

# Introducing the Boston Alternative Energy Facility



## Boston Alternative Energy Facility is a state-of-theart power-generation plant which will lead the way in land-based renewable power across the UK.

This nationally significant infrastructure project, backed by Alternative Use Boston Projects Ltd, a privately owned project company, will generate 102MW\* of renewable energy, of which 80MW\* will be exported to the National Grid and the rest will be used by the facility. Electricity will be generated in a secure, clean and affordable way.

#### What's important about the Boston Alternative Energy Facility?

- The facility will process one million tonnes of refuse derived fuel (RDF – which is derived from non-recyclable household waste), generating enough power for more than 185,000 homes (equivalent to over 60% of the households in Lincolnshire)
- It will provide investment for the region's economy; we expect it to create up to 300 jobs during the construction phase and around 80 jobs when operational
- The UK has a target of generating at least 15% of energy from renewable sources, including energy from waste\*\*, by 2020. The facility will contribute to this target when built
- It will mean that one million tonnes of RDF could be processed here out of the three million tonnes the UK currently sends abroad – so the UK benefits from generating energy rather than continental Europe
- Recovering energy from non-recyclable material is far better than it being sent to landfill.

## What do you think?

In order to shape our proposals, it's really important to us that the **local community** and **other stakeholders** have the **opportunity to influence the plans**. We'll be holding two rounds of consultation which will be your chance to **let us know what you think**. We'll listen to **your feedback** and, where relevant and appropriate, we will use it to finalise the plans for Boston Alternative Energy Facility.

#### What will happen at the Boston Alternative Energy Facility?

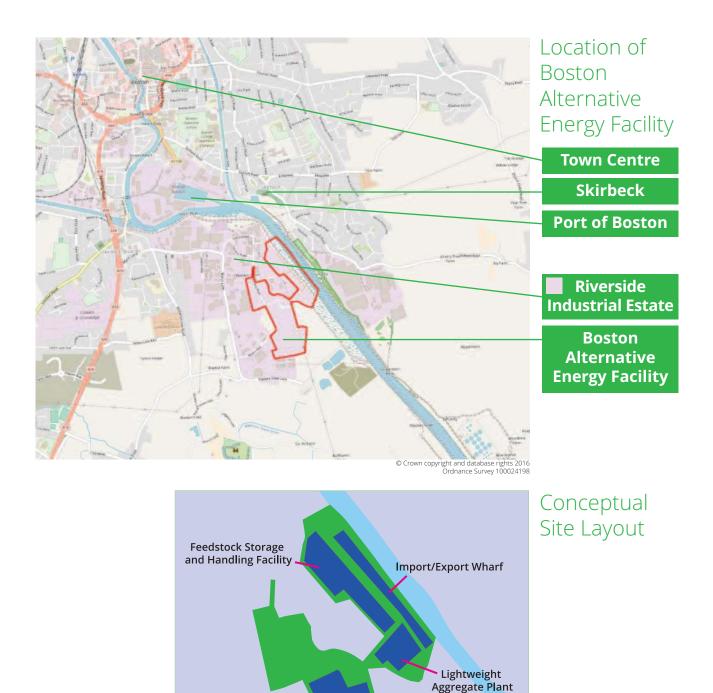
#### The process by which power will be generated is called gasification.

This process will use a fuel (or feedstock) called refuse derived fuel (RDF). The RDF is made from non-recyclable household waste and will be baled and transported by ship to the Boston Alternative Energy Facility from UK ports. This will minimise road traffic movements to and from the site.

The proposed site at the Riverside Industrial Estate in Boston is adjacent to the Haven – and is within an area allocated for industrial development by the local planning authority – so is the ideal location.

\* MW hour equivalent

<sup>\*\*</sup> The Government defines technologies such as gasification as 'renewable' in policy EN-3.



### The proposed development includes:

 a wharf with cranes and berthing points for up to three ships

Gasification Plant

- storage area to house the incoming material
- a processing facility to prepare the feedstock to a consistent specification
- conveyors for transferring the processed material
- a gasification unit that will generate power, which will then be exported to the National Grid via a grid connection and substation
- a lightweight aggregate manufacturing plant to process the residue from the gasification process and
- a storage area for loading of the lightweight aggregate onto a ship for removal from the site.

#### The process is as follows:



**RDF arrives by river,** minimising road traffic movements



Unloaded into a **storage area** from a purpose-built wharf then transferred to a processing facility



**Material shredded** to a consistent size, and non-suitable items for the gasification process removed



The feedstock is converted into energy using the gasification process



**Shredded feedstock** transferred via sealed conveyor to the gasification facility



**Recyclable materials** such as glass and metal captured separately and sent for recycling



Around 80MW\* of power is exported to the National Grid via a grid connection and substation



Leftover ash will be captured at the gasification facility and transferred to the lightweight aggregates plant, where it is recycled on site to produce aggregates for use in the **construction industry** 



The lightweight aggregate product will be **removed by ship** 

#### What is gasification?

Gasification is a way of generating renewable energy. It involves the creation of a chemical reaction using a restricted oxygen supply. This converts carbon-based materials in the feedstock into a synthetic gas (syngas). The syngas is a fuel, which is turned into electricity by recovering heat in a boiler.

The process of producing the syngas does not involve combustion, so the facility is not an incinerator. Gasification is more efficient and cleaner than mass-burn incineration, and has the additional benefit of creating a useful product – energy!

Gasification does not compete with recycling, as materials can and should be recycled where possible.

### How can I have my say?

We are here

## We are committed to honest, open and effective two-way engagement.

We will inform the local community of our proposal and welcome views and feedback. We are happy to answer questions, and all responses received during the consultation will be carefully considered and where relevant and appropriate taken into account as our proposals develop. We'll be taking a two phase approach to consultation, with the second phase offering the opportunity to see how feedback from the first phase has shaped the plans.

There will be a programme of consultation with nonstatutory (informal) stakeholders, for example local residents and community groups, and statutory (formal) consultees for example Boston Borough Council, Lincolnshire County Council and the Environment Agency up until the application submission in 2019.

## Our timeline for the Development Consent Order (DCO) process

As the Boston Alternative Energy Facility will generate **more than 50MW\* of renewable energy** for the National Grid, it is classed as a **Nationally Significant Infrastructure Project**. This means we need a DCO under the Planning Act 2008 to allow it to be constructed and operated.

We are in the first phase of the process - pre-application, so are consulting with you

There will be a **second phase of consultation** and our proposals will be finalised taking into account your feedback

We will **submit an application** for a Development Consent Order to the Planning Inspectorate

After the application is accepted – the Planning Inspectorate will **examine the application**, taking into consideration the comments of consultees, and make a recommendation to the Secretary of State for Business, Energy & Industrial Strategy

The Secretary of State for Business, Energy & Industrial Strategy is responsible for **making the final consent decision**.

As this is a complex decision making process, it can often take 18 months or more from acceptance of the DCO application to decision. Following approval, the Facility will take approximately three years to construct and commission. The construction period will begin when the relevant pre-construction requirements have been completed. These will be identified in the decision made by the Secretary of State.



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To keep up to date with the latest news on the Boston Alternative Energy Facility proposals, please visit:

#### www.bostonaef.co.uk

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