management meetings. In addition,by improving cutting oil quality and specifying the oil's lifetime, the aim is to help reduce cutting oil consumption by five per cent by 2025.

Charging stations for electric vehicles

KOCKUMS MASKIN installed electric vehicle charging stations during 2024, to support the electrification of the company car fleet. The charging stations also benefit employees and contractors, as they can charge their vehicles at a more favourable price at KOCKUMS MASKIN.

Focus on education and the local community

KOCKUMS MASKIN has expanded its apprenticeship programme to provide even better opportunities for learning and development. The aims include supporting talent development and preparing the next generation for the labour market. As a result of this stronger focus, local authorities and networks have invited the company to come and talk about its experience. The company is also keen to invite schools to visit, and spark curiosity and interest in a future career in the foundry sector.

KEY FIGURES

KOCKUMS MASKIN

Air and soil pollution		2023	2024
Total weight of air pollutants	tonnes	0	0
Energy			
Total electricity consumption	MWh	1,843	1,710
Percentage of electricity purchased from renewable energy sources	%	100	100
Consumption of other purchased or acquired energy from fossil sources	MWh	14	18
Consumption of other purchased or acquired energy from renewable sources	MWh	707	860
Consumption of self-produced non-fuel renewable energy	MWh	0	0
Fuel consumption from other fossil sources	MWh	0	0
Fuel consumption from renewable sources: Biomass	MWh	0	0
Percentage of energy consumption from fossil sources	%	1	1
Percentage of energy consumption from renewable sources	%	99	99
Total energy consumption	GJ	9,231	9,315
Total energy production	GJ	0	0
Total energy consumption from fossil sources	MWh	14	18
Total non-renewable energy production	MWh	0	0
Total renewable energy consumption	GJ	9,179	9,252
Total renewable energy production	GJ	0	0
Waste			
Total weight of hazardous waste	tons	0	0
Total weight of non-hazardous waste	tons	506	512
Water			
Total water consumption	m^3	1,537	2,155
Total amount of pollutants discharged to water	m^3	0	0

Scope

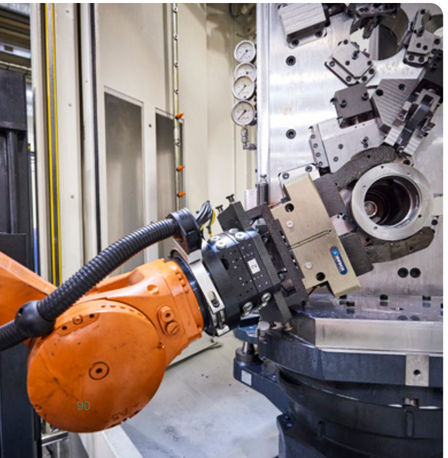
The charts show the percentage distribution of CO_2-equivalent emissions.

Drivhusgasemissioner og reduktionsmål		2023	2024
Percentage of scope 1 GHG emissions from regulated emissions trading schemes	%	0	0
Scope 3: 1 – Purchased goods and services	tCO_2eq	5,193	4,427
Scope 3: 4 – Upstream transportation and distributiont	tCO_2eq	136	162
Scope 3: 5 – Waste generated from operations	tCO_2eq	11	11
Scope 3: 6 – Business travel	tCO_2eq	0	0
Scope 3: 7 – Employee commuting	tCO_2eq	40	48
Total gross scope 1 GHG emissions	tCO_2eq	4	5
Total gross scope 2 GHG emissions (based on location)	tCO_2eq	1,727	1,637
Total gross scope 2 GHG emissions (based on market)	tCO_2eq	0,0	0,0
Total gross scope 3 GHG emissions	tCO_2eq	5,381	4,651

Diversity, fairness and inclusion		2023	2024
Number of employees	Employees	68	67
Employees – women/men	Employees	7/61	9/58
Managers – women/men	Employees	1/8	1/8
Salaried employees/production	Employees	20/48	22/45
Apprentices	Employees	2	1
Employee turnover rate	%	15	7
Lost-time accidents at work	total amount	3	2

Governance		2023	2024
Whistleblower cases	cases	0	0

We handle all whistleblower cases professionally and in accordance with our policy, which ensures anonymity and independent handling, via PwC.



BIRN

BIRN GERMANY

ULDALL

VELAMP

TASSO

TASSO BERNAREGGI

KOCKUMS MASKIN

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