

Energy Recovery Facility Isle of Portland

POWERFUEL

November 2019

Powerfuel Portland is proposing to deliver an Energy Recovery Facility at Portland Port in a £100 million investment.

Using tried and tested technology, the proposed facility will generate 15MW of partially renewable low carbon energy, enough to power around 30,000 homes.

There is currently a shortage of waste treatment facilities in Dorset and waste is exported out of the county by road to either be treated or sent to landfill.

The proposed facility will use Refuse Derived Fuel (RDF) and be capable of treating local waste arisings once recyclable materials such as glass, plastics and metals have been removed.

Site location

The site is an existing brownfield site on industrial land owned by Portland Port, adjacent to Balaclava Bay.

The site already has planning consent for an energy plant which would have used either

vegetable oil (including waste oils) or waste rubber crumb from tyres.

The energy recovery facility (ERF) that Powerfuel Portland is proposing can produce low carbon energy much more cleanly and efficiently than the consented scheme.

The facility will have the capacity to process up to 180,000 tonnes of RDF per year, providing a practical solution to our significant waste problem.

RDF consists largely of combustible components of municipal solid waste, comprising household, commercial and skip waste after the recyclable material has been removed.

The project will provide approximately 350 construction jobs and around 30 long-term, permanent jobs directly at the plant. Up to 45 indirect jobs will also be created.

Site Location Map



Powerfuel Portland is inviting local residents to a public exhibition to find out more about our plans – see back page for details

Our plans

The proposed new energy recovery facility will process non-recyclable household and commercial waste by using it as a fuel.

The ERF uses effective, proven technology, with 42 similar facilities already operating across the UK and many more across Europe.

The plant will generate 15MW of low carbon electricity, enough to meet the energy needs of around 30,000 typical homes per year.

The ERF can also feature a local heat network to provide cheaper and more environmentally sustainable heat for local services, businesses and housing projects. Private local power supplies could also be made available.

The facility will operate under strict air emissions control limits set by regulatory bodies.

Artist's impression of the proposed ERF



How does the process work?

The proposed energy recovery facility will process refuse derived fuel in a combustion chamber where oxygen is added to produce high temperatures.

The heat generated from the combustion chambers heats up water which is converted to steam and delivered to a turbine that generates electricity.

All gases from the combustion chamber are filtered and cleaned before being vented to the atmosphere in line with strict controls monitored by the Environment Agency.

The ERF will not treat hazardous or clinical waste. The bottom ash can be recycled and used as aggregate.

ERF Process Infographic



Powerfuel Portland will employ state-of-the-art emissions control technology to keep well within the limits set and monitored by the Environment Agency.

Why develop this type of facility on the Isle of Portland?

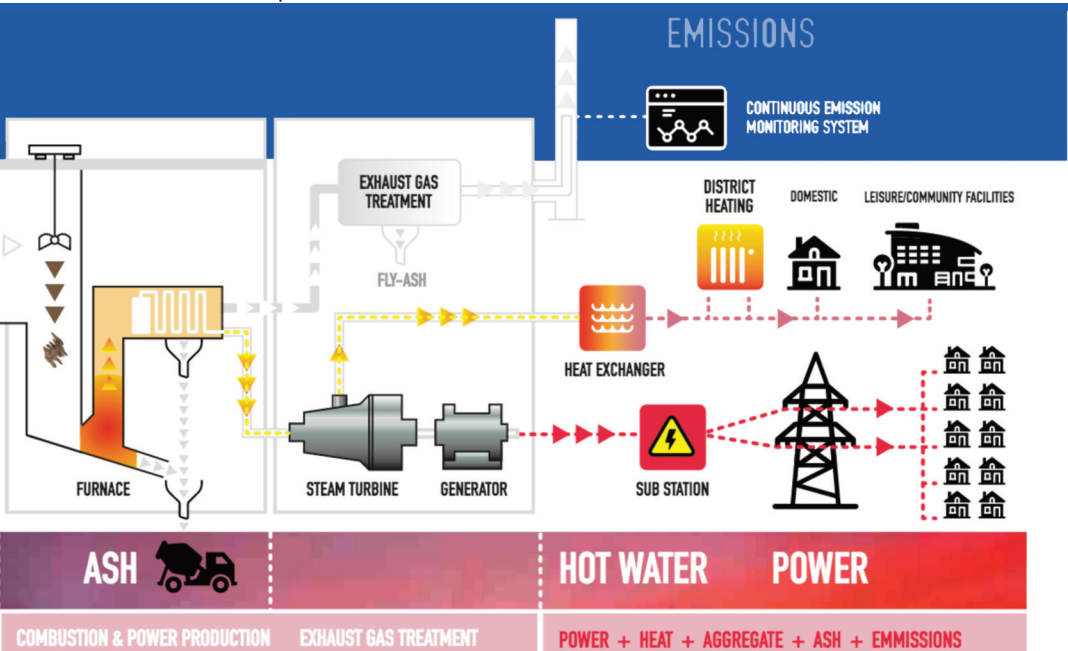
There is currently a shortage of waste treatment facilities in Dorset and many tonnes of waste are exported out of the county to either be treated or sent to landfill. The new proposed facility offers a local solution.

In addition, the entire Isle of Portland is served solely by an 18MW Grid supply. This means that power is constricted on the island, which has proved to be a barrier to economic growth.

The electricity generated by the ERF will help counter this power issue and enable Portland and its port to attract new businesses with the prospect of providing low carbon heat and power.

The Portland Port site has been chosen for the ERF because:

- It is an existing industrial area (currently unused) within the port allowing for waste to be transported by road or delivered by ship.
- Planning permission already exists on this site for a very similar operation.
- Given the geography of the island and the location within the port, the ERF is being sensitively designed to reduce environmental impacts and minimise possible visual impact of the facility.
- The ERF will enhance local resilience in respect of both heat and power.
- Once the ERF is operating, in addition to paying local taxes, there will also be community benefit contributions allocated to local sustainability projects.



Find out more

Powerfuel Portland would like to invite you to a public exhibition to find out more about our plans.

The exhibition will be held on:

**Thursday 5th December 2019 from 2pm – 7pm
at the Portland Community Venue
Three Yards Close, Portland
Dorset
DT5 1JN**

This informal drop-in event is intended to provide the local community with the opportunity to find out more about the proposal before a planning application is submitted. Members of Powerfuel Portland's development team will be on hand to discuss the plans and answer any questions you may have.

If you are unable to attend but would like any additional information about the proposal please visit www.powerfuelportland.co.uk or contact us by:

Emailing: info@powerfuelportland.co.uk

Phoning: **0808 168 1678** (Freephone)



Powerfuel Portland is a development company with an office in Dorset whose Directors have extensive experience of delivering large scale renewable energy facilities.