Fryers Road Development Q&A Document

1. Who is BH EnergyGap?

BH EnergyGap (BHEG) is a developer that builds success on its know-how in developing sites, procuring planning consents and building contracts, selecting state of the art technologies and waste management expertise. These skills together with the ability to secure reliable funding from experienced investors/owners, enables BHEG to deliver major projects.

2. What is BHEG proposing?

BHEG is proposing to build a Resource Recovery and Renewable Energy Production Facility, called the 3Rs Facility, at the Fryers Road site, Birchills Leamore, Walsall. The 3Rs facility will process up to 458,000 tonnes of commercial and industrial and similar waste types that would otherwise be sent to landfill or exported abroad. It will generate energy from this waste, a significant proportion of which will be renewable energy. BH EnergyGap already has planning permission for the scheme, but is now bringing forward a new, improved proposal that necessitates the submission of a new planning application for the facility.

3. What is a 3Rs facility?

The 3Rs facility will process residual waste material ('what's left' after recycling at source) to produce energy using modern thermal treatment technology. The combustion process will recover energy from the residual waste to create steam that can be used to generate electricity for export from the site (and potentially supply heat to local users). These activities will provide a sustainable alternative to landfill disposal, the use of fossil fuels and of primary materials.

4. Where will waste come from?

Deliveries of materials for processing will come predominantly from commercial and industrial businesses within Walsall and the wider Black Country area. Whilst the UK has made major strides in landfill avoidance, there remains a shortage of facilities, such as the 3Rs facility, to enable local businesses to ensure the residual waste they generate is managed sustainably.

5. What used to be on this site?

The site has a long history of industrial activity including mining productive coal seams, metal processing and landfill. The site has also been subject to remediation and works to create a development platform.

6. Why was this site chosen?

The site has an existing full planning permission to build a waste recovery and combined heat & power plant, very similar to the 3Rs Facility as now proposed. The site is identified in the adopted Black Country Core Strategy (February 2011) as a site for new strategic waste management infrastructure. It is also allocated within the Walsall Site Allocation Document, which was adopted by Walsall Council in January 2019, as a 'Potential Waste Site' (Policy W3, site reference WP2).

7. Why submit a new planning application?

To enable a better development solution for the site and a more workable and commercially viable proposition that will better accommodate technological advances in fast changing market conditions.

8. What are the key local benefits?

- Improved architectural design of the building
- More construction phase employment and higher quality permanent jobs
- Opportunities for education and training
- Increased energy, including renewable energy, generation
- Additional environmental features such as electric vehicle charging points
- Increased capital investment within the area

9. What is the application process?

The revised proposal for the 3Rs facility will be the subject of a planning application to Walsall Council and will be for full planning permission. The application will include several documents one of which will an Environmental Statement, which will include the following assessments:

- Landscape and Visual Impact
- Noise Effects
- Air Quality
- Human Health Risk
- Ecology and Nature Conservation
- Ground Conditions and Contaminated Land
- Surface Waters and Flood Risk
- Archaeology and Cultural Heritage
- Socio-Economics

Following submission of the application to Walsall Council, there will be a statutory public consultation period where interested parties and individuals can make comments on the scheme to the Council. The Council, in determining the application, is required to give due regard to all submissions received.

To operate the facility, as well as requiring planning permission from the Council, various other approvals and permits will need to be obtained. The most significant of these is an Environmental Permit issued and regulated by the Environment Agency. The purpose of the Environmental Permit is to ensure that operation of the development does not give rise to risks to health or the environment.

10. How many new jobs will the 3Rs create?

During construction the 3Rs facility will create up to 450 jobs. Skills required will be construction, mechanical, electrical and civil engineering, instrumentation and administration. This development will be a significant investment and also create various regeneration opportunities for local business suppliers and services in the area during the building programme and into operation. The construction programme will include a building envelope with offices, internal plant with steel frame and walkways, extensive concrete structures and mechanical machinery. Once operational it is expected to employ up to 50 permanent jobs on site.

11. When will the 3Rs facility be up and running?

Construction and commissioning of the 3R's will take approximately three years to complete.

12.How much energy will the 3Rs generate?

The 3Rs will generate approximately 44 megawatts of electricity, sufficient power to meet the needs of approximately 90,000 homes.

13.Will the district heating and/or power generated by the 3Rs facility be available to local users?

BHEG is keen to try and achieve this and the feasibility of such a scheme is currently being assessed. To find out more and express an interest in receiving either heat or power contact BHEG via our website in the contact section www.bhenergygap.co.uk

14.What thermal treatment is being used at the 3Rs?

The type of thermal treatment being proposed is based on proven moving grate combustion technology. The incoming waste is subjected to a high temperature in an oxygen-rich environment which releases heat energy that is captured in the boiler, converting water into high temperature steam. This steam is then used to generate electricity and/or heat for sale to end users.

15. What happens on site, please describe the process?

Residual waste material that has already been subject to source separation for removal of recyclables, will be delivered to the facility, where it will be weighed and then unloaded into a pit, called the waste bunker, within the fully enclosed delivery hall. The waste is then transferred from the bunker by a grab crane and loaded into the combustion chamber. In the combustion chamber, the waste moves along a slowly moving grate where it is burnt in an oxygen rich environment. In these conditions, the waste releases the energy it contains as heat and transforms into an ash. The ash is discharged from the unit and once cooled is exported from the site to be turned into an aggregate substitute. The hot air from the combustion process passes into a boiler where it heats water contained in pipes to produce superheated steam. The steam then drives a turbine, which produces electricity that is exported from the site to the national grid and potentially to local power users. The steam is also capable of being exported from the site as a source of heat. The air / gas which has been heated during the process is cleaned through a sophisticated flue gas treatment system to meet modern standards and the cleaned gasses are released through the twin chimneys.

The ash from the process will include glass, other incombustibles and various metals. This ash will be taken from the site and delivered to an ash re-processor, where the metals will be removed and recycled. The remaining inert material will then be used as a construction aggregate.

The small amount of residue from the gas clean-up process will also be removed from the site and sent to re-processors where, depending on the situation, will be either used as a neutralising agent for acid wastes, turned into a construction aggregate or landfilled.

16. What traffic is the 3Rs facility likely to receive?

Vehicles will arrive from the south from Leamore Lane and along Fryers Road. The waste reception operations will occur during the period 07.30 – 19.00 hours Monday to Friday and 07.30 – 13.00 hours on Saturdays. These are the same periods as currently permitted within the existing planning permission. These movements are unlikely to occur during traditional peak periods. Furthermore, not all of the vehicles will necessarily be new to the area, as some will already be servicing local businesses. The overall number of vehicles serving the site, approximately 98 HGV deliveries per day, will be no greater than that associated with the scheme that already has planning permission on the site.

17. What will the building look like?

The current proposal benefits from a significantly enhanced architectural solution. It has been designed as a clean, modern building which will fit well within the setting of the industrial estate and set a benchmark for all future developments in the area.

18. How visible will the 3Rs be from nearby properties?

The 3Rs facility is situated in the middle of an industrial estate. The height of the building varies across its profile, with the highest part of the building being slightly higher (just under 7 metres higher) than the currently consented scheme. A full landscape and visual impact assessment has been undertaken as part of the planning application, which includes a series of ‘photo real’ computer generated images showing the building in context from various local viewpoints.

19.How high will the chimneys be?

The chimneys will be 102.3 metres in height and will sit at the exact same height above Fryers Road as the chimney that is consented in the existing planning permission, so there is no new impact from the updated application.

20. How safe is the 3Rs facility and will there be any health risks?

The planning application includes a human health risk assessment. This concludes that the 3Rs facility will result in no material adverse effects upon local health. In addition, in order to operate the facility an Environmental Permit will be required. Environmental Permits are issued and regulated by the Environment Agency and their purpose is to ensure that developments such as the 3Rs facility do not give rise to risks to health or the environment.

In June this year (2019) an official study funded by Public Health England and carried out by Imperial College on the health impacts of emissions from energy from waste facilities was released. The study, which is the final part of a wider series of studies carried out over a 6 year period, investigated the health risk of those living close to energy from waste plants. The overall conclusions are that such facilities do not give rise to material health risks and modern and well-regulated incinerators are likely to have a very small, or even undetectable, impact on people living nearby.