

## Masterplan Energy Support

### Project Description

Arch Henderson were commissioned by the project funders to develop the masterplan for the regeneration of a coastal industrial site in western Scotland. The masterplan included reusing a disused heavy industrial site and adjacent agricultural land for light industrial purposes as well as organic farming. One of the key aims of the masterplan was to deliver a sustainable business with low carbon energy sources and to pilot the use of innovative and emerging energy technologies.



### Project Details

- Project carried out in 2016
- Completed under a wider project with Gardiner & Theobald and Arch Henderson

### Contact

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### Our Role

ITPenergised (ITPE) worked with the main anchor tenant to identify and evaluate low and zero carbon energy options for the site. The feasibility assessment considered the potential for a number of technologies including;

- Gas fired CHP
- Wave
- Tidal
- Hydro
- Wind
- Solar PV
- Solar thermal
- Fuel cells; central or decentralised
- Energy from Waste
- Energy storage
- Biomass and/or Biomass CHP
- Heat pumps
- Geothermal
- Absorption cooling

The findings of the evaluations were presented in a review report which considered each technology in the context of criteria including;

- Benefits
- Barriers
- Incentives available
- Technology maturity/risk
- Supply chain maturity and after sales support
- High level costs and typical ROI

### Client

**Ardyne Estates Ltd.**