

Sustainability Report



2016



COMHLACHT CHALAFORT
ÁTHA CLIATH
DUBLIN PORT COMPANY

DPC strives to operate Dublin Port to the highest feasible environmental standards.

DPC has an important and long standing commitment, firstly, to mitigate the negative environmental effects of Port operations and, secondly, to contribute to improving the environment. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their needs. For this reason DPC are committed to ensuring the monitoring and minimization of our environmental impact.



What's Inside

Foreword by the CEO	2	Safety	34
About Dublin Port Company	4	Social	36
Mapping to our Greener Port	6	Economics	42
Shipping Routes	8	Key Figures	46
Key Events	10	Initiatives	50
Environment	24	Glossary of Terms	54

What Sustainability, the Environment and Corporate Social Responsibility mean to DPC:



Sustainability to Dublin Port means ensuring that the Port can exist and operate at a rate which meets present human needs and demands and can expand to meet future needs while preserving the environment and remediating environmental problems of the past to enable the existence and operation of the Port to continue into the future. DPC together with our stakeholders' participation, including port users, work towards ensuring a sustainable port constructed on sustainable operations, activities and developments.



In keeping with the Sustainable Development Goals officially known as Transforming our World: the 2030 Agenda for Sustainable Development; Dublin Port Company and the Sustainable Energy Authority of Ireland (SEAI) signed a joint energy efficiency agreement in 2014. As a member of the Public Sector Energy Partnership Programme, the agreement means that Dublin Port Company and SEAI will work in partnership to achieve a target of 33% energy efficiency savings and improvements by 2020. DPC also obtained certification for ISO 50001 the international Energy Management Standard in December 2016.



DPC's Corporate Social Responsibility activities allow us to integrate social and environmental concerns into our business operations. DPC is committed to not only considering the environment, but also the anthropogenic impact of the environment, ecology and preservation of the environment. Integration of the Port with Dublin City is one of our main objectives.

Foreword by the CEO

Far right:

*Eamonn O'Reilly -
Chief Executive*

This Sustainability Report 2016 is the fourth annual report we have published.

With record throughput of 34.9m gross tonnes in 2016 and continued growth projected into the future, our commitment to sustainability requires us to set and achieve targets for the impact of port operations in a range of areas including economic, environmental and social.

Our objective remains to operate Dublin Port to the highest feasible standards, to learn from best practice in the port sector worldwide and, wherever possible, to lead best practice.

This report sets out the actions we have taken and the progress we have made during the past year in meeting our commitment to sustainability.

Eamonn O'Reilly
Chief Executive



Our objective remains to operate Dublin Port to the highest feasible standards



About Dublin Port Company

A large, bold yellow number '1' is centered on the page. The background is a dark blue, moody photograph of a lighthouse on a rocky shore at dusk or dawn. A stone wall is visible in the foreground, and the sea is in the distance. The sky is filled with soft, dark clouds.

1



98%

recycling rate in 2016



5%

increase in company turnover

2%



increase in Trade vehicles
(cars imported through DPC)

ISO 50001

Obtained Certification for ISO 50001, Energy Management System in December 2016



0.9%

increase in
number of ferry
passengers

ISO 14001

Successful Surveillance audit for ISO 14001, Environmental Management System in March and September 2016 with Certification Europe

6.1%

increase in
Imports




6.7%

increase in
Exports


Mapping towards our Greener Port




1995

 DPC constructs/upgrades Dolphins for terns.


1998

 Six Interceptors installed in MTL, Seatruck, Alexandra Quay East, Bissett Engineering

2000


 Two Interceptors installed on Promenade Road.

2005


 Commencement of the Port Estate site environmental audits.

2006


 Interceptor Installed on Alexandra Road Extension.


 No.1 Terminal energy management review commences.


2007

 New Interceptor and containment area installed at No.1 Dry Dock and No.5 Ro-Ro Terminal.


2008

 DPC achieves certification in ISO 14001 and EcoPorts PERS.


 DPC signed World Ports Climate Declaration.


 Wind generators and solar panels fitted to North Bull and Poolbeg light houses.


2009

 Baseline air monitoring: air monitoring programmes around Dublin Port Estate were completed.


2010


 Implementation of a Noise and Weather monitoring programme.

 Yearlong Viability testing of electrical vans commenced.

 No.1 Terminal energy project commenced on ramps, marshalling areas and internal lighting.

2011

 Baseline air monitoring: air monitoring programmes around Dublin Port Estate were completed.

 Composite water samplers installed to provide ongoing capability for random sampling of surface water network.

Waste Management



2016: DPC achieves its highest recycling rate to date at 98%

2009: 40% of DPC waste was being recycled. This triggered the implementation of a waste management programme.

2014: DPC now recycles 94% of its waste.

2007



Commenced optimisation of on-site electrical distribution system and removal of excessive high loss transformers.

Commencement of Free Phase recovery to combat historic ground pollution.

2009



A base-line investigation of DPC's Carbon footprint was completed.

2010



Additional oil recovery wells installed.

2011



All of the electricity consumed by DPC is 100% renewable which means the energy is created by a natural source.



Extension of Port rail network.

2012



A computerized management system IZER was commissioned to assist in monitoring and measuring water leakage.

2013



Investigation project regarding the possibility of installing ship to shore energy was carried out.

2014



Signing of Memorandum of Understanding for the establishment of the Dublin Bay Biosphere Partnership to support the designation of Dublin Bay as an official UNESCO site.

Launch of Dublin Port's first Sustainability Report.

2015



Continuation of the air monitoring programme.

PERS (Port Environmental Report System) Certification obtained in March 2015.

Dublin Bay Biosphere UNESCO Designation.

Energy Efficient (LED) High Mast Lighting installed (Various locations).

Continuation of the BirdWatch Ireland and DPC Programme of waterbird monitoring and research within Dublin Bay.



Finalist in National SEAI Sustainable Energy Awards.



Experimental LED fittings installed on Tolka Quay Road in street lights.

2012



Installation of Interceptor at Ocean pier.



Installation of a Building Management System in Port Centre to increase energy efficiency.



11kW wind turbine installed in Terminal 1. In 2013 the turbine produced 20,000 kWh.

2013



DPC creates a new site for terns on a floating platform in the Tolka Estuary.



Port Centre Building management system saves 204,000 kWh.



BirdWatch Ireland and DPC launched a programme of waterbird monitoring and research within Dublin Bay between 2013-2016.

2014



Dublin Port Company and the SEAI signed a joint energy efficiency agreement to achieve a target of 33% energy efficiency savings and improvements by 2020.



Commencement of a one year air quality baseline study.

2016



Continuation of the air monitoring programme.



Dublin Bay Biosphere UNESCO Conference.



Obtained certification for ISO 50001



Continuation of the BirdWatch Ireland and DPC Programme of waterbird monitoring and research within Dublin Bay.




Installation of Solar Panels at the Maintenance & Service Building.



Installation of Green Screens to provide information on what DPC is doing regarding environmental and energy management in our Terminals for members of the public

Shipping Routes

- 
- A map of the world centered on the Atlantic Ocean, showing shipping routes originating from Dublin, Ireland. The map is color-coded: North America is light blue, South America is dark blue, Europe is light green, Africa is dark green, Asia is light yellow, and Australia is dark yellow. White curved lines represent shipping routes connecting Dublin to various global destinations. The routes are as follows:
- Antwerp
 - Argentina
 - Belfast
 - Bilbao
 - Black Sea Ports
 - Brazil
 - Bristol
 - Canada
 - Cork
 - Emden
 - Ghana – Tema
 - Indonesia
 - Isle of Man
 - Le Havre
 - Liverpool
 - Milford Haven
 - Norway
 - Pembroke
 - Rotterdam
 - Spain
 - Waterford
 - West Africa – Lagos
 - Whitegate



Key Events

2

An aerial photograph of a large industrial port or shipyard, heavily tinted with a red color. The scene shows various industrial structures, including tall cranes, storage tanks, and a large body of water. A prominent yellow number '2' is overlaid in the center of the image.

Projects completed in 2016

1. Road Pavement Re-surfacing Works on Alexandra Road, Tolka Quay Road, White Bank Road, Ocean Pier, Terminal 1, Terminal 5 and Bond Drive Extension.

Surfacing works consisted of the following elements:

- Resurfacing works
- Reconfiguration works

Purpose:

The general maintenance of the surface of the internal roads network and of the quayside areas used for operations.

2. Quay Wall Repairs, various locations

The Quay Wall Repairs consisted of the following elements:

- Surveying landside quay wall
- Underwater surveys
- Repairs and remedial work to quay walls

Purpose:

To address the undermining of quays walls caused by both ships propellers and bow thrusters.

3. Terminal 2, Water Main Upgrade

Water main upgrade consisted of the following elements:

- Cleaning and inspecting existing water main using jetting techniques
- Cleaning, surveying and insertion of new High-density polyethylene pipe (HDPE pipes) into the existing life expired cast watermain.

Purpose:

Provide the appropriate infrastructure to allow fresh drinking water to be bunkered to ships.

4. Condition surveys of historical structures

The condition survey project consisted of the following elements:

- Surveys to establish the general condition of the structures
- Recommendations for further studies required to identify potential significance of structural deterioration

The historical structures include:

- The Great South Wall
- The Bull Wall
- Bull Island Bridge
- Bulloch Harbour

Purpose:

The condition surveys produced detailed baseline reports that will be used to provide information on the current condition of the structures and set up a monitoring programme that will allow the structures to be easily monitored into the future.

5. Drainage Condition Surveys and works, various locations

Drainage condition surveys of the ports drainage network consisted of the following elements:

- CCTV survey and investigation works
- Drain unblocking works
- Pipeline repairs (in pipe)
- Drainage, civil and structural repair works

Purpose:

To identify and rectify the areas within the drainage network which needed to be cleaned repaired, unblocked or replaced.

Projects completed in 2016 (continued)

6. Tern colonies

The refurbishment of CDL dolphin and the moving of the large tern pontoon.

Terns are small seabirds that breed in Ireland and spend the winter in African waters. Two species, the Common Tern and Arctic Tern, breed within Dublin Port. They arrive here at the end of April each year to breed on artificial structures within the port. Because the terns are specially protected by an EU Directive, Dublin Port Company has assisted in their conservation within the port over a number of years.

During 2016, timber protective boards were added to the CDL dolphin to prevent eggs and chicks being blown into the sea. The repositioning of the second floating pontoon from the Great South Wall to the location of existing tern colony at the ESB Dolphin was carried out to compensate for parts of the ESB dolphin that had to be removed due to deterioration. Other works included the introduction of baffles to the second floating pontoon to prevent predators gaining access onto the pontoon.

Purpose:

To help provide the terns with more secure nesting space within the port.

7. Maintenance Dredge Campaign

Maintenance dredging involves the removal of sediments that have built up in existing navigation channels, berths, approaches, and associated turning basins. It is a vital component of operations in most ports and harbours. Channels, berths and swing basins naturally shallow over time due to siltation and sediment transport processes.

Dublin Port Company is required to undertake Maintenance Dredging of the Port's navigation channel, basins and berthing pockets to maintain ruling depths to allow the safe passage of shipping to and from the Port. Maintenance dredging is a permitted activity and carried out under a Foreshore Licence and Dumping At Sea Permit and regulated by the DECLG and EPA.

The project consisted of the following elements:

- Bathymetric surveys of the dredge areas and dump site
- Environmental monitoring of the dredge areas and dump site
- Stakeholder liaison
- Environmental reporting of the dredging activities

Purpose:

Maintenance dredging is required to maintain designated channel and berth depths to ensure the continued efficient passage of vessels utilising the port. Most ports cannot sustainably function without maintenance dredging.

8. Alexandra Basin Redevelopment

8.a North Wall Quay and Berth 52/53 Site Investigations

Purpose:

To identify the ground conditions which will aid in the ABR project going forward.

8.b Marine Site Investigations

Purpose:

To identify the existing Geotechnical and Environmental ground conditions that will aid in the ABR project going forward.

8.c Cross Berth Quay Wall Construction - Berths 26 to 28

Purpose:

Cross Berth Quay (CBQ) is the 1st Phase of the Alexandra Basin Redevelopment and consists of the construction of new quay walls with two new bankseats.

8.d P&O Boundary Realignment

Purpose:

Site preparation, site clearance and re-alignment of existing P&O boundary to allow creation of a site area for future works.

8.e ABR Pre-Design Surveys

Purpose:

Reviewing current Dublin Port utility services with a view to identifying the location and extent of these existing services.

9. CDL Yard

Purpose:

Re-development of existing port lands (41,00m² approx.) between Alexandra Road and Tolka Quay Road. Yard and Terminal 4 to be redeveloped as part of the ABR project.

Top right:
Piling works at Cross
Berth Quay (CBQ)

Bottom right:
Piling works at Cross
Berth Quay (CBQ)



Projects completed in 2016 (continued)

10. Storecon Yard Demolition and surfacing

Purpose:

Site clearance, site preparation and re-development of existing port lands (32,000m² approx) between Tolka Quay Road and Promenade Road. Yard to create additional storage space for Dublin Port tenants as per Chapter 5 of the Masterplan.

High Mast Lighting (HML) Specification and performance:

HB6 RE73 FFF Specials are fitted to the 30m high masts in the port with the new led lighting Harvesting controls. Currently the consumption of the new Led is approx. 1.7KW @ 100% Power and around 450watts at dimming level. During March 2016 a trial on these units showed the consumption on an old mast in the port was 2,135 kWh and New Mast LED was 325 kWh this was a reduction of 84.78% of the consumption.



11. Coal Quay

Purpose:

Site clearance, site preparation and the relocation of Hammond Lane to the opposite side of the quay due to the CPO by DCC for new Covanta site.

12. Texaco Yard

Purpose:

Site clearance, site preparation and the incorporation of vacant land to the north of Alexandra Road into the existing Ocean Pier and Alexandra Quay East terminal facilities to create additional storage for unitised cargo with the facilities for future rubber tyre gantries and reefers.



Top left:
Demolition of Structure
at Storecon Yard

Top right:
Storecon Yard – High
Mast Lighting

Right:
Storecon Yard after
Construction

Top left:

New gates on
Alexandra Road

Top right:

New gates on
Alexandra Road

Below:

Trial LED solar lights



13. McCairns Yard

Purpose:

Site clearance, site preparation and the incorporation of vacant land to the south of Alexandra Road into the existing Ocean Pier and Alexandra Quay East terminal facilities to create additional storage for unitised cargo as per Chapter 5 of the Masterplan.

14. DPC Internal Roads Upgrade Works - Topographical Survey

Purpose:

Topographical surveys of the complete road network to ascertain levels to allow for Level 2 b Prelim design to be undertaken.

15. Gates on Alexandra Road - Phase 1

Purpose:

The erection of gates to close off Alexandra Road and to allow vehicular crossings between McCairns Yard and Texaco Yard uninterrupted.

16. No 1 Branch Road South

Purpose:

Site clearance and site preparation creating an open vehicular access to Alexandra Quay West

17. Installation of Solar Panel on the Maintenance & Services Building

An array of solar photovoltaic (PV) comprising of 180 square meters was commissioned on the east-west facing roof of the M&S building.

Purpose:

To reduce the running costs, protect against energy price increases and reduce the company's carbon footprint in line with the National Energy efficiency mandate and the 2020 targets. The system consists of 108 individual 208 Wp PV modules connected to a 25kW SMA inverter with grid tie protection.

The system is estimated to produce 23.45MWh/year; The Irish national average electricity consumption is 5,300 kWh per annum. This figure was based on estimated average usage for a 3-bedroom house. The Solar array on the M&S building then would power 4.3 houses for an entire year and take 12 tonnes of CO₂ from the atmosphere.

Projects completed in 2016 (continued)

18. Seafarers Centre

By promoting sustainable design in the built environment and in particular looking at re-cycling and re-use of existing buildings, DPC identified a building, formerly the canteen at the Odium's Mill site, as having potential to accommodate the new Seafarers Centre. Originally dating from 1940s the building is well sited within the Port Estate to accommodate the Seafarers. With a focus on excellence in the quality of design and construction the project was completed successfully in May 2016.

This project fits into DPC's overall Strategic and Masterplan; to develop quaysides adjacent

to deep water to their maximum in accordance with environmental / licensing requirements to remove non-core activities and facilitate adjacent to quayside /deep water such that they can be utilised. The relocation of the Seafarers fits well with this strategy as they were previously located within core operational areas.

DPC sought innovative and quality design solutions to accommodate a new Seafarers Centre at and ensured key sustainability targets were written into the brief set by the project manager – Jim Kelleher tasked the design team to exceed modern Building Regulations. A BER rating of B1 was achieved.

Purpose:

For the provision of a drop-in facility available to Seafarers of all denominations and none, in a welcoming and calm environment in addition to accommodating the pastoral care organisations (Mission to Seafarers, Stella Maris) under the one roof, who care for Seafarers coming to Dublin Port.



Top right:

The new Seafarers
Centre, Alexandra Road,
Dublin Port

Bottom right:

The new Seafarers
Centre, Alexandra Road,
Dublin Port

Below:

The new Seafarers
Centre, Alexandra Road,
Dublin Port



**DPC, through its strategic key objectives
underpinning the Masterplan, is
committed to:**

- Integrating new development with the built and natural landscapes of the surrounding area;
- Enhancing the natural and built environments and be integrated with the City.
- Promoting sustainable design in the natural and built environment. To promote in the development of future port facilities the principles of Universal Design to make environments inherently accessible for those with and without disabilities.
- A promotion of excellence and focus on good quality in design where possible.

This project successfully addressed all of these.



Key Events

Top right:

Pat Ward, Head of Corporate Services, Jim Keogan, Former assistant Chief Executive at Dublin City Council, Brid O'Connell, Welcome Marketing Ltd, Eamonn O'Reilly Chief Executive Dublin Port Company

Bottom right:

Captain Michael McCarthy, Chairman of Cruise Europe, Pat Ward, Head of Corporate services, Jim Keogan Former assistant chief executive at Dublin City Council

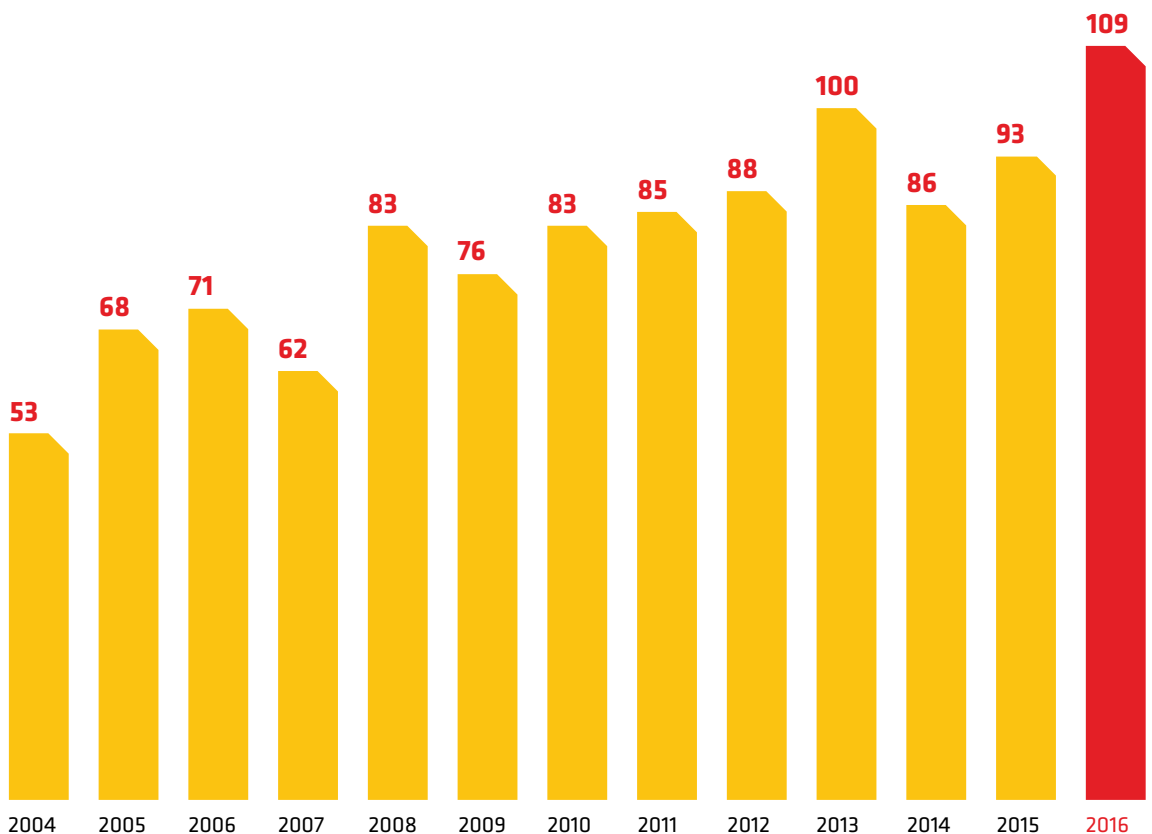
Cruise Dublin Launch

On March 2016, Dublin Port Company launched Cruise Dublin with the aim to champion Dublin as Ireland's cruise capital to international cruise companies. With the number of cruise passengers visiting Dublin every year increasing, Cruise Dublin wanted to capitalise on the city's marquee status and promote Dublin as a premium cruise destination. Working with members form local authorities, tourist attractions and retail outlets, the remit is to significantly enhance the cruise passenger experience by offering cruise companies and their clients a seamless, hassle free experience through quality stakeholder offerings.

Realising the economic benefits cruise tourism adds to the city, Cruise Dublin also helps Dublin Port Company realise their objective of re-integrating the port and the city. Dublin Port Company has been the driving force behind the development of Dublin's burgeoning cruise tourism business, having worked to attract and build this valuable business for the city for over 30 years. This is the next step in creating a positive economic impact for the city, enhancing inbound tourism and contributing to the development of Docklands.

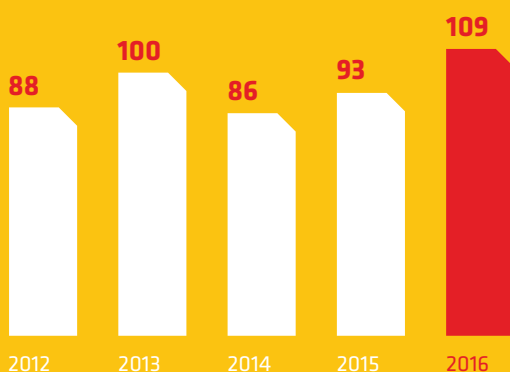


Trend in Dublin Ports Cruise business 2004 – 2016

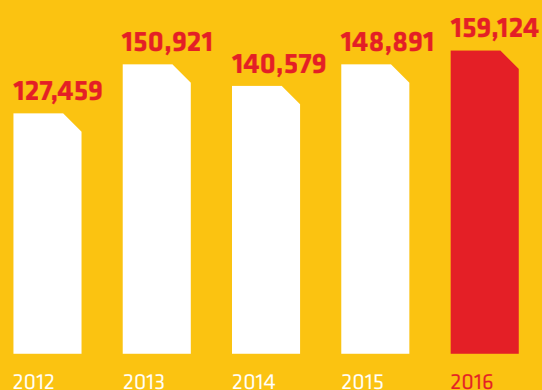


Cruise Stats

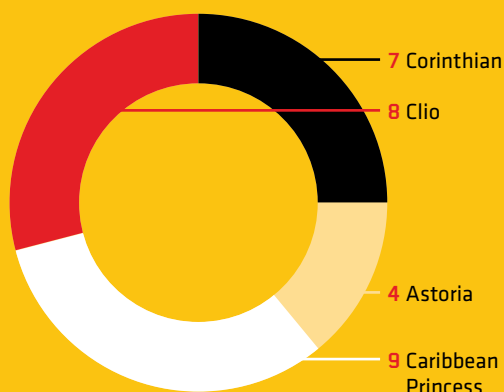
Cruise Vessel Numbers



Cruise Passengers



Top cruise line visits in 2016



Right:
Disney Magic

Top 5 Largest Cruise Liners:

333.33m ----->

MSC Splendida

Greenock, UK > **Dublin Port** > Cork

319m ----->

Celebrity Silhouette

Waterford > **Dublin Port** > Liverpool, UK

300m ----->

Disney Magic

Boston, USA > **Dublin Port** > Liverpool, UK

294.13m ----->

Norwegian Star

Greenock, UK > **Dublin Port** > Copenhagen, Denmark

294m ----->

Queen Elizabeth

Reykjavik, Iceland > **Dublin Port** > Southampton, UK

Key Events (continued)

Right:
Biosphere Conference
Brochure

Below left:
Green Screen

Below right:
ISO 50001 Certification



Dublin Bay UNESCO Biosphere Conference: Connecting People and Nature

The first Dublin Bay UNESCO Biosphere Conference took place at UCD on October 26th, 2016. Its theme was "connecting people and nature". It was a great success, attracting a wide audience of over 120 delegates including councillors, community groups, NGOs, local businesses, academics, ecologists, students and staff of local and national government bodies. Keynote talks came from Prof. Martin Price, Chair of the UK Man and Biosphere Committee, Dr Olivia Crowe of Birdwatch Ireland and Laurie Bennett of Within People, who gave an inspiring presentation on engaging people with nature. Several other speakers highlighted the great work being done locally. There was lively discussion over coffee. The day closed with useful workshops on Communication, Supporting Sustainable Communities and Research Networking.

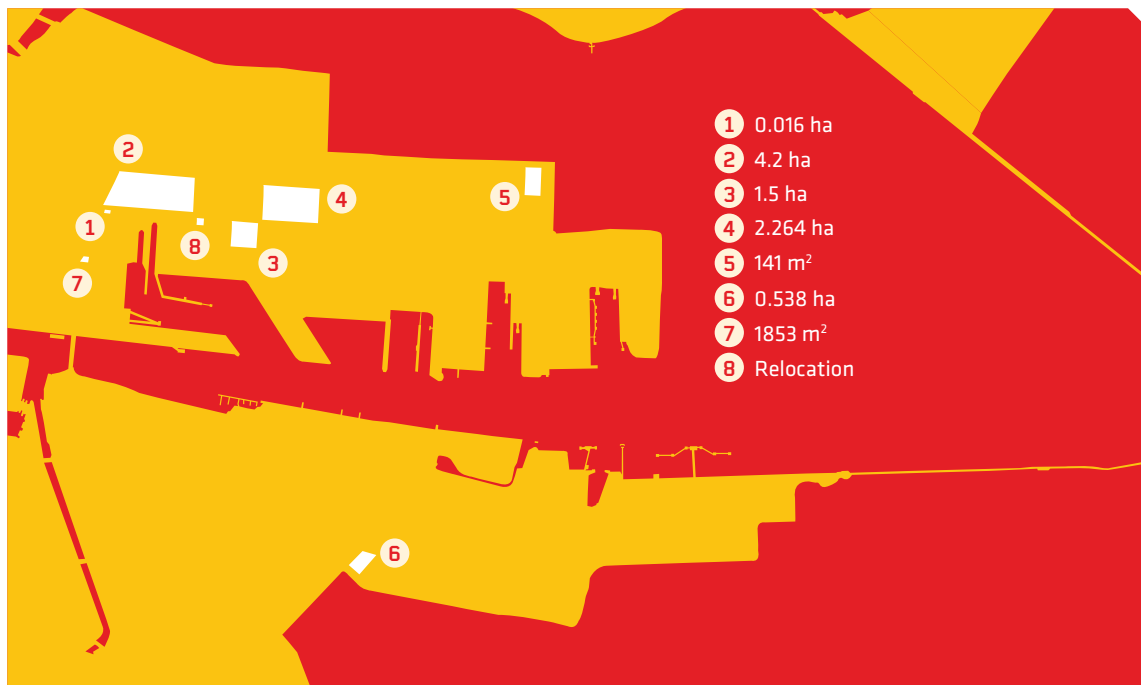
Green Screens

Green Screens were installed in our Terminals in Q4 of 2016 to inform members of the public about the work DPC are doing towards sustainability and to let them know what they can do to help us work towards a greener environment. Information is updated regularly and includes information on energy and environmental initiatives throughout the Port and tips for saving energy and improving their environmental awareness throughout their homes.



ISO 50001 Certification





New Appointments

Left to Right:
Michael Daly –
Marine Operative



Graham Fitzgerald –
Marine Operative

Left to Right:
Martin Doyle –
Marine Operative



Paul Holohan –
Maintenance Technician

Left to Right:
Eugene Smith –
Maintenance Technician
Stephen Rooney –
Maintenance Technician



Left to Right:
Ronan Carroll –
Pilot



Kurtis Leonard –
Marine Operative

Right:
Niall Duffy –
Fire Warden



Land Movements

- 1 0.016 ha** – Former SAL Freightline building – Alexandra Rd was demolished
- 2 4.2 ha** – Former CDL/Bord na Móna, Carnival Yard and Drumhaven Sheds have all been consolidated and redevelopment is completed. Lands now used for general lay down of cargo transiting the Port.
- 3 1.5 ha** – Former McCairns Yard and Q10 at No.3 Branch Rd –development completed and currently used for laydown of containers etc. being stevedored by Doyle Shipping Group. - Caretaker agreement in place.
- 4 2 ha** (Site 10) Alexandra Road – Doyle Shipping Group -Caretaker agreement in place.
- 5 141 square metres** – Doyle Shipping Group – re-occupied Unit Q – Dublin Port Warehouse Facility Tolka Quay Rd.
- 6 0.538 ha** – Ecocem Ltd. (Site 7(s)) South Bank Rd. - Temporary letting (former Roadstone Site) Dublin Stevedores Ltd. – new Portacabin at South Bank Quay
- 7 1853 square metres** – Irish Water (part Site 7) Short Term Licence for installation works south of Port Centre and easement over lands granted.
- 8** Missions to Seamen relocated from facilities at Berth 33 (Portacabin) to dedicated Seafarers Centre on Alexandra Road on the grounds of the former Odlums premises.

Key Events (continued)

Long Service Awards

Main Image:

L-R Eamonn O'Reilly, CEO; Conal O'Flanagan, Procurement Manager; Fergus Britton, Deputy Harbour Master; Colette Roche, Senior Clerical Officer and Lucy McCaffrey, Chairperson of DPC

Bottom left:

Fergus Britton, Deputy Harbour Master received an award for his 25 years' service with Dublin Port Company

Bottom middle:

Conal O'Flanagan, Procurement Manager received his award for 40 years' service to Dublin Port Company

Bottom right:

Colette Roche, Senior Clerical Officer received her award for 40 years' service with Dublin Port Company



Right:

L-R Pat Ward, Head of Corporate Services, Fergal McKeivitt, NISO Secretary, Mandy Nelson, NISG chair, Pat Breen T.D., Minister for Employment and Small Business.



NISO

The NISO All Ireland Occupational Safety Awards were established nationally in 1992 with 20 entries and have grown to become Ireland's premier safety awards.

The Awards recognise how organisations manage health and safety at work and winning an award demonstrates the positive and proactive culture of safety management that exists within your business.

Dublin Port Company entered the competition in 2016 for the first time, and were invited to the awards ceremony on 7 October 2016 in Killarney, where the company received a Distinction Award for their submission.

Social Media

At Dublin Port Company we take great measures to incorporate the comments and opinions of staff, customers, and the Community.

Since the launch of Dublin Port Company on social media in June 2013, we have grown a follower base of over 20k fans who actively engage with us on a regular basis.

We have worked to disseminate relevant information to our stakeholders and the general public through our social media channels posting varying topics of interest from leisure activities, cruise ship arrivals, community events and commercial facts relevant to our business which have been warmly welcomed and has helped integrate Dublin Port with the city.

 **21,013**



455

You Tube 98

2,501

Timeline of Events

Dublin Port has a very unique and indeed varied story to tell. Social media is a necessary communication tool which provides a platform for all stakeholders to engage. Our huge following demonstrates the interest that Dublin Port stimulates, while acknowledging the success achieved over this past 3 years since our launch.



June 2013
Launch of Dublin Port Company on Facebook & initial blog site



November 2015
Launch of the Dublin Port Archive site



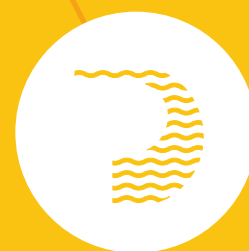
March 2016
Launch of Cruise Dublin and the members site



March 2015
Design update of the Dublin Port blog



January 2016
Launch of Instagram/Twitter platform



June 2013
Launch of Dublin Port Company corporate site

Environment

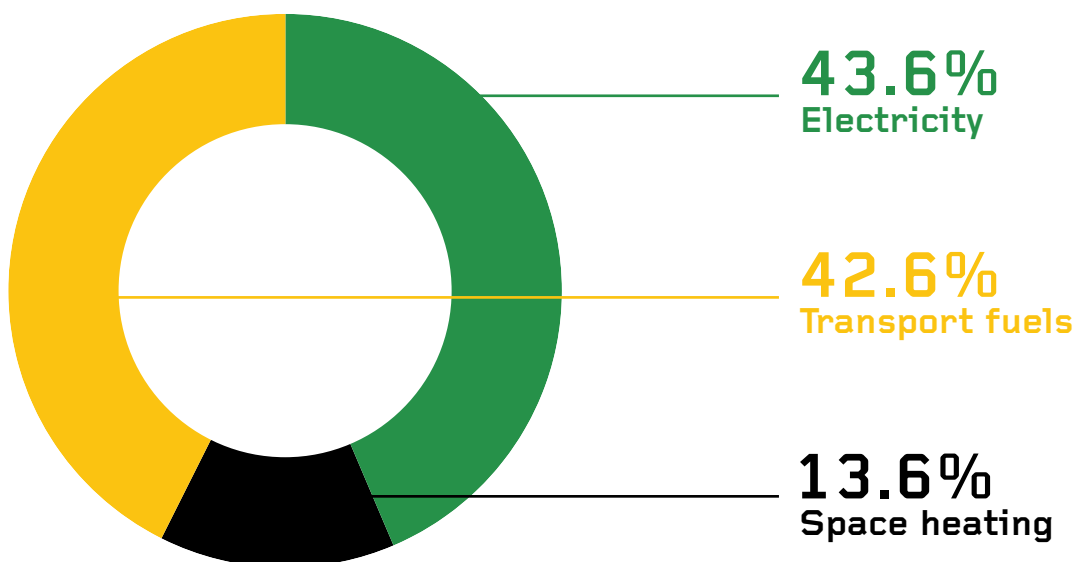
A large, bold, yellow number '3' is centered in the middle of the image. The background is a coastal scene with a dark, textured beach in the foreground, a calm sea in the middle ground, and a dark horizon line. Two large ships are visible on the horizon, and a small, dark silhouette of a person is walking on the beach near the water's edge. The overall color palette is dark and moody, with the yellow number providing a strong contrast.

Energy 2016

Dublin Port Company's total Final Energy consumption was excess of 18.069 GWh in 2016. When we talk in terms of total final energy (TPER), we mean all energy consumed. This includes all electricity, marine gas oil for fueling our marine craft, thermal oil and gas for our space heating requirements as well as diesels and petrol to keep our vehicles on the road.

Dublin Port's energy consumption is enough to power 3,500 average homes in Ireland and results in 4,255 tonnes of CO₂ emissions per annum.

Our energy consumption comprises of 43.6% electricity, 42.6% transport fuels for vessels and vehicles, 13.6% for space heating.



Dublin Port Company and Sustainable Energy Authority of Ireland (SEAI) signed a joint energy efficiency agreement in 2012. As a member of the Public Sector Energy Partnership Programme, the agreement means that Dublin Port Company and SEAI will work in partnership to achieve a target of 33% energy efficiency improvements by 2020.

The third National Energy Efficiency Action Plan (NEEAP 3) reaffirmed Ireland's commitment to delivering a 20% reduction in energy demand across the whole of the economy by 2020, along with a 33% reduction in public sector energy use. Each NEEAP outlines the energy efficiency measures that will be implemented to reach the national energy saving targets as well as the progress towards this target. NEEAPs also include information on the exemplary role of the public sector and on provision of information and advice to final customers.

Under the Public Sector goals, Dublin Port is obliged to achieve a 33% energy efficiency improvement by 2020 relative to its baseline year of 2009. As the activities of the port grow or contract, energy use will rise or fall. As a

result, our main ('Level 1') Energy Performance Indicator is energy use (TPER) per tonne of volume throughout, and our challenge is to achieve a 33% improvement in this.

As of December 2016, DPC has achieved a 17% improvement in energy performance. In order to meet the 2020 target of a 33% energy efficiency improvement DPC needs to achieve a 5.1% improvement each year, between 2017 and 2020 across its major energy consumers, defined as

- Buildings – electricity and fossil fuel use to be reduced by 5.25% per annum.
- Marine fuel use to be reduced by 5.25% per tonne per annum. This target is driven by port tonnage, therefore on a constant tonnage basis, the 5.25% target means achieving:
- Electricity savings of 69,020 kWh (~70 MWh) in 2017
- Thermal savings of 49,734 kWh (~50 MWh) in 2017
- Marine fuel savings 136,065 kWh (~136 MWh) in 2017

Energy 2016 (continued)

Since Baseline to 2016



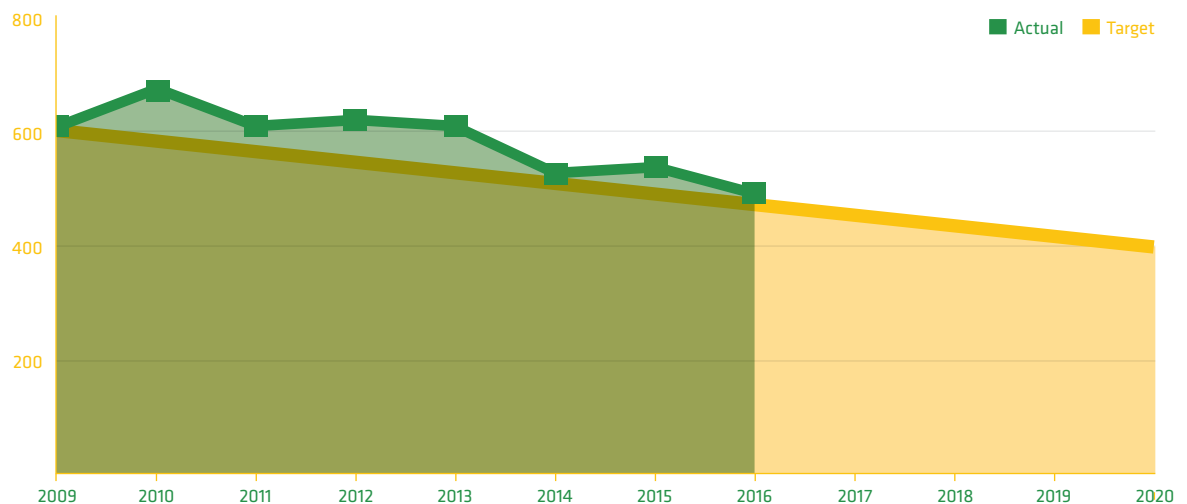
Energy saving down

16.7%

Energy consumption up

9.7%

Energy Performance Indicators 2016



7.4%

better than 2015

16.8%

better than baseline



24.3%

improvement required by 2020

5.4%

worse than target 'guidepath'

Level 2 Energy Performance Indicators (2016)



Electricity

228 $\frac{\text{kWh}}{1000 \text{ Tons}}$

7.4% better than 2015



Thermal

70 $\frac{\text{kWh}}{1000 \text{ Tons}}$

6.4% better than 2015



Transport

221 $\frac{\text{kWh}}{1000 \text{ Tons}}$

8.6% better than 2015

Clockwise from top left:
Energy Policy

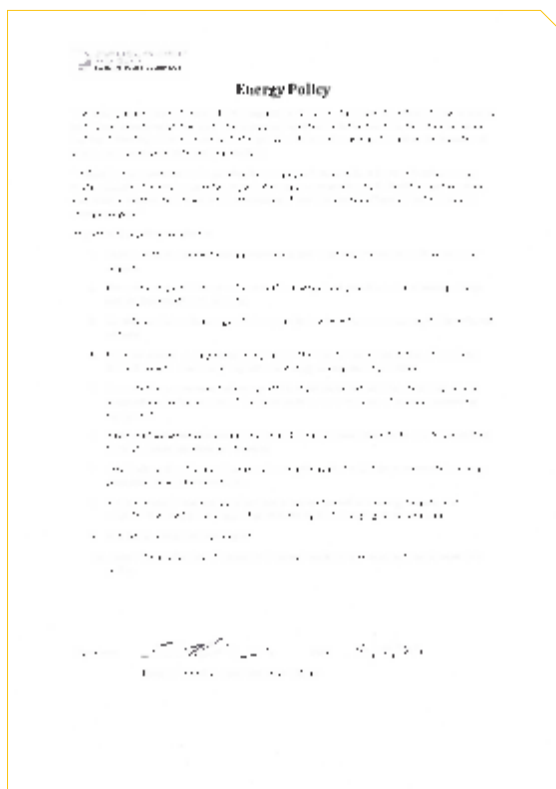
ISO 50001 Certification

Solar panels at
Maintenance and
Services, Dublin Port
Company

The graph on the previous page shows Dublin Port Company's glide path to the national 2020 energy targets, in 2016 the consumption of total primary energy was 519 kWh used per 1000 Ton of Throughput indicating an improvement of 41.6 Kwh per 1000 Ton, our target for 2020 is 418Kwh per 1000 Ton of Throughput.

Dublin Port Company's commitment to energy efficiency and reduction of CO₂ Emissions was underlined at the highest level when Chief Executive Eamonn O'Reilly, signed off on the 2016 Energy Policy that states:

"Dublin Port is committed to improving its energy performance in order to minimise energy costs, minimise the environmental impact of energy consumption by its facilities and services, and make a contribution toward the attainment of national energy efficiency and renewable energy targets."



The company's introduction in 2016 of a new Energy Management system and certification to ISO50001 is further evidence of the significant resources which have been allocated to help achieve the 2020 energy efficiency targets set by Government.

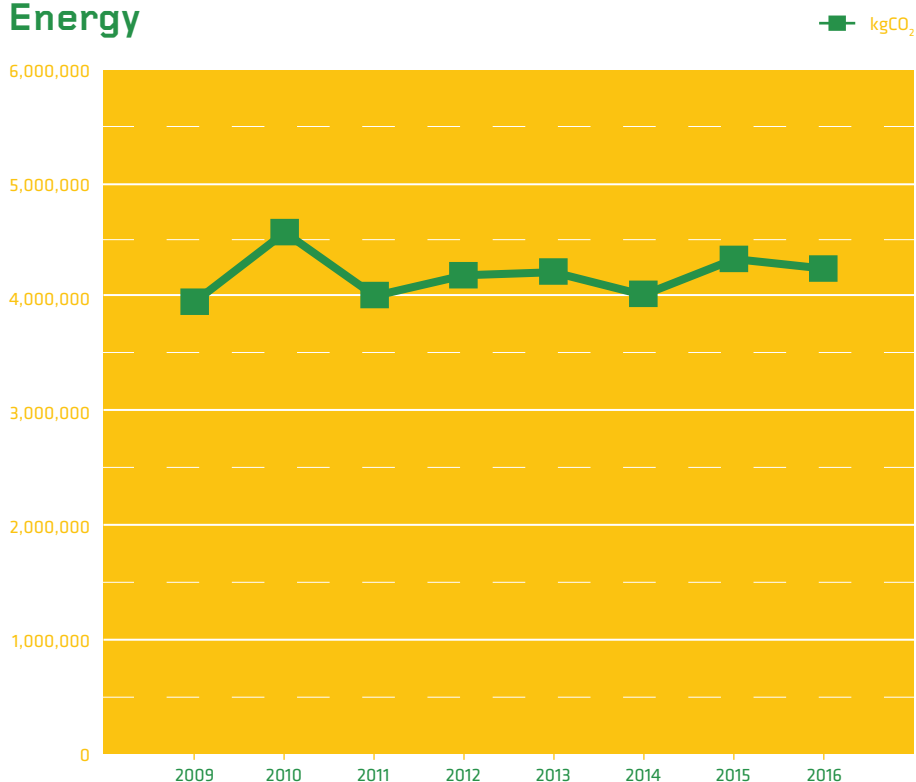


Our energy efficiency programme has seen much investigation into lighting design as well as standardisation and replacement of existing fittings. The installation of solar Photovoltaic systems in the Maintenance and Services building, the trialing of a fully renewable smart street lighting system and remote metering and data analytics all point to how seriously the Company is in pursuing energy efficiency on all fronts.

Carbon Emissions

Energy Category	Energy Type	Unit	Baseline	2009	2010	2011	2012	2013	2014	2015	2016
Electricity	Net Electricity Imports (MPRN data)	kgCO ₂	2,102,799	2,102,799	2,307,840	2,044,640	2,244,961	2,059,677	1,850,569	1,879,633	1,850,936
	Onsite Generation by Non-Fuel Renewables or Landfill Gas	kgCO ₂	0	0	0	0	0	0	0	0	0
Thermal		kgCO ₂	694,018	694,018	668,036	766,900	714,897	621,058	520,807	565,116	557,018
Gas	Natural Gas (GPRN data)	kgCO ₂	59,397	59,397	73,474	60,001	78,544	166,798	139,377	148,797	165,593
Heating Oils		kgCO ₂	634,621	634,621	594,562	706,898	636,353	454,260	381,430	416,319	391,425
	Kerosene	kgCO ₂	20,286	20,286	21,444	20,192	10,096	20,192	20,253	21,454	31,813
	Gasoil	kgCO ₂	614,336	614,336	573,118	686,706	626,257	434,068	361,177	394,865	359,612
Transport Fuels (Mineral Oil Fuels)		kgCO ₂	1,165,528	1,165,528	1,598,035	1,204,948	1,252,975	1,540,946	1,647,625	1,899,373	1,847,293
	Marked Diesel (non-thermal)	kgCO ₂	1,063,416	1,063,416	1,511,163	1,114,680	1,164,307	1,450,310	1,551,917	1,790,932	1,738,380
Transport Biofuels		kgCO ₂	0	0	0	0	0	0	0	0	0
Total CO₂ Emissions		kgCO₂	3,962,345	3,962,345	4,573,910	4,016,487	4,212,833	4,221,681	4,019,001	4,344,122	4,255,247

Energy



Air Quality Monitoring 2016

Air monitoring data from 18 monitoring stations over a period of 6 monitoring events was assessed against legislative limits and target values for the protection of human health and vegetation. Monitoring was carried out for NO₂, SO₂, PM10, PM2.5 and Total depositional dust.

With respect to SO₂ monitoring results, no levels of SO₂ above the EU limit value were recorded at any of the 18 monitoring stations (A1 – A18) over the 6 monitoring events.

With respect to NO₂ monitoring, there were a few breaches in the EU annual average limit value over a number of monitoring stations (A1 – A18) over the 6 monitoring events. When data was averaged over the 6 individual monitoring events for each of the 18 monitoring stations a total of 2 stations exceeded the annual limit value of 40µg/m³. Average concentration values ranged from 44.40 to 45.55 µg/m³ for these 2 monitoring stations. Typical concentration values ranged from 40.12 µg/m³ to 47.63 µg/m³. Eleven of these exceedances were at locations A4 and A9 which are in close proximity to traffic dwell locations (junction and roundabout) which could explain the exceedance.

With respect to PM10/2.5 monitoring, no breaches for PM10/2.5 occurred at the two monitoring stations D5 and D6. Monitoring was carried out over a period 1 week at monitoring station D5 and D6.

With respect to Total depositional dust monitoring, this was carried out at 4 monitoring stations (D1 to D4) over four monitoring events (1 monitoring event duration equals approx. 1 month). The results indicated that severe nuisance dust levels persisted at monitoring station D3 over 3 monitoring events and D2 for one monitoring event. Total depositional dust levels at all other locations were below the Irish EPA recommended limit value.

With regards to the comparison of SO₂ and NO₂:

Year 2015 Vs Year 2016

SO₂

Monitoring data collected during Event 2 Year 2016 were similar in nature across the monitoring area in comparison to Year 1 2015.

NO₂

When Year 2 2015 is compared with Year 1 2016 data sets, there is a reduction of 12 individual monitoring stations and therefore the overall compliance levels across all monitoring stations has improved by 67%



Right:
Air monitoring locations

Dublin Bay Birds Project

Dublin Bay is an internationally important wetland complex, and is designated as a Special Protection Area (SPA) based on the wintering waterbirds that it supports. It is internationally important for Light-bellied Brent Goose *Branta bernicla hrota*, Knot *Calidris canutus*, Black-tailed Godwit *Limosa* and Bar-tailed Godwit *Limosa lapponica*, and supports nationally important numbers of a further 18 species.

Each year we provide details on the Dublin Bay Birds project which commenced in 2013 in our Sustainability Report. DPC are supporting Bird Watch Ireland (BWI) to complete this 3.5 year programme which monitors and researches the waterbirds within Dublin Bay. The programme was initiated because Dublin Bay is among the top-ten most important wetlands in Ireland for migratory wintering waterbirds. The programme involves comprehensive counts and observations.

The following outlines the progress of the project throughout 2016:

1. Core surveys

Four waterbird species were present in internationally important numbers in Dublin Bay between July 2015 and June 2016: Light-bellied Brent Goose, Knot, Black-tailed Godwit and Bar-tailed Godwit. A further 24 waterbird species were recorded in nationally important numbers during the same period. In total, 64 waterbird species were recorded throughout the year, with the highest species diversity occurring during surveys in January (44 species) and February (41 species) and the lowest diversity in May (24 species). These patterns of diversity are as expected, with peak diversity during the mid-winter period and the lowest number of species recorded mid-summer.

2. Colour-ringing

Since 2013 525 waders have been ringed as part of the Dublin Bay Birds Project. In 2016, the colour-ringing re-sightings database grew to over 3,000 records. The colour-ringed species are Oystercatchers (380 birds) with smaller numbers of Bar-tailed Godwit (102) Redshank (39) and Curlew (4). This information is allowing us to track how these birds are using the resources in Dublin Bay and will lead to the identification of areas that are particularly important, and those that are used less frequently. The majority of the sightings continue to come from locations within Dublin Bay, but reports of colour-ringed birds continue to be received from Scotland, Iceland, the Faroe Islands and Norway. This adds an interesting international context to the project and allows us to ascertain where these Dublin-wintering birds are breeding, and passing through on migration.

3. Breeding terns

Common Terns and Arctic Terns have been known to breed in the Dublin Port area since at least 1949, and each year since 1994, the breeding Common and Arctic Terns at Dublin Port have nested on two isolated mooring dolphins situated on the south side of the port. The ESB dolphin is

designated as a Special Protection Area under the EU Birds Directive and the CDL dolphin is designated as proposed Natural Heritage Area under the Wildlife Act. In 2013, a raft was customised to accommodate breeding terns and was floated on the Tolka estuary. In 2015, a second floating raft, designed to facilitate breeding terns, was instated in the Liffey at the Great South Wall.

In total, at least 503 tern pairs laid eggs in the Dublin Port colony in the 2016 breeding season. The majority of the nests (382) were on the ESB Dolphin, with 114 on the Great South wall raft (Pontoon No. 2), and only 7 on the Tolka raft (Pontoon No. 1) which was significantly affected by depredation. The CDL dolphin was not used in 2016, either as a result of disturbance of the removal of nesting substrate, or a combination of both. Productivity (the number of chicks raised per pair) on the concrete platform of the ESB dolphin was estimated at 0.31-0.92 chicks per egg-laying pair. The wooden platform of the ESB dolphin could not be accessed to estimate productivity. It is estimated that only 0.08-0.12 chicks per egg-laying pair fledged on the Tolka raft, having been strongly affected by depredation. Productivity on the Great South wall raft was 0.31-0.38, which is low but represents some improvement from last year. It is expected that it will take several years for stable colonies to form on the new rafts, with younger breeders likely to be the first to colonise but liable to be less successful at breeding due to inexperience. Overall productivity in Dublin Port was low and a shortage of food is likely to have been the main cause of the elevated chick mortality seen this season – as was the case at the Rockabill and Dalkey tern colonies in 2016.

Six tamper-proof rat bait stations were deployed on the ESB concrete platform, the Tolka raft and the Great South wall raft this year and no evidence of mammalian predation was detected on any of the four nesting structures. There was significant evidence of avian depredation on Pontoon No. 1 during the incubation stage however, resulting in very low productivity there. The premature fledging of chicks into the water was not a problem in 2016 due to the installation of higher perimeter boards on some structures and the curtailment of late-season ringing visits. Maintenance of each of the nesting structures is paramount in order to maintain suitable nesting substrate for the birds; prevent mammalian predation; and avoid the premature fledging of chicks into the water before their feathers are waterproof. The ESB wooden structure has deteriorated substantially to the point of collapse and Birdwatch Ireland continues to call for the situation to be remedied in advance of the 2017 breeding season. The structure is a Special Protection Area (SPA) and should be repaired or rebuilt if necessary to protect the future status of the terns at the SPA.

Right:
Common Tern in Flight



In 2016, 112 chicks were fitted with individually identifiable colour-rings, which will allow them to be identified at a distance, without the need for recapture. This is a continuation of the work that began in 2015 and will allow the movements of individual birds to be tracked from their natal structures to their breeding sites, when they are recruited into the breeding population. This will measure how the tern population responds to the presence of the new structures and will ascertain whether the provision of these structures will result in an overall increase in the Dublin Port colony population or simply its redistribution to a larger number of structures. As with the waders above, the colour-ringing of terns also helps shed light on international movements both during and outside the breeding season. To date terns ringed in Dublin Bay have been reported in Northern Ireland (July 2016), Scotland (May 2016), Wales (July 2016) and Namibia in West Africa (Jan 2017).

4. Gulls

The total number of gulls recorded during a roost survey across Dublin Bay in February 2016 was 25,060. Six species of gull (Black-headed, Common, Herring, Lesser Black-backed, Great Black-backed and Mediterranean Gull) were recorded, with Black-headed Gulls the most numerous. This is higher than the total recorded in 2015 (18,758) but still lower than in February 2014 (29,564). Higher numbers were recorded in 2012 (42,228) and 2009 (41,293) but these surveys covered a larger area than the current project so the results are not directly comparable.

5. Post-breeding tern aggregations

Five species of tern (Black Tern, Roseate Tern, Common Tern, Arctic Tern and Sandwich Tern) were recorded during the dusk surveys in August and September 2016.

A peak count of 17,440 terns was recorded on the 12th August, an exceptional number compared to recent years. A count on the previous day (11th August) found 3,003 terns and one the following day (13th August) recorded 11,800 terns, indicating that such large aggregations are rare and short-lived and any comparable events may have been missed in other years. Peak counts of 11,700 and 9,025 were recorded in 2006 and 2007 respectively, and

an estimated 20,000 to 30,000 terns were reported in August 1996, so the peak count in 2016 is unusual but not unprecedented. Outside of the exceptionally large numbers on the 12th and 13th of August 2016, numbers of roosting terns in Dublin Bay were broadly consistent with the counts recorded in 2013, 2014 and 2015, as part of this study.

The changing numbers and species composition of tern aggregations in Dublin Bay numbers during the survey period indicate that there is considerable turnover in the roosting flocks throughout the post-breeding season. We have shown through ringing work that Sandymount Strand supports terns not just from the Dublin colonies, but from at least as far away as Scotland and Norway. Similarly, the presence of Black Terns, whose closest breeding colony is in the Netherlands, indicates that Dublin Bay supports terns from much further afield than just the Dublin or Irish colonies in the post-breeding season.

6. GPS tracking

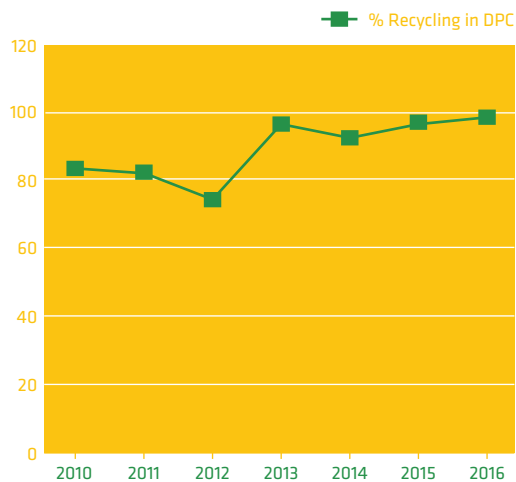
Thanks to support from Dublin Port Company and Sustainable Energy Authority of Ireland, a team of BirdWatch Ireland staff and volunteers, supported by a canon-netting team from Scotland and the Irish Brent Research Group, undertook the successful catch of over 120 waders at Bull Island, Dublin Bay in November 2016. Each was given a unique colour and letter/numbered ring combination so that they could be easily identified in the field. The expert team also managed to successfully attach a total of 14 GPS tags to three Curlews, five Redshanks and six Oystercatchers.

The team managed to successfully download information from every tag deployed, with the data downloaded from tags ranging from 4 days to 106 days (average of 55 days). This dataset is currently being analysed, but there is a lot of locational information collected and while we are still learning about why individuals make certain behavioural choices (roosting/foraging/commuting) at different stages of the tidal cycle, the value of this emerging technology cannot be overstated. This work was supported by the Sustainable Energy Authority of Ireland (SEAI) through the Renewable Energy Research and Development Programme and by Dublin Port Company.

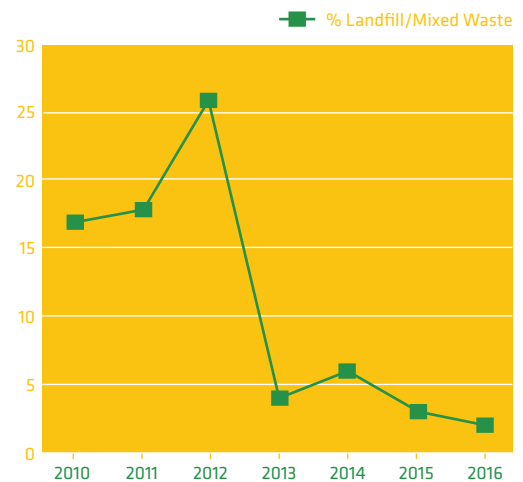
Waste Management

98% In 2016, DPC reached its highest recycling rate recorded at 98%.

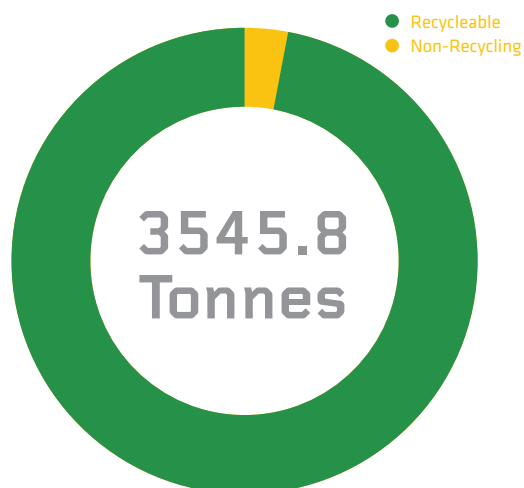
Recycling %



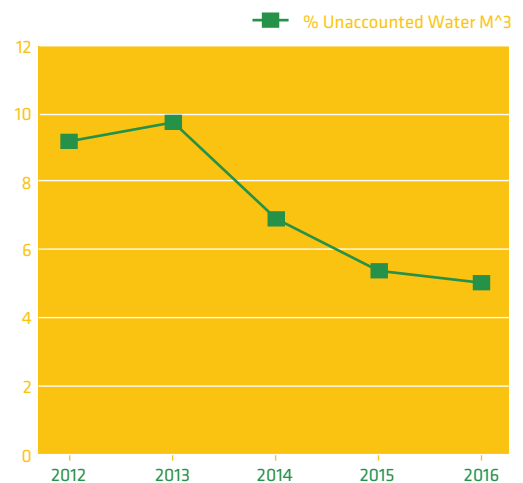
DPC Landfill/ Mixed Waste %



DPC Construction Contracts Waste



Unaccounted Water as a % of Total Water Used





Safety

4



Conserving and Nurturing our Human Resources

Total Cost of Training



30

Number of training courses completed



298

Number of persons attending courses

Course:

- Basic First Aid
- Gas Testing
- Master (Code Vessel)
- PSA The Private Security Authority
- CPC Module 2 Minimising Risks and Managing Emergencies in the Transport Industry (MRMET)
- Internal Occupational Health and Safety Management System Auditor (OHSAS 18001)
- Module I: Supervisors Oil Jetty Ship Shore Interface
- PST Sea Survival
- Demount Gritter and Din Mounting Snow Plough
- ISO 14001 Internal Environmental Auditor
- Module II: Supervisors Oil Jett Introduction to the Common Oil Pipelines Committee Material
- QQI First Aid
- ECDIS Navigational Aid
- ISO 50001 Masterclass Programme
- Occupational First Aid
- Risk Assessment
- Elementary First Aid Course (EFA) STCW-95
- Life Jacket Familiarisation course
- Oil Jetty Safety, Security and Evacuation Familiarisation - Non Operational
- Safe management and handling of healthcare risk waste
- Emergency Management Team Training
- Managing the Construction Design Process
- Oil Spill Training
- Safe Pass (FAS)
- ENG 11 (Medical) Seafarers Medical Cert
- Manual Handling
- Passenger Boat Proficiency Certificate
- Security Awareness Training
- VTS V-103 Refresher
- VTS V-103(1)

Right:

Safety Committee (L-R): James Kennedy (Harbour Safety Rep), Bernadette Brazil (EHS & Risk Manager), Pat Ward (Head of Corporate Services), Maurice O'Beirne (Harbour Police Safety Rep), Stephen Collier (Maintenance and Services Manager), Paddy Paisley (Maintenance & Services Safety Rep), Bernard Power (Pilot Safety Rep), Laura Kearns (Health and Safety Specialist), Paul Clarke (Marine Supervisor), Michael McKenna (Harbour Master), Fergus Britton (Deputy Harbour Master), Marian Clinche (Properties Office),



Social

5



CSR Programmes

Dublin Port Company commenced their CSR programmes in 2001 at a time when CSR was not on the radar of most national companies.

Since 2001 our programmes have increased steadily under our three pillars:

- **Education:** supporting local infant, primary and secondary schools
- **Community:** supporting various local groups
- **Sport:** supporting local sporting clubs and events

DPC believe the investment made through sponsorship and volunteering of staff in our chosen three CSR pillars has improved the educational and social life of the communities surrounding Dublin Port.

Within the Company's Strategic Plan, CSR is defined as the commitment of the Port to contribute to sustainable economic development; working with employees, the local community and society at large to improve the quality of life, in ways that are both good for the business of the Port and good for Dublin City, its citizens and visitors

The CSR policy approved by the Board sets a target for the Company's cash contribution to CSR activities at 1% of Profit Before Tax.

Education

DPC's Scholarships Programme

Since the commencement of the programme in 2001 over 560 students have received financial support for their third level education. Applications for the academic year 2015/2016 for support were received in early September, interviews were held, each application was objectively assessed by an independent interview panel. Fifty Two of those who applied received financial support to begin their third level education 107 students are now receiving grants. Continued feedback from students receiving financial support is very positive, most students would say,

"It would be impossible for them to continue their education without the financial support, enabling them to purchase books, bus/train tickets and provide for general expenses. "

National College of Ireland, Early Learning Initiative

Dublin Port Company sponsors the PCHP (Parent Child Home Programme), this programme was set up to envision a world where every child enters school ready to succeed because every parent has the knowledge, skills and resources to build school readiness where it starts: in the home.

PCHP takes place twice weekly for half an hour in the child's home over two years. Parents and toddlers aged from 18 months up to 3 years old attend (selected on referral and needs based criteria). The group provides activities, rhymes and books to support parents and toddlers to learn through play together. The curriculum is child-centred, play based and incorporates the principles of Aistear - The National Framework for Early Learning - to support toddlers learning through play; encourage attentive parenting; increase parent to parent support; and strengthen parent/child attachment.

This programme as proved to be very successful; parent(s) are always very thankful they have taken part in the programme, to improve not only their child's development but to give them the skills to interact with their child and prepare them for school.

Ringsend College - iPad Programme

Children coming from the local primary school in Ringsend received their education through interactive white boards and using iPads sponsored by DPC, this allowed them to acquire a skill set for using PC's and software. It became apparent the second level school could not provide this continued educational experience as they did not have iPads. Ringsend College approached DPC with a proposal to invest in an iPad programme which would allow the 'new' students coming from the primary school to continue their education through continued use of an iPad. DPC agreed to sponsor the programme over a five year period this would allow the students to receive their own Ipad when commencing second level education in September 2014. Each student pays a weekly dividend back into the iPad account over the five years, this allows for the next group of 'new' students to receive an iPad on commencement of their second level education and It also gives ownership and responsibility to each of the students for their own iPad.

East Wall English/Maths Grinds and Home Work Club.

St Joseph's East Wall Youth have been doing grinds in English and Maths for Junior and Leaving Cert and also run a Home Work Club. The programme runs from November through to May.

CSR Programmes (continued)

Community

DPC sponsors various community groups in the local areas, ranging from to family drug support, summer projects, youth clubs, pensioner outings, community festivals and many more.

RDRD (Ringsend & District Response to Drugs)

RDRD has received financial support from DPC since 2001 the project has provided support services to over 200 families in the local communities. Year on year there has been a significant increase in those seeking support. The project team work with families that are experiencing tragic and traumatic circumstances ranging from serious illness, suicide, poverty, drug addiction, alcoholism, domestic violence and homelessness. The services provided by RDRD are vital to the communities who need them.

St. Andrew's Resource Centre, South Dock Festival

The festival is an annual event run by St. Andrew's Resource Centre in collaboration with Pearse Area Recreational Centre and many local groups and clubs. The festival aims to highlight and celebrate Pearse Street's and City Quay's traditional association with the docks as well as continuing to celebrate their lively local community and heritage.

The Lord Mayor launches the festival as part of Dublin Port Company's 'Casting of the Spear' where the Lord Mayor casts a spear into Dublin Bay marking their territory and boundary of Dublin and its Bay this tradition began in the 1800's.

This years' festival provided an array of events and activities to suit all ages and interests. From the opening Race Night event to the Teddy Bears' Picnic, the Seniors Big Day In and the Fair in the Square, there was an event to appeal to every member of the community.

Sport

DPC recognise the important role sport can play in the lives of communities; it brings people together to enjoy and take part in a shared interest. Sport crosses a wide sector, from rowing, sailing, football, hurling, soccer, swimming and many more.

The River Liffey, Dublin Port and Bay is a hive of activity during the summer months; Stella Maris and St. Patrick's rowing club annual regattas, Dublin Curragh racing, The Liffey Swim, Poolbeg and Clontarf yacht clubs sailing racing.

The GAA and soccer clubs hold training and competitions throughout the year, involving all ages from child to adult. The 95th Liffey Swim took place in September; the event was well attended by swimmers and onlookers.



Right:
Clana Gale Fontanoy

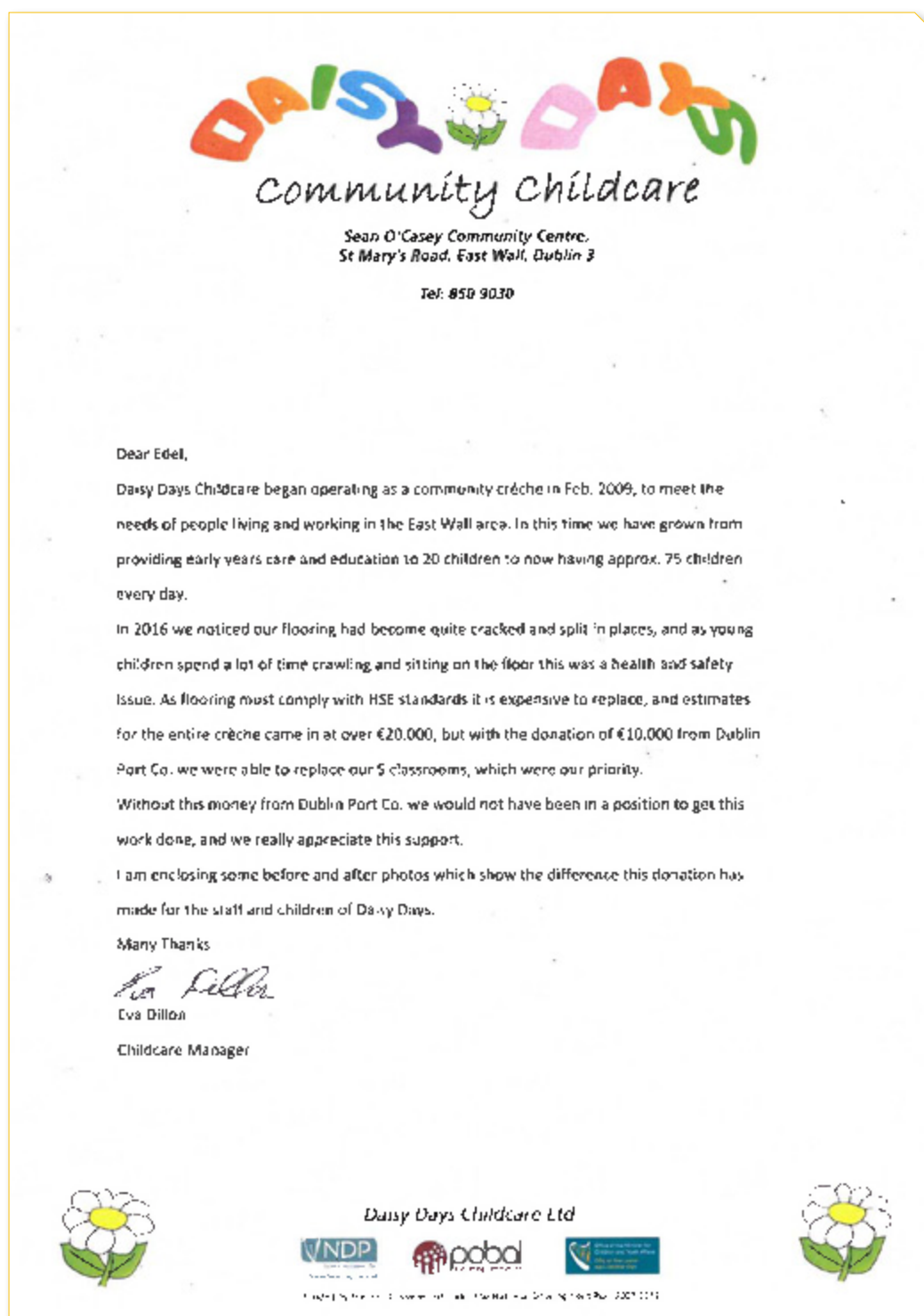


Top right:
Ringsend Regatta

Bottom right:
Poolbeg Yacht Club
Regatta

Community

Daisy Days Community Childcare



Right:
 Letter of appreciation
 from Daisy Days
 Childcare Manager,
 Eva Dillon



All images:
Daisy Days Childcare
classroom after repair
works.

Economics

6



Introduction

In 2016 total throughput grew to a record 34.9m gross tonnes representing a 6.3% increase on the previous year. Compound growth over the last four years was 24.7% and total throughput volumes are now four million tonnes (12.9%) higher than they were in 2007 before the economic downturn.

The growth achieved was shared across both imports and exports. Imports grew by 6.1% from 19.5m tonnes to 20.7m tonnes while exports increased by 6.7% from 13.3m tonnes to 14.2m tonnes. We continued to see strong growth in the unitised sector where volumes increased by 6.1% to 28.8m tonnes, while volumes in the non-unitised sector grew by 7.6% to 6.1m tonnes.

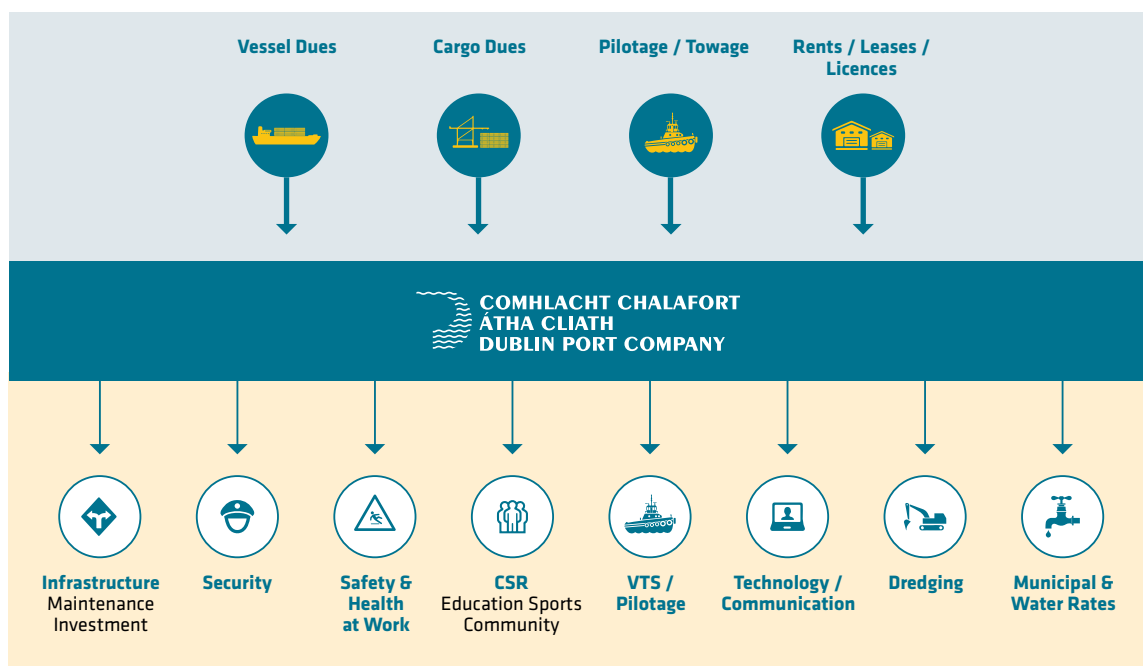
The growth in throughput volumes has contributed to another strong financial performance in 2016 whereby

- Turnover increased by 5.1% from €77.7m to €81.6m
- Operating costs amounted to €36.6m in both years
- Operating Profit increased by 6.1% from €42.9m to €45.6m
- Profit for the Financial Year increased by 7.3% from €36.4m to €39.0m
- Earnings before interest, tax, depreciation, and amortisation (EBITDA) increased by 8.8% from €49.3m to €53.6m

The company has embarked upon a period of significant capital investment and in December 2016 the Board approved a 10 Year Capital Expenditure Programme amounting to €600m. Construction work on the Alexandra Basin Redevelopment Project commenced in 2016 and a number of sites within the port area were redeveloped to provide additional facilities for the transit storage of the fast growing RoRo and LoLo Sectors of the business.

In addition the company has acquired additional lands amounting to 44 hectares located 14km from the port in order to facilitate the future development of Dublin Inland Port to cater for the requirements of port-related but non-core activities which will be relocated in order to maximise the use of the existing footprint of the port area for the transit storage of cargo.

Revenues & How They Are Spent



Volume Figures 2015-2016

Ro-Ro (Units)



2015	887,826
2016	944,531

7.6% ↑

Lo-Lo (TEU)



2015	614,226
2016	663,732

8.1% ↑

Ro-Ro Units per hectare per annum

2015	27,956	7.6% ↑
2016	30,081	

Lo-Ro TEU per hectare per annum

2015	16,736	8.1% ↑
2016	18,085	

Trade Vehicles



2015	102,149
2016	104,185

2.0% ↑

Passengers*

2015	1,799,691	0.9% ↑
2016	1,814,089	

Cruise Passengers

2015	148,891	6.9% ↑
2016	159,124	

Cruise Visits



2015	93
2016	109

17.2% ↑

Bulk Liquids (million tonne)

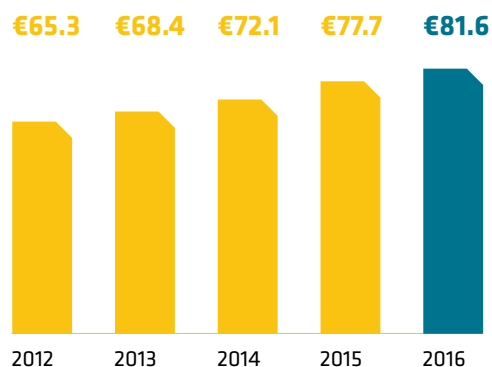
2015	3.8	4.1% ↑
2016	4.0	

Bulk Solids (million tonne)

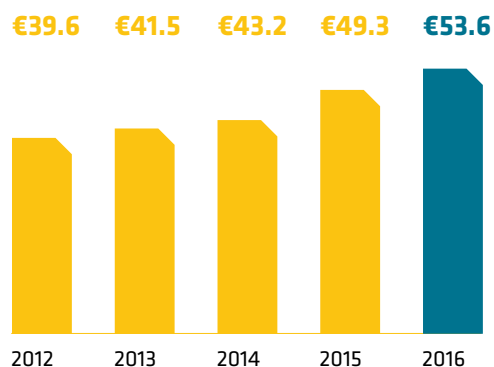
2015	1.8	15.3% ↑
2016	2.0	

Financial Figures

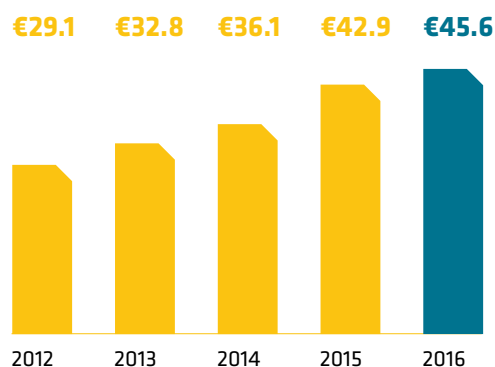
Turnover (millions)



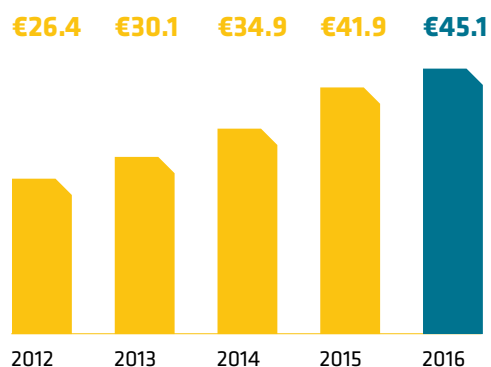
EBITDA*** (millions)



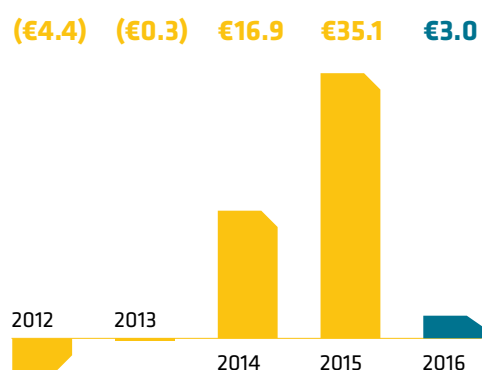
Operating Profit (millions)



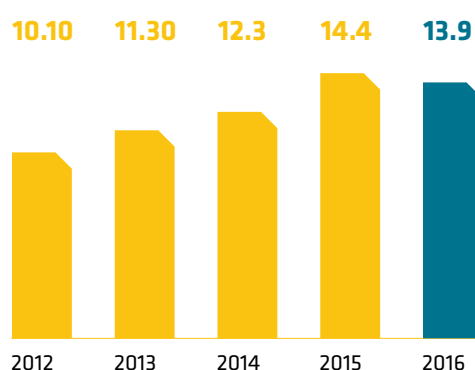
Profit before Tax (millions)



Net (Debt)/Cash (millions)



ROCE (%)



Key Figures

7



Social

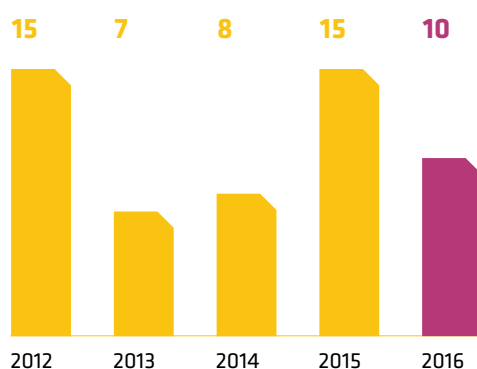
	2012	2013	2014	2015	2016
No. of Permanent Employees	135	132	136	136	148
Age Distribution:*					
20 – 29	3	5	4	1	4
30 – 39	21	19	15	19	27
40 – 49	44	43	45	42	41
50 – 59	60	58	63	63	58
60+	12	10	9	11	18
Average Age	48	48	49	49	49
Absence due to illness, %	4.15	3.7	4	3.5	3.98
No. of Salaried Employees	26	35	36	40	49
No. Of Collective Agreement Employees	114	100	101	100	99
No. of total staff*	140	135	137	140	148
No. of females/ males in total staff *	140 Staff 22 Females/ 118 Males	135 Staff 21 Females/ 114 Males	137 Staff 21 Females/ 116 Males	140 Staff 21 Females/ 119 Males	148 Staff 23 Females/ 125 Males
Total No. of Executive Management Team	7	6	7	8	8
No. of female/ males executive managers	7 Males	6 Males	7 Males	8 Males	8 Males
Total No. of Senior Management Group**	3	4	4	6	8
No. of females/ males in Senior Management Group	1 Female/ 2 Males	1 Female/ 3 Males	1 Female/ 3 Male	1 Female/ 5 Male	2 Female/ 6 Male
No. of members on Board of Directors	7	7	7	8	6
No. of female/ males on Board of Directors	3 Female/ 4 Males	3 Female/ 4 Males	3 Female/ 4 Male	3 Female/ 5 Male	2 Female/ 4 Male
Staff turnover, %	5.92	4	3	2	7.75
No. applying for Annual Travel Ticket	3	3	10	10	10
No. of Interns/ FAS apprentices/ temporary contracts	2 Apprentices/ 3 Temporary Contracts	1 Apprentice/ 2 Temporary Contracts	0	0	4 Apprentices/ 1 Temporary Contract
No. employees subject to random intoxicant testing	0	36	36	47	65
Applications for further education	2	3	5	5	3

Safety

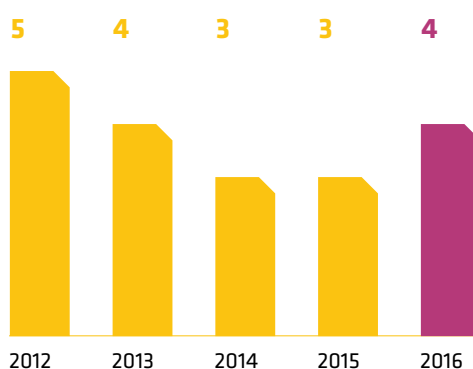
Total Man Hours



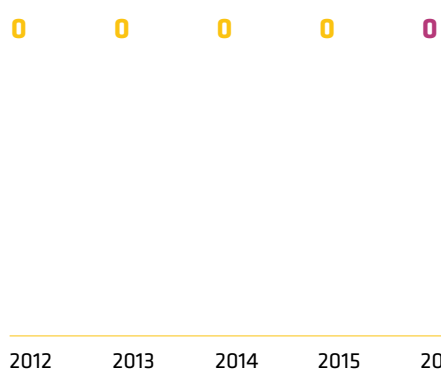
Quantity of accidents



> 3 days – HSA Reportable



Fatalities



*Includes no. of interns/ FAS apprentices/ temporary contracts

** Does not include executive management

***Earnings before Interest, Taxes, Depreciation and Amortization



Initiatives

8



What we said Vs What we did

2016 Update on Initiatives

Investigate the options available for the installation of Dublin Bike station(s) around the Port Estate.

The installation of Dublin Bike Station(s) in identified locations around the Port Estate is being completed as part of Dublin Port Company's Masterplan. Information on our Masterplan can be viewed at <http://www.dublinport.ie/masterplan/masterplan>.

This will remain one of DPC's initiatives for 2016 and progress will be provided in our 2017 Sustainability report.

Continue to monitor the carbon emissions of DPC during 2016.

Awaiting SEAI report.

Provide environmental monitoring data upon request through a common dashboard/online tool as part of the UNESCO Dublin Bay Biosphere.

Information on monitoring data can be requested through the biosphere website page: <http://www.dublinbaybiosphere.ie/contact>

Continue the baseline air monitoring programme over 2016 to gather further data on the air quality within the Port Estate.

An independent monitoring company was engaged by Dublin Port Company to complete ambient air quality monitoring of the Port estate during 2015 and 2016. This monitoring is completed and DPC are awaiting the final report. The air quality programme is planned to continue for an additional 4 years, from 2017 – 2020.

Liaise with the Ports tenants to ensure compliance with the new Code of Practice for Health and Safety in Dock Work.

In 2016, Trinity College Dublin (TCD) completed a Safety Culture Survey including interviews in Dublin Port Estate. DPC engaged TCD to complete the survey. The survey was completed independently of Dublin Port Company by the Centre for Innovative Human Systems in the School of Psychology of TCD by a leading professor. 8 companies of varied operations (stevedoring, ferries, marine operations and container storage) within Dublin Port Estate participated in the survey. The desired outcome of the survey is to provide information and guidance on the current safety culture within Dublin Port Estate and begin a process of dialogue, consultation and knowledge sharing among operational companies within the estate with a view to developing a safety committee or meeting forum for our customers, led by DPC.

Obtain third party verification for DPC's Safety Management System.

In October 2016, National Irish Safety Organisation (NISO) awarded DPC with a distinction for their Safety Management System.

Implement and improve our software management systems to manage all safety and environmental accidents and near misses for easier recording and analysis.

Our current management system software has been upgraded to facilitate the reporting and investigation of accidents. Training will be rolled out in Q1 of 2017.

Upgrade the internal road system.

Topographical surveys of the road network to ascertain levels to allow for Level 2 b Prelim design was undertaken in February 2016. This project will continue into 2017.

Commence works on ABR.

■ **NWQ and Berth 52/53 Site Investigations**

Site Investigation Works were completed to identify the ground conditions which will aid in the ABR project going forward.

■ **Marine Site Investigations**

Marine Site Investigation Works were carried out utilising two Jack-up Barges and one Multicat Vessel to identify the existing Geotechnical and Environmental ground conditions that will aid in the ABR project going forward.

■ **Cross Berth Quay Wall Construction - Berths 26 to 28**

Cross Berth Quay (CBQ) is the 1st Phase of the Alexandra Basin Redevelopment and consists of the construction of new quay walls with two new bank seats.

■ **P&O Boundary Realignment**

The preparation, clearance and realignment of the existing P&O boundary. This provides site area for future works.

■ **ABR Pre-Design Surveys**

Reviewing current Dublin Port utility services with a view to identifying the location and extent of these existing services. The Survey included Alexandra Basin and Berth 52/53.

Please refer to Pg. 12 for a more detailed overview of the projects completed as part of our Alexandra Basin Redevelopment Project.

What we said Vs What we did (continued)

Replace designated High mast lighting.

Dublin Port Company has in the region of 508 High Mast light fittings in the estate providing high level lighting for the Ports operations. DPC decided to change 346 of the High Mast light fittings to a high efficient LED light following a successful trial of these lights.

Upgrade the Odlums building.

Dublin Port Company has invested €500,000 in a new Seafarers Centre at Dublin Port. Housed in the former Odlums workers' canteen, the Centre provides vital services to sailors docking at the port under the care of the Mission to Seafarers (The Flying Angel) and the Catholic Apostleship of the Sea (Stella Maris). It was officially opened by the Lord Mayor of Dublin Mayor Críona Ní Dhálaigh, who is also Honorary Admiral of Dublin Port.

Host the European Sea Port Organisation (ESPO) Conference.

DPC in partnership with ESPO hosted the ESPO Conference in Dublin Castle during June 2016. The conference was a great success with over 270 delegates attending the two day conference.

Significantly contribute to our soft values programme through the Project "Opening up Port Centre Precinct" which will assist Dublin Port to integrate with the surrounding City and enhance the local environment.

This project is currently underway with a completion date of late September 2017.

Preserve industrial heritage by relocating & upgrading a redundant crane as part of the relocation of the Estate entrance off East wall Road.

As part of the "Opening up Port Centre Precinct" the crane will form part of the final phase of the project. Further information will be provided in our 2017 Sustainability Report.

Crane 292 is being installed as a landmark element along the Port City interface as a celebration of Dublin Ports industrial heritage and as a landmark feature as part of Opening up Port Centre along the East Wall road.

The crane was built by Stothert & Pitt in Bath, England. It is a 10-ton travelling electric crank luffing grabbing crane. Crane 292 (previously named 611 and

301) was bought as a pair along with another Crane (380). It operated on the bulk jetty for Gouldings and was sited on Alexandra Quay West until its removal in 2015.

Increase the footfall and scope of the Riverfest held each June Bank Holiday weekend.

The footfall of Riverfest grew from 65,500 in 2015 to 94,000 in 2016. DPC expect to further increase this number again in 2017.

Selection of the correct method for the archiving of Dublin Ports records to secure the ports historic achievements and developments and make these available to the public.

DPC have committed to sourcing and employing an archivist during 2017 to manage Dublin Port Company's records.

Continue to consult with relevant stakeholders to ensure land use improvements and efficiencies are achieved.

DPC host project specific liaison group meetings with relevant authorities and stakeholders and DPC provide a representative at local community group meetings.

Continue the monitoring of the Traffic Measurement System to collate data for future development

The new Traffic Measurement System installed on Promenade road measures all vehicle movements entering and exiting the port via Promenade road. Promenade road is the primary route for port operations and will be the only entry and exit route when Alexandra Road closes in 2017. In 2016, a total of 2.2million vehicle movements were logged exiting from Promenade road, an average of 7,400 vehicle movements per day and a total of 1.8million vehicle movements were logged entering the port via Promenade road, an average of 5,858 vehicle movements per day. This data is used by our planning teams for consideration during port development plans.

2017 Initiatives

- Continue to investigate the options available for the installation of Dublin Bike station(s), and identify suitable locations around the Port Estate as part of Dublin Port Company's Masterplan.
- Develop a safety committee with our customers, led by DPC.
- Upgrade the internal road system.
- Port Perspective- a Port and City integration initiative programme using art to portray the culture and history of the port city relationship.
- The donation of the 290 Crane to DCC for display on the Quays. The Crane dates from the 1990s. It is a 20 ton Portal Slewing crane manufactured by Liebherr.
- Complete a feasibility study for the installation of Ecowaves, the generation of power through waves.
- Continue to monitor the carbon emissions of DPC during 2016.
- As part of DPC's soft values programme, a time ball will be installed.
- Continue the baseline air monitoring programme in the Port estate from 2017 – 2020.
- Utilise the report received from Trinity College Dublin on the Safety Culture in Dublin Port to develop a forum to improve safety within the Port Estate with a focus on the requirements of the Port Authority and Port Tenants outlined in the Code of Practice for Health and Safety in Dock Work.
- Develop a port specific induction for shared areas within the port e.g. Common user and shared quay areas.
- Receive third part accreditation for OHSAS 18001, the internationally recognised Safety Management System standard.
- Preserve industrial heritage by relocating & upgrading a redundant crane as part of the relocation of the Estate entrance off East wall Road.
- Continue to consult with relevant stakeholders to ensure land use improvements and efficiencies are achieved.
- In partnership with DCC, DPC will increase the footfall and scope of the Riverfest held in June 2017.
- Increase the following and information available on social media.

Glossary of Terms



Ro-Ro

Roll On Roll Off is a cargo handling method whereby vessels are loaded via one or more ramps that are lowered on the quay or lowered onto a ship.

Ro-Ro comprises cargo items that can be driven on / off a ship. These include Heavy Goods Vehicles (HGVs), cars, buses and other vehicular traffic.

Lo-Lo

Lift On Lift Off cargo is a containerised cargo handling method by which vessels are loaded or unloaded by either shore or ship cranes.

TEU

Twentyfoot Equivalent Unit. Lo-Lo cargo is normally measured in TEUs. A forty foot long container equates to two TEUs. Container vessel capacity and port throughput capacity are frequently measured in TEUs.

Liquid Bulk

Cargo includes oil, petroleum, chemicals, molasses, liquid petroleum gas (LPG) and bitumen.

Dry Bulk

Loose mostly uniform cargo normally loaded/discharged by crane. Cargo types include animal foodstuffs, coal, fertilizer, cement fines, peat, minerals, grain, etc.

Break Bulk

General loose non-containerised cargo, stowed directly in a ship's hold.

Pilotage

The act of advising the master of a ship in navigation when entering or leaving a port in confined water.

Towage

The provision of a tug vessel to assist other vessels in safe operation within the Port

Stevedore

An individual or firm that employs dock workers to load and unload ships.

Dredging

The removal of sediment to deepen access channels, provide turning basins for ships and to maintain adequate water depth along waterside facilities.

NO_x

A generic term for the mono-nitrogen oxides NO and NO₂ (nitric oxide and nitrogen dioxide).

SO₂

Sulphur Dioxide.

PM

PM stands for particulate matter or particulates. These are microscopic particles in the air.

Anthropogenic impact on the environment

Impact due to human activity as distinct from natural causes.

Notes



From sustainably managed forests -
For more info: www.pefc.org



Dublin Port Company

Port Centre, Alexandra Road,
Dublin 1, Ireland.

+353 1 8876000

info@dublinport.ie

www.dublinport.ie

[DublinPortCompany](#)

[@DublinPortCo](#)

[dublinportco](#)