

## Overview

City of Cardiff Council (CCC) is using Re:fit in order to optimise the energy efficiency of certain properties, improve their building performance, reduce CO<sub>2</sub> emissions and save money. Re:fit was seen as an ideal approach to tackle school buildings and demonstrate the ability to make significant and cost-effective improvements, paid for through energy savings.

Llanedeyrn Primary School is in an eastern suburb of Cardiff and has more than 300 pupils, including those attending the nursery. Although the school is not large, the energy savings through Re:fit certainly are. Guaranteed savings will see energy costs fall by more than two-thirds through significant reductions in both electric and gas use, combined with on-site renewable-energy generation.

<b>Project:</b>	Llanedeyrn Primary School	
<b>Savings:</b>	£10,040 net annual energy cost savings  66% saving on annual energy cost	50% reduction in CO <sub>2</sub>
<b>Value:</b>	£109,000*	Simple payback of 10.9 years
<b>Timescale:</b>	Installation completing in 2017	
*Part of £4 million City of Cardiff Re:fit programme		



The Re:fit project will deliver significant improvements across the school, including:

- upgrades to the Building Energy Management System to enable better control of the property
- new controls for water heating to provide hot water without unnecessary out-of-hours heating
- improvements to the heating and heating-control systems
- lighting upgrades, including installation of LED lighting
- controls to reduce the number of computers that remain on during out-of-hours periods
- generation of renewable energy through a 50kW roof-mounted solar PV using high-efficiency panels.

This project helps to demonstrate that Re:fit and City of Cardiff Council can deliver savings, paid for through energy savings, even on lower-energy-use properties. Five schools are undergoing Re:fit projects and work has started on developing solutions for a further 18 properties.

*"Llanedeyrn Primary School provides a great example of the improvements that are being made possible for schools through the City of Cardiff Re:fit programme. We are delivering improvements on five schools under the initial phase of work and more schools will benefit under future Re:fit projects."*

**Adam De Benedictis, Energy Manager, City Operations, City of Cardiff Council**

## Energy efficiency and financial savings through Re:fit

Re:fit is a procurement framework and support service available to all public sector organisations in the UK. Since 2009 it has been helping organisations to deliver "spend-to-save" environmental retrofit projects that both improve their buildings and, importantly, make substantial guaranteed financial savings.

For more information about the National Re:fit Programme, contact [robert.mckinnon@local.gov.uk](mailto:robert.mckinnon@local.gov.uk) or phone 07920 702 297.