



Case Study - EPC in Dublin City Council



38%

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

Guaranteed savings through EPC

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|---------------------|---|
| Location: | Ballymun, Finglas & Markievicz Sports & Fitness Centres, Dublin |
| Example of upgrades | BMS Optimisation CHP upgrades LED upgrades |
| Results: | 38% energy savings in the 1st year |
| Funding: | Dublin City Council, SEAI, DCCAE |
| Year completed: | 2016 |

Upgraded using Ireland's first local authority Energy Performance Contract (EPC)

Project background

Dublin City Council awarded its first Energy Performance Contract (EPC) project to Noel Lawler Green Energy Solutions in July 2016, working closely with Dublin's Energy Agency Codema in procuring this contract to upgrade three of its Sports and Fitness Facilities.

The project was supported under the SEAI National Energy Services Framework, as well as the European project EESI2020, co-funded under H2020.

Project description

As leisure centres are typically high energy users, Dublin City Council decided to use an Energy Performance Contract (EPC) model to carry out upgrades to Ballymun, Finglas and Markievicz Sports and Fitness Centres, 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.

This project is a great example of how the public sector can work together to drive efficiencies and I would like to thank the great teams in Codema, the SEAI and the Department of Energy for their support and technical assistance.

Brendan Kenny,
Deputy Chief Executive,
Housing & Community, DCC

After a rigorous procurement process, DCC awarded the contract to Noel Lawler Green Energy solutions; this contract is for 8 years and includes full maintenance of all equipment associated with the upgrades by the ESCo.

Energy Measures

The energy upgrades at the three sports and fitness facilities were completed by the end of 2016 and included:

- Building Management System (BMS) optimisation
- CHP overhaul and power modulation controls (Finglas)
- New 110 kWh CHP and power modulation controls (Ballymun)
- Upgrade of lighting to LED and lighting controls
- New cooling strategy for Air Handling Units
- Boiler plant replacement with high modulation boiler
- New controls for pool pumps

Results to Date

Codema works closely with the ESCo to carry out regular Measurement and Verification (M&V) of the buildings. The latest M&V figures show that in its first year, the EPC project has saved Dublin City Council approximately €122,000 on its costs, and has achieved average energy savings of 38%.

Codema will continue to assist DCC with managing this M&V process for the duration of the contract period.

The project has been so successful that DCC has initiated a second EPC involving a number of its buildings; this second project is at an advanced stage, and is due for completion by the end of 2018.

Energy Savings: €122,000 total cost savings within 1st year across the 3 sports & fitness centres

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