

Iconic Wind Turbine Project in the Cork Lower Harbour Area



Summary

Company name:	Cork Lower Harbour Energy Group
Project actions:	Planning & Development of four Iconic Industrial cited Auto-generating wind turbines in the Cork Lower Harbour Area
Dates of project:	January 2008 to May 2014
Contract type:	Collaborative
Finance source:	Internal – IDA supported
Additional funding:	Government Funding
Total project cost:	€20 million plus
Savings verification:	Via energy monitoring system data analysis



Cork Lower Harbour Energy Group (CLHEG) logo

	Annual Energy (kWh)	Annual CO ₂ (tonnes)
Before project	118,500,000	40,000
After project	94,500,000	26,000
Savings (% in parentheses)	24,000,000 (20% saving)	14,000 (35% saving)

“The collaborative aspect of this project has been transformational and has demonstrated the power of Irish company collaboration in delivering an iconic project internationally” Donal Og Cusack, Energy Lead, Depuy Synthes.

Background

In 2008, six healthcare manufacturing companies in Cork came together to co-operate on common issues in relation to energy and four of these member companies engaged in a Wind Turbine Project.

The close geographical location of the sites, coupled with the drive to reduce energy costs, improve cost competitiveness and enhance environmental performance, are the key reasons that the companies decided to work together on this project.

Combined, the company’s total energy related CO₂ emissions were 40,000 tonnes per annum prior to this project with savings of over 35% delivered as a result.

The project was part funded by the IDA, a contribution which demonstrated the support of the Irish Government to renewable energy projects to the corporate arms of each company.



Panoramic picture of the cork lower harbour area showing the iconic turbines

*Annual energy savings of 24,000,000 kWh have been achieved in this project, the equivalent to the annual energy use in 1200 average-sized houses in Ireland. The project saved 14,000 kg of energy related CO₂. The project supported 375 full-time equivalent jobs per year.

Project Description

The four companies making up the Wind Turbine Project within CLHEG, DePuy Synthes, GSK, Janssen Biologics and Novartis, manufacture some of the world's best-known, advanced medicines and medical devices for a variety of uses. They are responsible for the employment of 4,000 people and have invested well over €2 billion in the Cork region over the past 20 years. In addition, the four sites have a combined annual spend in excess of €100 million.

The first major test for this newly founded collective was a need for a collaborative response to a planning challenge raised by Cork County council in response to early discussions around the potential to develop a number of auto-generating wind turbines in the Ringaskiddy area of Cork.

A comprehensive and proactive pre-planning process was entered into, to facilitate a clear understanding of the requirements and concerns of the Planning Authority and all statutory and private stake-holders in the harbour area. This approach was maintained throughout the planning process with all four sites acting in a coordinated manner through regular meetings of the Lower Harbour Energy Group at technical implementation level feeding back to a Site Leader steering group. This collaboration continued for the duration of the project. Although separate planning applications were lodged for each project, the applications were submitted simultaneously and all four companies collaborated on the EIS surveys and field work and interaction with statutory bodies such as the National Parks and Wildlife Service (NPWS) and Irish Aviation Authority (IAA). This enabled the cumulative impact of the development to be assessed in an open and transparent manner

Benefits



DePuy Synthes with their 3MW wind turbine in the background

The CLHEG project involved the installation of one wind turbine at each of the DePuy Synthes, GSK and Janssen Biologics sites. The three wind turbines will generate up to 3MW of electricity at each site, improving each site's environmental performance, reducing each site's electricity costs by up to 30% and simultaneously making them more attractive for inward investment.

The project will allow DePuy Synthes, GSK and Janssen Biologics to achieve a significant decrease in the CO₂ emissions generated during their production processes, resulting in a positive impact for the environment. This equates to the removal of approximately 14,000 tonnes of CO₂ each year, or equivalent to taking 7,300 cars off the road.

The project is also in line with Government policy to reduce greenhouse gas emissions by 20% before 2020. After the successful approval of planning in November 2012, works on the CLHEG wind turbine project began in September 2013 with three of the four wind turbines for which planning was granted fully installed and operational by May 1st, 2014. The fourth wind turbine to be located in Novartis has been deferred to facilitate the completion of other projects onsite first.

"This project has improved the business competitiveness of the member companies as well as helping them to lead the commitment to environmental responsibility within their international organisations" Liam O'Leary, Energy Lead, Janssen Biologics

Clients

Donal Og Cusack
Energy Lead
DePuy Synthes

Liam O'Leary
Energy Lead
Janssen Biologics

Ed Collins
Energy & Utilities Champion
GSK

Ed Kelleher
Energy Lead
Novartis