



Case Study

Redcar & Cleveland Borough Council

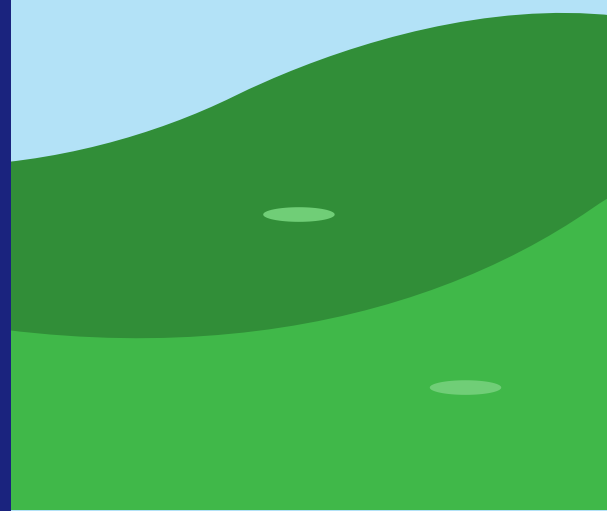


Summary

- **Location:** Redcar & Cleveland, North Yorkshire, England
- **Capacity:** 300 kWp solar PV + heat pumps
- **Type:** Mixed technology deployment (Solar PV and Heat Pumps)
- **Developer:** Decerna
- **Owner:** Redcar & Cleveland Borough Council
- **Panel type:** Longi 530W
- **Completion date:** March 2021

DECERNA

Decerna specialises in delivering, unlocking, and advancing the low-carbon economy through innovative renewable energy solutions and comprehensive project management services.



Overview

In a landmark project demonstrating public sector leadership in the transition to a zero-carbon economy, Redcar & Cleveland Borough Council (RCBC) partnered with Decerna to implement a comprehensive decarbonisation project across seven community buildings. The project, funded through the SALIX Public Sector Decarbonisation Scheme, strategically combined solar photovoltaic installations with heat pump technology to accelerate the region's journey towards net zero. Decerna managed the entire project lifecycle, from initial feasibility studies through to commissioning. The installation encompassed 300 kWp of solar PV systems and heat pumps across three buildings, making it one of the region's most significant public sector renewable energy deployments.



Project Summary

Buildings and Scope

The project transformed seven key community buildings:

- 25K Community Centre
- Redcar and Cleveland House
- CLC Data Centre
- Dormanstown Family Hub
- Daisy Lane
- Grangetown Library
- Skelton Civic Centre

Technical Implementation

The project delivery involved several key phases:

1. Initial Assessment

- Comprehensive technical feasibility study of existing building portfolio
- Identification of optimal renewable energy measures for each facility
- Development of detailed implementation strategy

2. Funding Acquisition

- Successfully secured £426,611 from SALIX Public Sector Decarbonisation Scheme
- Created comprehensive funding proposal and technical specifications

3. Project Management

- Overall project management by Shreya Kulkarni from Decerna
- Regular reporting to both council and Salix stakeholders
- Coordination between multiple contractors and stakeholders

4. Technical Delivery

- Heat pump installations by Oakes Energy Services
- Solar PV systems (300 kWp total) by Advanced Renewable Power
- Integration of systems with existing building infrastructure
- Full commissioning and testing

Climate Impact and Sustainability

The project delivers significant contributions to the UK's zero-carbon transition:

- Annual carbon savings of 55 tonnes CO₂e
- Substantial reduction in energy costs amid rising energy prices
- Successfully commissioned by March 2021
- Enhanced energy independence for council buildings
- Improved building infrastructure sustainability
- Demonstration of practical pathways to net zero for public sector buildings

Local Benefit & Community Impact

The project exemplifies how renewable energy can create lasting positive impact for local communities:

Economic Benefits

- Reduced operational costs for public buildings, enabling more efficient use of council resources
- Protection against rising energy costs, ensuring long-term financial sustainability
- Creation of local green jobs through project implementation
- Skills development in renewable energy technologies

Social Impact

- Enhanced comfort and functionality of vital community spaces
- Improved facilities for community services and activities
- Educational opportunities around renewable energy and sustainability
- Demonstration of public sector leadership in climate action

Environmental Leadership

- Visible commitment to environmental stewardship
- Practical example of multi-technology renewable solutions
- Contribution to regional carbon reduction targets
- Blueprint for other local authorities to follow

Project Innovations

- The project showcased several innovative approaches:
- Integration of multiple renewable technologies
- Efficient project delivery within tight public sector timeframes
- Successful coordination of multiple stakeholders
- Effective use of public funding for maximum environmental impact

Lessons Learnt

Key insights from the project include:

- Importance of thorough initial feasibility studies
- Value of experienced project management in complex multi-site deployments
- Benefits of combining different renewable technologies
- Critical role of stakeholder communication in public sector projects

This initiative serves as a powerful example of how local authorities can successfully implement renewable energy solutions across their building portfolio, combining different technologies to achieve significant carbon reductions while managing costs effectively. The project demonstrates that public sector organisations can play a crucial role in driving the UK's transition to a zero-carbon economy while delivering tangible benefits to their local communities.



Learn more about what's happening at Decerna at www.decerna.co.uk



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