



## ENERGY RECOVERY

### and proposals for a new Energy Recovery Facility

#### North Quay consultation group

- In a bid to provide information and create a dialogue with local people Onyx has set up a local consultation group. In 2004, local people and local interest groups were invited to join and find out more about waste management generally and, in particular, the plans being developed for North Quay.

Meetings commenced in January 2005, and members of the group have become involved in the waste issues from the preliminary stages of the project design. They have met the people involved in the project, visited an operational facility, found out about energy recovery from household waste, been involved in the compilation of the Environmental Statement and have discussed and commented on the architectural proposals. By working with members of the public, Onyx hopes that the needs and concerns of the local community can be taken on board.



The proposed site



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Energy from waste -  
what about the rest?

## The waste strategy

To avoid the use of landfill and increase recycling and recovery via:

- Reduce and reuse initiatives
- Sorting of dry recyclables
- Composting of green garden waste
- Energy recovery

East Sussex County Council and Brighton & Hove City Council have awarded Onyx a 25 year Integrated Waste Management Service Contract, which commenced in April 2003.

Onyx is responsible for managing household waste once it has been collected from homes in East Sussex and Brighton & Hove, as well as the materials that residents deliver to the Household Waste Recycling Sites and all compostable, recyclable and general household waste delivered to its facilities.

The councils' strategy is to manage the area's municipal waste more sustainably and break dependence on landfill. To put the strategy in place, a network of facilities needs to be developed. These include a Composting Facility, a Materials Recovery Facility, an Energy Recovery Facility and four Waste Transfer Stations. Local landfill will take the remainder of the waste that cannot be recovered, until the sites are full.

Currently about 400,000 tonnes of waste is generated by households each year in East Sussex and Brighton & Hove, of which 23% is recycled. The rest is landfilled.

Various materials can be recycled in East Sussex and Brighton & Hove using recycling points, kerbside collection services or by visiting the Household Waste Recycling Sites. The materials which are not separated for recycling by the householder are best used in a facility to recover the energy they contain. The benefits are less waste going to landfill and the generation of electricity which will provide heat and light for our homes, reducing the demand for fossil fuels. In the future councils will be fined for over-dependence on landfilling.



Recycling and composting must increase as capacity to deal with the waste in any other way is restricted.



## The proposed site for the Energy Recovery Facility



The site selected for development is situated at North Quay, Newhaven, between the river Ouse and the railway line.

The site has an industrial history related to port activities and storage of aggregates.

### Development plans

On this site Onyx plans to build an Energy Recovery Facility with the capacity to process 210,000 tonnes of waste a year. It would treat household waste that is not reused, composted or recycled from East Sussex and Brighton & Hove.

### Getting the balance right

The facility will be specifically developed with a capacity much lower than the total amount of household waste generated. This is to ensure that recycling initiatives are not compromised by the facility and to encourage even higher recycling levels.

### An Energy Recovery Facility - what does it do?

**An Energy Recovery Facility burns waste under highly controlled conditions, and in so doing recovers heat energy in the form of steam, which is used to generate electricity. If required, heat can be produced for local heating schemes.**

The proposed facility would export around 16.5 megawatts of electricity. This would be supplied to the electricity distribution network and is sufficient to power more than 16,500 homes. The waste volume received would be reduced by up to 90%. The ash would, where possible, be put to beneficial use by having most of the metal content extracted for recycling, and then being used as an aggregate substitute in the construction industry. The facility would also have an extensive flue gas cleaning process ensuring that only gases which meet stringent emissions regulations are released to the atmosphere.



### Planning

The North Quay site at Newhaven has been identified in the draft Waste Local Plan second deposit 2002 as suitable for a waste management processing facility, including energy recovery. This allocation was endorsed by an independent inspector in his report after a year-long Public Inquiry into the draft plan, which was published in June 2004.



Onyx is now proposing to submit to East Sussex County Council (the Waste Planning Authority for the area) a planning application for an Energy Recovery Facility in the Autumn of 2005. Should planning permission be granted, construction would commence in 2006 with operations beginning in 2009.



## What if no Energy Recovery Facility

Currently landfill is running out in East Sussex and Brighton & Hove. This means that without an Energy Recovery Facility, waste would have to be transported long distances out of the area to be landfilled.

Onyx would need to transport the waste in articulated vehicles travelling many more miles than would otherwise be the case, adding to energy consumption as well as exhaust emissions.



### Environmental Statement

The Environmental Impact Assessment regulations require that for certain types of development, planning applications need to be accompanied by a formal Environmental Statement.

### Specialist studies

Specialist studies have also been undertaken. These commenced in June 2004 and will address a wide range of factors including transport, air quality, health and visual impact. These studies, their outcomes, any impacts arising and measures proposed will be included in the Environmental Statement which will form part of the Planning Application.



### Baseline studies

Onyx has commissioned a number of independent baseline studies to establish existing conditions related to the site and the area around the site.

For aspects such as air quality and noise, monitoring was programmed to ensure a robust baseline data set for the prediction of impacts. The aim of the programme is to provide baseline conditions against which to assess a future Energy Recovery Facility.



This requirement applies to the proposals at Newhaven and will be produced to provide an accurate and comprehensive evaluation of the project and its potential adverse and beneficial environmental effects. The document will provide information to:

- The Planning Authority - to assist in making an informed decision about the suitability of the scheme.
- Statutory consultees (e.g. Environment Agency, English Nature and local authorities etc) - to enable them to respond to the Planning Authority, ensuring their views on the project are taken into account.
- Other consultees - interested organisations and members of the public, various groups including pressure groups - to enable them to respond to the Planning Authority, ensuring their views on the project are taken into account.

### Integrated Pollution Prevention Control (IPPC)

- Onyx will also submit an IPPC Application. This is a statutory regulation which is enforced by the Environment Agency. Under these regulations potential polluting substances are controlled to a safe level. The IPPC Application will deal with the technical aspects of the facility's operations and emission controls and has to be approved before any such facility can operate.
- The facility would be operated to meet the new stringent European Union standards.
- As part of IPPC, Best Available Technology has to be employed, which ensures the technology used is both proven and reliable.
- Both the Planning Authority and the Environment Agency will impose conditions as appropriate and monitor compliance.