



# Sustainability Strategy 2024

Green   
Tourism  
SILVER



# Creating a Greener Future

"Beamish Museum acknowledges the climate emergency and the part we must play in taking action to address it. We will use our national and regional role, heritage and identity to help shape a sustainable and equitable future, achieve net zero by 2045 and protect our planet for future generations."

# Our Sustainability Strategy for a Greener Future

## WHO ARE WE?

Founded in the 1970s by Frank Atkinson, as part of his vision to create a museum 'for the people by the people', Beamish, The Living Museum of the North, aims to preserve the North East's social, industrial, and agricultural heritage through an immersive, living museum experience that puts visitors first and champions active participation from local communities. The museum is located just outside of Durham in North East England and is the country's largest open-air museum, set within a 400-acre site.

Our exhibits and offices across the site have a variety of impacts based on their use, particularly as the museum authentically represents life from the early 1820s to the 1950s. Key areas include the Regional Resource Centre, Main Entrance, 1940s and 1950s Farms, Tramway, 1900s and 1950s Towns, Georgian area and Waggonway, and the Colliery and Pit Village.

A registered charity and company limited by guarantee, Beamish Museum is self-sufficient and welcomes over 800,000 visitors a year. We employ 500 staff, supported by over 350 volunteers, and are active participants in both national and international museum networks.





**MESSAGE FROM  
CHAIR OF BOARD OF TRUSTEES,  
CHRIS LOUGHRAN**

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"Beamish is a world-leading open air museum and visitor attraction in the UK. With that comes a responsibility to not only acknowledge the environment emergency but play our role in taking action to address it. This sustainability strategy creates a framework for Beamish to achieve net zero by 2045. But it is also a driving force that will underpin the museum's strategic direction, where climate and social justice sit at the heart of our decision making. The Board of Trustees is committed to supporting this strategy. We will ensure it is embedded in the museum's future direction. And we will use our unique site, community and reputation and heritage to help, influence and champion positive change."



**MESSAGE FROM  
CHIEF EXECUTIVE OFFICER,  
RHIANNON HILES**

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"Beamish is committed to taking action to address the climate emergency and this strategy sets out how our special site, unique collections, and committed staff and volunteer team will achieve this. We have a unique role to play in engaging visitors and stakeholders to promote understanding of the climate crisis and inspiring them to take positive action for change. Our museum is inspired by the people of the North East and their sense of community, resilience and resourcefulness and we will draw on these traits to ensure we play our part in addressing the climate crisis."

# Purpose, Vision & Guiding Principles

Our Purpose is to share stories of life in the North East and our Vision is to contribute positively to life in the North East.

Our three Guiding Principles determine priorities and how Beamish works are putting our people first in everything we do; genuine community engagement – enabling participation in the making of the museum, the activities and stories that we tell, creating enduring, meaningful and diverse connections; and self-reliance and entrepreneurial spirit – always looking for new opportunities to innovate and grow to reach more people.

# Implementing Our Strategy

Beamish Museum is committed to providing a high-quality visitor experience whilst minimising the environmental impact of our activities, and ensuring we adhere to all applicable legislation and other organisational requirements. The museum is dedicated to fostering smart, inclusive growth by creating a self-reliant and sustainable museum and reducing our carbon footprint by minimising waste and energy consumption and generating renewable electricity and heating systems across the site. Beamish will continue to improve the management of energy to operate the site in an energy efficient manner.

Our strategy spans a 22-year period, by which point we will reach net zero. We will achieve this through the implementation of an action plan, which works alongside this strategy. The action plan will be formed through a workshop with key stakeholders in the museum and is guided by our Sustainability Working Group (see Appendix A for SWG terms of reference), comprising of representatives from our Board of Trustees, Senior Leadership Team, and experts working in the field of environment and climate change. This work will be overseen by our Sustainability Manager, who will review targets and actions regularly, and ensure the action plan is updated. This strategy will be reviewed every three years.

The action plan is informed by the museum's key environmental priorities outlined below, which align with key partners, such as Durham County Council, and have been identified as areas where the museum can make the most impact towards the UN Sustainable Developments Goals (see Appendix B). The action plan will be reviewed and updated quarterly by internal stakeholders to report on progress, and on a six-monthly basis by the Sustainability Working Group, who will report into Beamish Board of Trustees.





## We recognise that there are four priority areas, which are:

- Decarbonisation
- Protecting the Natural Environment
- Operating Sustainably
- Working in Partnership with People



7 AFFORDABLE AND  
CLEAN ENERGY



9 INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



13 CLIMATE  
ACTION



17 PARTNERSHIPS  
FOR THE GOALS



# Decarbonisation

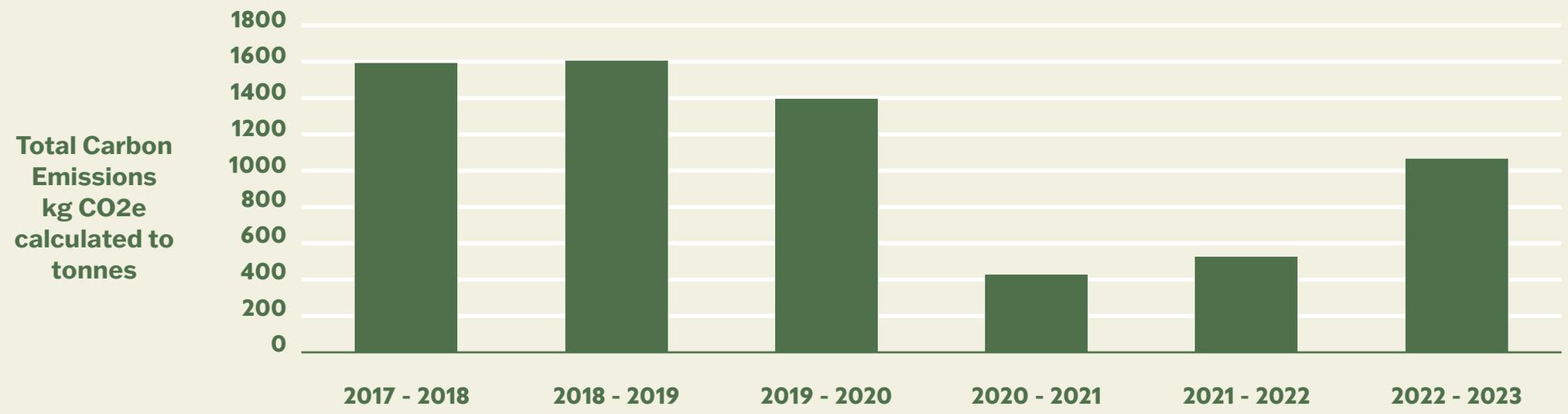
We are committed to being net zero by 2045, by using our own woodland and 400-acre site for carbon sequestration, thus protecting, restoring and enhancing its precious natural heritage and biodiversity, and achieving strong economic growth through circular, zero-waste and resource efficient initiatives.

We will seek additional funding to create invest to save projects, thus improving energy efficiency, through implementation of renewable energy technologies, such as solar farms and geo-thermal.

As a museum it is imperative that we ensure historical engagement remains paramount, and we will work with heritage partners and others to establish low carbon or no carbon alternatives. We will regularly undertake museum-wide energy audits and review alongside the Energy Savings Opportunity Scheme\* (ESOS) and Carbon reporting tools, to ensure we implement realistic targets, as well as regularly monitor our infrastructures and galvanise our strategic direction to net zero (see Appendix C for data relating to greenhouse gases for 2021/22 vs 2022/23).

\*ESOS is a UK mandatory energy assessment and opportunity scheme. Obligated participants are required to undertake an Energy Audit by a Qualified and Registered Lead ESOS Auditor, approved by the Environment Agency.

# Carbon Calculations 2017 - 2023



GHG calculations from coal, steam, household coal, LPG, gas oil, diesel, unleaded fuel, and electricity are used to give us the total Carbon Emissions kg CO2e used, calculated to tonnes:

2017 - 2018	1584	First year recorded
2018 - 2019	1606	1% decrease from previous year
2019 - 2020	1392	13% decrease from previous year
2020 - 2021	421	70% decrease from previous year due to Covid-19 Pandemic
2021 - 2022	548	30% increase, anticipated due to recovery from Pandemic
2022 - 2023	1055	92.5% increase, however, 24% decrease on last full operating year 2019 - 2020

# Decarbonisation

## Where we are now

Renewable energy as first choice, energy from fossil fuels as second.

Fossil fuels such as coal used in visitor engagement.

Energy usage monitored to identify trends and areas where usage can be reduced.

## Where we will be in 2045

All carbon emissions from the museum stopped or offset.

All gas and fossil fuels used in our visitor engagement removed and replaced with low carbon alternatives.

Energy usage reduced and only energy efficient technologies and energy sources in place throughout.



# Protecting the Natural Environment

We recognise the significant value and importance of keeping our natural environment intact, and through our Woodland Management Plan and Engagement Plan, we will ensure we conserve natural resources and protect the existing natural environment, support wildlife and provide natural adaptation and mitigation mechanisms against the effects of climate change.

We will work with partners such as Natural England and Forestry Commission, to ensure we continue to implement best practice in land and forestry management and can contribute to wider regional initiatives.



# Protecting the Natural Environment

## Where we are now

Working to use traditional methods, such as dry stone walling to increase small mammal refuges.

Identifying ways to use our woodlands more effectively to improve environmental awareness to visitors and staff.

Developing a Woodland Management Plan, and an Engagement Plan.

## Where we will be in 2045

New landscaping to support survival of native species, and responsible species rich seed sourcing.

Nature and educational walks for visitors, promoting the benefits of supporting climate change, created.

We will have clear strategies in place to manage our land sustainably to ensure we aid nature recovery and maximise carbon storage, to support thriving ecosystems.

<b>1</b> NO POVERTY 	<b>8</b> DECENT WORK AND ECONOMIC GROWTH 
<b>2</b> ZERO HUNGER 	<b>10</b> REDUCED INEQUALITIES 
<b>3</b> GOOD HEALTH AND WELL-BEING 	<b>11</b> SUSTAINABLE CITIES AND COMMUNITIES 
<b>4</b> QUALITY EDUCATION 	<b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION 
<b>5</b> GENDER EQUALITY 	<b>14</b> LIFE BELOW WATER 
<b>6</b> CLEAN WATER AND SANITATION 	<b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS 

# Operating Sustainably

We will undertake all activities to ensure active participation in operating more sustainably – better balancing social, environmental and economic needs.

Our external stakeholders, including our local suppliers, are expected to adhere to, and exceed, best sustainable practices, ensuring their environmental strategy aligns with our own. We will ensure we increase awareness of our strategy, through training and communication to all teams, visitors and stakeholders, to encourage ownership and contribution towards achieving our priorities.

We will continue to work with waste contractors to ensure that none of the waste generated by the site goes to landfill, with 100% of our general, food and glass waste being recycled or used to generate energy.

We will continue to work with local transport companies to encourage more visitors to travel via public transport, and we need to build on this to make visiting Beamish more sustainable.

Communication internally, and with visitors, is essential to the successful delivery of our priorities.



# Operating Sustainably

## Where we are now

EV charging points are being installed to facilitate new electric vehicles, and we encourage visitors to travel using public transport.

Reviewing our waste management infrastructure and identifying ways to strengthen engagement with visitors to educate around the effects of climate change.

Working with partners to identify suitable technologies to convert period vehicles to low or no carbon fuel alternatives.

We work with our stakeholders to ensure they align their own sustainability practices with our own, and need to put strict measures in place to ensure this is done across the museum.

## Where we will be in 2045

All modern vehicles are ultra-low emission; and excellent public transport links in place, as well as improved cycling routes.

Clear infrastructure in place for waste management; ensuring only sustainable packaging/materials are used throughout our offer.

All vehicles converted using new technologies to ensure zero carbon transport.

Strong procurement policy in place, regularly reviewed to ensure operations are cost effective, and that sustainability is first and foremost in all purchases working only with approved suppliers.

# Working in Partnership with People

8 DECENT WORK AND ECONOMIC GROWTH



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



11 SUSTAINABLE CITIES AND COMMUNITIES



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



17 PARTNERSHIPS FOR THE GOALS



We will build and strengthen engagement with visitors to highlight the link between history and the effects of climate change, both negative and positive. We will share key learning in relation to climate justice through our learning activities for school groups and engagement stories.

We will establish a Sustainability Work Group in 2025 to guide our environmental responsibility work, and membership will include representation from our Board of Trustees and external stakeholders, to ensure we align, and contribute to, regional priorities. In addition, a Climate Action Team with representatives from our staff and volunteers, as Champions, who will work together to ensure we achieve our action plan aims and objectives. We are viewed as leading internationally on our

sustainability with the Association of European Open Air Museums' (AEOM) Board, feeding into the International Council of Museums' (ICOM) statement of intent for environmental sustainability, and are a lead on the sub-group demonstrating excellence in environmental responsibility; and are roundtable members of the National Museum Directors' Council's Environment & Ecology Sub-group. We work closely with Arts Council England, a major funder of the museum's work, and we are committed to embedding its Investment Principles into all aspects of our work. Additionally, we engage with Julie's Bicycle, as per our NPO funding agreement.



Durham County Council's Single Use Plastics Task Group at Beamish 2024

# Working in Partnership with People

## Where we are now

We have created climate change activities within our learning delivery.

Staff and volunteers have limited understanding of how the museum is responding to climate change.

We work with a range of colleagues across cultural and business operations to advocate for change.

## Where we will be in 2045

Understanding and stories about climate related issues are embedded within all programme delivery.

Everyone has an excellent understanding of what the impacts of climate change are and how the museum is responding and plays an active role in achieving the museum's priorities.

Be a strong voice in advocating for climate justice; and ensure clear and transparent guidelines are in place.

# Active & Inclusive Participation

Active and inclusive participation is the approach across all priority areas. Without involvement and buy in from staff and volunteers, and external stakeholders, we cannot deliver the vision outlined in this document.

Beamish is committed to regular review and improvement of the museum's environmental performance through our Sustainability Strategy Action Plan and will ensure best working practice towards a more sustainable Beamish, and support change by being the appropriate voice when needed to communicate and motivate change, both internally and externally, which will include the relaunch of monthly sustainable initiatives for colleagues and encourage participation and suggestions.



# Active & Inclusive Participation

Our key external partners in relation to sustainability and best practice are:

## Durham County Council

We are part of the Single Use Plastics Committee, as well as the Climate Emergency Strategic Board, and are a key partner creating greener initiatives and working towards to a Net Zero region.

## National Museums Directors' Council

The National Museum Directors' Council (NMDC) represents the leaders of the UK's national collections and major regional museums, and we are represented on both the Board of the Council by the CEO, as well as the Environment & Ecology Group and UK COP for Museums, by the Sustainability Manager.

## National Trust

We work closely with the Trust's Climate & Environment Advisor, sharing learning and best practice.

## Derry City & Strabane District Council

We work closely with the Climate Programme Manager, sharing learning and best practice.

## Association of European Open-Air Museums

AEOM is an association of leaders of open air museums in Europe. It is affiliated to ICOM and collaborates with people and institutions worldwide. The museum's CEO is Vice President and our Sustainability Manager is leading on a sub-group.

## Association of Independent Museums

We have a Trustee on the Board of the Association of Independent Museums (AIM) which works to address the needs of the growing independent museum sector, providing a network of mutual help and support that shares good practice and creates a singular voice for hundreds of organisations.

## Arts Council England

Arts Council funds projects within the museum and we are committed to its Investment Principles, including creating an environment in which cultural organisations can more readily change and develop, as well as come and go.



Association of European Open Air Museums conference in Hungary, 2024.

# Active & Inclusive Participation

Our key external partners in relation to sustainability and best practice are:

### Gallery Climate Coalition

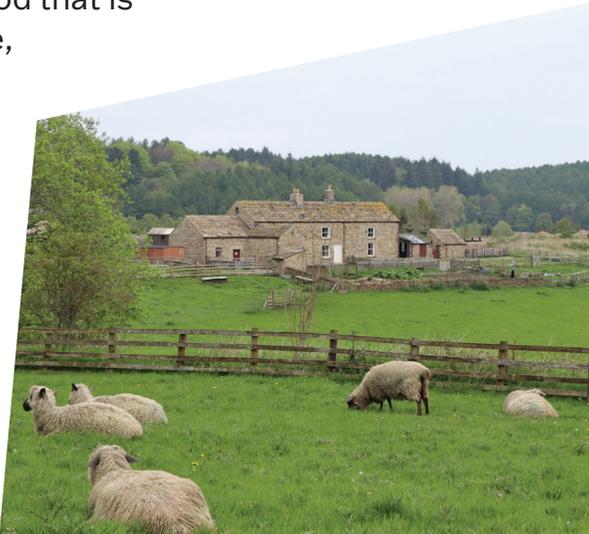
An international community of arts organisations working to reduce the sector’s environmental impacts. We work with them to contribute to best practice and guidelines to help other organisations.

### Julie’s Bicycle

Provides a wealth of tools and support to help us to reduce our impact, and to measure, understand and report on progress through Creative Green, which is reported to Arts Council England as part of our reporting procedures.

### Food Durham

Working with Food Durham, the County Durham Food Partnership, creates community initiatives that stimulate and join up activity across the whole food system from grassroots to strategic level. Food Durham’s vision is to develop a system that enables food that is good for people, the planet and the local economy of County Durham to be accessed by everyone.



### Museums Association

We work to support the Climate Justice campaign, which supports museums in tackling the climate and ecological crisis. The campaign empowers museums to be bold and brave in taking action, putting forward a systems-change approach which focuses on climate and social justice.

### Net Zero North East England

Working with Net Zero England to decarbonise the North East to create a greener, fairer, and more sustainable region through collaboration between local government, business, education, the public sector, and civil society to drive a comprehensive regional approach to tackling the climate emergency.



Tree planting with the International Police Association, 2024

# Sustainability Working Group

## Terms of Reference

### Key Purpose

The Sustainability Working Group (SWG) takes collective responsibility for leading development and implementation of the museum's sustainability agenda, driving forward the key themes of the Sustainability Strategy, namely:

- Decarbonisation
- Protecting the Natural Environment
- Operating Sustainably
- Working in Partnership with People
- Active & Inclusive Participation

### Frequency of Meetings

The group will meet every six months, with extended meetings taking place where necessary on specific topics.

### Membership

To include six people including representatives from the Senior Leadership Team, Board of Trustees, and external experts.

### Terms of Reference

SWG will:

- Contribute to establishing Beamish Museum as a leader in the sustainability agenda through actively engaging with key partners and ensuring best practice.
- Ensure that sustainability risks and opportunities are identified, relevant to the context of the museum and incorporated into strategic decision making.
- Ensure the UN Sustainable Development Goals are aligned across all areas of the museum.
- Review commitments, profile and performance in sustainability, including delivery of the museum's action plan and annual reporting on sustainability; and make recommendations to the Board of Trustees for approval.
- Monitor progress and provide guidance in the delivery of the Sustainability Strategy, including progress against targets and objectives, as identified in the action plan.
- Identify, promote and embed sustainability-related initiatives in the museum by promoting sustainable development, good practice and active engagement in sustainability amongst staff, volunteers, key partners and stakeholders.
- Oversee relevant sector benchmarking through audits and reviews to evidence, evaluate, measure and monitor levels of sustainability and target areas for improvement.
- Report into the Board of Trustees bi-annually, ensuring sustainable issues are highlighted, and raise appropriate matters for consideration and discussion, i.e., projects requiring capital funding.

# Museums and the Sustainable Development Goals

The SDG agenda can be summarised as being made up of ‘five Ps’: **People, Planet, Prosperity, Peace, and Partnership**. The first three relate to the three dimensions of sustainability (social, environmental, economic), while peace and partnership enable and support the pursuit of sustainability:



**People:** to end poverty and hunger, in all their forms and dimensions, and to ensure that all human beings can fulfil their potential in dignity and equality and in a healthy environment.

**Planet:** to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations.

**Prosperity:** to ensure that all human beings can enjoy prosperous and fulfilling lives and that economic, social, and technological progress occurs in harmony with nature.

**Peace:** to foster peaceful, just and inclusive societies which are free from fear and violence.

**Partnership:** to mobilise the means required to implement the 2030 Agenda through a revitalised Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity focused on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people.

Source 2019: Henry McGhie, Founder - Curating Tomorrow



# SUSTAINABLE DEVELOPMENT GOALS

<b>1</b> NO POVERTY 	<b>2</b> ZERO HUNGER 	<b>3</b> GOOD HEALTH AND WELL-BEING 	<b>4</b> QUALITY EDUCATION 	<b>5</b> GENDER EQUALITY 	<b>6</b> CLEAN WATER AND SANITATION 
<b>7</b> AFFORDABLE AND CLEAN ENERGY 	<b>8</b> DECENT WORK AND ECONOMIC GROWTH 	<b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE 	<b>10</b> REDUCED INEQUALITIES 	<b>11</b> SUSTAINABLE CITIES AND COMMUNITIES 	<b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION 
<b>13</b> CLIMATE ACTION 	<b>14</b> LIFE BELOW WATER 	<b>15</b> LIFE ON LAND 	<b>16</b> PEACE, JUSTICE AND STRONG INSTITUTIONS 	<b>17</b> PARTNERSHIPS FOR THE GOALS 	

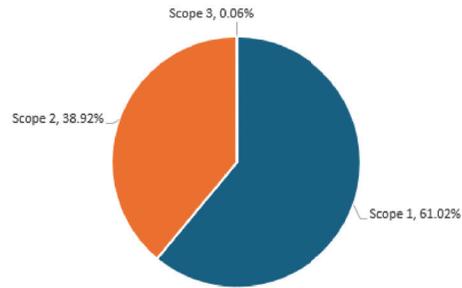
- 1** End poverty in all its forms everywhere.
- 2** End hunger, achieve food security and improved nutrition and promote sustainable agriculture.
- 3** Ensure healthy lives and promote wellbeing for all at all ages.
- 4** Ensure inclusive and equitable quality education and promote learning opportunities for all.
- 5** Achieve gender equality and empower all women and girls.
- 6** Ensure availability and sustainable management of water and sanitation for all.
- 7** Ensure access to affordable, reliable, sustainable and modern energy for all.
- 8** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- 9** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- 10** Reduce inequality within and among countries.
- 11** Make cities and human settlements inclusive, safe, resilient and sustainable.
- 12** Ensure sustainable consumption and production patterns.
- 13** Take urgent action to combat climate change and its impacts.
- 14** Conserve and sustainably use the oceans, seas and marine resources for sustainable development.
- 15** Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.
- 16** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.
- 17** Strengthen the means of implementation and revitalize the global partnership for sustainable development.

# Streamline Energy Carbon Reporting (SECR)

(Green Consulting, January 2023)

Graphical Breakdown

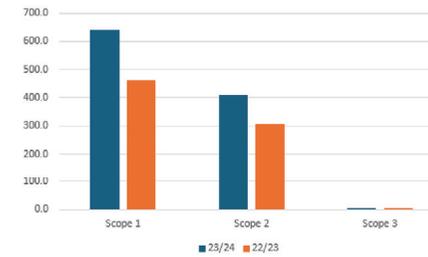
GHG Emissions % Breakdown by Scope



Emission Type	tCO <sub>2</sub> e
Scope 1	642.6
Scope 2	409.8
Scope 3	3.7

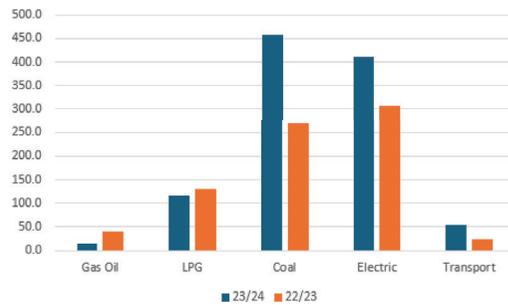
Graphical Breakdown - Continued

GHG Emissions % Breakdown by Scope - FY23/24 v FY22/23



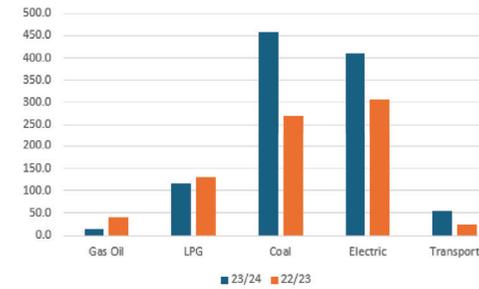
tCO <sub>2</sub> e	FY23/24	FY22/23
Scope 1	642.6	464.0
Scope 2	409.8	307.1
Scope 3	0.7	6.6
Total	1,053.1	771.6

GHG Emissions % Breakdown by Scope



Emission Type	tCO <sub>2</sub> e
Transport	55.3
Gas oil	14.5
LPG	115.6
Coal	457.9
Electric	409.8

GHG Emissions % Breakdown by Scope - FY23/24 v FY22/23



tCO <sub>2</sub> e	FY23/24	FY22/23
Gas Oil	14.5	41.9
LPG	115.6	130.4
Coal	457.9	270.0
Electric	409.8	307.1
Transport	55.3	23.3
Total	1,053.1	771.6



**BEAMISH**  
THE LIVING MUSEUM OF THE NORTH