

## Case Study - Upgrade of Lighting at Irishtown Stadium

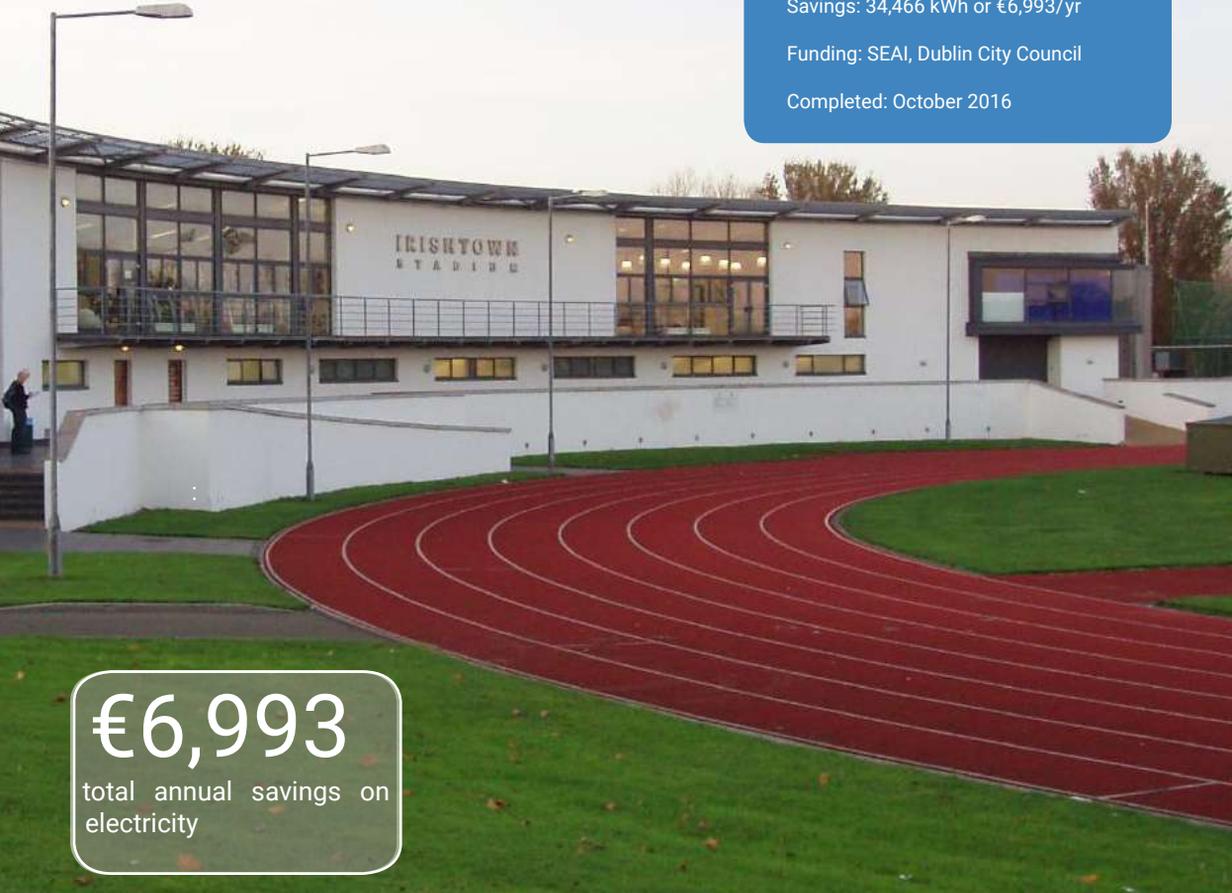
### Upgrade of Lighting to LEDs

Location: Irishtown Stadium  
Ringsend, Dublin 4

Savings: 34,466 kWh or €6,993/yr

Funding: SEAI, Dublin City Council

Completed: October 2016



# €6,993

total annual savings on  
electricity

### Project Background

Irishtown Stadium is located in the heart of Ringsend, Dublin 4. It is a multi-purpose facility, providing services such as an athletics track, all-weather football pitches, a gym, studio and changing areas. As the stadium provides a range of indoor and outdoor activities and has long operating hours, it uses a significant amount of lighting which was costing over €11,000 per year. This project focused

on upgrading the majority of indoor and outdoor lighting to energy-efficient LEDs, which would greatly reduce the stadium's lighting bill by 80%. The project was initiated by Dublin City Council and Codema through the Sustainable Energy Authority of Ireland's Better Energy Communities programme, and also included lighting upgrades in Pearse House and St Andrew's Resource Centre.

"By working an Energy Performance Guarantee into the contract, the City Council has the security of knowing that targeted energy savings from the lighting upgrades must be achieved. The work will pay for itself in just over 3 years, and brings us one step closer to meeting our 2020 energy targets."

Jim Beggan,  
Head of Sport & Recreation,  
Dublin City Council

### Results from Lighting Upgrades\*

Annual Electricity Savings	34,466 kilowatt hours
Annual Cost Savings	€6,993
Project Cost	€41,411
Payback	4.1 years

*\*Savings verified from Measurement and Verification Plan, which followed the principles of the International Performance Measurement Verification Protocol (IPMVP)*

### Project description

On behalf of Dublin City Council, Codema prepared an application in 2016 for funding through the Sustainable Energy Authority of Ireland's Better Energy Communities programme to upgrade the lighting at Irishtown Stadium to energy-efficient LEDs. The project was approved by SEAI in June 2016 as a joint application involving Irishtown Stadium, Pearse House and St Andrew's Resource Centre.

Codema carried out a survey of the building to identify potential savings from improved lighting. Dublin City Council then procured Watt Less Ltd to carry out the work, which was completed in October 2016.

SEAI provided just over €12,000 in funding through the BEC programme, so the total cost to Dublin City Council was €28,987, with a payback of just over 4 years.

This project was also a first for Dublin City Council as it uses an Energy Performance Guarantee mechanism in the contract. This approach sets a target of 40 MWh electrical energy savings, and 10% of the final payment is retained until these savings are proven.

There is significant opportunity for Dublin City Council to carry out similar projects using energy performance-related contracts in 2017.

### Renewable Energy

In addition to the lighting upgrades, Dublin City Council installed solar photovoltaic (PV) panels on the roof of Irishtown Stadium in August 2016. These panels will help the stadium to save over 13,000 kWh or €1,600 per year, and will complement the savings from the lighting upgrades.