

Belfast Harbour

Belfast Harbour Commissioners Statement of Intent - Air Quality Strategy

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Forward

The quality of the air that we breathe plays a key role in the health of our local communities. It is our aspiration that people who live in, work in and visit Belfast Harbour should be able enjoy an environment which is clean and safe, with air quality which is not harmful to health.

This Statement of Intent sets out Belfast Harbour's aspirations for improving and maintaining healthy air quality in the Port of Belfast. The statement outlines the consistent approach and key actions that are required to improve air quality across the Harbour Estate.

Belfast Harbour is a busy, thriving multi-modal port set within an urban environment, so meeting the challenges associated with air pollution is no easy challenge. However, the Board and our Leadership Team are passionate about making improvements for the benefit and health of the current and future generations. We will therefore work closely with our stakeholders to ensure that we develop and implement a Port Air Quality Strategy and Action Plan that not only meets our statutory duties, but also puts public health and the improvement of our natural and built environment at the centre of everything that we do.

I am delighted to endorse this strategy to improve air quality in Belfast Harbour, and the benefits it will deliver to the health of all of those people who live, work in and visit the Port and Belfast Harbour Estate.

Vision

We will be the world's greenest multi-modal Port. Belfast Harbour handles a diverse range of trades, from ferries and containers to petroleum and dry bulk products. In that sense we are a truly "multi-modal" port, and our ambition is to be the greenest multi-modal port in the world. We will deploy new technologies to improve air quality, reduce fuel consumption and reduce emissions.

We will also be rolling out extensive environmental education, community regeneration projects and activities which improve the City, the Harbour Estate and Belfast Lough through biodiversity activity and environmental clean-ups. We also plan to continually improve water, air quality and biodiversity in Belfast Harbour to make it a more attractive location to live, work and visit.

We will be the region's most sustainable developer. Our buildings and workspaces will lead the way in environmental sustainability. Our City Quays developments are already the most sustainable in the region, designated as 'BREEAM Excellent', an industry recognised standard for sustainability. We will continue to develop our products with this sustainable ethos in mind.

Digitisation, Decarbonisation and Decentralisation. Belfast Harbour continues to improve our environmental performance and our goal is to 'digitise, decarbonise and decentralise' our energy usage in the Harbour Estate.

We will deliver energy solutions, which will improve our environmental sustainability and reduce ships' emissions within the Port. Innovative technology will also be used to reduce energy consumption and we'll provide advice to our customers to help them reduce their usage.

We are electrifying our vehicle fleet where practicable and will adopt zero-emission vehicles to promote environmental stewardship, as well as install electric vehicle charging points in key areas to promote the uptake of electric vehicles.

We will develop and pursue Clean Air, Clean Water and Biodiversity agendas, reducing the use of single use plastic and continuing initiatives with our partners to improve the water quality in Belfast Lough.

We will also promote the adoption of a ‘Good Growth’ agenda with our tenants and customers, seeking out new opportunities for them with environmental partners. Realising these green ambitions will only be possible through partnerships. We will work with existing and prospective customers to drive forward green initiatives, and establish a consortium of SMEs to assist in the delivery of clean, cost-effective and resilient energy.

Board Commitment

The Executive Leadership Team and the Board of Belfast Harbour Commissioners are fully committed to developing and endorsing a formal Air Quality Strategy covering the period 2020 – 2035. This strategy will be aligned with the Green Port objectives described in the Belfast Harbour document ‘A Vision to 2035: A Port for Everyone’.

Air pollution and sources of pollutants in Belfast Harbour

Air emissions within Belfast Harbour fall into 3 broad categories:

- **Greenhouse gases** such as Carbon Dioxide (CO₂), Methane(CH₄) and Volatile Organic Compounds (VOC’s) primarily associated with internal combustion, transport activities and industrial processes that contribute to climate change
- **Pollutants that reduce local air quality** and impact on people’s health such as Nitrogen Oxides (NO_x), Carbon Monoxide (CO), Sulphur Oxides (SO_x) and fine Particulate Matter (such as PM 10 and PM 2.5) largely associated with internal combustion and transport activities
- **Visible dust** associated with bulk cargoes and construction activities that may be categorised as a nuisance.

The table below displays the on-site emissions produced in tonnes by harbour craft, general use cargo handling equipment (excluding electric cranes) and vehicles owned and operated by Belfast Harbour Commissioners during 2018. These have been calculated using 2018 fuel consumption data.

Pollutant	Vessels	Plant	Vehicles	Cranes	Total
CO ₂	820	22	209	1123	2174
CH ₄	0.21	0.02	0.12	1.20	1.55
NO _x	10.90	0.31	2.51	12.53	26.25
CO	2.19	0.05	0.95	3.13	6.32
VOC	0.83	0.02	0.18	0.60	1.63
PM	0.89	0.01	0.09	0.36	1.35
SO _x	5.92	0.15	1.58	8.20	15.85

Totals were calculated using appropriate emissions factors found in the EMEP/EEA air pollutant emission inventory guidebook 2016 and the greenhouse gas conversion factors for 2018 supplied by the Department for Business, Energy and Industrial Strategy.

Legal and other requirements

Belfast Harbour is certified against ISO 14001:2015 (International standard for Environmental Management Systems) and ISO 50001:2011 (International standard for Energy Management

Systems), as a requirement of these standards Belfast Harbour has established and maintains a register of legislation, standards and other requirements applicable to the business.

Air Quality and emissions to air from the maritime sector is a health and environmental priority in the UK and has been identified as one of the top issues for European ports.

The Government's Clean Air Strategy was published in May 2018 and includes requirements for all major ports (handling 1m tonnes or more since 2016) in England to develop air quality strategies setting out their plans to reduce emissions across the port estate including ship and shore activities by 2020. The ports in scope are also required to prepare inventories and calculate associated emissions.

In January 2019, the Department for Transport (DfT) published "Maritime 2050: Navigating the Future" setting out the Government's vision for the future of the British maritime sector, this includes the Clean Maritime Plan which sets out domestic policies to reduce greenhouse gas and pollutant emissions from domestic shipping and port activities.

Although not currently within scope of the Government's Clean Air Strategy, Belfast Harbour intends to adopt the associated guidelines and produce a local Port Air Quality Strategy during 2020.

Partners and Stakeholders

Over the next 15 years we will continue working with our customers, service providers and tenants to reduce air emissions throughout the Harbour Estate, we will also work closely with Belfast City Council, our universities, research centres and innovators to reduce emissions to air wherever possible.

Consultation

Belfast Harbour will consult with customers, port operators, tenants and other key stakeholders during the development of our Air Quality Strategy. These include port user groups, industrial sector representative associations and Belfast City Council Port Health and Environmental Health Departments.

Stakeholder engagement sessions will be held throughout 2020.

Scope of emissions

Significant emitters of relevant emissions from port operations include road movements such as internal and external vehicles, operation of port equipment such as port mobile cranes, pilot and work boat operations, energy used for heating, lighting and workshop operations and emissions from vessels at berth.

Emissions from visiting ships, harbour tugs and third party workboats are beyond the control of Belfast Harbour and therefore out of the scope of direct actions to reduce emissions from on-site activities. Belfast Harbour will, however, consult and liaise with the relevant operators regarding their own emissions and actions they could take to reduce them.

The Port Air Quality Strategy will be created through analysis of a baseline emissions inventory, which will consider all relevant emissions generated on site and under the control or direct influence of Belfast Harbour based on historical data held by the port.

The emissions inventory will include all internal combustion activities and business travel around the site. Background emissions from shipping will also be included in the emissions inventory, this data

will be compiled using the National Atmospheric Emissions Inventory [NAEI] shipping methodology and include emissions while at berth. Emissions generated by third party users such as hauliers and port users will also be considered. A gap analysis is being conducted to understand what data already exists and what additional data is required to develop a relevant baseline, using 2016 as the baseline year. Belfast Harbour is working with external subject matter specialists to secure such data.

Targets and Financial Commitment

To deliver the strategy during 2020, an Energy and Air Quality working group has been established. The working group includes functional representatives from Belfast Harbour, this group facilitated by the Compliance Team will be responsible to the Safety, Environmental and Security Committee of the Board for delivering the Air Quality Strategy and associated workshops with port users, terminal operators, regulators and other third party stakeholders.

Belfast Harbour is committed to improving air quality for our employees, port users and the local community. Funding is being provided to establish a baseline emissions inventory and to create an Air Quality Strategy that will facilitate the establishment and monitoring of short, medium and long term actions to achieve specific emission reduction targets. This strategy will form a key pillar in our overall plan to become the leading multi-modal green port and achieve our ultimate ambition of becoming a zero emission business.

Belfast Harbour has established a plan for delivery of the Port Air Quality Strategy, key milestones are outlined in the table below:

Action	Completion
Energy and Air Quality Working Group	Monthly Meeting ongoing
Develop air pollution base map of Belfast Harbour Estate	Q1 2020
Create baseline emissions inventory	Q1 2020
Review of current plant and port equipment, to identify efficiency initiatives.	Q1 2020
Stakeholder engagement.	Commence Q1 2020
Develop air quality monitoring plan	Q1 2020
Commence diffusion tube monitoring at key locations	Q2 2020
Acquisition of road traffic data	Q2 2020
Collate and analyse shipping data	Q2 2020
Analyse the completed emissions inventory to identify short, medium and long term actions.	Q2 2020
Assess the impact of these actions in order to set ambitious emission reduction targets.	Q2 2020
Communicate the agreed actions and targets to internal and external stakeholders.	Q3 2020

Publish the Port Air Quality Strategy	Q3 2020
Stakeholder engagement on the published strategy.	Q3 2020

Contact Information:

Please use the following link to comment on how Belfast Harbour is addressing air quality improvements and any suggestions you have on the development of an Air Quality Strategy:

<https://www.belfast-harbour.co.uk/corporate/contact-us/>

Further information on Belfast Harbour's sustainability and environmental strategy and our vision for the future is available online at www.belfast-harbour.co.uk



Joe O'Neill
Chief Executive Officer

