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This report ("Report") covers the activities of the enfinium group from January 1, 2021 to December 31, 2021.

# **About this report**

This inaugural ESG report presents our strategy to make a positive impact on environmental, social and governance issues. It highlights our performance on these matters for the 2021 calendar year and illustrates our vision and goals for the future.

While this information will primarily be of interest to investors, government, regulators, employees and customers, we are publishing this information publicly in line with our commitment to full transparency and accountability across all our operations. For this reason, we have made every effort to ensure the information in this report is presented clearly and accessible to the widest possible readership.

For more information about enfinium and our ESG commitments, please visit enfinium.co.uk

This report has been prepared in alignment with the UN Sustainable Development Goals.

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"Environmental, social and governance (ESG) considerations are integrated into the policies and principles that govern our business and reflect our commitment to sustainable growth. We recognise the potential ESG-related risks, which we work to identify and manage just as we manage risk in all areas of our business."

Mike Maudsley, Chief Executive Office

## **Chairman's foreword**



Climate change is, more than ever, at the front of minds amongst policymakers, scientists and investors. Dealing with this challenge is reshaping the future of many industries, including waste-to-energy, through financing, regulation, technological innovation and investor activism. The U.K.'s hosting of the COP26 UN Climate Change Conference in November 2021, together with the mounting evidence in the natural world of the real impact of climate change, has served to push the environment to the top of all of our agendas.

enfinium's vision - making a difference today to deliver a cleaner tomorrow - guides the company's strategy, priorities, and the opportunities it creates for its people, partners and communities. Since joining the business as Chairman of the Board in July 2021, I have been fortunate to spend time with the enfinium team to hear first-hand what drives them. Time and time again, environmental, social and governance issues surface in conversations as an important reason for working at enfinium.

What enfinium does matters. enfinium is an integral part of the U.K.'s environmental infrastructure, diverting waste that cannot be reduced, reused or recycled from landfills and export, and providing residents and businesses with local, sustainable waste management solutions, converting residual waste into heat and power.

enfinium's role as a provider of 1.7 million MWh of stable, baseload, partially-renewable electricity, powering more than 500,000 homes and businesses across the U.K., is also of particular importance at a time when energy security concerns are paramount and supplies of natural gas are constrained as a result of the geopolitical situation in Europe.

This 'Making a Positive Impact' ESG report builds on the significant work carried out last year, including through the launch of enfinium's Green Financing Framework. enfinium was the first multi-site U.K. waste-to-energy operator to achieve externally certified green accreditation across the whole operating business based on the Loan Markets Association Green Loan Principles and the International Capital Markets Association Green Bond Principles. The accreditation reflects the fact that enfinium operates the most modern, energy efficient waste-to-energy fleet in the U.K., a testament to the hard work of employees, partners and investors.

I am proud to be joined as Chairman at enfinium by a team of talented managers and non-executive directors with significant waste management, power, finance and energy sector expertise that are all committed to enfinium's ESG strategy of making a positive impact on the environment and the local communities we serve, day in, day out.

"Time and time again, environmental, social and governance issues surface in conversations as an important reason for working at enfinium."

Sir Peter Gershon Chairman

# **Chief Executive's** introduction

I am delighted to be able to share with you enfinium's first annual 'Making a Positive Impact' ESG report and showcase the huge efforts that our One Team have made to accelerate our progress in developing and delivering our environmental, social and governance objectives. 2021 was a transformational year that saw the creation of enfinium as a different type of waste management company. An innovative organisation, designed to deliver sustainability for the future and with a critical role to play as part of the country's environmental infrastructure as the operator of the U.K.'s most energy efficient fleet of waste-to-energy facilities.

In this report, we lay out the steps we have taken as a business in the past 12 months to build the foundations of our ESG strategy and pursue our goals. We explore both the large and small initiatives as well as case studies that highlight how our teams and our partners make a positive impact each and every day. Our ESG strategy sets a clear environmental, social and governance framework. This enables longer and shorter term target setting to drive performance across all areas of the business.

I believe the benefits of a clear, bold and long-term ESG strategy are vital to the waste management sector and enfinium's future. Our ESG strategy is the cornerstone of how the business performs for the benefit of all our stakeholders - employees, customers, local communities, regulators, suppliers, and investors. The team and I share the vision that our ESG strategy is an integral part of our overall business strategy and will drive our success in the future. It is clear from our notable achievements this year that ESG already adds value and enhances our business performance.

Notable achievements during the year included the launch of our externally certified Green Financing Framework, all our facilities becoming ISO 14001 accredited for environmental management and ISO 45001 accredited for Health & Safety, the launch of our annual employee engagement and customer satisfaction surveys, an innovative mental health first aider programme, the completion of comprehensive biodiversity studies at our facilities and record recycling levels of our process residues. For such a young company, enfinium has a strong platform from which we aim to succeed and grow.

Building on the success of 2021, we have already started the next phase of our work, which will be to set out how our business can transform by supporting the delivery of the circular economy and becoming an integral part of the essential green infrastructure of the U.K. We look forward to sharing these ambitious plans during 2022.

Finally, I would like to record my thanks for the efforts of our ESG Working Groups, drawn from across the business, who have volunteered their own time to contribute towards our future. We have a unique, peopleled approach to ESG at enfinium and I am proud to be able to share some of their stories and passion with you in this report.

"I believe the benefits of a clear, bold and long-term ESG strategy are vital to enfinium's future."

Mike Maudsley Chief Executive Officer

## Our vision and mission

Everything we do is guided by two fundamental principles: our company vision 'making a difference today to deliver a cleaner tomorrow' and our mission 'to power green communities and the circular economy'.

For the U.K. to fulfil its sustainable development goals, our country needs to evolve the way it produces and disposes of goods. Currently, most industries that manufacture physical products use a linear system of extracting natural resources, manufacturing them into consumables, then disposing of them at the end of their useful life.

However, this 'take-make-waste' approach is at odds with the world's finite and diminishing supply of natural resources, resulting in supply chains that are environmentally unsustainable and prone to

dramatic price fluctuations when presented with shortages of indemand materials.

The solution to this challenge is to close the loop between waste and extraction to create a circular economy. Based on the simple principle that resources should be reused as much as possible, the circular economy embeds reusing, repairing and recycling into the heart of production and consumption activities. Implementing the circular economy would allow us to decrease the impact of production and consumption on the environment,

reduce dependence on virgin materials and recover the inherent value of waste.

As a leading waste-to-energy (WtE) operator in the U.K., this focus on the circular economy and the ESG benefits it presents sit at the core of our business. From the strategies that direct our operations to the day-today actions of all our teams, everything we do is guided by two fundamental principles: our company vision 'making a difference today to deliver a cleaner tomorrow' and our mission 'to power green communities and the circular economy'.



# enfinium's role in dealing with residual waste

#### What happens to our rubbish?

According to the latest U.K. statistics on waste published by the Government, the U.K. generates 220 million tonnes of total waste each year. Approximately two thirds of this is construction and demolition waste, with the remaining one third coming from households and commercial and industrial (C&I) waste.

27 million tonnes of this household and C&I waste cannot be reused or recycled and must either be sent to landfill, exported overseas or processed in WtE facilities.

Although the use of landfills in the U.K. has declined significantly since the 1990s due to investment in waste treatment facilities, around 11 million tonnes of residual waste is still sent to landfills each year. DEFRA's latest figures show that 6.6 million tonnes of this residual waste was biodegradable, meaning that it will decompose within landfills to produce methane, a potent greenhouse gas with a global warming potential more than 80 times more harmful than CO<sub>2</sub> when measured over a 20-year period.

The 2-3 million tonnes of waste that is exported each year is often processed in WtE facilities in other countries, incurring additional emissions and costs through shipping and transport activities. But some of this waste - especially non-recyclable plastics - also ends up, often illegally, in developing countries where it is burnt in open dumps or left to pollute waterways and oceans.

WtE operations provide the most sustainable solution to managing the residual waste that our communities and businesses are producing. Our facilities convert residual waste efficiently into partially renewable low-carbon power for the National Grid, playing a valuable part of the U.K.'s circular economy and waste management solutions. Our operations are an essential service and part of the U.K.'s critical environmental infrastructure. We provide local communities and wastecollecting partners with a reliable and sustainable local solution for their waste - which would otherwise be sent to landfill or exported overseas.

The U.K. generates 220 million

tonnes of total waste each year

## 11 million

tonnes of residual waste is still sent to landfills

## 2-3 million

tonnes of waste that is exported each year is often processed in WtE facilities in other countries  $0 \hspace{1cm}$ 

# enfinium's role in dealing with residual waste

#### What about recycling?

The average recycling rate for household waste is currently 46%, and the U.K. is determined to increase this with a plan to drive up rates through the Resources and Waste Strategy. At enfinium, we fully support this plan to boost recycling rates. In particular, plastic is the single greatest waste challenge we face. Plastics in the residual waste stream are bad for the environment and we support efforts to minimise the amount of plastics in our waste and increase recycling.

However, improving recycling rates will not on its own eliminate residual waste. Most experts believe that, even with significant policy intervention and support, recycling rates may only reach 55% by 2035, leaving well over 20 million tonnes of residual waste to be dealt with - even before allowing for population increases and economic growth. Dealing with that residual waste in a way that supports the circular economy and eliminates GHG emissions is our ambitious goal - and one we are investing in today.

Some argue that building more WtE facilities harms recycling rates by removing the incentive to recycle. In 2021, we carried out a detailed review of the sources of waste that is processed in our facilities and found that, both for municipal as well as commercial and industrial waste, the residual waste we receive comes from sources with some of the highest recycling rates in the country. The average recycling rate for waste we receive is 10-20% above the national average. We work with all our waste suppliers and incentivise them through our contract specifications and pricing mechanisms to only provide waste to our facilities which cannot be reused or recycled.

# What is the climate impact of dealing with waste?

Compared to the harmful effects of methane emissions from landfill, processing waste through WtE facilities is generally accepted as a better solution from a GHG emissions perspective.

The waste sector has achieved a reduction in GHG emissions of around 65% since the early 1990s by diverting waste to WtE facilities and away from landfill. On average, WtE facilities save around 200kg of CO<sub>2</sub> equivalent in emissions for each tonne of waste processed, compared to the alternative of landfill. Our state-of-the-art, modern facilities deliver at around 25% better than this, saving an average of over 250kg of CO<sub>2</sub> equivalent per tonne of waste.

While the investment in WtE facilities has reduced emissions by a significant amount, the waste management sector is still responsible for emitting around 18 million tonnes of CO<sub>a</sub>e per year (4% of the U.K.'s total emissions). 89% of these emissions come from methane from landfill sites. So the overriding priority in the coming years, in order to decarbonise waste fast, is to finish the job of stopping residual waste from being disposed in landfill by ensuring that there is sufficient capacity of modern, clean WtF facilities to deal with residual waste

We are proud of the part we play today in helping the U.K. reduce emissions on the path to Net Zero. But we also know that we must do more - and more quickly - to decarbonise waste management.

# Building the future: waste treatment in the circular economy

The circular economy is based on the principle that resources, especially materials, should be used and reused as much as possible. In contrast to the 'take-make-waste' linear model that our economy typically uses, the circular economy embeds reusing, repairing, and recycling existing materials and products for as long as possible into the heart of our production and consumption activities.

Implementing the circular economy would allow us to decrease the impact of production and consumption on the environment, reduce dependence on newly created/virgin materials and recover the inherent value of waste.

We have a clear and ambitious vision of the role that we can play within the circular economy of the future.

There will always be some material that cannot be reused or recycled indefinitely in its existing form which will need to be processed with minimum harm to the environment.

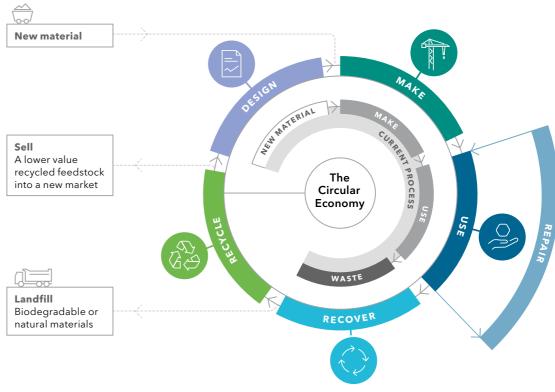
enfinium has a financial incentive to reduce plastics in the waste we process, a lower calorific value means the same boilers can process more waste, which is our primary source of revenue.

The waste sector has achieved around a

# 65% reduction in GHG emissions

since the early 1990s by diverting waste to WtE facilities and away from landfill

Figure 1. Transitioning to the circular economy



WtE facilities of the future can deliver three key things to help realise the circular economy:

- 1. Ensuring 100% of the residues from our process are recycled or reused. We already recycle 100% of the incinerator bottom ash (IBA) from our facilities and you can read more in this report about our innovative partnership with Blue Phoenix that has made this a reality. For Air Pollution Control residues (APCr), we have achieved a recycling rate of 62% and will work with our partners in the industry to increase this each year until we reach 100%. By recovering metals from our IBA, we return valuable resources to the production cycle and avoid the need for mining or extracting new material, which is both energy intensive and harmful to the environment.
- Capturing the CO<sub>2</sub> emissions and reusing or storing them through Carbon capture, utilisation and storage (CCUS) schemes. We are investing today in understanding how CCUS can work for our facilities and we believe this technology can and will be delivered in our sector. CCUS from waste treatment will play a vital role in helping our country meet its Net Zero target by 2050 or before.
- 3. Using the energy we create and the materials we receive to decarbonise other sectors and power the green economy. Today, we create partially renewable baseload electricity to power homes and businesses. We play a part in the decarbonising the industry by supplying heat from our process to the DS Smith paper mill at Kemsley in Kent.

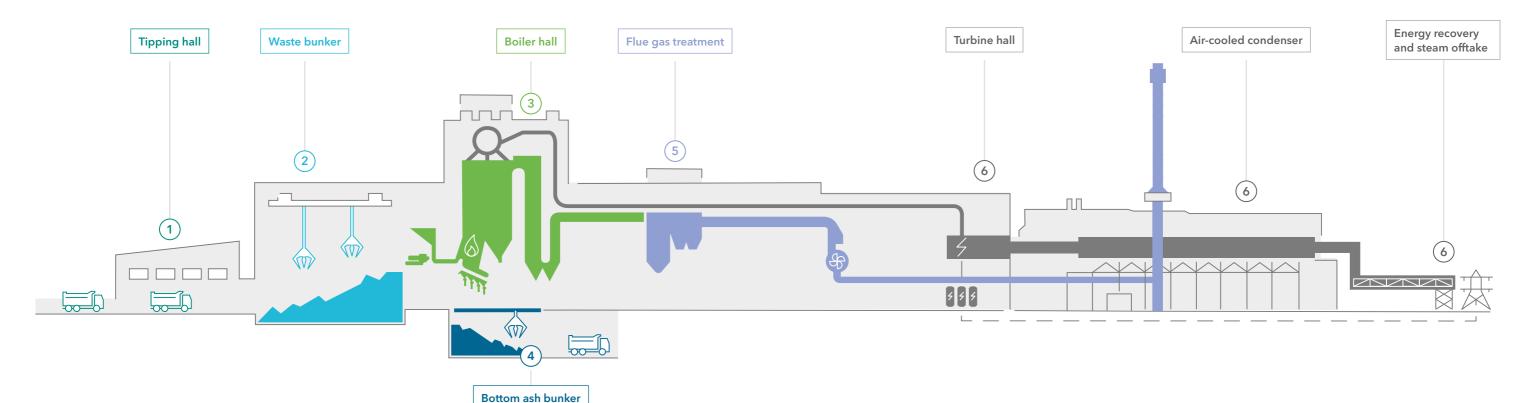
But we believe we can do much more. Whether through producing hydrogen or sustainable fuels at our facilities to decarbonise transport, using heat in industrial processes or district heating schemes to decarbonise the heating of buildings and storing energy for use at times of peak demand, our facilities can play a key role in the sustainable, energy-secure economy of the future.

If we can achieve these ambitions, we can truly close the loop of the circular economy and ensure zero waste from our process, zero and then netnegative emissions to achieve Net Zero sooner. We can also ensure the creation of flexible green energy hubs to help drive the clean economy of the future.

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# **Our process**







#### Waste, receiving and storage

Waste that cannot be recycled arrives, weighed and transported to the tipping hall. Material is unloaded from the waste vehicles directly into the fuel bunker.





#### **Bunker**

This renewable fuel can vary in moisture content and thermal value, so we continually manage and weigh waste in the bunker to ensure consistency. Overhead cranes then load waste into hoppers. Hydraulic rams feed the waste onto the reciprocating grate systems of boiler units.





#### **Combustion and boiler**

In these boilers, we process the waste that cannot be recycled at extremely high temperatures, typically up to 1,200 degrees centigrade, moving waste steadily through the reciprocating grate systems that ensure complete combustion and minimise residue.





# Residue handling and treatment

The process generates a bottom ash product, which can be recycled by removing ferrous metals such as iron and steel and non ferrous metals such as copper and aluminium. The processed ash can be used as construction aggregate.





#### Flue gas treatment

After heat is absorbed in the boiler to produce steam, the flue gas exits and powdered activated carbon is injected to capture mercury and trace organic compounds. Hydrated lime is combined to neutralise acids such as sulphur dioxide and hydrogen chloride. The gas then passes through a fabric filter where fly ash particulates and remaining pollutants are removed. Flue gas exits the stack after a series of emissions monitoring measurements are carried out to ensure compliance with environmental permit levels.





# **Energy recovery and steam offtake**

High pressure steam from the combustion is used to drive the steam turbines, producing heat and electricity for local homes and businesses. At our Kemsley facility, heat is exported to the neighbouring DS Smith paper mill to reduce the site's reliance on its own gas heat and power plant.

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# Where we operate

Our fleet of state-of-the-art WtE facilities are located across the U.K., serving communities throughout the country.

Number of homes and

△ Waste processed

## UNDER CONSTRUCTION

A Skelton Grange will be capable of processing up to 410,000 tonnes of residual (post-recycled) waste to generate 49MW (gross) of partially renewable, baseload electricity to power the needs of up to 100.000 U.K. homes and businesses.



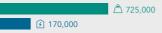
#### OPERATIONAL

B Ferrybridge 1 is capable of processing up to 725,000 tonnes of residual (post-recycled) waste to generate 85MW (gross) of partially renewable, baseload electricity to power the needs of up to 170,000 U.K. homes and businesses.



#### OPERATIONAL

B Ferrybridge 2 is capable of processing up to 725,000 tonnes of residual (post-recycled) waste to generate 85MW (gross) of partially renewable, baseload electricity to power the needs of up to 170,000 U.K. homes and businesses.



#### OPERATIONAL

C Parc Adfer is capable of processing up to 200,000 tonnes of residual (post-recycled) waste to generate 21MW (gross) of partially renewable, baseload electricity to power the needs of up to 45,000 homes and businesses in Wales.



#### UNDER CONSTRUCTION

(D) **Kelvin** will be capable of processing up to 395,000 tonnes of residual (post-recycled) waste to generate 44MW (gross) of partially renewable, baseload electricity to power the needs of up to 95,000 U.K. homes and businesses.



**E Kemsley** is capable of processing up to 657,000 tonnes of residual (postrecycled) waste to generate 74MW (gross) of partially renewable, baseload electricity to power the needs of up to 160,000 U.K. homes and businesses.



## **ESG** at enfinium

Our ESG Working Group comprises three teams: environmental, social and governance.



Each team is responsible for the specific activities and objectives of each workstream, while the wider **ESG Working Group convenes** monthly to track progress, determine priorities, and discuss new ideas or challenges. There is Executive Committee representation in the ESG Working Group to ensure that the work of the teams is aligned with, and can shape, the overall strategy of the business. Progress is reported to and monitored by our Group Board. Our ESG Governance structure is summarised in the diagram below.

The activities of the ESG Working Group are communicated across the organisation through our monthly engage newsletters and through our programme of roadshows and 'trade fairs' at our facilities and offices, where all our people have the opportunity to learn about and become involved in our ESG programme.

For our partners and communities, we will be communicating all our activities across a number of reports each year. These reports are listed on the right.

#### **ESG** reports (this report)

Our annual 'Making a Positive Impact' report to communicate progress in the delivery of the ESG Strategy, objectives, and key ESG performance measures.

#### Financial and climate reporting

We will communicate our emissions performance data alongside updates on our emissions reduction and decarbonisation plans on an annual basis. At the same time, we'll share our climate-related risk and impact assessments.

#### Allocation and impact reports

Under our Green Financing Framework, we will publish an annual allocation and impact report showing how the proceeds of our financing are being used to deliver our sustainability and ESG objectives, highlighting the positive impact our business has through the metrics identified in the Framework.

Finally, it is important for us to note the ESG workstreams are not the sole responsibility of our ESG Working Group. Every member of our team interacts with our ESG workstreams through our values. Our values uphold our robust governance systems, risk management and controls. They help us serve our customers transparently, enable employee investment and cultivate a safe, diverse and inclusive work environment.



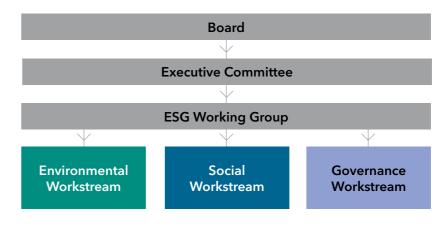


Figure 3. enfinium values













# **Our ESG strategy**

2021 was a landmark year for our business. As we created enfinium in June 2021 through the integration of Wheelabrator U.K. and Multifuel Energy under the stewardship of Igneo Infrastructure Partners (Igneo IP), we redesigned many of our processes and policies to form what we believe is the U.K.'s most progressive WtE operator. This gave us a unique opportunity to build our operations around our vision of 'making a difference today to deliver a cleaner tomorrow'. Everything about enfinium, from our vision and values to our organisation structure and performance measures, were carefully designed to support our ESG ambitions.

To drive forward our strategy, we created our ESG Working Group and adopted a unique approach in which we asked for volunteers across all levels of our operations with relevant experience, passion and commitment to take responsibility for owning the ESG activities. This 'people-led' approach means that our ESG activities are embedded across the organisation and owned by the people who deliver what we do each and every day.

The first action for the group was to determine the workstreams and ambitions for our ESG strategy and define ESG in a way that is meaningful for our business and our bold vision for the future.

The group took inspiration from recognised sustainability frameworks to ensure we incorporated bestpractice and industry-recognised standards, but then tailored these with input from our dedicated environmental, social and governance teams to define workstreams and ambitions suitable for our business. We also recognise the key role of the United Nations Sustainable Development Goals in framing the urgent call for action to deliver the 2030 Agenda for Sustainable Development adopted by all United Nations member states in 2015. Our priorities and ambitions are aligned as far as possible with supporting the achievement of these goals.

"We are a different type of waste company. One designed precisely to deliver sustainability in everything we do. Our ESG Strategy is not an 'add on' to our Business Strategy. It **is** our Business Strategy."

Mike Maudsley Chief Executive Officer



Ensure we protect and enhance biodiversity, ecological areas, and associated ecosystem services, such as food, air

**Environmental** 

protection

and water.





Climate change

Achieve lower greenhouse gas and CO<sub>2</sub> emissions to continue on the path to deliver net zero.

**Pollution** 

Continuous improvement in monitoring and remediation of air pollution as well as other on-site pollution and emissions.



13 CERNATE ACTION

Sustainable resources

Manage and conserve land and water resources effectively, encourage recycling and use resources sustainably wherever possible.







ENVIRONMENTAL

**Employee** engagement and wellbeing

Work to develop an actively engaged team, promoting employee wellbeing to create a positive working environment and culture, to attract and retain individuals.







Community

Work within the communities in which we operate, and the wider community, through outreach, engagement, charitable work, and communication to maintain our social licence to operate.



13 CLIMATE

**(**≜)

**Health and safety** 

Create a workplace that believes in zero harm to physical and mental health.



Diversity, equity and inclusion



5 CENDER EQUALITY

Promote diversity, equity and inclusion to attract and retain talented people and improve business results by enabling everyone to fulfil their potential.





**Business ethics** 

Adopt and maintain the highest standards of business ethics as a trusted partner to our customers, communities, suppliers and regulators.







Corporate governance

with best practice in corporate governance, reporting, independence and authorities, and



17 PARTNERSHIPS FOR THE GOALS

Ensure compliance approvals.

**Risk management** 

Effectively identify, assess and manage risks and opportunities, as an integral part of the management structure and culture.



Pay our taxes fairly and on-time, and remain transparent in the way we structure and operate our business as a responsible, longterm operator.

**Tax transparency** 





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# **Our ESG performance** measures

enfinium is building its reputation on being there for our customers, communities and employees.

The events of 2021 – the global Covid-19 pandemic and the increasingly visible effects of climate change – underscore why understanding, anticipating and effectively managing environmental, social and governance (ESG) matters are key to delivering on our mission to serve our clients, communities and customers. ESG is a business imperative and a key driver of longterm business success.

ESG topics across our operations. We assess and identify new or emerging ESG issues that could impact or be impacted by our business on an ongoing basis. This includes discussions with subject matter experts from across our business and analysis of feedback we receive through our regular engagement with stakeholders. We also monitor ESG trends and policy developments,

enfinium manages a broad range of

disclosure standards and industry best practices.

We have identified a range of performance measures across our environmental, social and governance workstreams that will allow us to assess, monitor and improve our ESG performance each year.

These performance measures are as follows:

- Scope 1, 2 and 3 CO<sub>2</sub> emissions
- Net carbon benefit of operations
- Net electrical efficiency
- R1 efficiency calculations
- IBA and APCr recycling
- Metals recovery rates from IBA
- Biodiversity scores and net gain
- Water usage and recycling / harvesting
- Emissions performance against permit limits / CCS scores

2021 was the first year of full operations for our current fleet and the data included in this report for the 2021 calendar year is our baseline against which we will track progress

- Health & Safety RIDDOR / LTIFR rates
- Health & Safety -Safety observations and inspections
- Apprenticeship programme recruitment
- Employee engagement survey scores
- Customer satisfaction survey scores
- Community fund investments
- Diversity statistics
- Gender pay reporting

- Supplier evaluation completion
  - Compliance training completion
  - Non-executive director representation
  - Board meeting attendance
  - Cyber security risk scores
  - Climate related risk assessments
  - Direct and indirect tax contributions

for future years. We intend to review our ESG performance measures on an annual basis to ensure they remain fit for purpose, and may add further metrics and data in future reports.



The environmental section of this report illustrates the impact of our operations on the planet, its natural resources and atmosphere.



#### **Environmental protection**



Ensure we protect biodiversity, ecological areas and associated air and water.

#### **Pollution**



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Effectively monitor and remediate air pollution (SOx, NOx and other air emissions) as well as other on-site pollution and emissions.

These four ambitions reinforce our commitment to be a safe, responsible and sustainable business in our Health, Safety and Environment (HSE) Policy. This policy, which has the guiding principle 'to cause no harm to people or the environment,' outlines our commitments from an environmental protection and sustainability perspective.

#### **Climate change**



Work towards lower greenhouse gas and emissions to help meet reduction targets and net zero

#### Sustainable resources



Manage land and water recycling and use resources sustainably wherever possible.

- We strive to protect the environment by minimising risk arising from all our activities
- We take action in mitigating climate change and to prevent pollution
- We remain committed to environmental stewardship and the protection of biodiversity
- We collaborate with our clients, customers, employees, and supply chain partners to continually advance sustainability

# **Key highlights**

Led by our ESG Working Group and environmental sub-group, we have identified four workstreams to monitor our environmental policies and performance: environmental protection, climate change, pollution and sustainable resources. As well as highlighting areas where we are successfully delivering on our ambition to create a circular economy, this section of the report also details opportunities, plans and actions for how we intend to improve in the future.

Across the four environmental workstreams, the key highlights of this section are:

Our four operational facilities produce 1.7 million MWh of sustainable baseload energy each year, powering c.500,000 homes in the U.K., by processing 2.1 million tonnes of local and regional residual waste that cannot currently be reused or recycled.

In partnerships with IBA and APCr recovery companies, we have recycled 408,420 tonnes per year of our IBA by-product, meaning that we have achieved 100% recycling of IBA. Meanwhile, we have recycled 46,604 tonnes/year of our APCr by-product, approximately 62%.

In 2021, our facilities delivered a net carbon benefit to the U.K. by avoiding a total of 571,747 tCO<sub>2</sub>e of emissions entering the biosphere-atmosphere (equivalent to a reduction of around 3% of the waste sector's total emissions).

All our facilities are ISO 14001 accredited for environmental management. We operate well within all of our environmental permit emissions limits and already comply with the new more stringent BREF limits for emissions across all our facilities.

Our operational facilities are among the most energy efficient nationally and overall. Our Ferrybridge 1 and 2 and Kemsley facilities rank within the top 5 of 45 operational WtE facilities in the U.K.



We have conducted biodiversity assessments across all our facilities and developed plans to use these assessments as baseline indicators and ensure we make year-on-year improvements.



"For us it is not just about CO<sub>21</sub> it is the wider impact on the surrounding environment and communities that is very important. Yes, we work very hard to reduce our CO<sub>2</sub> emissions, but we also work hard to close the loop in the circular economy, enhance biodiversity and make a positive impact."

Nuria Serrano Martin **HSE Manager** 

We have conducted a detailed review of our approach to scope 1,2 and 3 calculations based on real-time data from our CEMS system for scope 1 emissions to ensure these are as accurate as possible.



# The people behind our environmental strategy



Our ESG Working Groups have specific members who are tasked with leading on our ambitions. These team members have specialist interests and experience, and are dedicated to the task of protecting the environment and promoting sustainability within enfinium's operations. We asked two of the group's members to explain what drives them to be part of enfinium's ESG Working Group.

#### Nuria Serrano Martin HSE Manager

"I have been in the waste management industry for over fourteen years and am proud to be working in an organisation that is fully committed to their ESG agenda. As a group HSE Manager, my ambition is to ensure everyone within the team understands the positive impact we are having within the communities in which we operate, and to inspire individual volunteers to share ideas that can help us fulfil our mission of bringing about a cleaner tomorrow.

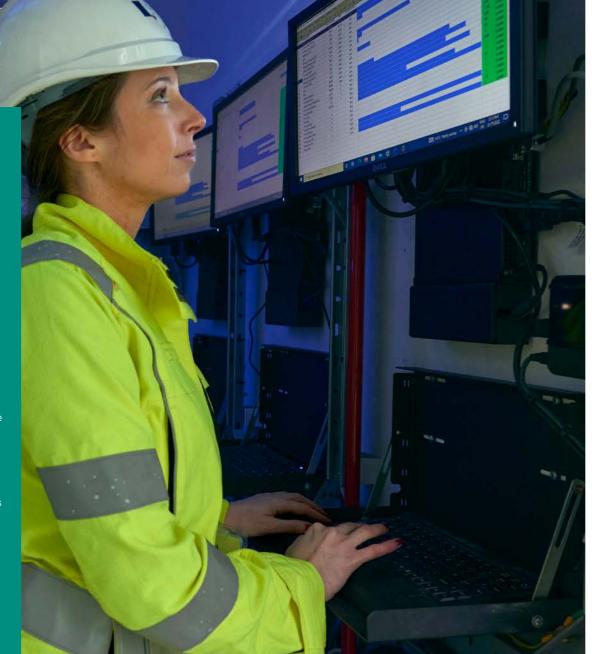
On the environmental side, we are passionate about reducing our carbon emissions and minimising our impact on climate change. Our facilities use the most advanced technology that adheres to extremely stringent environmental standards,

which converts our waste into renewable energy that is used to power nearby homes and communities. We are one of the few WtE facilities to export heat to decarbonise nearby industry, and we play an active role enhancing the ecosystems around our facilities."

## Jamie Williams Environmental Officer, Parc Adfer

"My education in environmental studies has given me an understanding of the challenges that climate change presents, and training in how to protect the environment. I am really keen that, as a society, we don't overuse the earth's resources and we look to alternative technologies to cut down on resource use and pollution.

Environmental protection really is a top priority in our organisation. When I have joined meetings with the Board, the first thing they talk about is safety and environmental matters. This dedication allows me to work every day to protect the environment and reduce the impact of climate change by making sure we reduce any waste the plants produce - and when waste is produced, we use it in the most sustainable way."



# **Environmental protection**







We see ourselves as stewards of the land and environment where our facilities are located.

This means we aim to protect biodiversity, ecology areas and associated ecosystem services, such as food, air and water, in our communities.

To create a baseline understanding of the biodiversity across our sites, we have conducted assessments across all our facilities in line with the recently published DEFRA biodiversity metric 3.0. These assessments confirmed the land in and around our facilities has valued ecosystem members and structures for us to protect.

Working from these baseline surveys, we have created ecology management plans and biodiversity enhancement plans with the intention of improving biodiversity across our facilities year on year.

The central aspects of these plans are to:

- Conduct annual habitat condition surveys, completed by independent and suitably qualified ecologists
- Conduct daily checks of habitat condition
- Conduct external noise monitoring surveys to determine any impacts on nearby (within 800m radius) sensitive ecological receptors
- Establish service agreements with our landscaping contractors to ensure landscaping design concepts and guidelines are adhered to

To ensure our business can continue to grow without harm to the environment, we are strong proponents of Biodiversity Net Gain (BNG), which is a recognised approach to development that leaves biodiversity in a better state than before. BNG provides a framework that supports our activities on a site to have a measurable positive impact on biodiversity and helps us deliver improvements through habitat creation or enhancement, after avoiding or mitigating harm.

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**24** Environmental Social Governance

CASE STUDY

# **Enhancing biodiversity** at enfinium Parc Adfer

In 2016, construction commenced at Parc Adfer and the facility achieved its commercial operation date (COD) in 2019. Throughout the construction and operations to date, we have enhanced the ecosystem and increased biodiversity of the site.

"Biodiversity has been enhanced compared to before the facility was constructed, due to the actions taken during construction, actions we continue today to protect the ecosystem." Jamie Williams Environmental Officer at Parc Adfer.

Before construction started, we conducted an ecological impact assessment and identified a range of ecosystem members and structures which could be adversely affected by our construction activity. This included an open mosaic habitat which provides a high biodiversity environment, including large numbers of species such as lizards and a range of invertebrates.

We took great care and responsibility throughout the build process to avoid, mitigate and minimise any harm to the ecosystem around the facility.

#### Prior to construction, we:

- Rehomed any common lizards that were within the development footprint
- Timed vegetation clearance to causes minimum damage to invertebrate populations
- Completed nesting bird checks
- Protected retained trees and hedgerows
- Designed a bat-friendly lighting scheme
- Surveyed for invasive species

# During the construction phase we:

- Appointed a 'Biodiversity Champion' and completed toolbox talks for all site staff
- Conducted daily monitoring of tree and hedgerow protection fencing and reptile exclusion fencing
- Created a 9300m<sup>2</sup> open mosaic habitat and created the remaining habitats in line with the site landscaping plan
- Constructed the amphibian breeding pond as part of the surface water drainage system
- Constructed two hibernacula adjacent to the amphibian breeding pond, to offer safe underground shelters to these animals during the winter
- Installed a reptile and amphibian friendly drainage system
- Installed ten bird and eight bat boxes

In addition to daily checks, annual surveys and service agreements with our landscaping contractors, our future targets and initiatives at Parc Adfer are to:

- Improve the biodiversity metric score to 48.84 units from the current score of 34.24 (42.64% increase)
- Conduct staff training to ensure biodiversity awareness
- Replant dead trees
- Clear undesirable and invasive species which could damage the present ecosystem
- Seed additional wildflower meadows in the South Easterly areas of the sites
- Continue to engage with partners over biodiversity collaboration projects

As part of our community fund at Parc Adfer, we welcomed the opportunity to financially contribute to a local project that was restoring a historic Victorian Garden in the area. The Enbarr Foundation was transforming the John Summers Steelworks and surrounding site into a sustainable wild meadow, gardens, wetlands and woodland. Key aspects included soaking away and restoring pathways, adding drinking water fountains, clearing the site of invasive species and installing equipment that supports biodiversity including beehives, rainwater butts, animal habitats and boxes and planting new plants and trees.



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# **Climate change**



The waste industry in the U.K. has achieved an overall reduction in greenhouse gas (GHG) emissions of over 65% since 1990, and we are proud to play an active role in achieving our country's Net Zero ambitions.

Today, the immediate priorities are to finish the job of eliminating harmful emissions from landfill, which still account for 89% of GHG emissions from waste treatment, and prevent exports of U.K. waste to other countries.

A key strategy to meet these aims is to ensure there is sufficient capacity in clean and efficient WtE facilities in the U.K. By providing this infrastructure, we are actively helping to lower the U.K.'s emissions profile. However, we recognise our operations contribute direct emissions of CO<sub>2</sub> to the biosphereatmosphere and our vision is to implement the technology and solutions that will allow us to avoid all emissions in future and deliver waste treatment that is fully integrated in a circular economy.

Today, we calculate our overall emissions impact by assessing our carbon 'balance sheet,' which sets out the direct and indirect emissions from our activities compared to the emissions avoided by diverting the residual waste from landfill, by the partially-renewable electricity we produce, from exporting the heat/ steam we generate where possible and by recovering usable resources from our incinerator bottom ash (IBA) and air pollution control residues (APCr). See figure 4.

We are committed to open and transparent reporting in relation to the emissions from our business activities and the figures used in this Report have been verified by Trident Utilities, a specialist compliance consultancy.

For 2021, these calculations show that our operations delivered an overall reduction of 571,747 tCO $_2$ e of emissions for the U.K. economy, a significant and growing contribution on the path to net zero.

To calculate our total we look at scope 1, 2 and 3 emissions. Scope 1 covers direct emissions and we capture data using industry best-practice Continuous Emissions Monitoring Systems (CEMS) to directly measure CO<sub>2</sub> and N<sub>2</sub>O and gas flow rate. These CEMS use a sample probe within the flue to continuously collect samples which are analysed in real-time to determine the quantity of CO<sub>2</sub> and N<sub>2</sub>O present.

Figure 4. Total enfinium emitted and avoided emissions in 2021 Total emissions: 1,037,839 **Scope 1:** 1,035,011 tCO<sub>2</sub>e **Scope 2:** 701 tCO<sub>2</sub>e Scope 3: 2,127 tCO<sub>2</sub> By-product Heat/Steam Electricity Landfill recovery export generation diversion 40,068 tCO<sub>2</sub>e 256,567 tCO<sub>3</sub>e 546,354 tCO<sub>2</sub>e 766,598 tCO<sub>2</sub>e Total avoided emissions: 1,609,587

Our operations delivered an overall reduction of

**571,747 tCO<sub>2</sub>e** of emissions for the U.K.

economy

The direct measurement approach allows the emissions profile of our operations to be more directly and accurately quantified.

The combustion of each tonne of residual waste in WtE facilities produces a 'gross' emission of around 1 tonne of CO<sub>2</sub> and so our gross process emissions in 2021 were 2,213,784 tCO<sub>2</sub>. However, because over half of the waste we processed was biogenic in origin, that 'biogenic fraction' of our gross emissions is excluded from our Scope 1 emissions because it forms part of the short-term biogenic carbon cycle as we explain further below.

Scope 2 covers indirect emissions from the generation of power we buy in. As a generator of low-carbon baseload electricity we only purchase small quantities of power and monitor this consumption with the aim to minimise as much as possible.

Scope 3 covers indirect emissions that occur in our value chain, both upstream and downstream of our activities. We currently include upstream emissions of purchased fuels and business travel. To enhance the way we measure scope 3 emissions, we will be refining the factors further, including purchased good and services, working with our supply chain to capture construction data from 2022, widening the scope of travel data, and improving our metering of water recycling and recovery.

Alongside scope 1, 2 and 3 emissions, we also measure the biogenic fraction of the residual waste processed through our operations. Biogenic CO<sub>2</sub> is the carbon dioxide released by the combustion or decomposition of organic material. Across our facilities, the biogenic fraction of the residual waste we processed for 2021 was approximately 53.0%. The International Panel on Climate Change (IPCC) considers the combustion of organic material to be CO<sub>2</sub>-neutral, because the carbon released from the organic materials already exists in the biosphereatmosphere system. This is different to the combustion of inorganic material, such as plastic, which releases additional carbon into the biosphere-atmosphere system, contributing to the acceleration of climate change.

Our aim is to maximise the biogenic fraction of the residual waste we process, as this will minimise the amount of plastic waste sent to our facilities. We do this by working with our partners to advocate for stringent recycling processes and our fuel teams working closely with our partners, through audits and spot checks to continuously reduce the amount of inorganic material coming into our facilities.

Where possible, we are also taking immediate actions to reduce our emissions. For example, 93.7% of the energy we purchase is from

renewable sources, we have installed EV charging stations at our Parc Adfer and Ferrybridge sites and we favour the use of local partners in our supply chain.

In addition to these immediate emissions-reducing actions, we are also embarking on a number of long-term strategic projects:

- Investing in the development of carbon capture, utilisation and storage (CCUS) technology and evaluating a number of technology options for implementation at our facilities.
- Looking to further leverage the heat produced in our plants to heat our adjacent buildings, this system of utilising residual heat from our operations is currently in place at our Parc Adfer site.
- Seeking further opportunities to partner with local industry to enable our combined heat and power (CHP) capabilities by exporting residual heat. Our Kemsley facility is currently CHP delivered and exports steam to the neighbouring DS Smith recycled paper mill.
- Exploring the opportunity to reactivate an incumbent rail system at our Ferrybridge site to import and transport waste via rail.

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In the next year, our objectives also include achieving ISO 50001 accreditation across all of our operating facilities. This internationally recognised standard for efficient energy management will enable us to:

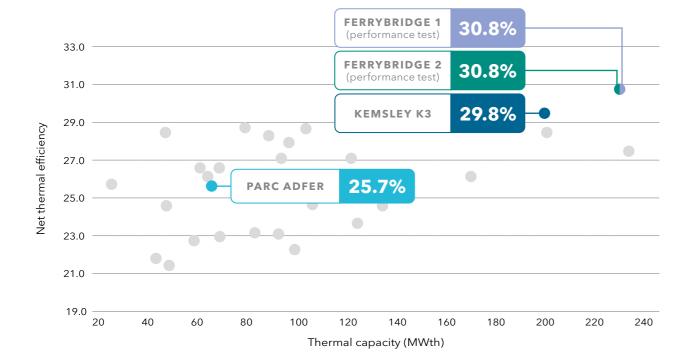
- Implement policies for more efficient energy use
- Fix targets and objectives to meet those policies
- Use data to better understand and make decisions about energy use
- Measure the results
- Review how well the policy works
- Continually improve energy management

Our operational facilities are currently among the most energy efficient nationally and our Ferrybridge 1 and 2 and Kemsley facilities rank within the top 5 of 45 operational WtE facilities in the U.K.<sup>1</sup> But we want to continue maximising the operational excellence and efficiency of our fleet on a continual basis. This means developing and implementing energy action plans for our facilities is a high priority. This may include implementing new energy-efficient technologies, reducing energy waste or improving current processes to cut energy costs. See figure 5.

"CCUS offers an exciting opportunity for the WtE sector to deliver net zero by achieving overall negative emissions from waste treatment. At enfinium, we are developing feasibility studies to explore which technologies might be viable at our facilities in the years ahead."

Mike Maudsley Chief Executive Officer

Figure 5. enfinium facilities' net electrical efficiency compared with other operating U.K. WtE facilities



1 Fichtner reference database of U.K. WtE facilities



Accelerating the transition to electric vehicles

To encourage our employees and partners to adopt electric vehicle (EV) technology and make the switch from internal combustion engine (ICE) vehicles, we have installed EV charging stations at our Parc Adfer and Ferrybridge 1 sites.

Ferrybridge 2 plan to install a further four EV charging points in the first quarter of 2022 to enable further investment in facility electric vans and provide employees with access to charging at work. We will continue to roll-out EV charging stations across all our sites and incorporate more electric vehicles throughout our operations

The Parc Adfer and Ferrybridge 1 electric charging stations use the electricity generated directly from our waste to energy plant rather than drawing power from the national grid.

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**ENVIRONMENTAL** GOVERNANCE SOCIAL

## **Pollution**







Ensuring the air and environment around our facilities is not adversely affected by our activities is critically important to our business and our team, who don't just work at our locations but typically live within the area as well.

For this reason, the effective monitoring and minimisation of air pollution (SOx, NOx and other air emissions) as well as other on-site pollution and emissions is a key ESG issue.

All our facilities are ISO 14001 accredited. This internationally agreed standard for environmental management systems (EMS) is used by organisations to manage their environmental responsibility in a systematic manner. Our accredited EMS ensures we satisfy the requirements for:

- Compliance with environmental permits, consents, licences and legislation
- Management, training and competence of personnel
- Fitness for purpose of monitoring methods
- Maintenance and calibration of monitoring equipment
- Quality assurance of monitoring
- Environmentally sound procurement of goods and services
- Minimisation of waste and compliant management and disposal of any wastes produced
- · Carefully managed design, operations and modification of the process
- Regular review for continuous improvement

#### enfinium Parc Adfer **BREEAM**

With the recent construction of our Parc Adfer facility, we had the opportunity to employ new techniques for the assessment of construction and building, in accordance with the Building Research Establishment Environmental Assessment Method (BREEAM). This method is used to assess, rate and certify the sustainability of building.

BREEAM includes several sustainability categories for the

- Management sustainable procurement, responsible construction practices and construction site impacts
- Energy energy monitoring (submetering), external lighting, technologies
- Health and wellbeing visual and thermal comfort, acoustic performance, safety and security
- Transport cyclist facilities and travel plan
- Water consumption monitoring, leak detection, water efficient equipment and harvesting

- Materials insulation, responsibly sourced materials and life cycle impacts
- Waste construction and operational waste management
- Land use and ecology mitigating ecological impact, enhancing site ecology and long-term impact on biodiversity
- Pollution NOx emissions, surface water run-off, noise attenuation and reduction of night-time light pollution

We are proud that our Parc Adfer facility has achieved a BREEAM excellent rating which puts our facility among the top 10% of newly constructed buildings in the U.K., and is considered a best-practice example in the construction industry.

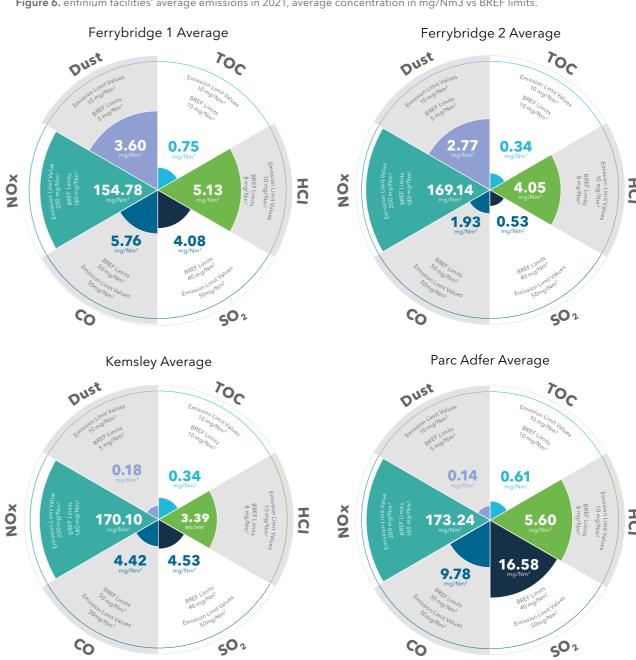
"I live close to our Parc Adfer facility so the environment that I work to protect every day is my environment, it is my local community."

Jamie Williams Environmental Officer at Parc Adfer Through the EMS and in accordance with our environmental permits, we continuously monitor our operations for emissions of dust, total organic carbon (TOC) hydrogen chloride (HCI), sulphur dioxide (SO<sub>2</sub>), carbon monoxide (CO) and nitrogen oxides (NOx). See figure 6.

We are proud that, in 2021, all of our facilities operated not only well below the safe emissions levels in our environmental permits but also below the more stringent BREF limits which are due to be implemented in the U.K. over the next 2 years.

We are continually looking for opportunities to reduce emissions for all of these monitored items.

Figure 6. enfinium facilities' average emissions in 2021, average concentration in mg/Nm3 vs BREF limits.



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## Sustainable resources



We see ourselves as a critical part of the circular economy. As such, effectively managing the land and water resources we are responsible for is of the utmost importance. As is encouraging recycling and the sustainable use of resources wherever possible.



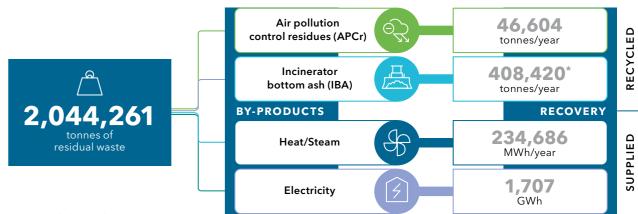
Within the WtE sector, a key performance indicator for sustainable resource management is an operator's R1 factor. This metric illustrates the level of energy recovered from waste passing through a facility. It is calculated as the ratio of energy produced over the energy contained in the waste, corrected as necessary for external inputs such as additional fuel or heat lost to residues.

Where the value of R1 is greater than 0.65 over the duration of a year, the process is classed as a recovery operation. This means the process is efficient and the benefits of the energy recovered are high enough to class the operation at a higher level in the waste hierarchy.' Below 0.65 and it is classed as a disposal operation. The latest R1 efficiency calculations for the enfinium plants show the following R1 values for 2021. See figure 7.

Figure 7. enfinium facilities' R1 values



Figure 8. enfinium process resource map for 2021



\*458,042 t including metals

As well as recovering energy from residual waste, a key workstream for us is to maximise the utility of the four by-products we create: electricity; heat and steam; incinerator bottom ash (IBA); and Air Pollution Control residues (APCr). See figure 8.

Our primary by-product is electricity. At present, our four operational facilities produce 1.7 million MWh of sustainable baseload energy, powering c. 500,000 homes in the U.K. This comes from a feedstock of 2 million tonnes of local and regional residual waste which would otherwise be sent to landfill or exported. As a critical part of the circular economy, our Ferrybridge 1 and 2 and Kemsley facilities have achieved the Renewable Energy Guarantees of Origin (REGO) certification and, at the time of writing, our Parc Adfer facility accreditation has been submitted and is being assessed. The REGO scheme certifies that an eligible proportion of each 1 MWh of the energy we produce is classified from a renewable source.

We are also finding ways to maximise the utility of our other by-products. The heat generated from our processes can be used for Combined Heat and Power (CHP) offtake. Our Kemsley facility provides heat offtake to the adjacent DS Smith paper mill, and we are looking to further enhance the CHP offtake through other partnerships with local heat networks. At Parc Adfer, we use the thermal energy generated by our processes to heat the administration building water through a plate heat exchanger.

Similarly, we do not see landfill as the final destination for the IBA we produce. The great majority of IBA consists of inert brick, rubble, glass, ceramics and stone and so can be further used as an alternative manufactured aggregate suitable for many applications, saving the need for fossil fuel based heating systems.

Recycled IBA is an extremely costeffective material when compared to primary aggregates and due to its comparably low density fewer ICE vehicle movements are required to transport materials to projects, further reducing the carbon footprint of the material.

We have partnerships with IBA recovery companies which have enabled us to recycle 100% of the IBA produced at our facilities during 2021 (458,042 tonnes including metals recovery). Our IBA partners further recover any metals contained in the IBA and then recycle our IBA into construction aggregate. This construction aggregate can then be used in buildings, roadways, and infrastructure across the U.K.

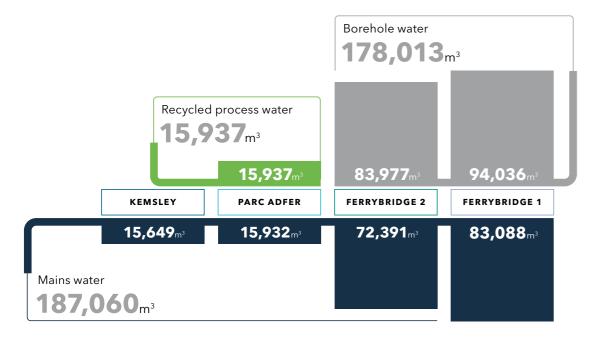
Our fourth by-product, Air Pollution Control residues (APCr), are produced from cleaning the gaseous emissions generated during the combustion of residual waste. It is typically a mixture of ash, carbon and lime, classified as hazardous waste. It is possible to recycle APCr through a recovery process but otherwise it needs to be disposed at a hazardous waste landfill. Our two Ferrybridge facilities have a recovery contract in place and have achieved 74.8% and 100% APCr recycling rates respectively. Kemsley and Parc Adfer are currently exploring opportunities to create recovery outlets for APCr and plans are in place at Parc Adfer for APCr to be used as a substitute for virgin aggregate used in creating the cell infrastructure at landfill sites.

In addition to the sustainable management of residual waste and the by-products we create, we also look at our environmental impact on the water resources connected to our facilities.

Globally, the availability of clean fresh water and drinking water is an increasingly important topic, partly as a result of the changing climate and partly due to the increasing overuse of groundwater and surface water. To ensure our operations use water responsibly, we continuously monitor where our water comes from and optimise the sustainability of our water supply policies. See figure 9.

- We reserve mains/towns water to support the critical processes requiring demineralised water, such as the boilers, cooling media in the steam flash tanks, fire safety systems and as domestic water
- Where possible we harvest rainwater to be used to supplement the critical processes
- Where possible we recycle in an indefinite loop the processed water for non-critical auxiliary processes such as the ashdischarge systems and process cooling
- At the Ferrybridge facilities we have a borehole license from the Environment Agency to extract water directly from the water table and aquifers. This gives us permission to use an allocated amount of water and helps to protect other water users and the water environment

Figure 9. enfinium facilities' water resource usage in 2021\*



<sup>\*</sup> enfinium are installing flow meters across all facilities to better quantify water usage. Enfinium recirculate and reuse around 95% of the water that we use at our facilities.



# enfinium Kemsley and DS Smith heat offtake partnership

DS Smith is a leading global provider of sustainable packaging solutions, paper products and recycling services. Like enfinium, they aim to reduce waste and pollution by building a circular economy. Since July 2020 our Kemsley facility has provided steam generation at the DS Smith Kemsley Mill, the largest U.K. mill for recycled paper. This has reduced the mill's reliance on fossil fuel. While enfinium and DS Smith work in different sectors, we share an ambition to reuse resources wherever possible, so enabling our waste thermal energy to power their operations has been welcomed

as a synergistic opportunity by both businesses.

Kemsley is also the only WtE combined heat and power facility in the U.K. to achieve its operational conditions precedent (OCP), meaning that the facility has satisfied the eligibility criteria required to generate electricity and receive support under a contracts for difference (CfD) with the U.K. government owned Low Carbon Contracts Company (LCCC), demonstrating enfinium Kemsley's strategic importance to the U.K. economy.

"DS Smith's partnership with the enfinium Kemsley combined heat and power facility is important in reducing our mill's reliance on natural gas, resulting in a significant reduction in CO2 emissions."

Ben Jennings DS Smith Plc, Mill Manager at Kemsley Paper Mill

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**ENVIRONMENTAL** GOVERNANCE

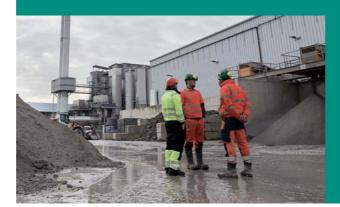


In 2018 enfinium and Blue Phoenix entered into a 15-year agreement which facilitated the construction of a state-of-the-art IBA recycling facility adjacent to our Ferrybridge facilities.

The construction of the adjacent IBA recycling plant delivers carbon savings estimated at 964,384 kgCO<sub>2</sub>/ yr by eliminating the need to transport the 220-250 ktpa of IBA to the previous facility in Sheffield. The agreement also incentivises the recovery of ferrous and non-ferrous metals from the IBA by incorporating a revenue sharing mechanism, as well as obligations to maximise the level of recycling of IBA.

Overall, 100% of the IBA from Ferrybridge plants is currently recycled with none being diverted to landfill.





in multiple projects including:

## 5,000 tonnes

for the upgrade of the central reservation, junction 33 to 34 on the M62 at Ferrybridge.

# 14,000 tonnes

for the construction of a new car auction facility, hall, office building, vehicle storage and customer parking facility in West Yorkshire.

### 8,000 tonnes

for a congestion reduction scheme on a busy intersection in Bradford.

These major improvements to the existing junction include widening the existing highway on all four approaches to the junction, signal upgrades and a P-loop. Cyclists and pedestrians will also benefit from the scheme with the addition of new cycle lanes, pedestrian islands, and more controlled crossings.

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Our social impact is something that's very important to us. That's why our ESG Working Group and the social team have identified four workstreams that will help us achieve our vision to become:

'The employer of choice locally and across industries; an engaged, welcoming, and safe place to work, where difference and success are valued.

align with our People and HR strategy

our vision, supported by the strategic

- a roadmap to how we will achieve

pillars of organisational capability,

operational excellence, and an

inclusive and welcoming culture.

This is what we will set out to do:

**Employee engagement** and wellbeing



Work to develop an actively engaged team, and promote employee wellbeing to create a positive working environment and culture, to attract and retain individuals.

Community



Work within the community where we operate and with the wider community, through outreach, engagement, charitable work and communication, to maintain our social licence to operate.

**Health and safety** 



To only have a positive impact on people's physical and mental health.

Diversity, equity



Promote diversity, equity and inclusion to attract and retain talented people and improve business results by enabling everyone to fulfil their potential.

# **Key highlights**

Here's a snapshot of all the work we've done so far in employee engagement and wellbeing, community, health and safety, diversity, equity and inclusion.



#### Roadshow to launch enfinium

In May, to mark the launch of our new business, values, mission and organisation structure, we held an enfinium roadshow. Across four days, the leadership team visited each of our facilities. And while treating everyone to breakfast, introduced the business strategy and growth plans for our business inviting everyone to offer their feedback. The roadshows have become so successful that we now operate quarterly roadshows at all our facilities on an ongoing basis to gather feedback, network and ensure every enfinium employee becomes an ambassador for our industry.

We have gathered volunteers from across all our facilities, to become trained as Mental Health First Aiders. We will continue to organise events around Mental Health Awareness Week - to further raise awareness and to educate about mental health conditions.



All our facilities are ISO 45001<sup>2</sup> accredited, and we are proud to have developed a proactive safety culture where safety observations are often reported and actioned before they escalate into incidents.



We launched our first annual customer satisfaction survey and were honoured to receive a positive reception from our customers, with a significant majority very satisfied with how we run our business and operate our facilities. We also now have a baseline for how we perform, so can look to improve on a yearon-year basis.



We developed and delivered our first employee engagement survey to help us define key themes to support employee engagement and satisfaction in 2022. These emerged as helping our employees connect more with our business strategy, developing further management skills across our facilities, and enhancing training and development opportunities.

We recognise this has been a transitional year for our team. We integrated two businesses into one - and rose to the challenge of uniting everyone under one new business name, and one set of purpose and values.





2 ISO 45001 is a ISO standard for management systems of occupational health and safety, with a goal to reduce occupational injuries and diseases, including promoting and protecting physical and mental health.

# The people behind our social strategy



Our ESG social team is made up of members who have a specialist interest or experience in the work we are doing to achieve our social objectives. And they are each dedicated to driving forward the culture at enfinium.

We asked two of the group's members to explain why they decided to become a part of it and how enfinium makes a positive impact on its people and the local

#### Jo Kwabla **Business Development Manager**

"I was having a conversation with a member of the senior leadership team, and she was asking my views on how we could improve our business. I mentioned that I thought more could be done from a social responsibility perspective, and she said 'okay - let's do it'. This really opened the door to all these ideas and opportunities I had been mulling in my mind. I am 100% passionate about ensuring enfinium has an active and supportive environment and directly from that first conversation we held an online Christmas quiz with all proceeds going to 'The Passage', a local homeless shelter.

positive, the sanitary management of waste so it doesn't go to landfill is not glamorous, but it does have a social utility. And that social utility also extends to social justice and ensuring we have a supportive, inclusive and

#### **Holly Trenholme HR Manager**

"On a day-to-day basis I support employees and managers, make sure roll out our people and HR strategy across the organisation. It was be involved in the ESG Working Group. What I didn't expect from the group was how excited I would become about my involvement. It is very different from my typical day-today role and it is great to collaborate organisation, learning how they approach different scenarios and their thought processes and ideas.

As the industry and company evolves, it. I always think you spend the you come in you want to feel engaged and motivated. And it is how organisations look to build a supportive workplace that makes people walk in everyday ready to

The very nature of our business is diverse team."

operations are running smoothly, and therefore a natural next step for me to with others from different areas of the

I feel we have a real opportunity to be leaders in what we do and how we do majority of your time at work so when make a positive impact."

# **Employee engagement** and wellbeing







Employee engagement, dialogue and involvement is crucial to us as a business. We work under the mantra that the more supported our team are, the more engaged they are. And if they're engaged, that helps us operate positively, safely and productively.

We recognise this has been a transitional year for our team. We integrated two businesses into one and rose to the challenge of uniting everyone under one new business name, and one set of purpose and values. That also meant standardising all of our health and wellbeing benefits and our compensation scheme. An important move so that everyone gets to share in the best of what we offer across the company.

For many of us, it has also meant that we have had to evolve the way we work, lead and manage our teams. All at a time when the U.K. and the world continued to battle the Covid-19 pandemic - and deal with all the uncertainty that surrounded it. While we worked hard to minimise the impact that all of these changes would have on our team, they came together with strength, resilience and grace to face them head on. Something that made us prouder than ever to be part of enfinium.

#### Our employee engagement survey

With the team coming together for the first time as enfinium, it seemed like a good opportunity to gather understanding and insight about what's important to them.

We developed and delivered our first employee engagement survey.

We asked our teams a series of questions about:

- Leadership including communication, motivating vision and role modelling
- Enablement including learning and development and systems and processes
- Alignment including safety, quality and improvement focus, recognition and expertise
- Development including career aspirations and opportunities
- Engagement including recommending a friend, retention and pride with work

We based our questions on the Culture Amp methodology which gives us a calibrated and benchmarked 'Good Score'. Something that we can use to check our progress and set targets against in the future.

The survey results have helped us define key themes to support employee engagement and satisfaction in 2022. These emerged as helping our employees connect more with our business strategy, developing further management skills across our facilities, and enhancing training and development opportunities.

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#### **Mental Health Awareness Week**

A key focus for our ESG Working Group this year, and into the future, is to ensure that mental health is part of an ongoing dialogue, in the same way we talk about physical health. That is why we are working to develop a system across the company that makes it easier for any of our team to get help and support whenever they need it.

In this first year, we gathered volunteers from across all our facilities, to become trained as Mental Health First Aiders. And we hold events around Mental Health Awareness Week to shine a light on this issue and educate people about mental health conditions. We have many more events planned for the future.

This year, we aligned our events with the Mental Health

Foundation's theme of nature. There is plenty of evidence to show that connecting with nature can improve emotional health, trigger feelings of calm in times of stress, and reduce feelings of social isolation - something that has been especially relevant during the Covid-19 pandemic. With protecting and supporting nature and the environment a priority for us as a business, it was beautifully synergistic to celebrate what nature can do for us and our wellbeing.

During the week, our healthcare provider, Vitality, put together a comprehensive programme of events to educate, inspire and inform our teams, including educational workshops, exercise sessions and Q&As with Vitality coaches.

"Mental Health Awareness Week was very important given that we are going through the Covid-19 pandemic. For those of us who could work from home we were doing so whilst home-schooling or caring for sick and elderly loved ones. For the critical workers in the facilities, they had to face the chance of taking the virus back home every day. We do not underestimate the impact of that, and we understand that not everyone has coped the same."

**Jo Kwabla**Business Development Manager



Mental Health Awareness Week photo competition





We encouraged our team to 'Get Walking and Start Talking' through our Mental Health Awareness Week photo competition. Everyone was invited to share photos of how they take care of their mental wellbeing by connecting with nature. And we gave them some ideas to get started:

- Take some time to recognise and notice the nature around you in your daily life. Spot the changing of the seasons, or the different type of birds you see when you're walking to the shops or having lunch. Being present has been shown to be associated with a positive mental state.
- Step outside and get moving. Not everyone enjoys running, but walking is a great form of exercise which releases hormones that make you feel good. Find an activity that you enjoy and suits your mobility and fitness.
- Reach out to your colleagues, friends, and family. Share what is on your mind, or just have a chat. Positive mental health can begin with just a conversation.

"With our facilities and teams located across the U.K., we had great pictures of people on mountains, in the countryside and on beaches. It was powerful because so many people entered, and we saw a snippet of joy in people's personal lives which we wouldn't usually see."

Holly Trenholme HR Manager

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44 SOCIAL GOVERNANCE

# **Community**







Having the support and trust of the local community is very important to us. So we make a big effort to engage with the communities around our facilities and work hard to get them to understand and support what we do.

"Excellent regular communication, with daily, weekly, and monthly updates by email. This is further enhanced by weekly and monthly video meetings. Excellent team of people and great to work with."

Customer feedback from Veolia, Commercial Manager

#### **Community Liaison Committees**

When joining a new community, we invite local people to join one of our Community Liaison Committees (CLCs). Something we did last year as we began construction at our new facilities at Skelton Grange in Leeds, and Kelvin in Sandwell.

The CLCs provide a transparent link between us, our communities and local stakeholders - and this is how they work:

- The CLC is set up so that any issues about the operation of the construction site and its effect on the environment, or local people living or working nearby, can be discussed and addressed with us and our contractors.
- The committee will ideally meet twice a year (or more often if necessary). Any actions identified will be agreed, added to the minutes and given a timescale for investigation and resolution. The outcome of investigations will be reported back at the next meeting or straight away to members if necessary.
- The CLC will continue throughout the construction and operation of the facility. It will end when the facility is decommissioned - or if the chairperson and members feel it's no longer useful.

#### **Community Funds**

One of the key ways we engage with our neighbours, is through our Community Funds, operating at a facility, project and corporate level. In 2021, our Community Funds provided £137,000 - money ready to be accessed by local community organisations, charities and projects.

The Community Funds are there to:

- Co-fund local environmental schemes which promote public access to, and use of, open space for health and wellbeing
- Support the development costs of new community organisations
- Co-fund new community activities to support vulnerable groups
- Support the community with loss of income through Covid-19
- Support volunteering activities which will aid community recovery
- Co-fund minor building works and equipment purchase for the safe reopening of community buildings and services

The fund is accessed through a simple application process and is open to not-for-profit groups, community, voluntary or social enterprises (e.g. co-operatives/development trusts), and local charities based within a defined partnership area.

Figure 10. enfinium faciltiies' overall customer satisfaction ranking for 2021. Data taken from 28 customer responses



#### **Customer survey**

Our customers are as much a part of our community, as we are a part of theirs. If we want to continually improve our services, we need to understand their experience of working with us. So this year, we launched our first annual customer satisfaction survey. See figure 10.

We asked our customers drawn from waste fuel suppliers across the U.K. to evaluate our work in terms of levels of satisfaction - from an operations, administration and accounting perspective. Then we collected insights about what we do well or could improve on. We also took the opportunity to ask our customers if their businesses have any specific environmental impact goals or metrics, which complement the Supplier Selection Criteria workstream featured in the Governance part of this report.

We were extremely pleased that the majority of our customers are very satisfied with how we run our business and operate at the facilities. We also now have a baseline for how we perform so we can look to improve on a year-on-year basis.

The insights have already helped us develop workstreams within our waste fuel teams to make some of the improvements suggested in the customer satisfaction survey.

"We were proud to receive a number of really complimentary comments from our customers about the teams that they meet on site and those they deal with at head office on a day-to-day basis. It was so nice to see our customers formally recognise individuals in our team who they enjoy working with."

**Nick Holmes** Senior Market Manager

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# Supporting the local community

## enfinium Parc Adfer Community Fund

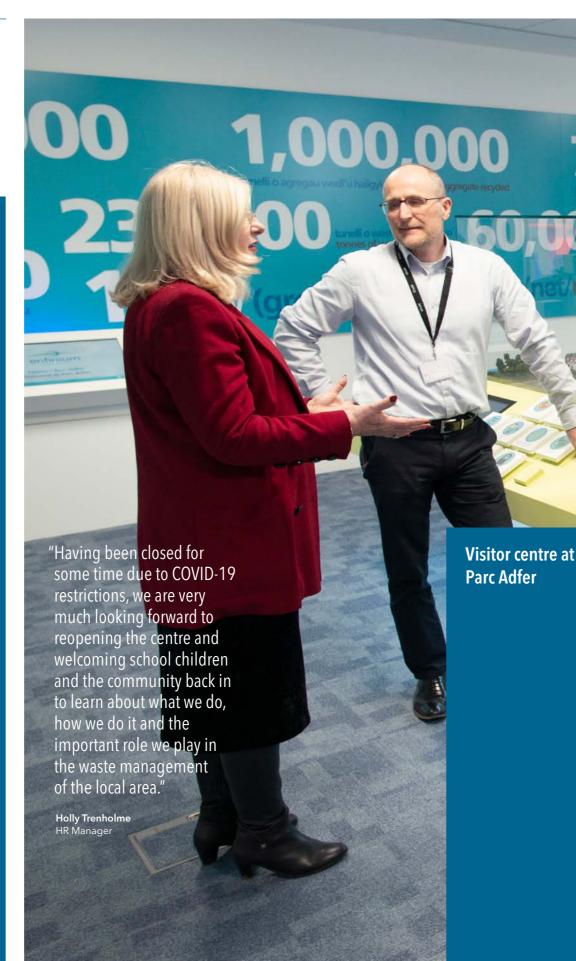


In 2021, £60,410\* of the Parc Adfer Community Fund was accessed by the community and used to bring many fantastic benefits to the local area:

- New outdoor learning and play equipment for Bryn Deva primary school
- New indoor and outdoor learning and play equipment for Ty Ffynnon playgroup
- Loss of income grant for Queensferry War Memorial Institute due to Covid-19
- Supporting the development of an online education hub for local schools and sports groups for North-East Wales Care and Repair
- Supporting Deeside
   Community Trust's Green
   Space Hub with an accessible outdoor shelter
- Supporting the regeneration of the John Summers Steel works with the Enbarr Foundation

- Supporting operations at 'Can Cook, Well Fed' which is a home meal box service that delivers meals to vulnerable people in the community
- Supporting operations at Groundwork North Wales who provide support with gardening tasks to vulnerable people in the community
- Enabling local swimming facility, Cambrian Aquatics, to build more changing rooms to increase the number of people who can use the facility at any one time
- Supporting Connah's Quay Town Football Club to purchase and install pitch barriers to ensure supporter and player safety

\* Cheque amount is for NWLTP and enfinium together rather than just the £60k spent by enfinium alone



Our visitor centre at the Parc Adfer facility provides a fascinating education space for the community, complete with a lecture space where we host local school children for

educational visits.

The visitor centre features interactive displays that help local people understand more about the complex aspects of our operations including, waste delivery, energy recovery, air quality control and ash recycling. And more about the waste hierarchy, the role of WtE in servicing the waste management of the authority and the WtE processes.

We operate our Parc Adfer facility as a Public-Private Partnership (PPP) with support from the Welsh Government to serve five local authorities that make up the North Wales Residual Waste Treatment Partnership. These authorities include, Conwy County Borough Council, Denbighshire Country Council, Flintshire Country Council, Gwynedd Council and the Isle of Anglesey County Council.

CASE STUDY

"The Parc Adfer facility is the only waste-to-energy facility in North Wales. It plays a vital role in all five local authorities objective to increase recycling rates, better manage waste as well as help our local communities through the Community Fund."

Steffan Owen

Regional Contracts Manager, Flintshire County Council

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# **Health and safety**





Safety on Purpose is a core value embedded both into the enfinium business and our working practices.

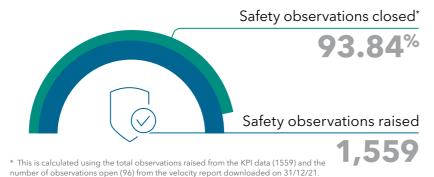
We aim to work safely, on purpose, to ensure we all return home safe, every shift, every day. We empower our team to always do the right thing for the safety of each other and the communities we operate in.

What this means in action is:

- We focus on every detail
- We put safety and the safety of others - before speed, before anything else
- We always stop, check and double check
- We speak up if we have any doubts about safety

All our facilities are ISO 45001 accredited, an internationally agreed health and safety management system which enables us to continually improve our Health and Safety (H&S) performance, fulfil our legal obligations and requirements, and achieve our H&S objectives. But we go further than that. We work hard to nurture our safety culture ultimately aiming for zero harm to physical and mental health.

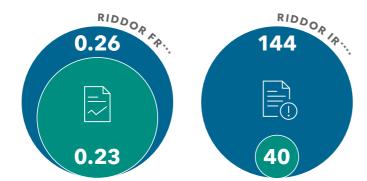
Figure 11. enfinium total safety incidents reported in 2021





number of near misses still open (50) from the velocity report downloaded on 31/12/21.

Figure 12. enfinium total RIDDOR rates in 2021



Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013

"The health and safety of our team is of course crucial to us, more than achieving our ultimate goal of having zero incidents and recordable injuries across our facilities, we want every single member in our team to return home safe, every shift, every day, without compromise."

**Nuria Serrano Martin** HSE Manager

Our Safety on Purpose programme is there to help us achieve our ultimate goal and guide us as we:

- Focus on positive actions vs negative outcomes - this shift involves changing the focus on safety. So rather than dwelling on the small number of safety deficiencies or shortfalls we see, to focus on the thousands of positive actions taken by our teams through all the safety observations they report each year. See figure 11.
- Engage and involve our H&S representatives to provide feedback to employees on a continual basis. This active and open dialogue between our operational and management teams allows our safety culture to be inclusive, empowering and encouraging of challenges without repercussions.
- Recognise and reward positive safety performance. We do this through our quarterly HSE (health, safety and environment) champion awards programme, where we celebrate members of our team who have taken action to prevent an accident, or come up with innovative safety related ideas and role-modelled our Safety on Purpose value.

We are proud that we have developed a proactive safety culture where safety observations are often reported and actioned before they escalate into incidents. The industry standard for safety observations is approximately 0.5 observations per person, but we go above and beyond that with around 0.7-1 observations per person.

This is reflected in our low Reporting of Injuries, Diseases, and Dangerous Occurrence Regulations (RIDDOR) rate. We have lower frequency rates and incidence rates when compared to other industry data. See figure 12.

To help us investigate and analyse any health and safety risks, we have also invested in a new company-wide management system which allows for real-time analysis, monitoring, and day-to-day incident notifications.

In 2021, we recorded 4 minor lost time injuries to employees and 5 minor lost-time injuries to on-site contractors giving us a LTIFR<sup>3</sup> rate for the year of 0.9. Our goal is to achieve zero harm every day and in 2022 we have increased the focus on our Safety on Purpose programme and rolled-out a number of new tools and programmes to improve our safety performance.

Figure 13. enfinium total LTIFR for 2021, in comparison to industry and segmented by FTE





3 LTIFR stands for lost time injury frequency rate

<sup>\*\*\*\*</sup> Number of RIDDOR per total hours worked.
\*\*\*\*\* Number of RIDDORs per total of full time employees.



not able to move. Another car drove up next to Tony's vehicle and rang for an ambulance. Tony conducted CPR to help the man. The man had suffered a cardiac arrest and it is thanks to Tony's quick thinking that the man is alive and recovering. enfinium take safety very seriously with regular morning safety checks, walks around the site and First Aid training to ensure both contractors and employees are ready for the unexpected.

to snag on fixed areas of the boom. This issue had the potential to cause a hydraulic hose failure - all while the unit was in use, at height and with personnel on board. The banksperson raised the issue to the driver, work was ceased and the unit brought down to ground level. Preuse inspection had been carried out. but the issue was not detectable until the boom was at its maximum reach. This clearly demonstrates the value of a vigilant and experienced person giving support during a task and taking ownership of the situation to make a positive Impact.

ensure that trucks were only allowed to use the North door.

# **Diversity, equity** and inclusion (DE&I)





We aim to promote diversity, equity and inclusion (DE&I) to attract and retain talented people and improve business results by enabling everyone to fulfil their potential.

We have created an internal DE&I working group to drive forward our ambitions of creating an even more diverse and inclusive culture. Our council identified that to meaningfully take action, we needed the support of an DE&I specialist to ensure strategies and roadmaps we develop are as actionable and impactful as possible. These actions could include:

- Enhancing our recruitment process
- Providing apprenticeships
- Cultivating a culture that is even more supportive and inclusive
- Implementing further management training
- Partnering with schools/colleges to enhance STEM subjects

#### **Gender pay profile**

Our DE&I working group has also identified the need to enrich the data we have about the diversity and inclusion profile of our organisation. Currently we collect gender data which allows us to report on our gender pay profile.

- enfinium's gender pay gap in 2021 was -21% with a median pay gap of 0%, meaning that, on average, women were paid more than men during the year. The current national average gender pay gap is 15.5%<sup>4</sup> in favour of men, therefore our measures are significantly better than the national average.
- Females make up 13% of the total enfinium population, with most female employees working in the management areas of the business. The industry average is 17%.
- Mean bonus gap is -2% and the median gap is 0%. Both measures show female colleagues either receive higher or the same bonus as their male colleagues.

4 Energy & Utility Skill Workforce renewal & skills strategy 2020

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POTOE

# Overnance



Our mission is to power green the highest ethical and

#### **Business ethics**



As a trusted partner to our customers, communities, suppliers, and regulators, we adopt and maintain the highest standards of business ethics.

#### Risk management



The effective identification, assessment and management of risks and opportunities is an integral part of our management structure and culture.

#### **Corporate governance**



We ensure compliance with best practice in corporate governance, reporting, independence and authorities and approvals.

#### **Tax transparency**



As a responsible, long-term operator we pay our taxes fairly and on-time and we are transparent in the way we structure and operate our business.

# **Key highlights**

Here's a summary of our key achievements in 2021. From the initial merger to the frameworks and policies we've put in place as well as the structure of our board that will continue to drive our business strategy forward.

When enfinium was created in 2021, we designed and put in place the infrastructure and framework to help us drive good governance within our operations, including new supply chain evaluation criteria, a new Board and executive team committee structure and enhanced reporting.

A major achievement in 2021 was the establishment of our **Group Board** with a number of key appointments of nonexecutive Directors to support and guide the management team.



We introduced a new Risk Management Policy to help our business operate sustainably and successfully for the longterm benefit of our customers, people, communities, investors and the environment.



We made a commitment to transparency around how we structure our business and pay our taxes and recognise the important role we have to play as a successful business in contributing to society and public services.



"We are able to leverage economies of scale across our facilities to ensure our business and our suppliers conduct themselves with the highest ethical, sustainable and quality standards. Key to this is our consistent and progressive policies and procedures."

**David Carruthers** Strategic Sourcing Manager ENVIRONMENTAL GOVERNANCE

# The people behind our governance strategy

We asked a member of our ESG governance team, David Carruthers (Strategic Sourcing Manager) why he joined the ESG Working Group and how he thinks enfinium makes a positive impact.

"It is important to me that I am working for an ethical company. A company that suppliers want to do business with, and a company that is not just making money regardless of the cost to people and the environment. And this extends to our supply chain. I am passionate about integrity in our supply chain because by working together to advance environmentally and ethically, we can make a real difference.

We are role-modelling what it is to be part of the circular economy. We are so careful to monitor, analyse and try to recover/recycle every single byproduct that comes out of our operations, and are looking to our supply chain to do the same. We also care a lot about our communities and what they think of us, and this drives us to continually improve our ethical practices and environmental procedures, and again we ask our supply chain partners to do the same."



## **Business ethics**







We conduct our business with honesty, respect and integrity, embracing human rights, diversity, and equal opportunities. And that is something we expect from everyone we work with too. We see ourselves as a trusted partner to our customers, communities, suppliers and regulators, and want to ensure we never lose their trust and confidence.

As this is the first year for enfinium, we have created and put in place an infrastructure and framework to help us drive good governance within our operations. A key part of this has been the roll-out of our supply chain evaluation criteria. For any businesses entering our supply chain, we review and evaluate their policies and procedures from the perspective of:

- Environmental law
- Health and safety law
- Combating modern slavery
- Corporate compliance
- Environmental policies
- Health and safety policies
- Insurance policies

Once we have this information, our HSE team analyse the proposed supplier, verify the information, and provide a recommendation to our procurement team on whether it is acceptable to go ahead with the partnership.

To support our supply chain evaluation criteria, we have good gatekeeping systems in place to ensure complete purchasing visibility and transparency across our operations.

Our gatekeeping systems also ensure our purchasing policy is adhered to. This sets out different procedures depending on the value of the items being purchased. For example, we require that all wooden products need to be purchased from Forest Stewardship Council (FSC) certified suppliers, and that power consumption and efficiency metrics are evaluated in the purchasing decision-making process.

"Even though we have the most efficient fleet in the U.K. we want to keep that status, we therefore consider efficiency and environmental performance just as important as cost when selecting suppliers."

**David Carruthers** Strategic Sourcing Manager

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# Our industry association memberships

We are proud to be members of a number of different industry associations and get significant value from sharing best practice with others in the engineering, energy, and operational sectors. All industry associations were reviewed to ensure they were in line with enfinium ESG guidelines and policy positions.

The associations we are members of include:

# Environmental Services Association (ESA)

This trade body represents the U.K.'s resource and waste management industry and is committed to delivering a long-term zero-waste, zero-carbon future. ESA aims to raise standards across the sector and ensure that the environment and the public are protected, by educating waste producers of their duty of care and the requirements for responsible and legal disposal of materials.

# Carbon Capture and Storage Association (CCSA)

Established to ensure that carbon capture, utilisation, and storage (CCUS) is recognised as an essential solution to deliver net zero emissions across the economy. CCSA is working to develop long-term commercial models that will establish CCUS to deliver clean local growth and help industry transition to a low-carbon economy.

# Confederation of British Industry (CBI)

The organisation represents over 190,000 businesses across the U.K. through boards and committees to ensure business is heard in government and beyond.

# The Association for Renewable Energy and Clean Technology (REA)

A not-for-profit trade association that works to secure the best legislative and regulatory framework for expanding renewable energy deployment and production. All to meet the U.K.'s electricity, heat, recycling, energy storage and transport needs.

# Engineering Equipment and Materials Users Association (EEMUA)

An internationally recognised source of expertise and information for the engineering industry. EEMUA helps to improve the safety, environmental and operating performance of industrial facilities.

# All-Party Parliamentary Sustainable Resource Group (APSRG)

A leading forum informing the debate between parliamentarians, business leaders and the sustainable resource community.

# **Corporate governance**







Our business was bought by Igneo Infrastructure Partners (Igneo IP) in the first quarter of 2021. And that is when Wheelabrator U.K. and Multifuel Energy merged to become enfinium.

To reflect this new company, we created and implemented a new governance structure and framework.

As a business, we are totally committed to maintaining the highest standards of corporate governance. And the framework we have put in place is designed to ensure that we achieve long-term, sustainable success for our people, the environment, the communities we work in and our shareholders and investors.

Our governance framework is there to ensure effective management of the group at a Board, Executive and Business level in our organisation. And also, to ensure all parts of our business are fairly represented.

Our Group Board has overall responsibility for defining our strategy and overseeing the performance of our business. It meets at least quarterly and is supported through the work of four Board committees:

#### **Health, safety and environment**

Responsible for defining and overseeing policies and procedures relating to health, safety and environmental matters. As well as monitoring compliance and continuous improvement of health, safety and environmental performance and setting the ESG strategy for our group.

# Finance, risk management and audit

Responsible for defining accounting policies and procedures, this committee receives reports from our group's auditors, establishes and reviews risk management activities and monitors the use of proceeds under the operating group's Green Financing Framework.

#### Development

Responsible for reviewing our group's pipeline of development projects and ensuring that these projects are aligned and delivered in accordance with our organisation's strategic growth plans.

#### Remuneration

Reviewing compensation and benefits programmes across our business to help us fulfil our vision to be the employer of choice in our sector. Also overseeing the implementation and management of short-term and long-term bonus and incentive plans that align with the overarching investment goals for our business.

"Our EEMUA corporate membership allows our engineering and project management team to join a monthly industry meeting where they share our best practise and listen and learn from others in the industry. It is incredibly helpful to stay connected to the wider industry, especially as the WtE industry continues to evolve and innovate."

Aurelien Eymaron Technical Manager

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# enfinium Group Limited Board

#### Figure 14. enfinium governance structure

enfinium Group Board				
Finance, Risk Management & Audit Committee	Development Committee	Health, Safety & Environment Committee	Remuneration Committee	
Financial accounting, auditing and reporting, corporate finance and risk management, Green Financing	Business development projects oversight and review	Health & Safety and Enviromental performance and compliance, ESG Strategy	Compensation incentives	

Executive Committee				
Executive Committee	Approvals Committee	Project Review Committee	Risk Management Committee	
Safety, environmental, operational, financial and human resources performance. Business development review and strategic objectives monitoring	Approval of items as required under the Authorities Schedule	Review all business development, strategic, transformation or cross functional projects	Oversee the operation of the Risk Policy & Framework, risk registers, action plans and risk mitigation measures	
Monthly	Fortnightly	Monthly	Quarterly	

<b>Business Level Committees and Working Groups</b>				
Information & Systems Security Committee	Operational Reviews	Construction Calls	Project Team Meetings	ESG Working Group
Information and systems security, policies, monitoring and accreditation	In-depth reviews of all aspects of performance for each operating plant	Review all construction projects, including progress, budget, risks and resourcing	Project Team meeting for each BD and Corporate project progress against key milestones, workstream updates, resources and planning	Development and implementation of ESG Strategy and ESG plan and objectives
Quarterly	Monthly	Weekly	Weekly	Monthly

#### **Key appointments**

A major objective in 2021 was the establishment of our Group Board with the appointment of non-executive Directors with appropriate experience and expertise to support and guide the management team.

On completion of the acquisition of the Wheelabrator and Multifuel Energy businesses by Igneo IP in February 2021, we welcomed Hamish Lea-Wilson and Nick Grant to the Board as non-executive shareholder representatives.

In July, we were delighted to announce the appointment of Sir Peter Gershon as non-executive Chairman and, in January 2022, Philip Piddington joined the Board, bringing further extensive experience of the waste sector to our team.

In March 2022, Lynn Fordham joined the Board as Chair of the Finance, Risk Management and Audit Committee.

Our non-executive Directors bring an unrivalled blend of skills and capabilities to our business. They also ensure that enfinium's vision and values are realised - and that the highest standards of corporate governance are maintained at all times.



Sir Peter Gershon Chairman

Sir Peter Gershon has been Chairman since July 2021. Previously he was the Chairman of National Grid plc, Tate & Lyle plc and the Office of Government Commerce. Mr Gershon was appointed a CBE for his services to industry in 2000 and knighted for his work on public procurement in 2004.



Lynn Fordham Non-Executive Director

Lynn Fordham has been a Non-Executive Director since March 2022 and is Chair of the Finance, Risk Management and Audit Committee at enfinium. Previously she was the CEO of SVG Capital and has also held senior executive roles at Mobil, BAA plc, Boots and Barratt Homes. Ms Fordham is a qualified Chartered Accountant.



Philip Piddington Non-Executive Director

Philip Piddington has been a Non-Executive Director since January 2022 and he chairs the Health, Safety & Environment and Development Committees at enfinium. Previously he was the CEO of Viridor and Chairman of the Environmental Services Association. Mr Piddington has held senior management positions within the RWE Group and BP plc.



Hamish Lea-Wilson Non-Executive Director

Hamish Lea-Wilson has been a Non-Executive Director since February 2021. He is Partner, Head of Transactions, Europe and a member of the European Diversified Fund I, II and III Investment Committees at Igneo IP. In addition to his role at enfinium, Mr Lea-Wilson sits on the Board of Finerge.



Nick Grant Non-Executive Director

Nick Grant has been a Non-Executive Director since February 2021. Previously, he was the CEO of Severn Trent Services and he is currently Partner, Head of Asset Management, Europe and a member of the European Diversified Fund III Investment Committee at Igneo IP. Mr Grant is also a member of the Boards of Directors of Coriance and Scandlines.



Mike Maudsley Chief Executive Officer

Mike Maudsley has been Chief Executive Officer since January 2022. Previously he was Chief Operations Executive Director responsible for leading all operating assets at Drax plc. Prior to Drax, he spent six years in the Middle East with Engie.



Mark Corben Chief Financial Officer

Mark Corben has been Chief Financial Officer since November 2019. Previously he was a Senior Advisor for new nuclear build at BEIS, CFO at Tideway for 5 years and led the Power & Utilities group at UBS for 17 years. Mark is a Chartered Accountant and trained at PwC.

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ENVIRONMENTAL GOVERNANCE

# **Risk management**







We want our business to operate sustainably and successfully for the longterm benefit of our customers, people, communities, investors and the environment.

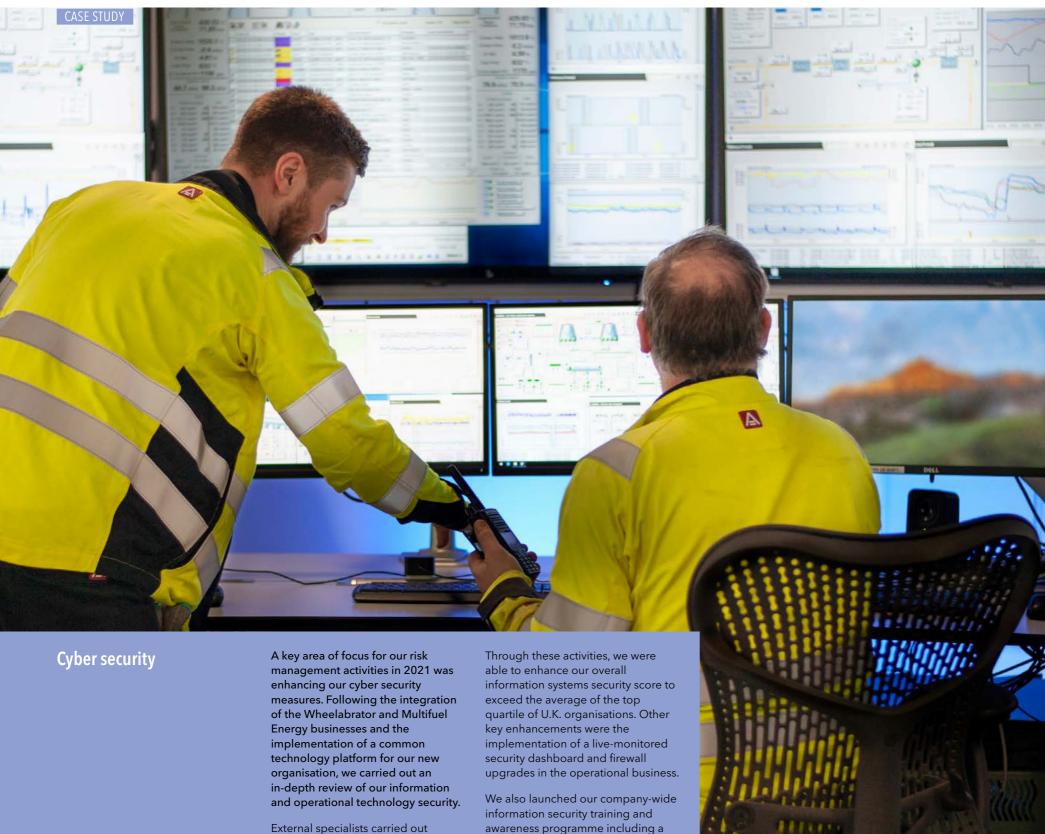
To do that, we need to remain agile enough to take advantage of opportunities to grow, develop and improve our business each and every day. We also need to effectively identify, monitor and mitigate any risks we might face.

We know that effective risk management is an essential and integral part of the management of our business. That is why the responsibility for it is shared at every level of our organisation. Our Risk Management Policy leads us to adopt best practice in this area. A move that should ensure threats are either eliminated or reduced to an acceptable level. Our review of risks in 2021 identified a number of principal risks to our business.



These risks and the key risk controls and mitigation measures are summarised here:

	Risk Description	Risk / Impact Assessment	Current Key Risk Controls
	Construction project delivery	<ul> <li>Delays in construction completion</li> <li>Additional costs in excess of contingency</li> <li>Plants meeting technical and performance standards</li> </ul>	<ul> <li>Selection of proven specialist EPC contractors</li> <li>EPC contracts to transfer risk, security package, performance guarantees</li> <li>Specialist construction management teams to oversee performance and programme</li> </ul>
Operational and Construction Corporate and Financial	Environmental compliance	<ul> <li>Breach of environmental permits leading to fines, penalties, criminal liability or inability to operate</li> <li>Reputational risk in relation to environmental performance</li> </ul>	<ul> <li>Environmental management system</li> <li>Implementation of best available emissions reduction technology meeting BREF requirements</li> <li>Continuous monitoring in relation to emissions (CEMS)</li> </ul>
	Health and safety	<ul> <li>Industrial injury/accident/fatality</li> <li>Exposure to heat and electricity, falls from height, industrial diseases, vehicle and plant safety</li> </ul>	<ul> <li>Safety on Purpose programme, 2021/2022 behavioural safety training</li> <li>Maintenance of safe systems of work, training, inspections, PPE, permits to work, process safety systems</li> <li>Safety walks and inspections led by leadership teams with all staff participating and carrying out safety observations</li> </ul>
	Fire and explosion	<ul> <li>Damage to facilities from fire or explosion leading to inability to operate</li> <li>Repair/rebuilding costs and loss of revenues</li> <li>Reputational damage</li> </ul>	<ul> <li>Fire detection and suppression systems, waste pit monitoring</li> <li>Safety on Purpose programme</li> <li>Property damage insurances</li> <li>Waste fuel quality checks</li> </ul>
	availability/ unacceptable waste	<ul> <li>Loss of production and revenue</li> <li>Additional maintenance and repair costs</li> <li>Liability to suppliers and customers</li> </ul>	<ul> <li>Continuous improvement in maintenance and inspection regimes</li> <li>Service and support agreements with OEMs, defect liability periods and guarantees under EPC contracts</li> <li>Business interruption insurance</li> </ul>
	Changes in policy/ regulation/taxation	<ul> <li>Changes in policy relating to WtE limiting growth opportunities</li> <li>Fiscal/taxation changes</li> <li>Environmental regulation changes lead to additional capex or non-compliance</li> </ul>	<ul> <li>Engagement with policy makers and regulators through industry bodies to understand impact</li> <li>Risk transfer and sharing</li> <li>Specification of plants to meet BREF requirements and 'future-proof'</li> </ul>
	Cyber and information security	<ul> <li>Hacking into IT or operational systems, leading to inability to operate</li> <li>Ransomware attacks</li> <li>Loss of commercial information or personal data breaches</li> <li>Reputational risk, fines</li> </ul>	<ul> <li>Transition to modern, cloud-based IT systems</li> <li>Third party testing, monitoring and reporting</li> <li>Training and awareness programme</li> <li>Review of operational technology to ensure appropriate segregation and firewalls</li> </ul>
	Energy pricing and heat demand	<ul> <li>Fall in power prices impacting on revenues</li> <li>Reduced demand and volumes from heat customers</li> </ul>	<ul> <li>Power hedging programme to reduce risks</li> <li>PPAs and long-term energy supply agreements</li> </ul>
	Financial market risks	<ul> <li>Lack of availability or cost of financing operational business and development projects leading to reduced growth or profitability</li> </ul>	<ul> <li>Refinancing to long-term debt platform to support operational business</li> <li>Ability to transfer development project financings into new platform after construction</li> <li>Interest rate hedging arrangements</li> </ul>



# **Tax transparency**







At enfinium, we recognise the important role we have to play as a successful business in contributing to society and public services through paying our fair share of taxation.

As a responsible, long-term operator, we pay our taxes fairly and on-time and we are transparent in the way we structure and operate our business. Our tax transparency principles commit us to:

- Complying with all tax laws and regulations in a responsible way
- Being transparent about our tax principles and open about the level of taxes we pay
- Not adopting abusive tax structures that seek to avoid tax in an artificial manner
- Paying and reporting our taxes on time

All of our operations and operating companies are located in the U.K., and we report fully on our tax payments and calculations within our audited financial statements that are published each year.

detailed reviews of our security arrangements and conducted penetration testing of our technology systems to identify where our security arrangements could be strengthened. As a result of this work, a comprehensive action plan was developed and implemented.

information security training and awareness programme including a software tool to simulate and train users in how to deal with 'phishing' and 'malware' attacks. All users are ranked on a compliance leaderboard and can improve their position and score by carrying out regular training and compliance activities.

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# **Data and reporting**

#### ENVIRONMENTAL

#### **Total GHG emissions**

Gross emissions: 2,224,494.8 (including biogenic and nonbiogenic emissions)

Total emissions	1,037,839 tCO <sub>2</sub> e
Scope 3	2,127 tCO <sup>2</sup> e
Scope 2	701 tCO <sub>2</sub> e
Scope 1	1,035,011 tCO <sub>2</sub> e

In addition to the reporting of scope 1, 2 and 3 emissions, the enfinium business also calculates the overall emissions benefit generated by its activities including the emissions savings achieved through:

- Generation of partially renewable electricity for export to the National Grid
- Recovery and recycling of materials from incinerator bottom ash (IBA) and Air Pollution Control residues (APCr), saving emissions that would otherwise be generated by producing virgin materials
- Exporting heat and steam to power industrial facilities and other buildings
- Diverting waste from landfill, which results in emissions savings because emissions from landfill are more harmful than those from waste-to-energy

#### **R1 efficiency calculations**

Facility	2021 R1 data
Ferrybridge 1	0.80
Ferrybridge 2	0.85
Kemsley	0.82
Parc Adfer	0.67

For the year 1 January 2021 to 31 December 2021, the emissions benefits generated from these activities were as follows:

#### **Total avoided emissions**

Electricity generation	Calculation of CO <sub>2</sub> benefit based on displaced marginal CCGT generation (0.32 kg CO <sub>2</sub> e/kWh)	546,354 tCO <sub>2</sub> e
By-product recovery	Ricardo EpE tool used for IBA and metals recovery emissions factors. APCr emissions factor from independent assessment by MJCA Consultants	256,567 tCO <sub>2</sub> e
Heat/Steam export	Calculated using BEIS 2021 emissions factor for heat	40,068 tCO <sub>2</sub> e
Landfill diversion	External consultant calculated emissions factor based on comparison between landfill and waste-to-energy emissions (0.375 t CO <sub>2</sub> e/t waste)	766,598 tCO <sub>2</sub> e

The total Avoided Emissions from the above activities for the year was: 1,609,587 tCO<sub>2</sub>e

The Net Carbon Benefit of enfinium's operations after deducting scope 1, 2 and 3 emissions is: **571,747 tCO**<sub>2</sub>**e** 

#### **Emissions performance compared to ELV and BREF limits**

Site	Dust	тос	HCI	SO <sub>2</sub>	со	NOx
Units	mg/m²	mg/m²	mg/m²	mg/m²	mg/m²	mg/m²
Emission Limit Values	10.00	10.00	10.00	50.00	50.00	200.00
BREF Limits	5.00	10.00	8.00	40.00	50.00	180.00
Ferrybridge 1 Average	3.60	0.75	5.13	4.08	5.76	154.78
Ferrybridge 2 Average	2.77	0.34	4.05	0.53	1.93	169.14
Kemsley Average	0.18	0.34	3.39	4.53	4.42	170.10
Parc Adfer Average	0.14	0.61	5.60	16.58	9.78	173.24

#### Water resource usage

Facilities	Mains/ town water	Recycled process water	Borehole water	TOTAL
Units	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m³
Ferrybridge 1	83,088	-	94,036	177,124
Ferrybridge 2	72,391	-	83,977	156,368
Kemsley	15,649	-	-	15,649
Parc Adfer	15,932	15,937	-	31,869
ΤΟΤΔΙ	187 060	15 937	178 013	381 010

#### SAFETY

#### Safety

436,398
236,579
5
6
4
5
0
0

#### Safety observations

Safety observations raised	1559
Safety observations closed	1463
Near miss raised	296
Near miss closed	246

#### **RIDDOR and LTIFR**

Metric	Value
Fatalities	0
RIDDOR FR	0.23
RIDDOR IR	40
LTIFR (employees)	0.9
LTIFR (employees + contractors)	1.3

#### **EMPLOYEES**

#### **Employees**

Number of staff (total)	238
Number of staff (female)	33
Number of staff in management (total)	7
Number of staff in management (female)	1
Number of board directors (total)	6
Number of board directors (female)	1
Number of onsite contractors (total)	9
Number of onsite contractors (female)	2
Number of new hires (total)	
Number of new hires (female)	
Number of new hires to Board or management (total)	
Number of new hires to Board or management (female)	0
Unadjusted gender pay gap	-21%

# **Glossary**

APCr	Air Pollution Control residues
BEIS	Department of Business, Energy and Industrial Strategy
BNG	Biodiversity net gain
BREEAM	Building Research Establishment Environmental Assessment Method
BREF	Best Available Techniques Reference Documents
C&I	Commercial and industrial waste
CCSA	Carbon Capture and Storage Association
CCUS	Carbon capture, utilisation and storage
CEMS	Continuous Emissions Monitoring Systems
CfD	Contracts for difference
CHP	Combined heat and power
CLCs	Community liaison committees
COD	Commercial operation date
DEFRA	Department for Environment, Food & Rural Affairs
DE&I	Diversity, equity and inclusion
EEMUA	Engineering Equipment and Materials Users Association
EMS	Environmental management systems
EPC	Engineering, procurement & construction
ESA	Environmental Services Association
ESG	Environmental, social and governance

EV	Electric vehicle
FSC	Forest Stewardship Council
GHG	Greenhouse gas
H&S	Health and safety
IBA	Incinerator bottom ash
ICE	Internal combustion engine
Igneo IP	Igneo Infrastructure Partners
IPCC	The International Panel on Climate Change
LTIFR	Lost time injury frequency rate
LCCC	Low Carbon Contracts Company
NWRWTP	North Wales Residual Waste Treatment Project
MSW	Municipal solid waste
REA	The Association for Renewable Energy and Clean Technology
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013
UN SDG	United Nations Sustainable Development Goals
WtE	Waste-to-energy

