

Case Study - Dublin City Council uses Energy Performance Contracts to upgrade its buildings

35%

energy savings expected
by this EPC project in the
1st year

Dublin City Council is leading by example by using Energy Performance Contracts to upgrade its buildings

Guaranteed energy savings through EPC

Buildings:	Ballyfermot Sports & Fitness Centre, St Catherine's Community Sports Centre, Ballybough Community, Youth & Fitness Centre, Cabra Parkside Community Sports Centre, Poppintree Community Sports Centre, Irishtown Sports & Fitness Centre & Bluebell Community & Resource Centre
Examples of upgrades:	LED lighting, Combined Heat & Power upgrades, solar PV
Funding:	Dublin City Council, SEAI and Energy Services Company (ESCo)

Project background

Dublin City Council continues to lead by example in energy management with the awarding of this Energy Performance Contract (EPC) to Noel Lawler Green Energy Solutions in August 2019.

The City Council, working closely with Codema - Dublin's Energy Agency, is the only local authority in Ireland to implement the EPC model, which delivers a performance guarantee, to upgrade the energy efficiency of its public buildings. This new contract will see the upgrade of seven of its sports centres.

Project description

As sports facilities are typically high energy users, Dublin City Council is using the EPC model to upgrade these facilities, rather than carrying out these works using more traditional methods.

An EPC is a contractual agreement by an Energy Service Company (ESCo) to guarantee energy savings over an agreed period of time. It differs from the traditional method of carrying out energy-efficiency measures, as the ESCo must ensure that these energy savings are achieved, and cannot walk away from an unsatisfactory job.

"I am delighted that the City Council is entering into an Energy Performance Contract, which will see the energy upgrade of seven of our sports facilities and contribute to achieving our energy and carbon reduction targets. I would like to thank Codema - Dublin's Energy Agency, the Sustainable Energy Authority of Ireland and the Department of Communications, Climate Action and Environment for their support and technical assistance. I would also like to congratulate Noel Lawler Green Energy Solutions on winning the contract."

Owen Keegan,
Chief Executive, Dublin City Council

After a rigorous procurement process, Dublin City Council awarded this contract to Noel Lawler Green Energy Solutions; this contract is for eight years and includes full maintenance of all equipment associated with the upgrades by the Energy Service Company (ESCO).

Energy Measures

The energy upgrades at the seven sports facilities will be completed by the end of 2019 and will include:

- Building Management System (BMS) optimisation
- New LED lighting
- New combined heat and power systems to efficiently heat the swimming pool in Ballyfermot
- Improved building control systems for effective management of all equipment
- Renewable energy measures through the installation of solar photovoltaic panels

Expected Results

Codema will work closely with the ESCo to carry out regular Measurement and Verification (M&V) of savings in each of the buildings. It was calculated that the project will achieve average energy savings of approximately 35% and will offset carbon emissions by 321 tonnes each year.

These savings are very achievable based on the energy savings that were achieved under the pilot EPC that was used to upgrade three of Dublin City Council's Sports and Fitness Centres. Since the works were carried out in 2016, energy savings of 42% have been achieved, offsetting over 700 tonnes of CO₂.

Savings: €129,000 total energy cost savings per year across the 7 sports facilities

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