

Project Highlight Newbattle Abbey College, Edinburgh College, West Lothian College & Borders College, Scotland

AMERESCO

Energy Conservation Measures Reduce Costs and Improve Built Environment for Four Colleges

Technology Type:

Solar PV | LED Lighting & Controls | CHP Energy Efficiency | BMS & Controls | Energy Performance Contract | Central Plant Upgrades

Total Facility Size 106,578 m²

Energy Project Size £2.8 million

Annual CO₂ Savings 642 metric tons

Estimated Annual Energy Savings $\pounds 400k+$





Summary

Beginning in 2018, Ameresco worked with four Scottish colleges to reduce energy consumption and costs and drive decarbonisation. This was the first large, multi-site EnPC project awarded and delivered through the Scottish Government's Non-Domestic Energy Efficiency Framework. Across twelve campuses, Ameresco identified opportunities, installed energy conservation measures, and guaranteed savings. Construction at all four colleges was completed within 6 months.

Solution

Operating on four live college sites - Newbattle Abbey College, Edinburgh College, West Lothian College, and Borders College - Ameresco and their subcontractors were required to act under strict health and safety guidelines, ensuring minimum disruption to the students and staff on site. The ageing infrastructure and historic nature of the area and listed buildings required careful coordination with the Historic Scotland and Midlothian Council to ensure all work was carried to meet the preservation requirements of the building and grounds. While providing additional control for heating at Newbattle Abbey College, Ameresco underwent an excavation process which uncovered improper disposal of old pipework on the site and promptly halted work in the service ducts and boiler house until abatement works were complete and air testing was carried out to confirm the area was safe for installations. During this time, heat was not compromised on site and the Ameresco team communicated with the client and contractors to ensure the project was completed safely and efficiently. Solutions provided for these projects included:

- LED lighting and controls
- Boiler replacements (oil to natural gas)
- Transformer tap down
- Insulation improvements

- Building Management Systems and controls
- Pool blanket and optimisation
- Variable Speed Drives (VSDs)

Newbattle Abbey College was delighted to participate in the project. Our 16th century building, and heritage estate has benefited enormously from the project investment which will enable a significant reduction in carbon emissions and accrue energy savings which can be reinvested in our estate.

Estates and Facilities Manager, Newbattle Abbey College

Benefits

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Ameresco's streamlined processes and efficiency of operation enabled this challenging programme to be mobilized, delivered and installed within the original timescale. We are proud to have partnered with the four Scottish colleges on this project, and believe that the energy efficiency measures implemented across each site have delivered the following benefits for the organisation:

- Reduced carbon and utility cost
- Improved occupant thermal comfort secondary glazing
- Elevated building lighting level to standard to improve experience
- Reduced energy costs 16% average
- Enhanced building controls across all sites



Ameresco's team of energy experts can assist you in identifying the solution that fits your needs.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please call **1-866-AMERESCO** or visit **ameresco.com**.

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