

Belfast Harbour

Environmental
Report 2014



Reg. No. EMS 508823

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Foreword

Belfast Harbour is a cornerstone of the local economy, facilitating the import and export of more than 70% of all Northern Ireland's seaborne trade and acting as a major stimulant for economic activity throughout the region by handling over 20% of all sea trade throughout the island of Ireland.

Belfast Harbour is also Northern Ireland's largest logistics hub, a major commercial centre and encompasses landmark regeneration projects such as Titanic Quarter, Sydenham Business Park and City Quays. More than 23,000 people are employed in the Harbour Estate in sectors ranging from heavy engineering to tourism. The Estate is also home to 195 acres of land set aside for nature conservation.

Managing the Harbour's 3,000 acre estate (2,000 acres of land, 1,000 of water) is a complex process and requires that the needs of industry and commerce be balanced with those of the environment. The Harbour continued to focus on carbon reduction, conservation of resources, elimination of waste and protection of the natural and built environment. As a result of such efforts the Harbour retained certification to the Carbon Trust Standard and was awarded Platinum status for the sixth consecutive year in Business in the Community's ARENA environmental benchmarking survey.

Safeguarding and improving our environment is an ongoing task and we will continue to work with partners such as Business in the Community, RSPB, the Carbon Trust and the Northern Ireland Environment Agency to ensure the sustainable development of Belfast Harbour.

Trevor Anderson
Operations Director

Building a Better Future

The development of the Port through the centuries is inextricably linked to the development, growth and significance of Belfast. Consequently, Belfast Harbour understands the importance of engaging with local communities, providing assistance in terms of both time and money, building bridges to education and training, managing and improving our environmental impact [particularly in respect of climate change] and encouraging our contractors and suppliers to also behave responsibly.

Value System

Belfast Harbour



Our corporate responsibility commitment is a strategic objective and forms part of Belfast Harbour's value system.

There are four dimensions to Belfast Harbour's Corporate Responsibility Strategy: Young people, Environment, Community and the Arts.

Belfast Harbour's annual CR programme supports initiatives and projects that reflect one or more of these dimensions.

Skyhawk Swoops into Belfast:

The intense and touching Gill Lewis story about how protecting a rare bird, an osprey, forges a deep and special friendship between children, was brought to life for school children thanks to a partnership between Belfast Harbour, the Lyric Theatre and the RSPB.

The mysterious adventure, brought to Northern Ireland by Clwyd Theatr Cymru with live music and songs, fused with digital media, takes the children on an incredible ecological journey that stretches from the UK to Africa.

Ahead of attending a performance at the theatre, the children participated in drama workshops hosted by the Lyric and RSPB. The workshops, sponsored by Belfast Harbour, were designed to complement the show and develop some of the themes in the book. The show ran at the Lyric Theatre from Tuesday, October 14th to October 21st 2014.

Environmental Goals

Belfast Harbour has established a number of environmental goals. Progress towards these goals is measured internally against a set of objectives which form a key element of the Harbour's Environmental Management System.

Our environmental goals which underpin the objectives are:

- Continue to reduce carbon emissions.
- Publish a Harbour Biodiversity Plan.
- Progress towards zero waste to landfill.
- Reduce resource consumption.
- Reduce mains water loss.
- Prevent environmental damage from pollution.
- Minimise the impact of dust, noise and vibration.

Environmental Management Systems

Belfast Harbour operates a formal Environmental Management System (EMS) which is certified to the internationally recognised standard ISO 14001:2004.

The EMS consists of 3 components:

- Environmental Policy
- Governance
- Operational Controls

Triannual strategic review of the Environmental Management System by the British Standard Institute confirmed that the Harbour is fully compliant with the requirements of ISO 14001. An assessment by Ecoports identified Belfast Harbour as an exemplar Port Authority of good environmental practice for the sector within the European and International contract.

Environmental Policy

The environmental policy is publically available on the Belfast Harbour website and is supplied on request to any interested party. Copies of the policy are made available to employees, contractors and suppliers working on behalf of Belfast Harbour.

The environmental policy is incorporated into an environmental management system designed to identify, assess and manage environmental risks. Supporting the policy are a number of additional policies addressing specific issues such as:

- Energy
- Procurement
- Waste and Resources
- Sustainability
- Biodiversity
- Travel

Environmental Policy Statement

Belfast Harbour recognises that effective environmental management systems and performance are fundamental to our business.

We consider it a priority to reduce the risks to our environment to a level as low as reasonably practical, to prevent pollution and to minimise the environmental impact of our activities.

In order to achieve this we will:

- Comply with all applicable legislation, regulations, codes of practice and other requirements to which we subscribe including the:
 - Principles of sustainable development
 - European Sea Ports Organisation (ESPO) Green Guide
 - Port Marine Safety Code
 - Protection of Biodiversity consistent with our duties as a Harbour Authority
- Systematically identify and assess environmental risks associated with our activities.
- Set measurable environmental objectives and targets supported by a management programme that measures and monitors performance, reviews effectiveness and evaluates compliance.
- Mitigate and control identified risks in order to manage our activities in an environmentally responsible manner.
- Develop, maintain and test emergency response plans and procedures.
- Involve and consult interested parties on environmental issues where appropriate.
- Ensure that employees and others working on our behalf are competent to carry out their work and understand the impact their actions and behaviour may have on the environment.
- Provide our employees (and where appropriate contractors and suppliers) with adequate information, training and supervision to enable them to understand and discharge their responsibilities for compliance with this policy.
- Communicate this policy to all persons working for or on behalf of Belfast Harbour Commissioners and make this policy available to the public.
- Strive to continuously improve our environmental management systems and performance.

This Policy Statement is periodically reviewed by senior management to ensure that it remains relevant and appropriate to the scope of activities conducted by Belfast Harbour.

Energy Management Policy

Belfast Harbour is committed to reduce the greenhouse gas emissions that result from our energy use whilst ensuring that we continue to meet essential business requirements and the needs of our stakeholders. This Policy provides a framework to set and review energy objectives and targets that will achieve this organisational goal.

It is therefore the policy of Belfast Harbour to:

- Comply with all applicable legislation and other requirements to which we subscribe related to energy use, consumption and efficiency.
- Incorporate energy efficiency considerations into procurement activities and to design for energy performance improvement.
- Establish and maintain a formal Energy Management System that is appropriate to the nature, scale and performance improvement objectives of Belfast Harbour.
- Develop awareness and encourage involvement in energy efficiency initiatives by employees, energy customers and other relevant stakeholders.
- Ensure the availability of information and resources to set and achieve appropriate objectives and targets.
- Demonstrate our commitment through external certification of our Environmental Management and Energy Management Systems to internationally recognised standards.
- Strive to continuously improve performance in energy use, consumption and energy management systems.
- Communicate this Policy to all levels within Belfast Harbour and make it available to other stakeholders as required.
- Review this Policy annually to take account of legislative, organisational and other requirements and update as necessary.
- Strive to continuously improve our energy efficiency and energy management systems.

Sustainable Development Policy

Belfast Harbour Commissioners recognise the importance of sustainable development.

We will therefore:

- Comply with the relevant sustainability legislation and regulations and, where possible, exceed any relevant minimum requirements.
- Raise the awareness of employees, suppliers, customers, visitors and other stakeholders by promoting the concept of sustainable development.
- Monitor the use of natural resources, and maximise the efficiency with which they are used.
- Manage our activities in accordance with the principles of sustainable development.
- Encourage our employees to apply sound sustainability practices at work, at home and within the wider community.
- Participate in the definition of sustainability practice, and set our own appropriate and demanding standards where none exist.

Green Travel Policy

Belfast Harbour is committed to minimising the impact of travel on the environment and optimising travel costs.

Belfast Harbour seeks to minimise the impact of travel by:

- Using teleconference technology to avoid travel where appropriate.
- Understanding the environmental impact associated with our business related travel.
- Encouraging Harbour staff to use sustainable methods of transport.
- Considering environmental performance when purchasing vehicles and designing traffic systems.
- Facilitating where practical the integration of sustainable and public transport modes within Belfast Harbour Estate.

Green Procurement Policy

Belfast Harbour seeks to reduce the environmental impacts of our operations by integrating environmental considerations into our procurement process.

Belfast Harbour takes environmental aspects into consideration when purchasing goods and services.

Our commitment is to:

- Avoid unnecessary acquisitions and reuse resources where possible.
- Where appropriate purchase products with a high recycled content.
- Give preference to the use of renewable resources where appropriate.
- Insist on compliance with applicable environmental legislation, regulations and standards from our suppliers.
- Consider environmental credentials and impact when selecting suppliers and goods.
- Consider the environmental impact throughout the life cycle of the product or service.



Governance

Belfast Harbour's environmental performance is governed at the corporate level by the Safety, Environmental and Security Committee. The committee comprises members of the Board supported by the executive management team.

The Committee oversees the Harbour's performance in respect of statutory obligations and the Port's own environmental objectives and targets.

Operational Controls

Day-to-day actions are managed in line with the policies, objectives and targets using a suite of standards, procedures and work instructions.

Environmental Competence

The key skills and knowledge required of Harbour employees are delivered through ongoing training, awareness and assessment programmes.

- All Belfast Harbour employees participate in environmental awareness initiatives.
- Employees with specific environmental responsibilities have completed specialised training such as Maritime and Coastguard Agency accredited Oil Spill Response training and training in waste management operations.



Environmental Context

Belfast Harbour is located at the head of Belfast Lough and consists of approximately 2000 acres of land and 1000 acres of water. The Harbour contains and is adjacent to nationally designated Areas of Special Scientific Interest, and European designated Special Protection Areas.

The Harbour is home to approximately 700 businesses including manufacturing, chemical, oil, gas and renewable energy companies as well as educational, office, retail, leisure, tourism and voluntary sector organisations. More than 23,000 people are employed in the Harbour each day.

The Harbour Estate contains:

1. Environmental aspects for which Belfast Harbour has direct control and responsibility.
2. Environmental aspects which are under the control of third parties but which may require monitoring or a response from Belfast Harbour.
3. Environmental aspects which are exclusively the responsibility of third parties.

This report addresses items 1 and 2 only.

Environmental Aspects

Significant environmental aspects include:

- Water and sediment
- Air quality
- Land quality and use
- Noise and vibration
- Biodiversity
- Climate change
- Energy efficiency
- Conservation of resources and waste management
- Visual impact
- Heritage



Water and Sediment

Sea and freshwater is important as a social and economic resource. Preserving the natural environment, improving water quality and avoiding pollution are key environmental objectives for the Harbour.

During 2014:

- The Harbour participated in a research project that resulted in oil spill operational forecasting systems being installed within the Harbour. The associated planning tools which provide data for pre-incident planning and response to oil spills were tested and validated during the year.
- Drainage improvements and the installation of additional interceptors continued in order to further reduce the risks associated with potentially contaminated run off water entering the Harbour.
- During 2014 there were 13 minor pollution incidents, arising from third party activities. All involved minor oil spillages which were dealt with to the satisfaction of the Northern Ireland Environment Agency (NIEA) and the Maritime Coastguard Agency (MCA).

Air Quality

Local air quality is important to the health of the people who work and live in and adjacent to the Harbour Estate. There are a number of operations under the control of Belfast Harbour which have the potential to impact air quality, and maintaining compliance with the relevant pollution control regulations is a key objective.

During 2014

- Belfast Harbour saw a continued increase in bulk cargoes handled by the port. Such cargoes can result in airborne dust. The Harbour continues to work closely with our customers and Belfast City Council's environmental Health Department to improve cargo handling processes.
- Numerous reports relating to dust caused by third party operations were received. These incidents were investigated and corrective actions completed where appropriate.
- An extensive air quality management project has commenced in order to address a number of persistent problems.
- There were no regulatory non-compliances by Belfast Harbour.

Land Quality and Use

Belfast Harbour is home to a number of commercial and industrial activities. Key objectives associated with land management include the prevention of illegal dumping, monitoring of pre-existing contamination and effective response to accidental spillages on land.

During 2014

- There were four recorded incidents of illegal dumping by third parties. These were investigated and reported to the appropriate authorities for action.
- There were 3 recorded incidents of spillage to land. These were of a minor nature and involved leakage of oil from third party vehicles which was contained by activating the Harbour Tier 1 Oil Spill Response Plan.

Noise and Vibration

Belfast Harbour supports a range of industrial and transport activities which have the potential to cause noise and vibration. The Harbour seeks to prevent such issues through careful design and location of facilities and by implementing standard operating procedures. Where issues arise these are measured and remedial actions taken where appropriate.

- During 2014, no noise complaints were received relating to Harbour activities. Two complaints were made regarding third party activities which have been passed on to the appropriate regulatory bodies for investigation.

Biodiversity

Belfast Harbour Estate and waters include nationally designated Areas of Special Scientific Interest, European designated Special Protection Areas and a Ramsar site of international importance for over-wintering waders. Belfast Harbour recognises that loss of Biodiversity is a significant environmental issue and more than 195 acres of land and seabed within the Harbour Estate have been set aside for nature conservation.

In 2012, Belfast Harbour jointly established an Ecological Steering Group with the Northern Ireland Environment Agency (NIEA), Royal Society for the Protection of Birds (RSPB) and contractors involved in the offshore wind farm facility construction project adjacent to the Belfast RSPB Reserve. This approach has continued into the operational phase of this project.

- Belfast Harbour are working with Business in the Community and a number of other public and private sector partners to develop a biodiversity charter for businesses in Northern Ireland.
- Belfast Harbour committed to the RSPB 'Pledge for Nature' during 2014 and is developing an action plan in conjunction with the RSPB.
- Belfast Harbour have engaged with a number of other stakeholders during the consultation process for a proposed Marine Conservation Zone (MCZ) to be located in Belfast Lough.



Climate Change

Belfast Harbour remains focused on the potential issues associated with climate change such as rising sea levels and increased storm surges. With this in mind Belfast Harbour established the following objectives:

- To responsibly manage our emissions and carbon footprint.
- To understand the potential impacts of climate change on Belfast Harbour.

During 2014:

- Belfast Harbour retained accreditation to the Carbon Trust Standard, an independently verified accreditation award to companies demonstrating continued reductions in carbon emissions.
- Reduced carbon emissions by 8.2% against a 2012 baseline.
- Established a flood forum to work with stakeholders on flood risk planning and mitigation.

Energy Efficiency

Belfast Harbour has continued to implement energy efficiency improvements:

During 2014:

- Belfast Harbour continued to install low energy LED lighting achieving emission reductions of up to 78% in some areas. A pilot street lighting project has verified the suitability of LED based street lighting for Harbour roadways.
- Operational control measures continued to be developed and implemented.
- Smart metering has been introduced to better monitor electricity and water consumption and identify opportunities for improvement.
- Additional cycle lanes have been introduced to encourage the use of cycling as a means of transport.

LED Quay lighting:

- 231 high pressure sodium lamps have been replaced with white LED lighting units.

Delivering the following improvements:

- Reduced energy consumption by more than 430,000 kwh/year.
- Saved 230 tonnes of emissions annually.
- Achieves 78% reduction in energy costs on general use quays.



Conservation of Resources and Waste Management

Belfast Harbour recognises that natural resources are finite and seeks to minimise the impact that its operations and development have on non-renewable resources. Specific objectives include:

- Sustainable development.
- Utilising recycled materials when appropriate.
- Minimising waste to landfill through reduction, reuse and recycling.
- Energy management based on reducing consumption and use of energy from renewable sources where possible.
- Reducing water leaks and consumption where possible.
- Encouraging industrial symbiosis within the Harbour community to prevent waste and reduce use of virgin resources where possible.

During 2014:

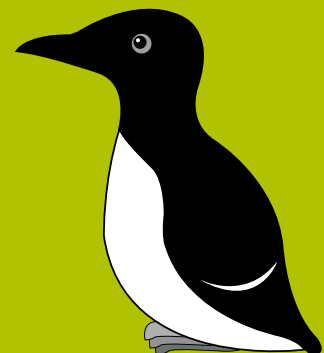
- Belfast Harbour continued to utilise a framework for sustainable development within the Harbour Estate working towards a target of achieving a BREEAM "Excellent" rating for the new City Quays 1 office development.
- Diverted more than 730 tonnes of waste from landfill and recycled almost 73% of total port waste.
- Belfast Harbour continued to reduce mains water consumption and installed smart meters where appropriate.

Heritage

Belfast Harbour has a rich maritime and industrial heritage. The Harbour Estate contains a number of listed buildings and docks as well as being home to the SS Nomadic and HMS Caroline. Where possible previous developments by Belfast Harbour have incorporated existing heritage features into their design, similarly planned developments endeavour to preserve and enhance the heritage features of the Harbour.

City Quays 1

- City Quays is the leading sustainable office development in Northern Ireland.
- 85% of materials came from within 25 miles of the site.
- 97% of waste was diverted from landfill.
- Waste from University of Ulster site was used as aggregate.
- 100% LED Lighting.
- Orientated to maximise daylight penetration.
- Smart lighting - all building foot prints have been set out to maximise daylight penetration, minimising the need for artificial lighting.
- BREEAM rating means CQ1 is in top 10% of UK non-domestic buildings.
- 12 construction jobs were created for the duration of the contract.
- Heat pumps will provide heating and cooling.
- High performance solar control glazing which reduces solar heat gain while offering high levels of natural light.



Visual Impact

Belfast Harbour comprises industrial, commercial, residential, recreational and natural environments. Developments are designed to complement the existing built and natural heritage wherever possible and often enhance an otherwise stark industrial landscape. Port operational and industrial facilities are generally located within areas of the Harbour zoned for such activities.

During 2014:

- The implementation of LED lighting technology has significantly reduced light pollution in the areas where installed.

Environment and Education

A core element of Belfast Harbour's Corporate Responsibility strategy is engagement with schools throughout Northern Ireland to promote the benefits of environmental responsibility and provide information on Belfast's maritime heritage.

The primary vehicle for engagement with pupils at educational Key Stages 1 and 2 is 'Webster the Port Monster' - Belfast Harbour's very own Environmental Guardian. Webster hosted two projects for schools in 2014, his Green Teacher of the Year Awards in association with Action Renewables and Webster's WaterWorks in association with the Ulster Orchestra.

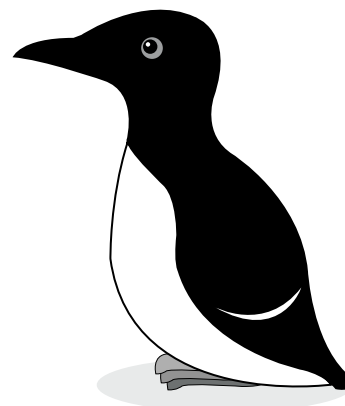


Engagement

Belfast Harbour believes that the operation of its business and the development of its facilities can be undertaken in an environmentally responsible manner and has established close working relations with other stakeholders on a local and international level to identify and share environmental best practice within the Port Industry. These relationships include:

- Business in the Community
- The Carbon Trust
- Action Renewables
- The Royal Society for the Protection of Birds (RSPB)
- Ulster Wildlife Trust (UWT).
- European Sea Ports Organisation (ESPO)
- Northern Ireland Biodiversity Group
- UK Major Ports Group
- British Ports Association
- General Stevedoring Council

The Port has organised a number of Belfast Harbour Environmental Forum meetings in which Harbour tenants, port users and Non-Governmental Organisations participated to address topics of common interest such as flood risk, waste management, biodiversity and new legislation.



Belfast Harbour

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