



BPG

Building a sustainable future

Corporate Sustainability Report 2023

Contents

Executive Summary

CEO message
Reporting compliance
Report highlights
Sustainability roadmap

Our Company

Group profile
Corporate governance
Sustainability governance
Our value chain
Technologies and innovation
Stakeholder engagement

General

Double materiality assessment
Sustainability strategies
Sustainability ambitions

Envrionmental

Taxonomy-alignment

Climate change mitigation
Pollution control
Water management
Biodiversity and ecosystems
Resource valorisation and circular economy

Social

Human and worker rights
Our workforce
Workers in the value chain
Effected communities

Governance

Business conduct

Data Appendix

Reporting approach
Environmental statistics
Social statistics

CEO Message

Our mission has always been to help build a better long-term future for our partners along the value chain, our investors, our employees and the new generations to come. Over the last twelve months, our global operations have continued to grow and so too has our ambitious sustainability agenda. With twenty-one operational processing facilities across three continents, putting this agenda into action is no small undertaking.

Since the first sustainability report published in 2022, we have made a significant step forward from voluntary reporting following the Global Reporting Initiative (GRI) standards, to aligning with the European Corporate Sustainability Reporting Directive (CSRD). Our main business is the recovery of valuable resources from Incinerator Bottom Ash (IBA). As you will read in this report, excellent progress has already been made in many critical workstreams throughout BPG ("Blue Phoenix Group"). These efforts are thanks to the continued support of our valued stakeholders and the remarkable teams of people working behind our operations, every day making big and small innovations that enable our business to make meaningful change on a global scale.

At BPG, we deal with real people, real waste and real challenges affecting local communities around the world. Last year we

honed a robust strategy under the pillars of Environment, Social and Governance. This report is a showcase of our progress, a commitment to holding ourselves accountable for our impacts, and a promise to go beyond corporate statements and take real actions for positive change.

Under the Environmental theme, we have expanded our data collection for greenhouse gas (GHG) emission quantification allowing us to report more accurately and comprehensively, particularly under Scope 3 categories. This year, we expanded our reporting scope, reporting for the first time on: pollution control, biodiversity and ecosystems, water consumption and resource recovery. We implemented operational efficiency measures, helping us mitigate further our climate impacts. To highlight a few, we expanded solar-PV installations, used hydro-treated vegetable oil (HVO) for many of our heavy vehicles and machinery, collected rainwater to use on-site, and treated and recycled wastewater in our wet processing and cleaning to nearly 100%.

I'd like to shine a spotlight on our new life cycle assessment (LCA) project, initiated to assess environmental impacts and measure the real benefits of our products in comparison to conventionally sourced materials.

Health and safety will always remain the priority for me, and this ethos feeds into all decision-making in our operations. All sites comply with local environmental regulations and hold the permit for waste handling and processing. In addition, we carried out product testing for leaching prevention using Blue Phoenix aggregates and minerals in different applications. Product testing was also carried out for our metal processing to identify metal composition before they are delivered to our customers.

Under the Social theme, we have made solid progress this year, launching a Global Policy Manual for all employees worldwide, to reinforce a pleasant, safe, and healthy work environment for all. Our employee-led Wellbeing Committee has been the driving force for various initiatives in physical, mental, and financial health.

Looking outside of our own operations, we've also started engaging deeper with stakeholders along our value chain to assure good working conditions for their employees. This will be an area we continue to focus on and have developed several stakeholder engagement initiatives to be shared in 2024. Additionally, we are in the early phases of reviewing business activities that may affect local communities in the vicinity of our operations, in a greater effort

to support society at large. This initiative will be more visible in the coming months.

Under the Governance theme, we have defined business conduct under a new Global Policy Manual. I firmly believe that a strong governance structure is the foundation for attracting and maintaining trusted partnerships and long-lasting relationships throughout the waste management sector.

We acknowledge that sustainability is a lifetime commitment. I'm proud of the progress we have made over the last twelve months. We are now better prepared than ever to take further steps towards our long-term goals.

Thank you for your interest in BPG and taking the time to read this report. We appreciate your support on our journey, working with partners to solve the global waste problem and *build a more sustainable future*.



Paul Knight
CEO, BPG

"Our sustainability efforts are a reflection of our values and an integral part of how we do business."

Reporting Compliance

APPROACH TO REPORTING

This report has been prepared in accordance with the guidelines of the European Corporate Sustainability Reporting Directive and the EU Taxonomy for sustainable activities. The contents of this report have been extended based on our revised sustainability strategies and a Double Materiality Assessment survey conducted at the end of 2023. An index of data can be found in the data appendix at the end of this report.

REPORTING PERIOD

The sustainability reporting period runs from the 1st January 2023 to the 31st December 2023. This reporting period has the same timeframe as the financial reporting of BPG. For any inquiries related to this sustainability report, please contact the BPG Sustainability Manager at sustainability@bluephoenix-group.com

ENVIRONMENTAL



EU Taxonomy alignment

Environmental Reporting:

Climate change mitigation

Pollution control

Water management

Biodiversity and ecosystems

Resource valorisation and circular economy

Contribution to the SDGs



SOCIAL



Social Reporting:

Human and worker rights

Our workforce

Workers in the value chain

Affected communities

Contribution to the SDGs



GOVERNANCE



Governance Reporting:

Business conduct

Contribution to the SDGs



Reporting Highlights



1

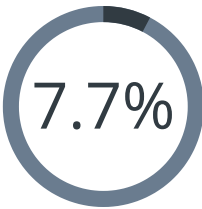
COMPLIANCE WITH CSRD REPORTING

We took initiatives to report compliance with many CSRD standards.

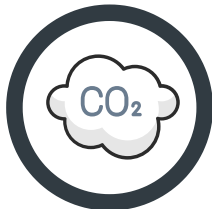


2

GHG EMISSIONS PERFORMANCE



of total GHG
emissions were
**Scope 1
and 2**



96,615
tonnes of GHG
emissions in
2023



3

ZERO FATALITIES

Our H&S performance remained strong, maintaining a pleasant and thriving work environment for our people.

89%

Employees agree
with the statement
"I feel safe at work"



4

EU TAXONOMY ALIGNMENT

**96% of our
business
activities**
are reported as
environmentally
sustainable



Reporting Highlights



5

RESOURCE RECOVERY

2.44 million tonnes IBA processed and diverted from landfill

123,000 tonnes of ferrous metals recovered

155,000 tonnes of non-ferrous metals recovered



6

PROCESSING SITES

21 operational processing sites
4 regional head offices

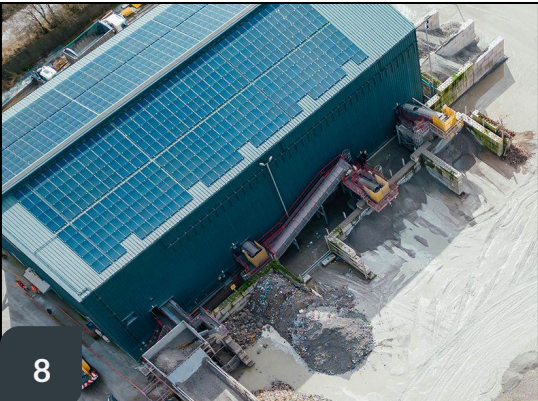


7

WATER RECYCLING AND RETENTION

Our water systems are fully recycled

We have 14 sites collecting rainwater for onsite consumption



8

RENEWABLE CONSUMPTION

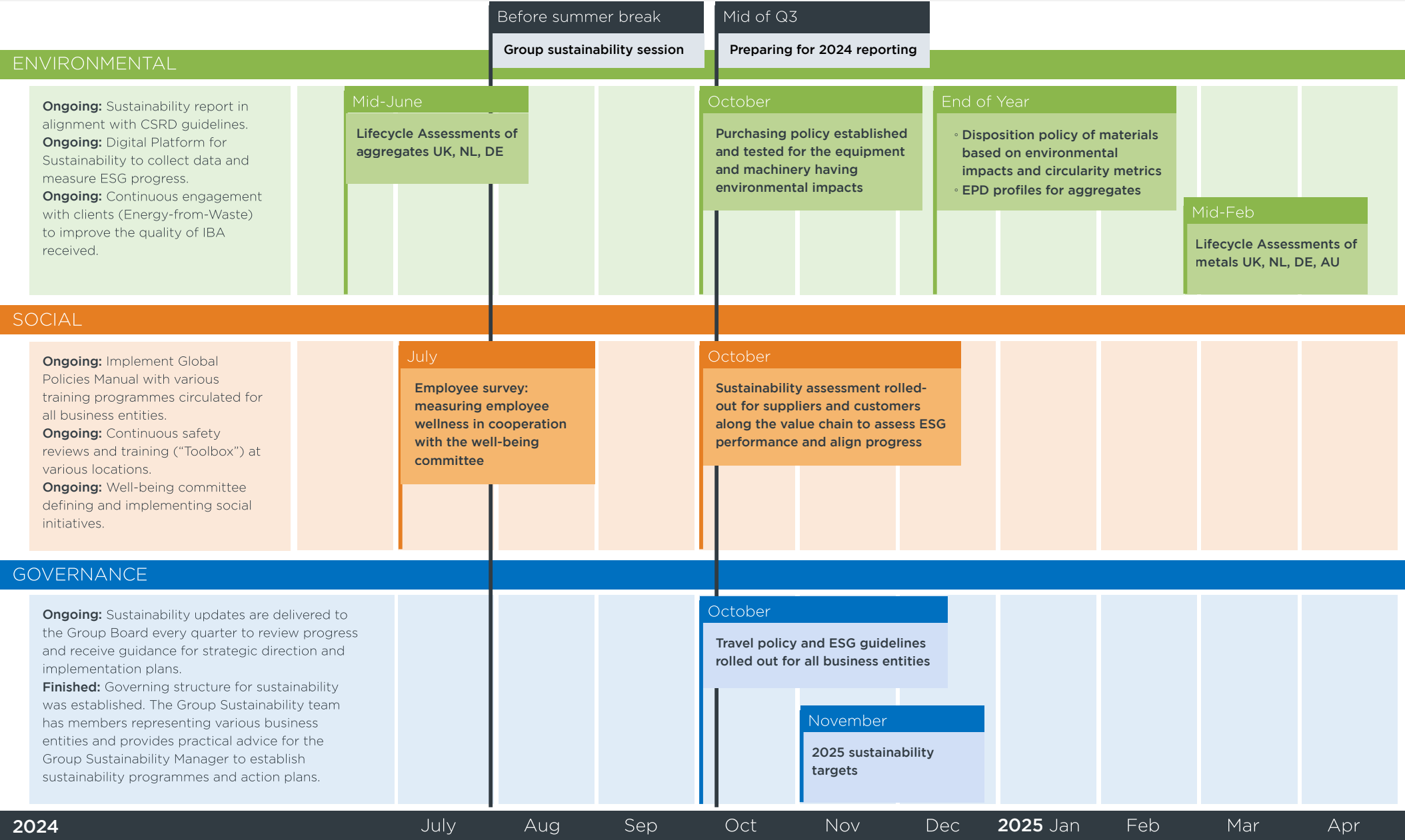
1.34 MWh of renewable electricity equal to 10% of total electricity consumed

880k litres of certified biofuels

(HVO) used, equal to 51% of total fuels consumed onsite



Sustainability Roadmap



A wide-angle photograph of a large industrial facility, likely a quarry or processing plant. The scene is filled with complex machinery, including conveyor belts, metal walkways with red railings, and large yellow and red structures. In the foreground, a conveyor belt is covered with a layer of dark, crushed material, possibly gravel or coal. The background shows more industrial equipment and a large open space under a high ceiling.

Our Company

Our Group Profile

We strongly believe that so-called waste is all about raw materials in a temporary state. With our global reach and passion teams, we strive to help Energy-from-Waste (EfW) companies recycle the seemingly unrecyclable. We recycle ash to produce clean minerals for reuse within the construction sector and in doing so extract ferrous and nonferrous metals. As the world's largest ash processor, we achieve operational excellence through our proven processes, professional teams, and the highest commitment to health, safety, and the environment. We are not alone on our mission, and we join forces where we can. We work closely with EfW plant operators, governmental policymakers and regulators, engineers, and scientists. Together we contribute to a more sustainable world.

ORGANISATIONAL STRUCTURE

BPG is a private equity owned company, specialising in the processing of IBA from EfW facilities. We operate 21 processing sites in the Netherlands, Germany, France, the UK, USA and will start operations in Australia in 2024. Blue Phoenix also supplies patented technology to 4 IBA processing sites across Europe and Singapore.

The group operates under 3 divisions: Blue Phoenix, QR Metals and CEMPR. Blue Phoenix designs, owns and operates facilities and technologies that process IBA from EfW partners. QR Metals is responsible for upgrading the metal products that have been separated from IBA. CEMPR is a research division developing an alternative filler to replace cement in concrete products.

Throughout the reporting period, BPG processed over 2.44 million tonnes of IBA, from which 1.87 million tonnes of mineral aggregates was produced and 155,000 tonnes of ferrous and 123,000 tonnes of non-ferrous concentrates was recovered. This data only includes the entities covered by the scope of this report, namely facilities operational at the time of reporting. BPG has over 540 employees worldwide. Our goal is to expand our operations in a sustainable manner, to continue diverting waste from landfills and recovering resources that can be circulated back into the economy.



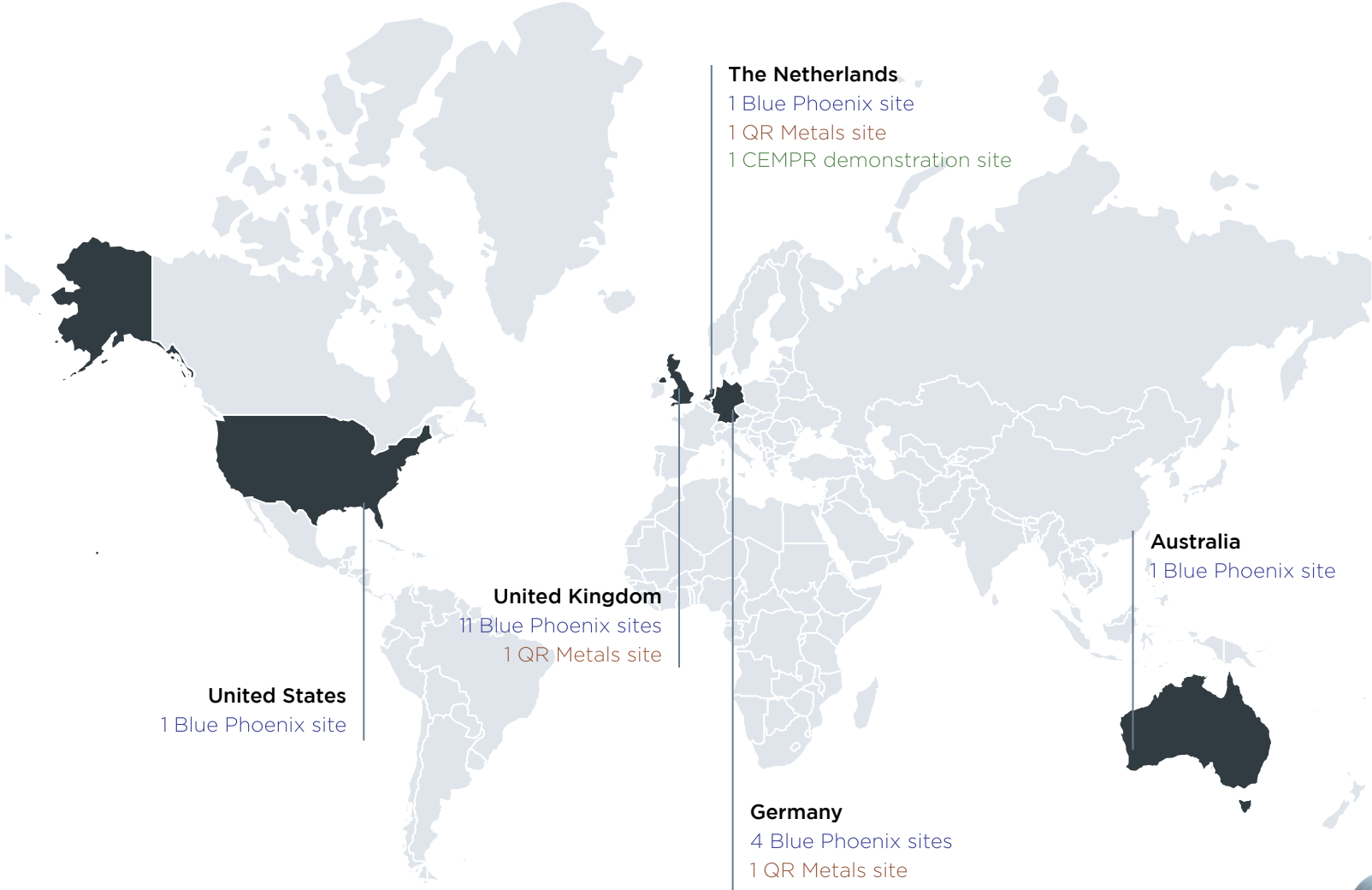
Blue Phoenix
Building a sustainable future



QR Metals
Building a sustainable future



CEMPR
Building a sustainable future



Our Group Profile

OUR SECTOR: WASTE MANAGEMENT

The Efw sector plays an important role in enabling recycling and circularity of so-called non-recyclables. Two key components to this are replacing fossil fuels for (district) heating and electricity production, and secondly, liberating unburnable elements that could not be technically recycled from municipal solid waste (MSW), which becomes available for reuse. At BPG, we aim to be the partner of choice for the Efw sector globally, bringing solutions for ash residue from waste streams.

THE CHALLENGE

Reduction of landfill GHG emissions and environmental impacts:

Landfills account for about 5% of global GHG emissions^[1]. Contamination from microplastics, minerals, and metals to groundwater and soil can be enormous. By diverting IBA from landfills, we help tackle climate and environmental impacts in all the regions where we have operations and technological implementation.

Acceleration of circular economy: The mineral and metal ore sectors account for 60% of all extracted resources^[2] and the manufacturing of these products for consumer goods, and construction materials is responsible for more than 12% of global GHG emissions^[3]. As demand for these products is expected to rise, urgent actions are required to improve the circularity of these sectors to limit negative consequences such as resource scarcity.



Corporate Governance

GOVERNANCE STRUCTURE AND COMPOSITION

The highest governance body of BPG consists of two boards: the Group Board and the Supervisory Board.

The Group Board

Consisting of the CEO, CFO, CTO, and CMO (Chief Metals Officer), the Board is responsible for overseeing the management of the company's operations, setting the strategic direction of the organization, and ensuring that the business operates sustainably and responsibly.

The Group Board meets regularly to discuss matters related to financial and operational performances, governance, and is supported by regional directors. The senior management team is responsible for overseeing specific aspects of the company's operations and reporting back. The Board also engages with stakeholders, such as lenders, customers, and employees, to understand various perspectives on the group's performance and incorporates feedback into decision-making processes.

Independence

All members of the Group Board are not directly related to the company's shareholders. Furthermore, members do not have any material conflicts of interest, allowing them to make impartial and objective decisions about the company's functions. The Group Board also delegates and consults with members of BPG's senior management team to champion specific business goals and strategies.

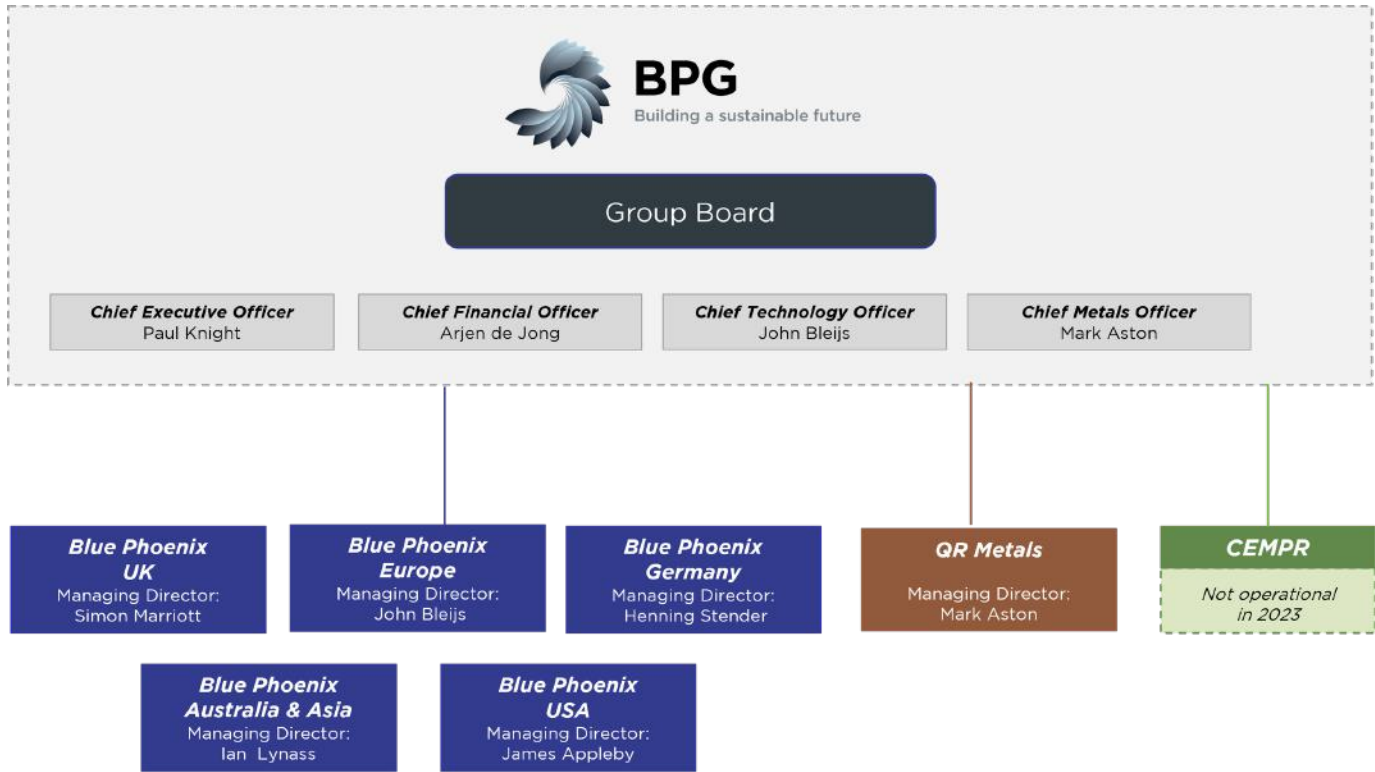
The Supervisory Board

The Supervisory Board consists of representatives of BPG's shareholders; three representatives from INFRAVIA Capital Partners, two representatives from Daiwa Capital Partners, and one independent partner. The Supervisory Board provides oversight and guidance, and monitors the company's performance to ensure alignment with the interests of the shareholders and the company's long-term goals.

OPERATIONAL STRUCTURE AND COMPOSITION

The operational governance body of BPG consists of six managing directors for the business entities. They are responsible for executing our business strategies effectively and efficiently, including but not limited to, ensuring the implementation of safe operations; that processes are connected and streamlined; resource use is optimized, and operational risks are assessed and managed.

The Group Board delegates clear roles and responsibilities to the managing directors, agreeing on performance metrics and implementing robust monitoring and reporting mechanisms. We aim to ensure that everyone within BPG understands their roles and they are responsible for their performance and actions. Through the performance metrics and regular monitoring systems, we can identify areas for improvement and take corrective actions when necessary. We also ensure that risks are assessed and understood and regardless of whether these are financial, operational, reputational or regulatory, they are competently managed.

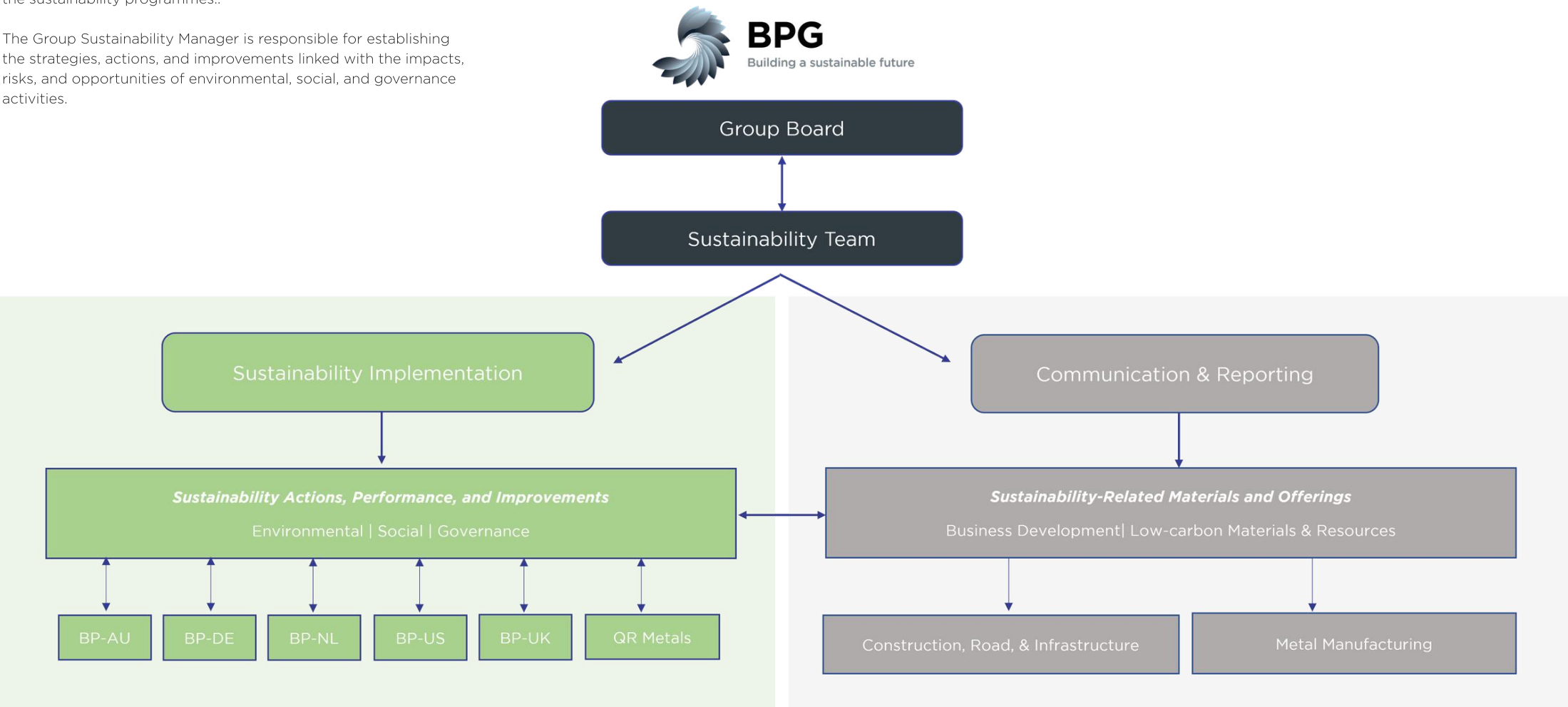


Sustainability Governance

CORPORATE SUSTAINABILITY

The Board appointed a Group Sustainability Manager to lead the global ESG strategy. They receive a quarterly report and regular updates to ensure the company is making effective progress on the sustainability programmes..

The Group Sustainability Manager is responsible for establishing the strategies, actions, and improvements linked with the impacts, risks, and opportunities of environmental, social, and governance activities.



Sustainability Team

PURPOSE OF THE TEAM

Initiated in 2023, a new team was formed including representatives from across BPG to address the environmental, social and governance impacts of BPG’s operations and value chain. This involves ensuring that group level programmes are designed, reviewed, and implemented across all business entities. In addition, team members are considered ambassadors to engage with various stakeholders on related topics. As BPG continues to grow, introducing a dedicated team has facilitated a more collaborative approach throughout the organisation towards meeting the growing demand for executing comprehensive ESG strategies.

COMPOSITION OF THE TEAM

The team is comprised of experts representing different business areas across the operational countries of BPG and is led by the Group Sustainability Manager. As sustainability is intrinsically linked with technology, finance, business development, operations, and communications, the role of this team is crucial in ensuring the success of cross-functional programmes that aim to improve BPG’s ESG performance.

MEMBER CONTRIBUTIONS

The team’s agenda is scheduled regularly via online and in-person meetings where possible, every 2-3 months. The team is tasked with engaging employees on sustainability-related topics, to think critically about current business goals and practices, and to develop initiatives to solve ESG challenges.



SUSTAINABILITY ADVISORS

BPG has 8 sustainability advisors representing:

- Technical, environmental and operational, Blue Phoenix
- Technical, environmental and operational, QR Metals
- Corporate finance
- Corporate communication
- Research and innovation
- Commercial and business development

Part-time
Provide feedback on strategies, solutions and action plans

SUSTAINABILITY LEAD

Strategy, Solutions and Management

LCA and SUSTAINABILITY SPECIALIST

Environmental Impact Assessment

Full-time
Establish strategies, solutions, and implementation programmes



Financial Performance

REVENUES

In 2023, the total revenues of BPG was €300M. The largest source of revenue was the sale of non-ferrous metals that are processed and recovered from our QR Metals entities. Other significant contributors were the gate fee we received from the collection, transport, and processing of IBA and filter dust, and the sale of non-ferrous concentrate and ferrous metals to external parties outside our group. The metal sales predominantly consist of upgraded products to metal smelters that directly recycle the product through industrial processes.

OPERATIONAL EXPENSES

BPG's operational expenses totaled €243M for the year, and consisted mainly of costs of goods sold, transportation, and revenue shares on metal income along with traditional costs associated with operational facilities like staff costs, equipment and energy costs. The group has a continuous focus on cost and process efficiency to stay competitive. The main cost challenges relate to the current higher inflation and the increase in energy costs in 2022 and 2023.

INVESTMENTS

BPG continually invests in the business to drive sustainability further. In 2023, the total investments amounted to €17M. Investments during 2023 include plant maintenance and improvements. The impact of this type of investment is a lower fuel and energy usage consumed on site, thus reducing the total GHG emissions and other environmental impacts of the group. Other significant investments were made in research and innovation. The CEMPR demonstration plant for producing cement filler products from IBA, is an example of a significant investment that aims to positively impact the high energy and carbon intensive cement sector. BPG also had other investments to improve internal reporting and working systems, including the ERP system, land acquisition, and spare parts.



Arjen de Jong, CFO

At BPG, we see a fundamental linkage between sustainability, business development, and our financial performance. There's a growing expectation from investors to track and report on sustainability to attract funding and loans. Without prioritising sustainability performance, companies potentially miss out on financial and nonfinancial opportunities.

From a business perspective, we operate within the market of recycled materials and the circular economy. The ultimate aim is to take more sustainability advantages from our products and create more value. It's an opportunity for the company as we are working with materials that have a lower carbon footprint than virgin materials, and we are not yet fully maximising the sustainability benefits, namely environmental and social performance.

Looking ahead, with the implementation of ETS (European Emission Trading Scheme) and CBAM (Carbon Border Adjustment Mechanism), we see our roles more visibly. Both European corporations and companies importing energy-intensive products into the European market need to prove that they make efforts to reduce product impacts. We can provide recycled resources helping various sectors (construction, cement, metals, and manufacturing) replace their fossil-based materials. The replacement helps reduce climate impacts, support businesses to comply with stricter sustainability standards, and implement the circular economy.

Our customers, particularly on the metals side have more interest in our products, particularly for ferrous metals where we see a shift in customers using primary material, to purposefully reduce their carbon footprint. This means that our products have more benefits and therefore also a higher potential value.

Our Value Chain

WHERE WE OPERATE

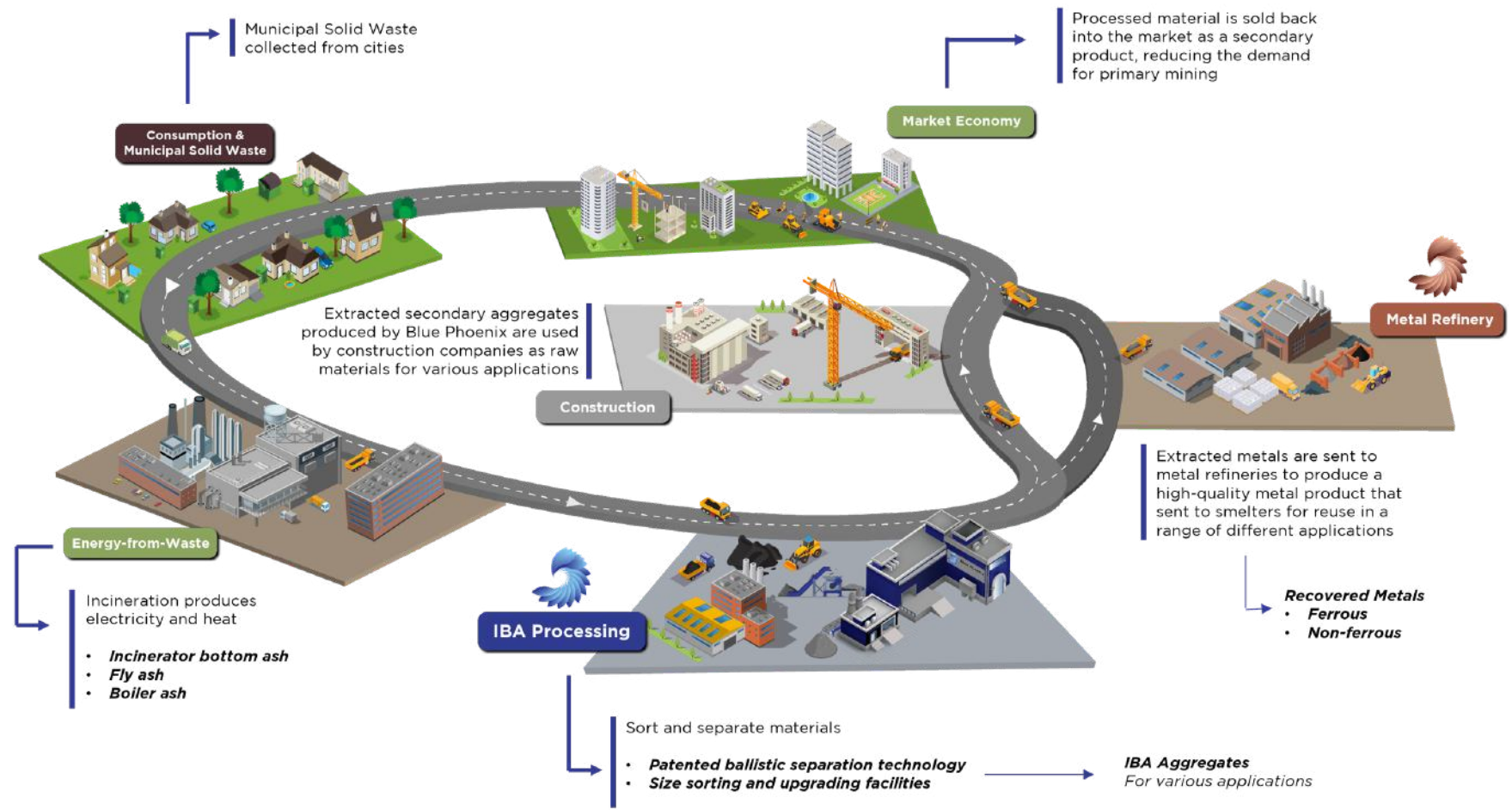
According to the European Statistical Classification of Economic Activities – the Nomenclature of Economic Activities (NACE), BPG falls within the E - Water supply; sewerage; waste management, and remediation activities. We serve the IBA market (upstream of our value chain) by helping our EfW partners handle their IBA in a compliant and sustainable manner. Downstream our value chain, we serve the metals and construction materials markets by providing them with key, low-carbon alternative products/materials.

BUSINESS RELATIONSHIPS

Other relevant business relationships to BPG are partners that process IBA at their sites using our patented ballistic technology. In addition, we provide technical support these partners to help them recover valuable materials at their sites. Regarding our procurement practices, 90% of all our incoming materials originates from national (local) sources. Many of our processing sites are located in close proximity to EfW partners which reduces transport emissions and costs.

BUSINESS MODEL

BPG has followed the same business model for more than a decade, contributing largely to our consolidated position as a major player in the global IBA processing, aggregates, and metal recovery markets. Whilst we maintain our position in mature markets, we continue to evaluate growth opportunities into new countries.



Technologies and Innovation – Blue Phoenix

TURNING IBA INTO VALUABLE RESOURCES

In many countries, IBA is still considered waste and is sent to landfills. At BPG, we have implemented our technologies to reprocess and recover resources from IBA for more than a decade and have proved our substantial contributions to support the development of the circular economy. At the same time, we ensure that the use of IBAA recovered from IBA does not lead to overall adverse environmental or human health impacts. This is completed through research of geographical conditions, regional regulations, and our continuous technological improvements to separate, wash (when necessary), and test products before they are delivered to the market.

We implement our technologies to support:

- Lower potential producer responsibility risks for the circular products
- Building up trust and securing long-term market acceptance
- Design and processing of products suitable for specific usage
- Our current market updates of IBAA and minerals are the construction and infrastructure sectors.

RESEARCH AND INNOVATION

At BPG, we believe that recovered resources from IBA are not limited. Therefore, we keep investing in our research and innovation (R&I) to deliver new products to the economy markets that meet the expectations of current and new customers. At present, we are developing new products for various applications that go beyond material replacement in road construction.

Technology, Innovation, and Sustainability

In parallel we work to integrate further technological innovation with sustainability. We aim to deliver our products with positive environmental performance and sustainability certificates to the market. We believe this is the right direction to accelerate the sustainable and circular economy, supporting various industries to do good for the climate, environment, and society.



John Bleijs, CTO

“ Within BPG, we see a crucial correlation between sustainability, technology and innovation. The driving force of our continuous innovation is the belief in finding solutions to today’s resource challenges, rather than pushing the problem to the next generation. More sustainable alternatives, like what we offer, are a more favourable solution for governments and authorities, with whom we work closely together with, to ensure 100% compliance in environmental regulations and pave the way for the responsible use of resources out of IBA . Working with these policy makers, allows us to identify where there are gaps in the legislation and what are the products we can develop for the desired applications. Most recently, we have been working closely together with authorities in Australia and the Middle East to develop new legislation that will drive the EfW market forward by transforming IBA into circular products which go back into local infrastructure projects. As a result, we will develop new technologies and products to fulfill with local requirements in those regions.

Across the Group, we are constantly innovating our process, and part of that is to continue to increase the quality of the products to increase the market acceptance. We are making great strides towards becoming product orientated, where our recycled products are recognised as high quality and with a low carbon footprint, taking a step further than being perceived purely as an EfW alternative to landfill. Through our research, we see the huge potential IBA has, if appropriately processed, for an even wider range of applications, which our new R&I team is busy developing.

Driving innovation efforts are imperative for sustainability and economics. We are committed to developing technologies that are not only economically viable but also environmentally responsible. This dual focus ensures that our innovations contribute to a sustainable future while keeping BPG at the forefront of the industry. One such development project, is our CEMPR demonstration facility in The Netherlands. Here, we are innovating a new climate change mitigation technology that produces a low-carbon binder from IBA that can replace cement in concrete production. This technology is already showing results of significantly lower carbon emissions in comparison with primary cement. Currently, we use aggregates to replace sand and gravel, which although has a large market, the CO2 footprint is relatively low. This innovation to replace cement has the potential to convert municipal solid waste into useful products for an industry that is known for being extremely carbon intensive.

Looking to the future, we want to create circular products that will make more significant positive impacts. We are a purpose-driven company. We look at what the desired sustainable applications for our products are to determine the characteristics of the output, and therefore what technology needs to be developed to achieve it. Ultimately, we want to build a broader portfolio of sustainable solutions to diversify from road construction. We use lifecycle assessments (LCA) in our R&I program to ensure that we take the impact of our entire value chain into account. We will continue to research, test, and scale up new solutions, to lead the way towards a more sustainable economy.

Technologies and Innovation – QR Metals

PROCESSING NON-FERROUS METALS FROM IBAA

QR Metals is the next step for metal refining after IBA processing. Our mission is to maximise the recovery of non-ferrous metal concentrates and to produce high-quality materials.

The production process in our largest sites consists of screening, washing and processing, and separating non-ferrous metal concentrates into heavy ferrous metals (HNF) and light non-ferrous metals (LNF). The process water used for the washing and processing stages is treated within our purification plants. This means that process water only needs to be taken in periodically. We balance the lost water by rainwater collection on-site or by purchasing a small volume of water from the water utilities.

RESEARCH AND INNOVATION

We strive to improve the metal recovery rate and metal quality, as well as develop new metal quality satisfying our customers' needs. The R&I team focuses not only on minerals but also on metals - how we can increase efficiency and split metals into various elements for different applications.

SUSTAINABILITY IN PRACTICE

Both QR Metals sites in the UK and The Netherlands have closed-loop water systems. We have plans to expand the facility for more storage, thus avoiding material moving and ultimately reducing climate impacts. QR Metals is also building more capacity for rainwater catchment in the UK. In addition, we are currently investigating how to remove the last metal traces from our water, thus maximizing water purification for reuse.

Generating renewable electricity on-site is a huge part of our strategy to reduce climate impacts. In 2024/25, solar panels are planned to be installed at our QR Metals sites. We also plan to use HVO fuels that have low impacts on the climate. Simultaneously, continue working on operational efficiency and downtime, helping to improve throughput without increasing energy consumption.



Mark Aston, Chief Metals Officer

Impacts and improvements

One of the biggest challenges we currently face is the condition of input materials. The weather and rainfall in particular have an impact on the quality of the materials that come to QR Metals because those materials are stored in an open environment before we receive them. Therefore, any dirt-content is difficult to liberate by dry screening, particularly under the bad weather conditions. The quality of input materials has impacts on water treatment process, in practice this means reducing

throughput to match the capacity of our water treatment. We are working with our suppliers to improve the quality of input materials, thus allowing us to run with an increased efficiency.

Transporting materials upstream and downstream has the biggest impact on our sustainability performance so we aim to work with our partners value chain more sustainable. At BPG, our US operations have already made strides to improve the output using a combination of techniques to reduce the mineral content in non-ferrous metals prior to shipping. As BPG grows, we also aim to expand QR Metals operations to develop refinery hubs in closer proximity to the sources, thus reducing the requirement for material to travel long distances. The balance between feasibility, sustainability, and economic business is what we always strive for.

Acceleration of the circular economy

QR Metals has high competition, therefore we always have an incentive to maximise the overall value and quantity of non-ferrous metals that we can deliver to our customers. We aim to extract all the received metals to the highest level and accelerate the circular economy and resource use together with our customers and suppliers.

QR Metals has 3 sites operated in different countries that give us many advantages. We can optimise our technologies and reduce transport impacts and at the same time, we're able to keep the sites at the optimal level of processing and deliver recovered non-ferrous metals to our customers in close proximity. In the long term, we also aim to have sustainability certificates for all our recovered materials. Compared with virgin materials, our products demonstrate highly avoided emissions and other environmental benefits. Thus, we are working on these sustainability aspects to showcase our sustainability efforts through both our operations and the products we deliver.

Engagement with stakeholders along the value chain

WORKING TOGETHER WITH PARTNERS GLOBALLY TO CREATE VALUE IN THE CIRCULAR ECONOMY

Across the group, we maintain strong relationships with various stakeholders, including customers, suppliers, investors, employees, local communities, community organizations, industry associations, governmental and non-governmental entities, and other business partners. We identify these stakeholders as being directly and indirectly impacted by our operations. Throughout the year, we **collaborate with these stakeholders** to understand their priorities and engage with authorities to develop policies and initiatives, and report on our most shared critical ESG concerns.

Our teams worldwide engage with various stakeholders through participating regularly in industry conferences and exhibitions, community events, external meetings and site visits to partner facilities as well as inviting visitors to visit our sites. We believe that it is not only our responsibility to connect with partners up and down our value chain to share knowledge and best practices, but to also work with industry authorities to **drive forward the environmental regulation** and the safe applications of recycled aggregates and metals.

Whilst we strive to attract top industry talent and invest heavily in our people to drive our business forward, we recognise the **valuable partners that help us along the way**. We rely on our network on industry experts and connections to work together to make a significant difference to the waste management sector. It is these partnerships that not only hold us accountable for our business impacts, but also inspire us to constantly strive for better decision-making, more ambitious goals and challenge ourselves to innovate both processes and technology.



AUSTRALIA



DUBAI, UAE



THE NETHERLANDS

Communication and Community Support

A MISSION THAT GOES BEYOND OUR BUSINESS

We understand that it is our role to not only make a positive contribution to society at large, but to also ensure that we are operating locally in a safe and responsible manner. Although the EFW market is widely known, the environmental and social impacts of operating large facilities around the world means that we are also responsible for engaging with local communities on our operations and educating groups on the benefits of circling secondary materials back into the economy.

Our approach to local communication and community support is two-fold:

- 1. Transparency with the local community
- 2. Getting involved in initiatives beyond our own operations



SPOTLIGHT PROJECTS



LEADING THE WAY TO A WORLD BEYOND WASTE

We teamed up with Content With Purpose (CWP) and CIWM for the 'Leading the way to a world beyond waste' digital series that focused on the crucial role the resources and waste management sector plays in moving to a fully circular economy. The aim of the project was to raise awareness about how we turn IBA into valuable secondary materials, reducing carbon footprint and contributing to a circular and low-carbon economy.

Working together with CWP, we created a series of videos telling this story of diverting household waste from landfills and transforming it into secondary materials. The scope of the videos included a documentary-style video for online platforms, a thought-leadership interview and a comprehensive social media campaign. The series was launched at the RWM conference in the UK, with a keynote session with industry experts discussing important industry trends, challenges, and our role in shaping the future.



KREFELD CLIMATE PACT

Our team in Germany is part of a Climate Pact with 25 other local companies actively working together with a shared commitment to environmental initiatives. Regular community events provide a platform for a collective exchange of ideas, with climate partners engaging in a workshop to share suggestions for future collaboration, emphasising steps needed towards climate protection and energy efficiency to uncover CO2-saving potentials.

The pact makes a concrete contribution to CO2 savings potential, for example in the area of energy efficiency. On the basis of these jointly developed topics, the design of the events and projects for next year is now being planned by the office of the Krefeld Climate Pact.



General



Double Materiality Assessment

APPROACH

This year, we conducted our first Double Materiality Assessment (DMA) survey with stakeholders. The assessment was developed based on the CSRD guidance, in combination with our own interpretation of the guided standards. We developed a simplified process, scoring matrices, and established a model for aggregation and prioritisation. Our target was to understand the material and financial impacts, risks, and opportunities of our operations and along value chain. External stakeholders include shareholders, clients, authorities, suppliers, etc. Internal stakeholders are selected employees across all divisions of the group and management. These stakeholders were invited to participate in the assessment via an online survey. We received 30 responses of which the highest responses were from our employees (13), clients/customers (7), and suppliers (7).

OUTCOMES

The survey outcomes indicate that integrating impact materiality and financial materiality is new for many of our stakeholders, making the complex ESG questions required by the new regulations, challenging to provide informed answers. Therefore, we only considered the most critical ESG aspects, and have added more thorough communication around ESG impacts, sustainability awareness and compliance, into our stakeholder engagement plan for next year. The survey outcome is aggregated per ESRS topic, showing that E (E5, E9, E10), S (S1, S6, S10), and G4 are our most material topics.

The **environmental impacts, risks, and opportunities** we have within E5, E9, and E10 are closely linked to our strategic sustainability efforts to tackle environmental pollution, improve waste management, and recover resources. These reflect our daily work, technologies, and innovation and indicate opportunities for our business growth and financial performance. We keep contributing to reducing climate impacts and accelerating a sustainable and circular economy.

The **social impacts, risks, and opportunities** reflect our efforts to maintain a healthy, safe, and pleasant work environment for our employees. Most notably, this year we implemented a Global Policy Handbook for all business entities, emphasising the responsibilities, rights, and opportunities of our workforce.

Under **governance impacts, risks, and opportunities**, the protection of whistle-blowers received the most attention. Through our global policies, we emphasise the importance of reporting incidents and we clearly state our policy to protect the whistle-blowers along the value chain.

Impacts, risks, and opportunities under each ESG topic are further discussed in the Environmental, Social, and Governance sections. The highlighted topics are taken from the stakeholder survey, site visits and internal consultation with the operational and environmental teams of all business entities.

	BPG's Material Topics										
	Renewable and efficiency of energy and fuel use	Better management of pollution and substances of concern	Water discharge and water leakage	Water management and efficiency	Waste discharge and waste management	Material recovery from waste	Sustainable procurement	Own workforce: Working conditions - secure employment	Own workforce: - gender equality and equal pay for work of equal value	Own workforce: - Equal treatment and opportunities for all - diversity	Protection of whistle-blowers
Environmental		x	x	x	x	x	x				
Social								x	x	x	
Governanace											x



Sustainability Strategy

REVISED STRATEGIES

Ensuring sustainability through the value chain is important, therefore, we have decided to revise our sustainability strategies to reflect better our sustainability efforts beyond our own operations.

In the revised sustainability strategies, we have expanded our focus to include more ESG aspects. **Under the environmental theme**, we aim to improve our climate impacts taking into account both upstream and downstream GHG emissions. We additionally aim to tackle pollution and maintain biodiversity and ecosystem services as we believe we can deliver more to improve environmental conditions.

Under the social theme, we also aim to ensure that fundamental rights are implemented not only for our workforce but also for the workers along the value chains. In the coming years, we will work more closely with our stakeholders to align social performance and share efforts to create and maintain a healthy and pleasant work environment for all.

Under the governance theme, we also aim to ensure that business conduct is implemented in our own operations and with our business partners.



Our vision is to accelerate the global circular economy sustainably whilst improving ESG conditions along the value chain

RESOURCES AND ENVIRONMENT

AMBITION: Accelerate the sustainable and circular economy by diverting waste from landfills and closing the recycling loop. As a result, improve climate conditions by turning ashes into valorised products.

PRIORITIES:

- Resources: we innovate and implement technological processes to valorise resources for various applications, all which contribute to accelerating the circular economy sustainably.
- Reduction of climate impacts: make improvements and implement efficient measures in our own operations; and along the value chain through continuous cooperation with suppliers, customers, and affected communities on data sharing, reporting, and impact reduction.
- Pollution control: we process IBA to the maximum level to avoid landfilling; testing and controlling of material quality and chemical use, parallely preventing impacts on the open environment.
- Water management: we treat and recycle water, assuring water efficiency and avoiding wastewater discharge to the surrounding environment.
- Biodiversity and ecosystem services: we limit contamination, material leakage, and waste generation to support the maintenance of biodiversity and ecosystem services.

CARE

AMBITION: Ensure a pleasant, safe, and healthy work environment for our employees and employees of our stakeholders along the value chain where everyone can thrive

PRIORITIES:

We implement various H&S training and measures to provide a healthy, safe, and pleasant environment for our own employees as well as to support similar working environment for the employees of our suppliers and customers upstream and downstream of the value chain.

TRUST

AMBITION: Foster accountability, transparency, and cooperation with all stakeholders to reduce ESG impacts and develop further toward a sustainable business

PRIORITIES:

We implement a digital platform for sustainability to share data and impacts, and enable accountability, transparency, and collaboration in our own operations, and with external stakeholders to ensure collaborative efforts and continuous improvements along the value chain.



Sustainability Ambitions 2025

REVISED STRATEGIES

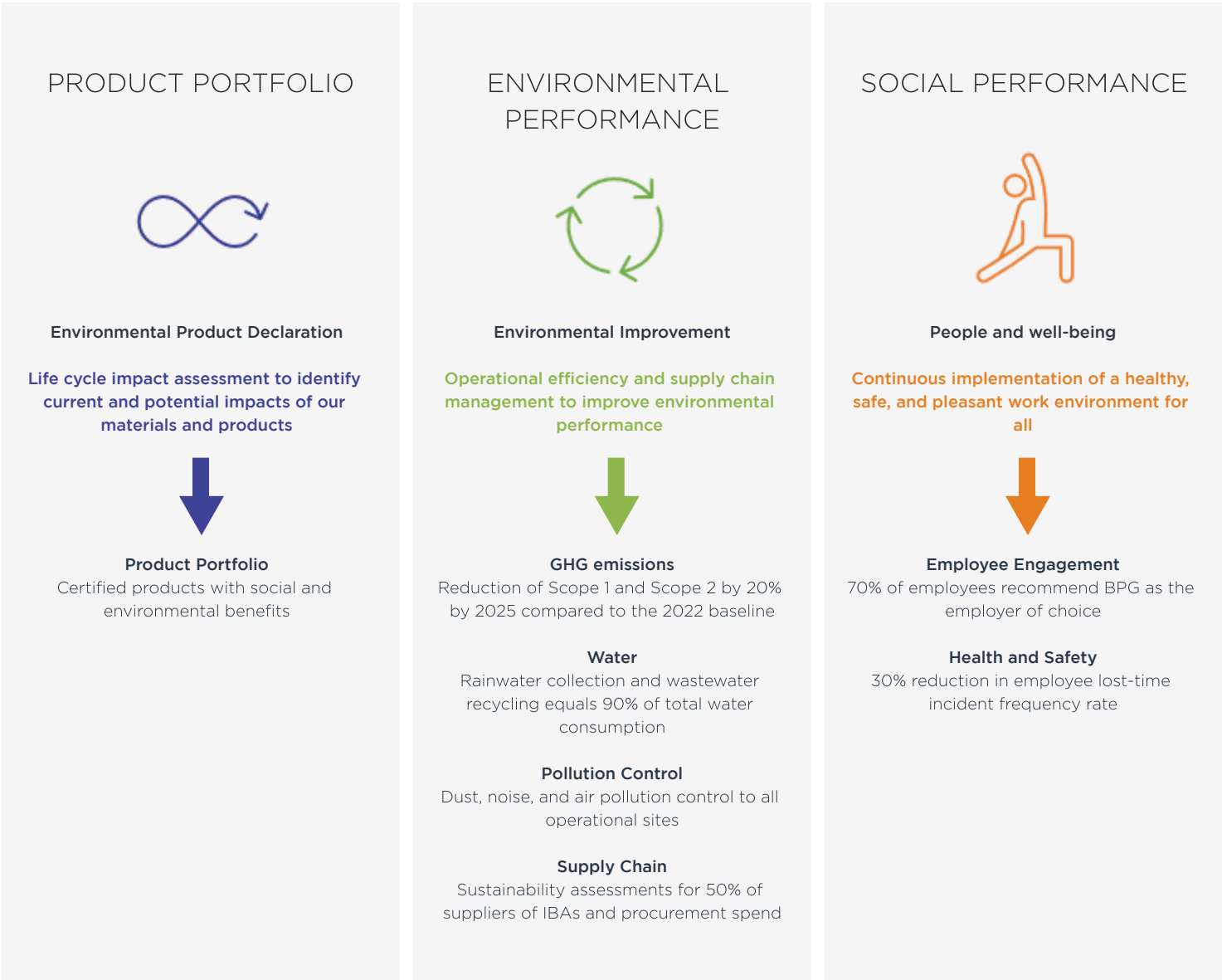
Our ambitions are not only focused on the total volume of aggregates and metals we process and recover from IBA, but also our aspiration to improve climate, environmental, and social conditions along the waste management value chain.

TURNING STRATEGY INTO MEASURABLE ACTIONS

Across the business, we have made considerable progress on our sustainability agenda in 2023. The installation of solar panels and the consumption of HVO fuels have led to the reduction of our Scope 1 and 2 GHG emissions. We will continue making these types of investments in our operational sites to extend the environmental performance benefits. Our EPC team ("Engineering, Procurement and Construction") has numerous projects in the pipeline, all designed to further improve operational efficiency.

As the group expands into a broader waste management platform, we will see a shift in the way we market recycled products. A critical next step in our product development starting next year is to implement LCA projects with the aim to assess our product impacts and quantify the sustainability benefits that these products can deliver to our customers. Additional goals on our agenda for 2025 include: continuous reduction of GHG emissions, better water management, better pollution control, and more comprehensive sustainability engagement upstream and downstream of the value chain.

These ambitions were established based on our current business structure. Potential M&A activity ("mergers and acquisitions") may impact our sustainability agenda next year. However, the transparency and accuracy of a robust reporting structure will remain the foundation for measuring our performance. Improving ESG performance is now firmly at the heart of our business culture, and we will continue to engage with stakeholders across the value chain to drive positive change in the sector.



Interview on BPG's Sustainability Journey



A TRANSFORMATION TO SUSTAINABLE BUSINESS

Thuy Mai-Moulin,
Group Sustainability Manager

Transformation to sustainable business is a collective effort we have to make together. I am proud of the remarkable progress we have made so far, and look forward to the huge potential impacts in the journey ahead. We started looking seriously at our operational impacts on climate change two years ago and in the meantime, we also saw the position of our business to drive positive changes, particularly in the development and expansion of the circular economy globally. Thus, we collected data to calculate GHG emissions that helped us see the most operational impacts. Since then, continuous efforts have been made, namely energy-saving measures, operational efficiency, and renewable energy consumption.

Preparation for the CSRD requirements and meeting stakeholder expectations

Compliance to CSRD standards is a big challenge for any business. The positive news is that we already have the knowledge internally on all the comprehensive and complex CSRD requirements. This prompted us to start reporting in line with the CSRD guidelines already this year. As of today, we can align our efforts with 30% of the standards. We understand that greater actions need to be taken to further organise our data and measure the progress of our initiatives, to be fully compliant to CSRD standards by 2026. Beyond our control, difficulties also lie along the value chain. When measuring GHG emissions, the most negative impacts were upstream and downstream transport, which are managed by our logistics contractors. Many of these

are small businesses, they are either not aware of the CDRD requirements nor have the knowledge and capacity to tackle impacts. Part of our mission is to raise sustainability awareness, share best practices, and most importantly engage our stakeholders to join forces with us to make our businesses sustainable in the long term.

This year, we also witnessed enormous requests from our financial stakeholders and customers to report on ESG performance and share our sustainability agenda. We foresee these requests increasing in the coming years due to stricter regulation and market demand. Our sustainability team will work hard to deliver product-related sustainability performance benefits to support customers in their journey to net zero.

Sustainability ambitions

BPG has the ambition to expand a sustainable and circular economy at the global level. Our products have sustainability benefits that can reduce the demand on fossil-based resources, on a large scale. Technological innovations and operational excellence remain the backbone of our operations and allow us to take further actions to reduce environmental impacts. We aim to have our product portfolio available by 2025, to offer certified circular products to the market. Our mission to foster a pleasant and safe working environment for everybody continues. I am confident in the sustainability pathway we are constantly developing, with dedication, commitment, and a core mission to make positive impacts for all.

Environmental



BPG Environmental Sustainability

ENVIRONMENTAL



EU Taxonomy alignment

Environmental Reporting:

Climate change mitigation

Pollution control

Water management

Biodiversity and ecosystems

Resource valorisation and circular economy

Contribution to the SDGs



ENVIRONMENTAL POLICIES

Climate change mitigation

As for all businesses, climate impacts are the biggest concern of our environmental strategies. Although the nature of our business is to help tackle environmental and climate problems, we have set the bar even higher this year. We have extended the number of impact categories in our GHG emissions measurement by adding chemical consumption and measuring investment in renewable energy, machinery, and biofuels. We also kept improving our operational efficiency to reduce overall GHG emissions.

Pollution control

Working in the waste management sector, we ensure that pollution to noise, water, soil, and atmosphere is regularly assessed and tackled. Leaching tests and toxicity tests are carried out for both incoming bottom ashes and outgoing processed materials (aggregates, minerals, and metals) in all regions where our materials are valorised. With sludges and processed waste that are sent to landfills, we ensure that these materials are safely disposed following national guidelines and regulations.

Water management

In the Netherlands, we use water to wash aggregates to remove potential contamination in the open environment. In some sites where we process metals, we also use water in the production process consisting of filtering, washing, and sorting the waste materials supplied from the incineration plants. The process water used in those sites is fully recycled through our own purification plant. We also collect rainwater on-site to compensate for water loss via material hydration and evaporation.

Biodiversity and ecosystems

Although we have not measured biodiversity and ecosystem impacts, we take internal assessments to ensure that our operational sites do not have negative impacts on the open environment and the surrounding areas.

Resource valorisation and circular economy

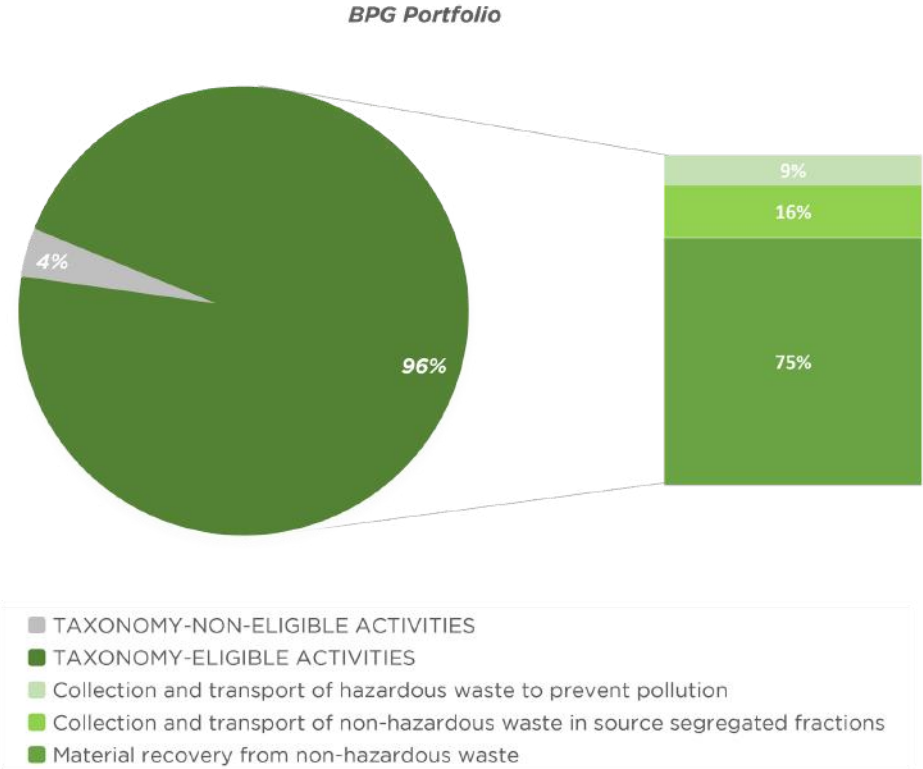
Our core business is to implement circular business practices, waste management, and to support responsible resource use and waste disposal. This is done by processing and recovering aggregates, minerals, ferrous, and non-ferrous metals from IBA that are re-used in various industries and sectors.

EU Taxonomy alignment for environmentally sustainable activities



This is the first year that BPG reported compliance with the EU Taxonomy, a cornerstone of the EU's sustainable finance framework. The taxonomy is a classification system that defines criteria for economic activities that are aligned with a net zero trajectory by 2050 and broader environmental goals than climate.

We are proud that our business falls under the sector of Waste Management with three environmentally sustainable activities:



TAXONOMY-ALIGNED REVENUE

This is the declared revenue associated with taxonomy-aligned economic activities as a proportion of our total revenue. It is adjusted from our total revenue. Our aligned revenue was €288M accounting for 96% of the total revenues.

TAXONOMY-ALIGNED CAPEX

This includes the CAPEX related to assets or processes associated with taxonomy-aligned economic activities as a proportion of our total CAPEX. Our aligned CAPEX was €17M accounting for 100% of the total CAPEX spent in 2023.

TAXONOMY-NON-ELIGIBLE SPEND

Revenue, CAPEX, and OPEX associated with taxonomy-non-eligible activities (not included in the delegated acts) have been determined. Taxonomy-non-eligible revenue, CAPEX, and OPEX are classified into other activities of the BPG group. Those included other incomes that do not belong to the transport, processing, or material recovery from IBA or hazardous waste. The total Taxonomy non-eligible spend was €12M.

EU Taxonomy-aligned Turnover

			Substantial Contribution Criteria						DNSH criteria ('Does Not Significantly Harm')						Minimum Safeguards (17)	Taxonomy aligned proportion of total turnover, year N (18)**	Category (enabling activity) (20)	Category (transitional activity) (21)
Economic Activities (1)	Code (2)	Proportion of Turnover (4)	Climate Change Mitigation (5)*	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity and ecosystems (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)				
Text		%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES		96%																
A.1. Environmentally sustainable activities (Taxonomy-aligned)																		
Collection and transport of non-hazardous waste in source segregated fractions	E38.11	16%	0%	0%	0%	0%	16%	0%								16%		
Collection and transport of hazardous waste in source segregated fractions	E38.12	9%	0%	0%	0%	9%	0%	0%								9%		
Material recovery from non-hazardous waste	E38.32	72%	75%	0%	0%	0%	0%	0%								72%		
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		96%	96%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	96%	0%	0%
A.2 Taxonomy-Eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)																		
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		0%																
Total (A.1+A.2)		96%																
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																		
Turnover of Taxonomy-non-eligible activities		4%																
Total (A+B)		100%																

Our taxonomy-eligible activities are 96% of the total revenue. Our substantial contribution is climate change mitigation. Circular economy and pollution prevention also play a role.

EU Taxonomy-aligned Capex

			Substantial Contribution Criteria						DNSH criteria ('Does Not Significantly Harm')												
Economic Activities (1)	Code (2)	Proportion of CapEx (4)	Climate Change Mitigation (5)*	Climate Change Adaptation (6)	Water (7)	Pollution (8)	Circular Economy (9)	Biodiversity and ecosystems (10)	Climate Change Mitigation (11)	Climate Change Adaptation (12)	Water (13)	Pollution (14)	Circular Economy (15)	Biodiversity (16)	Minimum Safeguards (17)	Taxonomy aligned proportion of total CapEx, year N (18)**	Category (enabling activity) (20)	Category (transition al activity) (21)			
Text		%	%	%	%	%	%	%	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%	E	T			
A. TAXONOMY-ELIGIBLE ACTIVITIES		100%																			
A.1. CapEx of environmentally sustainable activities (Taxonomy-aligned)																					
Collection and transport of non-hazardous waste in source segregated fractions (CapEx A)	E38.11	0%	0%	0%	0%	0%	0%	0%								0%					
Collection and transport of hazardous waste in source segregated fractions (CapEx A)	E38.12	0%	0%	0%	0%	0%	0%	0%								0%					
Material recovery from non-hazardous waste (CapEx A)	E38.32	100%	100%	0%	0%	0%	0%	0%								100%					
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		100%	100%	0%	0%	0%	0%	0%	Y	Y	Y	Y	Y	Y	Y	100%	0%	0%			
A.2 Taxonomy-Eligible but not environmentally sustainable activities (not Taxonomy-aligned)																					
			Our CAPEX-eligible activities are 100% of the total CAPEX of environmentally sustainable activity in the waste recovery from non-hazardous waste																		
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		0%																			
Total (A.1+A.2)		100%																			
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES																					
Capex of Taxonomy-non-eligible activities		0%																			
Total (A+B)		100%																			

Our CAPEX-eligible activities are 100% of the total CAPEX
CAPEX of environmentally sustainable activity is material
recovery from non-hazardous waste



Climate Change Mitigation

DECARBONISATION OF OUR OPERATIONS

We strive to run a sustainable business that creates long-term positive impacts on the environment and the economy. Tackling IBA waste and recovering valuable resources are the ultimate drivers and simultaneously, we continue to develop solutions to reduce GHG emissions throughout the collection, transportation, and processing of IBA, ferrous, and non-ferrous metals. We believe our collective actions make substantial contributions to the transition of a sustainable and circular economy.

Our internal sustainability efforts

We aim to be an industry leader in sustainability. Together with our environmental business focus, we keep tackling potential negative impacts, particularly from our own operations where we have full control of impacts.

We are committed to not only measuring and assessing GHG emissions but also actively finding reduction solutions.

Renewable energy deployment

- In 2023, we installed two solar panel systems in the UK, and purchased renewable electricity from the grid, thus making three operational sites fully carbon neutral. We also purchased 715,000 kWh of electricity generated from waste over 2,230,000 kWh of electricity used in the UK.
- Additionally, in the UK, 880,000 liters of hydrotreated vegetable oil was used, replacing 88% of fossil-based diesel consumption.

Operational efficiency

- Our efforts go beyond just the renewable deployment solutions. Improving operational efficiency has always been part of our business strategy. We continue to work on various saving measures such as using energy-efficient lighting, investing in new air compressors, and energy-efficient motors.

Working with value chain stakeholders

In some regions, raising sustainability awareness, and assessing environmental and sustainability policies has been coordinated with our suppliers and customers. Our wide geographical coverage makes decarbonising the value chain very challenging, particularly as conditions vary from one region to the another.

Our GHG emission assessment showed that most climate impacts are under Category 4 – upstream transport and distribution as well as Category 9 – transport and distribution. From 2024 onwards, we will focus our efforts on working with logistics and transport contractors to explore decarbonisation solutions together. We support the transition to a net zero economy, and understand that to achieve these long-term goals, we need to join forces with all stakeholders along the value chain.

IMPACTS, RISKS AND OPPORTUNITIES

E1 Climate change mitigation

Material impacts, risk, opportunity		Description
Total GHG emissions		
Impact materiality	Somewhat negative	Although BPG has low Scope 1 and 2 GHG emissions, the climate impacts under Scope 3 are still difficult to tackle, particularly with transport of materials to and from our operational sites
Financial materiality	High opportunity	Efforts to tackle GHG emissions are needed, and the efforts allow us to make positive impacts to drive further our business in the circular economy and bring benefits to various stakeholders
Mitigation measures to lower GHG emissions		
Impact materiality	Somewhat positive	BPG keeps working on our operational efficiency that helps to reduce total GHG emissions
Financial materiality	High opportunity	In the long term, BPG has more opportunities to expand our mitigation measures to all business entities in all the regions. Given the higher carbon price anticipated in the short term, mitigation measures indicate positive impacts to financial performance.
Renewable, and efficiency of energy and fuel use		
Impact materiality	Somewhat positive	The investment in solar panel installation and biofuel use has helped BPG reduce climate impacts
Financial materiality	Low risk and opportunity	BPG needs to be cautious of biofuel consumption (biofuel certificates) and considers further investment in renewable electricity



Interview on Environmental Compliance



SUSTAINABILITY PERFORMANCE OF BLUE PHOENIX UK

Neil Nolan,
Technical Director, UK

BP UK is the leading business entity of BPG. We are the largest IBA processor in the UK. We have the technology to process IBA and deliver products for various applications. It is not only the technology we want to emphasize, but also the product performance, the operational and value chain impacts we keep measuring and improving further.

Actions BP UK has implemented to improve sustainability performance

For many years in the UK, we have incorporated sustainability objectives within our Management Systems to monitor and improve environmental performance. We started assessing our GHG emissions through a third party in 2019, however we had been collecting electricity, water and fuel consumption data since 2012. Having extended the data collection to cover the wider GHG assessment criteria gave us a better understanding of the challenges that are ahead. While most impacts are under our suppliers' and customers' control, we believe that actions need to start from within. Therefore, we have invested in purchasing net-zero electricity, generating renewable electricity on-site, harvesting rainwater to suppress dust, and using certified HVO fuels in many of our operational sites.

We also assessed the efficiency of conveyors for stockpiling, timing of eddy current belts, and replacement of old machinery and equipment. We also well controlled spillages and disposed of contaminants in line with legislation.

Looking at GHG emissions at site level, we can be proud of the actions we have taken because some sites generate nearly zero GHG emissions through our processing of IBA into aggregates and metal concentrates.

Challenges and opportunities ahead

Although we have implemented various measures to improve environmental conditions and comply with current UK environmental legislation, for us those are only minimum benchmarks. We will measure biodiversity impacts adjacent to our operational sites, additional categories under Scope 3 emissions, and the climate and social impacts of material transport. These tasks will require substantial effort and investment, but we also see opportunities ahead.

Our products are low-carbon and recycled materials that many sectors count on to implement the circular economy. We take the opportunity to support our customers in fulfilling their corporate missions and grow our business further to tackle waste and recover resources. We will continue to focus on improving our performance from an ESG perspective, with compliance with our duty of care being the absolute priority.

From the Group perspective, sharing best practice is at the forefront of the Sustainability Team mindset and ensuring consistency through the business is paramount in creating 'One BPG'.

Greenhouse gas (GHG) emissions

DATA COLLECTION

While 2022 marked the foundation year of GHG reporting at the group level, we had bigger ambitions for the GHG emission assessment in 2023. We believe that accurate data collection is extremely important to showcase our internal efforts and to take concrete actions to reduce climate impacts along the value chain.

Various data was collected from the environmental and operational teams, as well as information provided by our finance departments. The data collected was also more comprehensive, with additional inputs of chemical use, rainwater harvesting, and waste generation. Logistic and transport data was also more accurate during this cycle of data collection. Last year, various assumptions had been made regarding material transport. This year, we more accurately estimated the distance of receiving raw materials from suppliers and delivered products to our customers and clients downstream.

EMISSION FACTORS

Emission factors play an important role in the final GHG emission results. Therefore, we carefully reviewed sources of emission factors and ensured that we used the most reliable emission factors in alignment with scientific findings and updates.

OVERALL PERFORMANCE

Compared to the 2022 results, our sustainability efforts and thorough approach to data collection showed positive outcomes.

GHG emissions under Scope 1 and Scope 2 were reduced by 12% and 37% respectively.

The GHG emissions were decreased as result of:

- more renewable consumption in our operations
- lower IBA processing at our Netherlands site

Scope 3 results showed an increase of 5% due to:

- added hazardous waste processing which has high GHG emissions attached;
- Capex and Opex of new vehicles and machinery;
- more accurate logistic data upstream and downstream of our value chain.

E1 Climate change

Material impacts, risk, opportunity		Description
Renewable consumption and efficiency of energy and fuel use		
Impact materiality	Somewhat positive	BPG's actions to improve further our current energy consumption, capture more renewables, and lower fossil fuel use led to some positive climate impacts
Financial materiality	Low risk and low opportunity	BPG's efforts showed a low risk of non-compliance to sustainability standards. However, BPG has not yet been able to capture the full financial opportunity of the climate benefits of our products due to lack of certification.

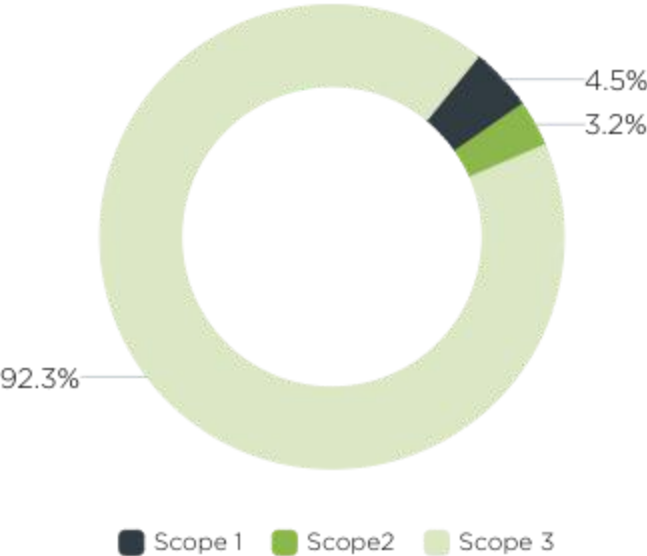


Greenhouse gas (GHG) emissions



GHG EMISSIONS BY SCOPE

In thousand tonnes CO2e



Data Point	2023	2022	Δ
Direct GHG emissions (scope 1)	4,304	4,865	-12%
Indirect GHG emissions (scope 2)	3,140	5,004	-37%
Indirect GHG emissions (scope 3)	89,171	84,578	5%
C1: purchased goods and services	12,325		
C2: capital goods	5,684		
C3: fuel- and energy-related activities	2,428		
C4: upstream transportation and distribution	32,917		
C5: waste generated in operations and waste handling	9,498		
C6: business travel	247		
C7: employee commuting	789		
C9: downstream transport and distribution	25,284		
Total GHG emissions Scope 1, 2, and 3	96,615	94,447	2%



Climate Impact of Processing IBA

APPROACH

Our performance is benchmarked on processing the IBA we received from the EfW plants. The outputs of processed IBA are minerals, aggregates, raw ferrous, and raw non-ferrous metals. We decided to assess the energy and machinery used in our operational sites to reveal the climate impacts of processing IBA. This covers all the climate impacts under Scope 1 and Scope 2. The inputs include fuels, electricity, chemicals, water, heavy vehicles and equipment used at our facilities, as well as the company vehicles. The performance excluded the transport of IBA upstream to our sites and the transport of aggregates, metals, and minerals to our customers downstream as well as other environmental impacts beyond our control.

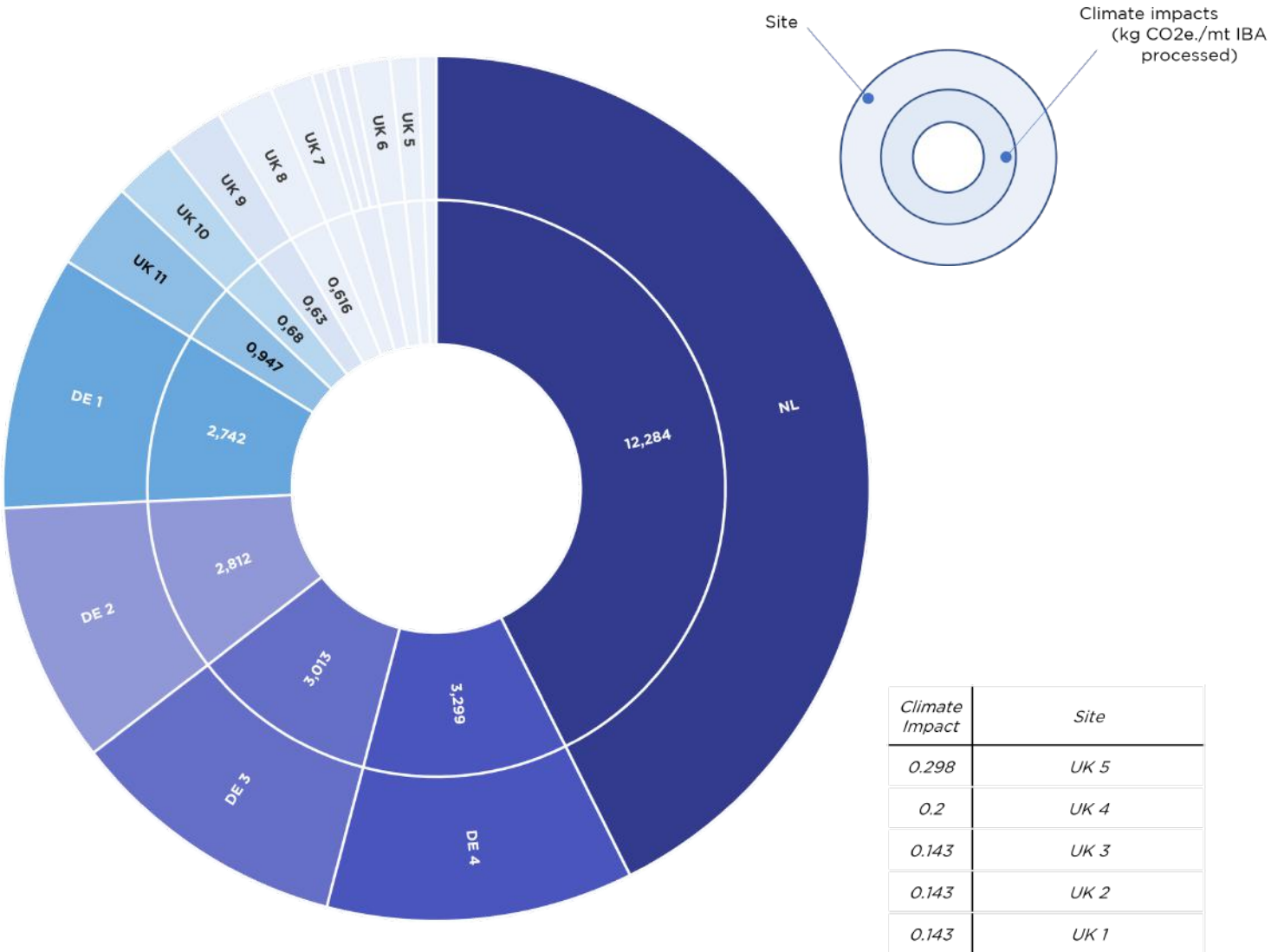
OVERALL PERFORMANCE

The results showed that three UK sites have the lowest GHG emissions per tonne of IBA produced: 0.143 kg CO₂e. Those were the result of implementing dry processing technology and using renewable electricity and HVO fuels on-site. The Netherlands site showed the highest GHG emissions per tonne of IBA produced: 12.28 kg CO₂e. This was the result of implementing wet processing technology to wash aggregates and minerals to lower potential contamination. This is to ensure the safe usage of our products following the environmental and technical requirements set up by the Dutch government. However, wet technology requires a high volume of water for washing and chemicals for treating wastewater, leading to high energy and resource consumption.

PERSPECTIVES

Next year, we will continue assessing the climate impacts of IBA processed but we strive to make extra efforts to quantify the upstream and downstream impacts that are included under various categories of Scope 3. The results of GHG emissions will be expectedly be higher, but we will share the results with our value chain stakeholders with the aim of tackling the climate impacts together.

kgCO₂e/tonne of IBA processed



Climate Impact of Recovering Metals and Minerals

APPROACH

Similar to the approach of assessing climate impacts of IBA processed, we carried out the same method for non-ferrous metals and minerals processed in our QR Metals facilities. We also assessed the energy and machinery used in our operational sites to reveal the climate impacts of processing metal and minerals. This includes all the climate impacts under Scope 1 and Scope 2.

The inputs include fuels, electricity, water, chemicals, heavy vehicles and equipment used at our facilities, as well as the company vehicles. The performance excluded the transport of materials upstream to our sites and the transport of non-ferrous metals and minerals to our customers downstream as well as other environmental impacts beyond our control.

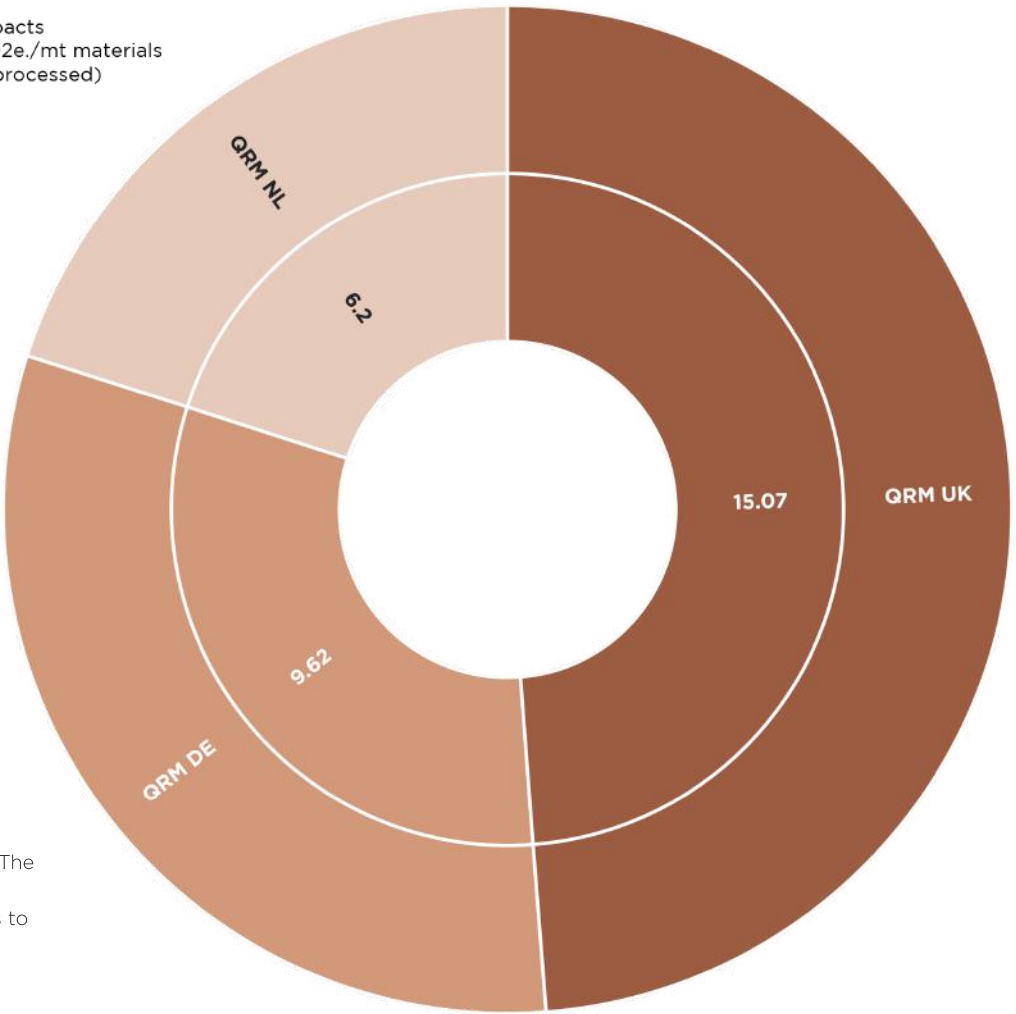
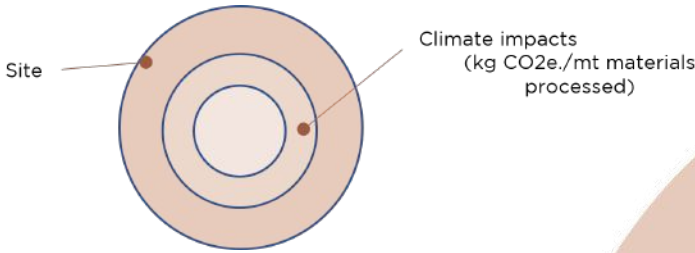
OVERALL PERFORMANCE

The results showed that our site in The Netherlands has the lowest GHG emissions per tonne of metals produced: 6.2 kg CO₂e. One UK site showed the highest GHG emissions per tonne of minerals and metals produced: 26.24 kg CO₂e. The results of The Netherlands site were highly positive thanks to several efficiency measures already implemented since 2018. Differences in results can be explained by technology, sizing, and yield of recovered metals.

In The Netherlands, we process heavy non-ferrous metals and aluminium of small size with lower metal yield. In the other sites, we applied different technology to recover heavy non-ferrous metals and aluminium of bigger size resulting in higher metal yield. The higher efficiency also caused more energy and water consumption, leading to higher climate impacts.

Anticipating that more renewable energy and rainwater harvesting to be implemented in 2024 in various QR Metals sites, the GHG emissions will be lower for our metals and mineral products.

kgCO₂e/tonne of IBA processed



PERSPECTIVES

Next year, we will assess the climate impacts of metals and minerals processed that also include the upstream and downstream impacts covering various categories of Scope 3. The results of GHG emissions will be higher but we aim to communicate the outcomes with our value chain stakeholders to tackle the climate impacts further.

Pollution Control

APPROACH

Our operational sites are conducted in a way to minimize the risk of any pollution. We use various methods to control spillages and dispose of contaminants in line with the legislation in the regions where we operate. All of our sites possess permits for waste handling, and restrictions to noise emissions, and water and air pollution. Most of our sites have ISO 9001 for Quality management and/or ISO 140001. If not, we have similar certificates in compliance with local regulations.

PROCESSING STEPS

- **Incoming materials:** We verify IBA and raw ferrous and non-ferrous materials at the moment they are transported to our operational sites. The aim is to compare ingoing to outgoing flow to learn, measure, and improve our performance in cleaning and processing of recycled products. In addition, we also measure some elements even if this is not required. For example, we assess PFAS to have an environmental insight and collect data for future use and regulations.
- **Processing:** Dust-, noise, and air pollution are also measured frequently during the processing stages.
- **Outgoing materials:** We continue to measure the same elements of output products including IBAA, minerals, ferrous and non-ferrous metals before they are transported to our customers. The aim is to confirm the quality and environmental compliance of our products delivered to clients and customers downstream of our value chain.

PERSPECTIVES

Looking ahead, we aim to apply ISO 9001 and ISO 14001 to all our operational sites in the regions in which we operate. We will assess the pollution situation more thoroughly in all business entities, including the investigation of environmental impacts, risks, and opportunities regarding pollution control and management.

IMPACTS, RISKS AND OPPORTUNITIES

E2 Pollution control

Material impacts, risk, opportunity		Description
Current air pollution and environmental control		
Impact materiality	Somewhat positive	Dust and noise pollution are being managed and further investigated, thus indicating some positive impacts
Financial materiality	Low risk and low opportunity	Air pollution may bear a risk to our own operational teams working onsite. Tackling air pollution helps improve health conditions for our workforce, thus lowering financial and health costs to our employees
Better management of pollution and substances of concern		
Impact materiality	Somewhat positive	Air pollution is being properly controlled but it needs to be further investigated for all business entities
Financial materiality	High opportunity	Improving environmental conditions helps leverage us to be in a better position as a more sustainable company



Water Management



WATER MANAGEMENT AT BPG

Water management is important at BPG. We have implemented good practices across the group to minimize our water-related impacts on the environment and local communities. BPG’s strategy on water focuses on three main pillars: water conservation, water efficiency, and compliance with regulations.

AVOIDANCE OF LEAKAGE AND DISCHARGE

In operational sites where water is used, the closed-loop water processes help us retain water within our processing facilities to be retreated and reused onsite. This helps to avoid any leakage and water discharged on the open environment that may cause impacts to soil, waterways, or biodiversity services.

WATER EFFICIENCY

Water is a precious natural resource; therefore, we implement good management practices including rainwater catchment, closed-loop water system, and minimal water withdrawal. We strive to use water most efficiently and responsibly and ensure a low water footprint of our products.

COMPLIANCE WITH REGULATIONS

In all BPG sites, we comply with national water regulations and guidelines. We have local procedures to ensure regulative compliance and anticipate new regulations required for our processes. Being compliant is a key part of our water strategy. We tackle our water-related impacts on local communities and the environment by strictly adhering to all relevant regulations.

PERFORMANCE

The treatment of wastewater and implementation of water recycling enhances our own sustainability efforts, allowing us to deliver products with low environmental impacts to our customers. By treating wastewater, our customers can be assured that we handle IBA-processed products responsibly. We remove contaminants and we do it while preserving local water bodies. In parallel, this also reduces exposure of BPG and our customers to strict regulations and helps us all meet the requirements set by authorities.



Water Management

CLOSED-LOOP WATER SYSTEMS

The aim is to use water to remove contamination of our processed products. At our ACCN plant in Assendelft, The Netherlands, we use large quantities of water to wash the mineral aggregates. Each tonne of IBA consists of approximately 80% of minerals. In 2023, ACCN processed 172,000 tonnes of IBA., equating to approximately 225,000 m3 of water being consumed in a year.

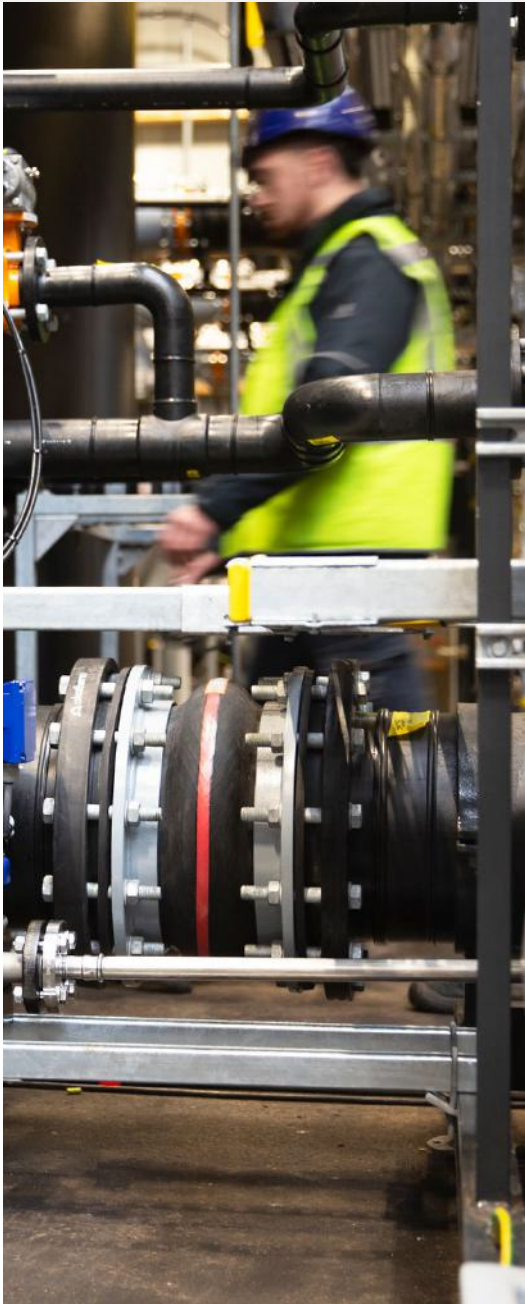
At our QR Metals site in Maastricht and Dudley, we use about 34,000 m3 to process 123,000 mt of non-ferrous concentrate metals. 25% of the total water volume is rainwater harvested onsite. We aim to double this volume in 2024 by installing water tanks for rainwater collection.

RAINWATER CATCHMENT

Along with rainwater catchment, we strive from minimal withdrawal from local water sources. We have 14 equipped with rainwater catchment systems to harvest rainwater. We use this water to moisten stock-piles of IBA to prevent dust, wash IBAA, and process non-ferrous metals. In addition, we prioritize the use of rainwater and therefore, withdraw very little from local water sources.

EFFICIENT WATER TREATMENT

We have nearly zero discharge of water to the open environment and there is only a small amount of water used by employees to wash and clean onsite is discharged to the wastewater network.



IMPACTS, RISKS AND OPPORTUNITIES

E3 Water management

<i>Material impacts, risk, opportunity</i>		<i>Description</i>
Water discharge and water leakage		
Impact materiality	Positive	Water system is a closed loop, thus we do not cause impacts to the surrounding environment
Financial materiality	Low opportunity	We continue our operations without concerns of negative impacts that may disrupt our business and reputation. But financial opportunity is not visible regarding water discharge and leakage
Water management and efficiency		
Impact materiality	Positive	We collect rainwater to compensate for water evaporation and water absorption in the material we produce
Financial materiality	High opportunity	We run our business in any region without concern to water scarcity and without causing climate impacts



Water Management

A DEEPER INSIGHT INTO OUR CLOSED-LOOP WATER SYSTEMS

Within BPG, we have three close-loop water systems.

One system is used to wash IBA aggregates and minerals. The aim is to remove the sulphates (SO_4) and other fine surface-bound pollutions at the first step. The water used in this process has a high concentration of salts and other solid materials. The water is treated to remove the solids and reused in the saltwater washing line until it reaches a saturation point. After that, the water is purified to remove the salts and contaminants, making it suitable for reuse. After the salt washing line process, the bottom ash still contains chlorides (Cl), Bromide (Br), etc. To remove the pollutants, the bottom ash is rinsed and cleaned using fresh water. The freshwater used in this step is purified the pollutants. The water is then reused for the freshwater washing line.

Two other systems are used to separate different types of non-ferrous metals through the implementation of jig and floatation processing technologies. Jig technology employs a dynamic approach, using pulsating water beds to bring the particles in suspension. By pulsating the water multiple times, it allows heavy particles to sink, while their lighter particles float on top. This creates two distinct layers within the material - one enriched with heavy metals and the other with lighter particles like Aluminium and minerals. The light particles undergo further refinement through the application of Eddy Currents, resulting in two distinct product streams. The first stream comprises high-quality light non-ferrous metals, ready to be supplied to metal smelters for various applications. The second stream is a mineral mixture with a purity suitable for use in a wide range of concrete products.

Flotation technology is used for separating light particles formed from an effluent stream following coagulation. We apply the flotation technology to recover HNF and LNF. With this technology, we can remove insoluble contaminants, fats, and oils from a liquid, resulting in good-quality of the processed metals.



Biodiversity and Ecosystem Impacts



BPG SUPPORTS BIODIVERSITY AND ECOSYSTEM CONSERVATION

Scientists have shown that not only our climate is under negative changes, but our nature, ecosystems, species, fauna, and flora are also being negatively affected by human and business activities.

One undeniable fact is that we depend on nature to support our lives and nourish us. We depend on diverse and healthy ecosystems to provide us with food and water, to give us a good atmosphere and living. We depend on ecosystem services to grow crops and harvest resources for growing the economy and society. But our nature is at risk.

Our core business is to divert waste from landfills, thus preventing waste, traces of minerals, plastics, and metals from leaching to the underground which have negative impacts on the soil, groundwater, and also the atmosphere. At BPG, we believe that our business is a part of the sustainability solutions to biodiversity and ecosystem conservation.

As we continue growing our business farther to the East, we expand our sustainable solutions further. In many countries, we help recover resources and send zero waste to landfills. In some countries where we use wet technologies, there might be potential impacts to nature, and we will assess the impacts further. We strive to optimise our business operations to protect nature and make contributions to restore biodiversity and maintain good ecosystem services through the way we sort, process, recover resources from IBA and beyond.

OUR ACTIONS IN 2024

In all our operational sites, we are fully complied with the regional and local regulations for our operations. Since we do not have wastewater discharge or leakage into the open environment, our biodiversity and ecosystem impacts are nearly zero or negligible.

In 2024, we will take more actions, assessing our impacts more comprehensively to continuously support biodiversity protection and maintain healthy ecosystems.

IMPACTS, RISKS AND OPPORTUNITIES

E4 Biodiversity and ecosystem services

Material impacts, risk, opportunity		Description
Direct impact drivers of biodiversity loss via water discharge or soil pollution		
Impact materiality	Somewhat positive	Water system is a closed loop, water discharge to the open environment is nearly zero and we do not cause soil pollution thanks to the efficient water management system
Financial materiality	Neutral	We keep promote the circular economy and further work is needed to quantify potential impacts of our operations to the natural environment

Resource Valorisation and Circular Economy

VISION AND BUSINESS MODEL

At BPG, we are committed to promoting sustainable practices throughout our waste processing and helping the EfW sector to become more circular by turning IBA into valorised resources. Nearly 100% of our input materials can be classified as recycled. Using recycled materials not only reduces our environmental impact by conserving natural resources and reducing waste but also supports the development of the Circular Economy.

Business model

Our business model is to process IBA waste into resources, namely aggregates, minerals, ferrous and non-ferrous metals. We also further process non-ferrous metals into CuZn concentrate, aluminium, silver, and gold. The vast majority of recovered materials are used for high-value applications. BPG does not generate significant amounts of waste. One type of waste we dispose of is the sludge generated from the processing and washing of IBA to create a manufactured aggregate product for infrastructure works, namely IBAA. At BPG, we help process certain quantities of hazardous waste. However, we do not generate any hazardous waste from our operations.

Other materials flow

The unburnt materials received at our facilities are sent back to the waste facility and some, i.e., sludge from process water purification, are disposed at the landfill. We make sure all the disposed materials are handled in compliance with the environmental regulations where we operate.

Office waste

Our waste mainly comprises office waste (organic, paper, and other recyclables) as well as some process-related wastes such as spent oil or rubber belts. During the reporting period, BPG did not track the amount of waste produced by these waste streams. However, we aim to assess office waste in the coming years to make our reporting more comprehensive and accurate.

IMPACTS, RISKS AND OPPORTUNITIES

E5 Circular economy

Material impacts, risk, opportunity		Description
Waste discharge and waste management		
Impact materiality	Highly positive	BPG business tackles waste pollution, thus we deliver more positive impacts than negative impacts to the overall environment.
Financial materiality	High opportunity	We have a high opportunity to manage waste efficiently at the global level, thus supporting the sustainable growth of our business and the global circular economy
Water management and efficiency		
Impact materiality	Highly positive	BPG business valorises waste into resources, thus we deliver more positive impacts than negative impacts to the circular economy
Financial materiality	High opportunity	We have a high opportunity to leverage our business position at the global level to support the net-zero and circular economy
Water management and efficiency		
Impact materiality	Neutral	Impacts of our procurement still needs to be further assessed since the procurement policy is not yet implemented
Financial materiality	Low opportunity	At the current state, a sustainable procurement policy is being established. BPG mainly purchases operational machinery and IT equipment, thus financial materiality is not visible at this stage.



Resource Valorisation and Circular Economy

MAIN MATERIAL FLOWS

During 2023 and for the entities enclosed in the scope of this report, we processed 2.4 million metric tonnes of IBA. The only sources of our materials were EfW facilities. From all the materials processed, BPG recovered 155 thousand metric tonnes of Non-Ferrous concentrate metals and 123 thousand metric tonnes of ferrous metals. In total, more than two million metric tonnes of aggregates (IBAA) were produced and diverted from landfills.

CONTINUOUS ACTIONS

Engagement with clients (Energy-from-Waste) to improve the quality of IBA received.

Material handling in the circular economy requires the proper management of materials flows to effectively connect them to processing and applications. If IBA quality does not meet certain requirements, e.g. bearing contamination, it cannot be easily processed to be circled back to the economy. In these cases, materials need to be returned to our EfW partners. We constantly engage with EfW partners to avoid pollutants ending up in bottom ash. We aim to recover as many resources as possible from IBA and turn them into high value applications. Therefore, IBA quality must be assessed to support material circularity to its highest.

Product communication and documentation

We aim to create information on product performance linked with policy and regulative compliance. We want to communicate the responsible use of our IBAA products in the countries where we operate. The off-takers of our recycled alternatives need to be assured that the products they receive are fit for purpose and comply with all legal criteria concerning the environment and product quality. The information we aim to deliver will be available for our external audiences, particularly customers, and clients so they can make strategic decisions and be compliant with the relevant regulatory frameworks.

PERSPECTIVES

Our assessment of technological innovation and material sustainability indicated that there is potential for using our products in both existing and new industries. This means that we can expand the application of minerals (IBAA) in the cement industry and metals in new manufacturing sectors. Our intrinsic specialism is the processing of IBA to optimise the recovery of mineral and metal resources to produce aggregates and metal flows that can be taken by market parties.

We continue to investigate further the credibility of our products, to showcase our operational excellence, and demonstrate that our materials can be used for higher-value applications.

One of the most important factors for our off-takers is that BPG can create consistent output qualities that they can rely on. The branding of our products and consistency of material is important for their own processes.

Working with authorities and policymakers to ensure regulatory compliance and market support of our products is vital to accelerate further the circular and sustainable economy in various global markets. Strong relationships with these types of partners along the value chain are crucial to operating globally and spreading awareness of the benefits that recycled and recovered materials can bring to infrastructure projects on a large scale. The importance of this network only increases as the group portfolio diversifies into other waste streams.



MATERIAL PROCESSED BY BPG IN 2023

Total processed IBA	MT	2,435,000
Total IBAA minerals produced	MT	1,871,000
Total Non-Ferrous concentrate produced	MT	155,000
Total Ferrous produced	MT	123,000
Materials circled back to the economy <i>(including both 2023 IBAA processed and 2022 IBAA stock)</i>	MT	2,590,000



Social

3
GOOD HEALTH
AND WELL-BEING

4
QUALITY
EDUCATION

5
GENDER
EQUALITY

7
AFFORDABLE AND
CLEAN ENERGY

8
DECENT WORK AND
ECONOMIC GROWTH

9
INDUSTRY, INNOVATION
AND INFRASTRUCTURE

10
REDUCED
INEQUALITIES

11
SUSTAINABLE CITIES
AND COMMUNITIES

12
RESPONSIBLE
CONSUMPTION
AND PRODUCTION

BPG Social Sustainability

SOCIAL



Social Reporting:

- Human and worker rights
- Our workforce
- Workers in the value chain
- Affected communities

Contribution to the SDGs



SOCIAL POLICIES

Our global policies

In 2023, our Global Policies were established. It is a compilation of mandatory global fundamental policies complying with global guidelines and legislations for corporates. The content of the Global Policies covers diverse topics namely:

1. Human Rights and Labour Rights
2. Modern Slavery Policy
3. Equal Opportunities and Dignity at Work
4. Well-being Policy
5. Communication Policy
6. Social Media Policy
7. Internal Sustainability Guidelines
8. Health and Safety
9. Data Protection Policy
10. IT Policy
11. Global Sanctions Policy
12. Code of Conduct

The Global Policies are written in English for our operations in Australia, the United Kingdom, and the United States. The policies are also translated into Dutch and German languages.

Toolbox for training

Our employees are required to familiarize themselves with and adhere to the Global Policies. Thus, we also published a generic toolbox for training purposes together with the Global Policies manual.

The training will be carried out for our employees during 2024. All new employees are required to undergo training on the Global Policy handbook upon joining Blue Phoenix Group.

Human Rights

HUMAN RIGHTS POLICY

In 2023, we have further detailed the Human Rights Policy following the Universal Declaration of Human Rights defined by the United Nations and embedded the policy in our Group Policy Manual.

Our Human Rights Policy outlines our commitment to respecting human rights, wherever we operate. This includes respecting the labour rights of our own workers and acknowledging salient human rights issues, including the rights of Indigenous peoples, and community engagement. Our human rights policy also outlines our commitment to remedying adverse impacts on individuals, workers, and communities that might arise from our activities.

Assessment of human rights related risks take place on different levels. On one hand we perform employee surveys and local risk assessments and audits to assess compliance. On the other hand, we also have one on one talks with our employees to provide them the necessary environment to speak up, in addition to the regular whistleblowing processes. At all times employees are requested to speak up to their line manager, the HR department, or any senior managers in case they detect a breach of human rights, without any fear of retaliation.

Actions ahead

In the coming years, we will expand the compliance with human rights further to ensure that the rights are respected for the workforce of our stakeholders. We will communicate the compliance, share our own experience, and measure progress with our stakeholders via the Digital Platform for Sustainability.



Own Workforce

BPG is composed of more than 500 employees who are dedicated to accelerating the sustainable and circular economy. Our employees are our biggest assets. We value our employees immensely. We strive to create a pleasant, safe, healthy, diverse, and inclusive working environment for all.

EMPLOYEE CODE OF CONDUCT

The BPG Code of Conduct (CoC) is one of the major pillars of the employee behavioral guidelines within the group. It emphasises the values of the company along with guidelines for employees ensuring compliance with internal and external regulations. sanctions law, competition law and anti-bribery law are examples of international laws which contain important behavioral guidelines for our employees worldwide.

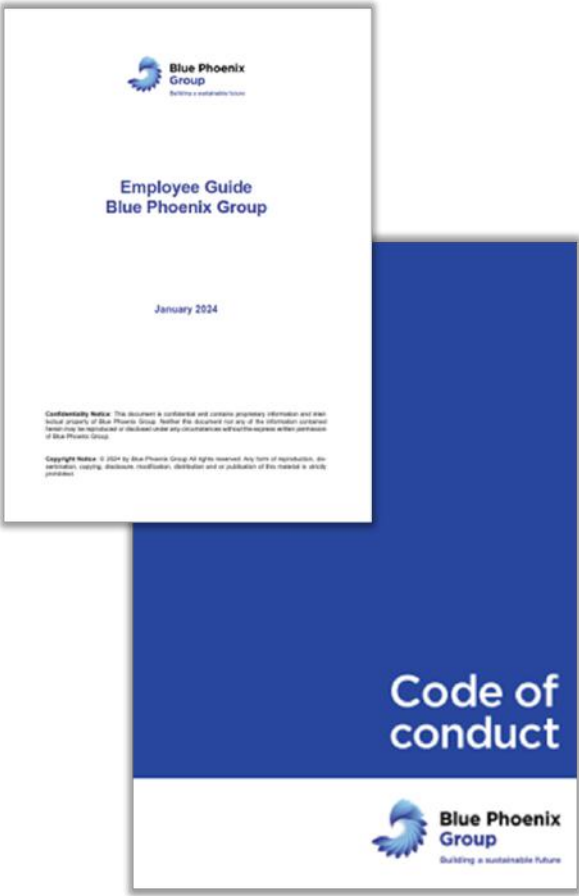
In order to provide new employees with guidance on these important regulations, we have rolled out a unified Global COC in 2020. It is mandatory for all new joiners to receive a copy of the CoC and to sign off for receipt and understanding before joining the company.

MINI HANDBOOK - EMPLOYEE GUIDE

Although local employee manuals have existed for a longer period within the group, in 2024 we issued a group Mini Handbook containing the basic rights and duties of every employee regardless of the country where they work. The Mini Handbook outlines a practical and simple employee information guideline and standard with regards to maternity/paternity leave, working hours and performance review. It also provides an umbrella for ensuring the basic principles of diversity and equality on the work floor and respect between employees in the group.

PROCESS AND CHANNELS FOR EMPLOYEES

Shared Service Portal (SSP intranet) – Group policies & manuals



IMPACTS, RISKS AND OPPORTUNITIES

S2 Own workforce

Material impacts, risk, opportunity		Description
Working conditions - secure employment		
Impact materiality	Highly positive	BPG offers long-term employment contract as far as we can, resulting in highly positive impacts
Financial materiality	Low opportunity	A healthy and safe working environment results in employee trust and high retention. The financial materiality impact is not highly visible because there is no direct link between financial performance and working environment
Equal treatment and opportunities for all - gender equality and equal pay for work of equal value		
Impact materiality	Highly positive	Implementing the code of conduct in which equality is offered to all employees regardless of gender and ethics lead to positive impacts recognized by our stakeholders
Financial materiality	Low opportunity	A healthy and equal working environment results in employee trust. The financial materiality impact is not visible, but we can maintain a good workforce for BPG
Equal treatment and opportunities for all - diversity		
Impact materiality	Somewhat positive	Our stakeholders value diversity in how we are treated and offered opportunities at work. BPG will explore opportunities to recruit more local and young people as well as diversify our gender employment.
Financial materiality	Low opportunity	The financial materiality impact of diversity is not highly visible, but we have the opportunity to maintain a stable work environment, support business growth in the long term

Own Workforce

HEALTH AND SAFETY

In the ever-evolving landscape of workplace Health and Safety, one principle remains constant at BPG: empowering employees is key to fostering a culture of safety and wellbeing. From hazard identification to emergency response, the active involvement of every team member plays a crucial role in maintaining a safe and healthy work environment.

Regarding accidents, we had **zero severe accidents** in the whole group. Most of the accidents reported were minor and had low impacts to employee wellbeing and our performance. The lost working time caused by injuries was also minor with three regions recording no days lost.



Leading by Example

Leadership sets the tone for workplace culture. Executives and managers must lead by example, demonstrating a commitment to Health and Safety in both words and actions. When leaders prioritize safety in decision-making processes and actively participate in safety initiatives, they inspire confidence and reinforce the importance of health and well-being throughout the organization.

TRAINING AND AWARENESS

Empowerment begins with education. Providing comprehensive training programs equips employees with the knowledge and skills necessary to identify potential hazards and mitigate risks effectively. Whether it's conducting regular safety drills, offering specialized training in ergonomics or chemical handling, investing in education empowers individuals to make informed decisions that prioritize their well-being.

Managing health and safety on site

Raising awareness is one of the key aspects when it comes to Health and Safety. The ethos at BPG is that "Everyone deserves to go home in the same condition that they came to work in". Firstly, it is vital that all employees, contractors and visitors are wearing appropriate PPE at all times when working or visiting on site. Alongside the formal group policies, at the core of our day-to-day operations we believe in the importance of regular and practical training on-site with our teams. In addition to notice boards, emails and an internal magazine, in our business it is proven that face-to-face communications is the most effective way to engage and train colleagues. A crucial part of this training is the first onboarding week in which new starters receive comprehensive safety instructions and PPE.

To maintain awareness and vigilance on Health and Safety topics, frequent training is required. Alongside site training, office staff are also required to complete periodical safety inductions for visiting sites and all employees are encouraged to become first-aid certified. It is mandatory for all site managers to perform toolbox trainings on relevant subjects related to Health & Safety to their teams. These trainings are also internally communicated to managers groupwide.

If a major incident has occurred, the site manager must immediately report it to the Management Board, and the incident details and preventative measures are communicated to all sites globally, so the awareness is spread through local toolbox training. The main goal is to learn from each other and prevent any incidents from reoccurring throughout the group.



MEASUREMENTS AND TARGETS

As group we have decided to register our Health and Safety related incidents in one central H&S software. All countries register their safety concerns and incidents within the H&S Software. In the incident section there are several sub forms in which details are kept on the type of incidents (e.g., environmental, damage, injury).

For every incident, a root cause analysis is performed to determine preventative and corrective actions. Closure of incidents is monitored to ensure effectiveness of the measures taken. Every month H&S figures are reported and discussed in the country MRM's and a summary of the H&S report is also shared with our shareholders.

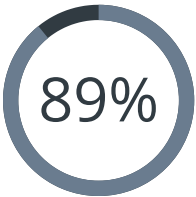


Own Workforce

EMPLOYEE ENGAGEMENT SURVEY

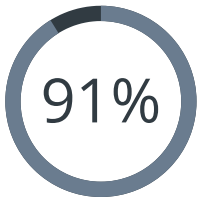
In order to measure our employee satisfaction and wellbeing, we perform an annual group employee survey. 350 employees responded to the 2023 survey. This equates to 63% of the total employees across the group. The country with the most respondents was the UK with 56% of respondents being UK based. The second highest group of respondents was Germany with 23% being based in Germany. The majority of respondents (68%) were in non-management positions.

Each region ran workshops with representatives from each business to discuss the outcomes of the survey and provide more detailed feedback and ideas on how to implement new initiatives to improve the working culture at BPG.



Employees agreed with the statement:

"I feel safe at work"



Employees agreed with the statement:

"I have a clear understanding of my role and responsibilities"



Employees would recommend BPG to a friend



EQUALITY, DIVERISTY AND INCLUSION

Diversity in our company refers to the variety of differences among our people. These differences can include race, ethnicity, gender, sexual orientation, age, physical abilities, religious beliefs, socioeconomic status, and more. Embracing diversity in the workplace has numerous benefits:

- **Innovation and Creativity:** A diverse workforce brings together individuals with different perspectives, experiences, and backgrounds, leading to more innovative ideas and creative solutions to problems.
- **Better Decision Making:** When teams are composed of people with diverse backgrounds and viewpoints, they can offer a wider range of perspectives, leading to more well-rounded and informed decision-making processes.
- **Increased Employee Engagement:** Employees are more likely to feel valued and included when they see diversity represented in the workplace. This can lead to higher levels of engagement, productivity, and satisfaction.
- **Enhanced Reputation:** Companies that prioritize diversity and inclusion often have a better reputation both internally and externally. They are seen as more socially responsible and attractive places to work, which can help with recruitment and retention efforts.
- **Improved Customer Relations:** A diverse workforce can better understand and serve a diverse customer base. Employees who reflect the diversity of customers are often better equipped to understand their needs and preferences.
- **Legal Compliance:** In many countries, there are laws and regulations that require companies to promote diversity and prevent discrimination in the workplace. Prioritizing diversity helps companies ensure legal compliance and avoid costly lawsuits.

To foster diversity in our company, we:

- promote inclusive policies and practices
- actively recruit from diverse talent pools
- promote diversity at all levels of the organization, and
- foster a culture of respect and acceptance on all our sites that we operate.

WELLBEING COMMITTEE

The committee represents the workforce across Blue Phoenix Group and is tasked with actioning wellbeing improvements across the Group.

Since the first session in March, the committee had discussed many topics surrounding wellbeing, including the follow topics and actions:

- Housing keeping audit of all facilities across the group
- Review of PPE standards
- Health & Wellbeing notice boards on site
- Mental health first aiders at all sites
- Plans to add mental health to the training matrix
- Complimentary fruit available at all sites
- Financial health workshop – payroll saving scheme



Interview on Social Compliance



THE IMPORTANCE OF LEGAL COMPLIANCE AND HR

Sarina Walidin,
Group Legal Compliance Manager

Legal compliance is fundamental to our business enabling us to run a sustainable business, and ensuring its continuity we need to be compliant with laws and regulations in particular International and European guidelines. As we operate in a very niche sector, we also need to comply with diverse, complex laws and follow international financial and governmental institutions.

Steps forward in HR and compliance this year:

Rolling out global manuals was a massive project. In recent years, the business has grown rapidly, leading to more entities joining our group. This growth has resulted in various rules and regulations across regions. In addition to internal motivations, like all businesses we must demonstrate compliance towards shareholders, banks, suppliers, and customers. This was a big challenge for us to align all countries to adhere to the rules in a structured way so that we can communicate transparently through a single global handbook. Every employee who joins our company will receive these types of documents.

For BPG, compliance is not just a tick in the box. The majority of our workforce sits within the operational teams which is made up of a very talented team of diverse educational backgrounds and nationalities. The policies set out are designed to ensure all employees are protected and informed of all rights and guidelines for a safe workplace. This is a really important part of our onboarding and training strategy, and all policies are explained through toolbox trainings for all operational teams globally.

These global policies form the fundamentals of our culture of safety and well-being. We speak about these manuals in our management team meetings with members who are responsible for ensuring compliance in their regions and we see that the commitment of our site managers to properly train their teams on site has fostered a core culture of respect, and this is something we are incredible proud of.

What's on the horizon?

We're taking the right first steps to solidify the fundamentals, to support our future growth. In the upcoming years, we need to keep the material alive and continue to actively train employees on HR and compliance topics. We will continue to look at how best to connect with employees and importantly, keep the manuals up to date.

Legislation keeps changing so we need to keep on top of it. It's a continuous process. Our wellbeing committee will remain crucial to further provide feedback on social requirements within the company to further increase the employee wellbeing. Our Wellbeing committee is involved in the development of the global annual employee survey so that we can go beyond ticking the box of compliance and evaluate whether the efforts taken are translating into improving the organisation's culture and working practices.

An improved performance appraisal structure will be implemented globally during 2024 to take our next steps in employee engagement and at the same time measure our continuous efforts on social compliance.

Workers in the value chain



OVERVIEW

We have business partnership with suppliers, the EfW partners, in the regions where we operate. We also have contracts with logistics and transport companies, that deliver IBA from EfW facilities to our operational sites or from our operations to customers.

Our suppliers and contractors have important roles in our sustainability solutions. We understand that we may be linked to negative impacts through the partnership with our suppliers and contractors. Therefore, we strive to tackle the impacts together with our stakeholders with a particular focus on a healthy and pleasant environment for their workers.

The workers of our stakeholders in our value chain vary. They can be employees working at the EfW facilities, transport contractors, or workers involved in the construction site and metal product processing. This might also include communities near our sites, including young and local groups.

RELATED POLICIES

The most important policy we want to engage with our stakeholders is the Human Rights Policy (see page 40 on how we implement it within our company) into our supplier onboarding and auditing process, aiming to build a sustainable and resilient supply base.

In addition to our Human Rights Policy, we supplement the management of potential risks related to:

- Health and Safety
- Quality Management
- Energy Management
- Anti-bribery and corruption
- Value chain management

In 2023, these policies and communication content have been established. However, we lacked a communication channel to engage with our stakeholders and assess their performance for different policies.

LOOKING AHEAD

In 2024, we will roll out these policies via the Digital Platform for Sustainability and measure the progress of stakeholder engagement. We aim to assist our stakeholders as far as possible to support a more sustainable value chain management of waste in the long term.



Affected Communities



OVERVIEW

Impact awareness and cross-stakeholder collaboration are essential to ensuring supportive and resilient relationships with communities impacted by our operations. BPG strives to ensure that the IBA processing is running sustainably. Therefore, we are committed to building resilient relationships with communities that might be impacted by our operations, and we seek support from all stakeholders to achieve this goal.

Potentially affected communities may have their rights, interests, and opinions of our business operations. Thus, we seek engagement with communities to understand their concerns, and prevent, and mitigate any potential adverse impacts.

RELATED POLICIES

Impacts and risks to affected communities

Affected communities are those directly within the vicinity of our operations. Our operations may also indirectly impact other stakeholders, for example, communities living along access roads to our sites. To manage impacts and potential risks, we plan to develop policies, procedures, and metrics to tackle any potential risks and grasp opportunities related to these impacts.

Policies and implementation

Our Human Rights Policy (see page 40) and Employee and Supplier Code of Conduct (see pages 45-46) form the basis of our commitment to respect the rights of affected communities. Currently, we operate in countries with no risks for Indigenous and Tribal People. Therefore, we focus further on Social Due Diligence of our operations.

COMMUNITY ENGAGEMENT AND CONSULTATION

We are committed to respectfully engaging with communities in the areas where we plan and operate our IBA processing. We are respectful of environmental compliance and cultural values, and we aim to make a positive contribution locally. We recognise the importance of community acceptance and engagement for the impact remediation as well as the success of our operations.

We aim to ensure the engagement to be initiated as early as possible in the screening of feasible operations. Engaging local stakeholders in the new development offers opportunities for us to identify and promote an operational site that is well-aligned with local identity and land use conditions. Key stakeholders and interest groups will need to be engaged in various ways, depending on their level of interest and influence in the project.

We are also aware that no community is homogeneous, engagement must take multiple aspects and adapt to the local context. Means of engagement with community stakeholders and local stakeholders can include discussion and concern tackling in both individual and group settings. These could take the form of public consultations, meetings with local representatives, webinars, local public events, in-person meetings with concerned stakeholders.

In 2024, we will implement related policies to ensure impacts are remedies and avoidable while maximizing opportunities for both the local communities and our business.



Governance



BPG Governance Sustainability

GOVERNANCE



Governance Reporting:

Business conduct

Contribution to the SDGs



GOVERNANCE POLICIES

The Global Policies established in 2023 also include important governance policies. In addition to 12 policies mostly relevant to our employees, the content also covers topics namely:

Anti-Bribery Policy

Whistle-blowing Policy

We aim to ensure all fundamental rights and codes of conduct are implemented not only in our own operations, but also with our stakeholders upstream and downstream of the value chain.



Business Conduct

CORPORATE CULTURE AND BUSINESS CONDUCT POLICIES

At BPG, we strive to maintain a healthy corporate culture with a high level of integrity, guiding our employees on professional communication and behaviors as internal teams as well as in interactions and collaborations with external stakeholders. We believe that through a good business conduct policy, we have a strong business and keep growing organically with reputation and recognition.

The Global Policies established in 2023 and implemented at all business entities address important topics such as anti-bribery and anti-corruption, whistle-blowing, communication, data protection, and code of conduct. These policies are overseen by our Global Policy Committee, which has the overall responsibility for policy review and monitoring compliance.

To ensure employee awareness and policy implementation for all operational sites, the policy training are accomplished locally using Toolbox talks (+ signature lists), which are prepared by the Group Policy Committee so that each employee joins an initial generic training, and during the year one subject of the Global Policy manual will be highlighted through a toolbox talk every 2 weeks.

PERSPECTIVES

In the coming years, we will use the Digital Platform for Sustainability to measure whistleblower cases, good business conduct training within BPG and we will encourage our suppliers to implement the business conduct to ensure a healthy relationship and collaboration.

Externally, we will also implement Supply Chain Due Diligence policy and measurement for our suppliers to support an efficient and sustainable value chain management.

IMPACTS, RISKS AND OPPORTUNITIES

G1 Business conduct

Material impacts, risk, opportunity		Description
Corporate culture		
Impact materiality	Somewhat positive	Implementing a corporate culture is important for our employees but outcomes need to be measured and assessed in the coming period.
Financial materiality	Neutral	Corporate culture does not have a visible impact on our financial performance at this stage. An assessment will be needed.
Corruption and bribery - prevention and detection, reporting and training		
Impact materiality	Highly positive	Avoidance of corruption and bribery is extremely important for our business, therefore the implementation of the anti-corruption and anti-bribery is seen to have a positive impact
Financial materiality	High opportunity	Anti-corruption and anti-bribery are important for our reputation and business growth, which is why our stakeholders see it as a great opportunity for BPG
Protection of whistle-blowers		
Impact materiality	Highly positive	Protection of whistle-blowers is considered the most important business conduct for BPG as it shows that we strive to grow a sustainable and fair business and make it transparent for all
Financial materiality	Low opportunity	In the financial aspect, protection of whistle-blowers is beneficial for the workforce but does not have impact on financial performance
Protection of whistle-blowers		
Impact materiality	Somewhat positive	BPG sees relationship management with our suppliers as important, but impact outcomes and adjustment will be discussed in the coming period
Financial materiality	Neutral	Relationship management with our suppliers is not seen having financial impacts at this stage

Interview on Communications



A RESPONSIBILITY FOR TRUSTWORTHY COMMUNICATIONS

Amy de Jong-Townsend,
Marketing Specialist

“ We’ve been on an incredible journey so far regarding not only our sustainability reporting and communications, but also our engagement across the value chain with valuable stakeholders whom we partner with.

Overall, sustainability communications play a vital role in shaping BPG’s reputation, driving business value and fostering positive relationships with stakeholders. Sustainability communications provide a platform for engaging with stakeholders and soliciting their feedback and support. It creates a sense of shared responsibility and collaboration in addressing the sustainability challenges facing the EfW industry.

Our communications goals are:

1. To accurately report on our sustainability activities and performance
2. To engage with industry stakeholders and collectively drive the circular economy forward
3. To educate new markets and the wider public on the benefits of transforming IBA into valuable resources

As our group has grown rapidly in the past five years, with two major acquisitions in the UK and Germany, we have faced a big challenge with organising our data and aligning standard communication practices groupwide.

Over the last 2 years we have already made huge steps forward by investing in additional resources to better structure our internal processes. It was important for us to first create this stability and we are now in a strong position to start implementing the communication strategy we have been developing.

Our sustainability strategy and our global communications strategy go hand-in-hand. Whilst we have taken the first steps to critically evaluate the way we communicate as a business; this is long-term journey. We have defined several pillars to act as the foundation for achieving our goals

- Transparency
- Engagement
- Clear messaging and storytelling
- Consistency

Measurable impact

We are facing a really exciting time in our business and in the EfW sector at large. Not only are our business operations growing in existing markets across Europe, but we are also seeing an increase in long-term projects in new markets where the EfW sector is in its infancy. This provides a massive opportunity for us to drive forward responsible frameworks for the applications of our products, and with this comes the need for credible and transparent communications.





Data Appendix

Reporting Approach

A MORE COMPREHENSIVE APPROACH TO COLLECTING DATA

Restatements of information

Restatements of information. The sustainability report 2023 is aligned with the guidelines of the European Corporate Sustainability Reporting Directive and the EU Taxonomy for environmentally sustainable activities. The sustainability report 2022 was in accordance with the GRI standards.

External assurance

The current general practice to review and assess the quality and verification of information contained in this report is for the Group Sustainability Manager to consolidate the data. This is followed by a review and approval by the Management Board. A third-party review is planned for the Sustainability Report 2024.

Organisational activities

The core activities of BPG processing for the recovery of aggregates, metals, and minerals from incinerator bottom ash (IBA). We serve the Energy-from-Waste (EfW) sector by diverting waste from landfills. Our processing sites are located close to EfW facilities.

Organisational boundary

The data contained in this report belong to all the entities of BPG that were both fully and partly operational during 2023 and over which BPG has 100% operational control.

CONTENTS OF THIS REPORT

This report has six sections.

Section 1 is the Executive Summary where we share the summary of the reporting compliance, our sustainability performance and impacts, and roadmap.

Section 2 covers the business operations, financial performance, technology, governance, and strategies of our Group.

Section 3 is the sustainability general in which we share the double materiality assessment outcome, sustainability strategies, and ambition towards 2025.

Section 4 includes environmental sustainability where we discuss actual and potential impacts, risks, and opportunities for compliance with the CSRD environmental standards.

Section 5 includes social sustainability where we also discuss actual and potential impacts, risks, and opportunities regarding our workforces, workers along the value chain, and affected communities.

Section 6 covers governance sustainability where we share actual and potential impacts, risks, and opportunities of business conduct for our own operations and with stakeholders upstream and downstream of the value chain.

Section 7 is the Appendix where we present our data to assess our environmental and social status



Environmental Data

TOTAL ENERGY CONSUMPTION IN 2023

Business Entity	Electricity (kWh)	Biofuel (HVO) (litres)	Diesel (litres)	Energy from Waste Electricity (kWh)	Renewable electricity purchased from the grid (kWh)	Renewable electricity production (kWh) - solar	Natural Gas (m3)	Oil (litres)
BP -UK	2,210,686	879,970	75,196	715,734	476,232	131,160		
BP-EU	5,655,657		323,194				15,591	
BP-US	1,806,806		416,952					
BP-DE	2,031,664		648,698	15,891	1,218,998		7,845	58,256
QR-Metals NL	893,144		59,051					
QR-Metals UK	1,259,502		186,621				60,208	

WATER CONSUMPTION (m3) IN OPERATIONS IN 2023

Business Entity	Total water consumption	Rainwater collected	Water purchased from water utilities	Water treated and recycling on-site
BP -UK	73,134	6,840	66,294	
BP-EU	259,630		630	259,000
BP-DE	168,798			
QR-Metals NL	10,003	5,400	4,603	
QR-Metals UK	23,907	2,689	21,219	236,477

TOTAL CHEMICAL USE (TONNES) IN 2023

Business Entity	Chemicals used for solid removal and water purification
BP -EU	938.8
QR-Metals NL	24.8
QR-Metals UK	77.8



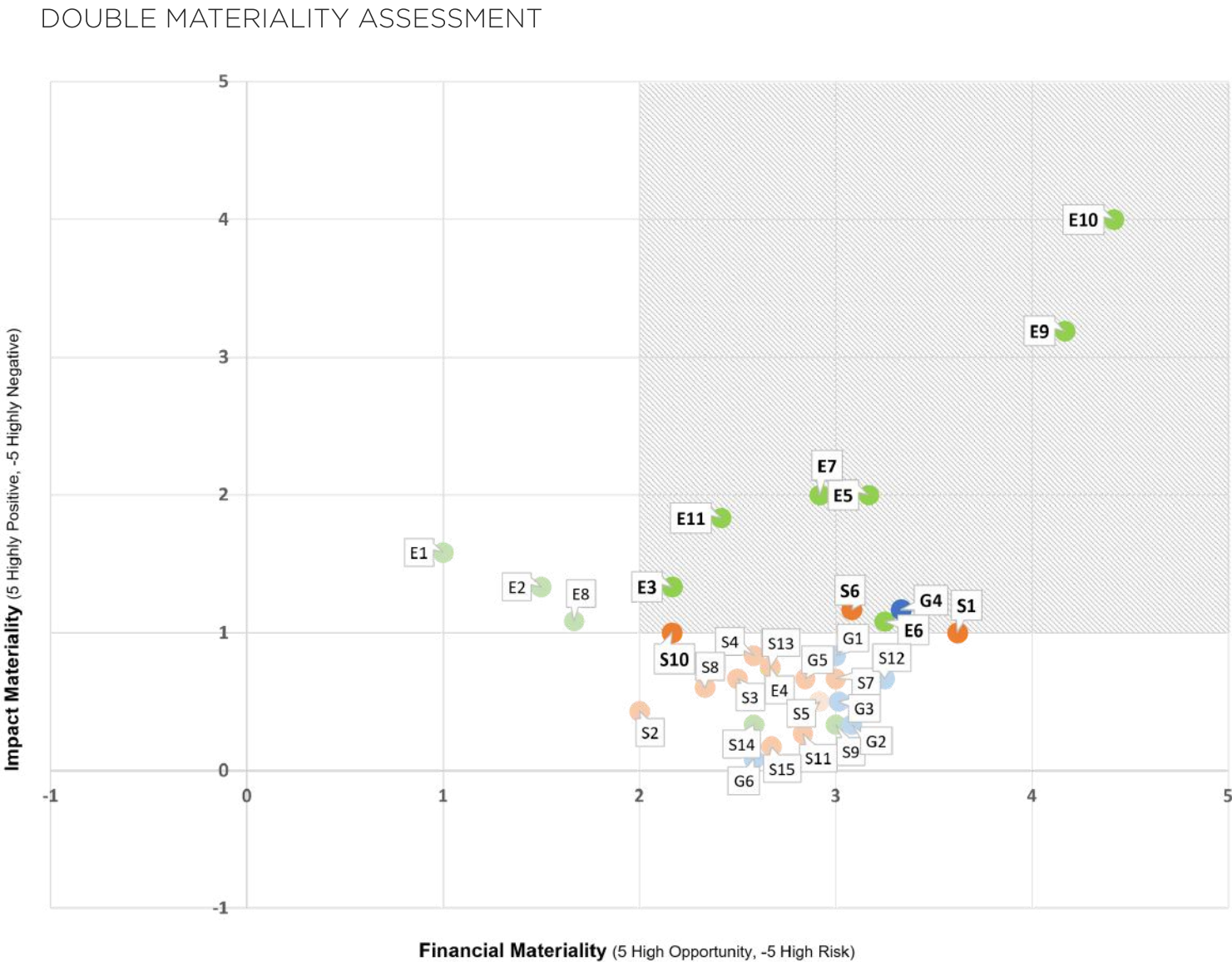
Social Data

HEALTH & SAFETY IN 2023

Business Entity	BP-UK	Europe BP-EU & QR Metals NL	BP-US	BP-AU	BP-DE	QR Metals UK
Accidents by severity						
Low	24	85	2	2	25	38
Medium	1	2			2	
High						
Lost working time caused by lost-time injuries						
Days	40				35	13



Main Impacts on Double Materiality Assessment



E1	Total emissions to the climate
E2	Mitigation measures to lower emissions to the climate
E3	Renewable and efficiency of energy and fuel use
E4	Current air pollution and environmental control
E5	Better management of pollution and substances of concern
E6	Water discharge and water leakage
E7	Water management and efficiency
E8	Direct impact drivers of biodiversity loss via water discharge or soil pollution
E9	Waste discharge and waste management
E10	Material recovery from waste
E11	Sustainable procurement
S1	Own workforce: Working conditions - secure employment
S2	Own workforce: Working conditions - adequate wages
S3	Own workforce: Working conditions - working time
S4	Own workforce: Working conditions - work-life balance
S5	Own workforce: Working conditions - health & safety
S6	Own workforce: Equal treatment and opportunities for all - gender equality and equal pay for work of equal value
S7	Own workforce: Equal treatment and opportunities for all - training and skills development
S8	Own workforce: Equal treatment and opportunities for all - employment and inclusion of persons with disabilities
S9	Own workforce: Equal treatment and opportunities for all - measures against violence and harassment in the workplace
S10	Own workforce: Equal treatment and opportunities for all - diversity
S11	Own workforce: Other work-related rights - privacy
S12	Workers in the value chain: Working conditions - health & safety
S13	Workers in the value chain: Equal treatment and opportunities for all - gender equality and equal pay for work of equal value
S14	Affected communities: Communities' economic, social, and cultural rights - environmental-related impacts
S15	Affected communities: Communities' civil and political rights - freedom of expression
G1	Corporate culture
G2	Corruption and bribery - prevention and detection, including training
G3	Corruption and bribery - incidents
G4	Protection of whistle-blowers
G5	Political engagement and lobbying activities
G6	Management of relationships with suppliers including payment practices



Disclaimers

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Building a sustainable future