

Hownsgill Energy Centre is a new small-scale, community-focused waste to energy recovery facility proposed for Consett in County Durham.

As well as supporting climate change efforts and the transition towards renewable energy on a local level, it will generate enough clean, green heat and power to supply the equivalent of 8,000 homes while encouraging new jobs, investment and further regeneration for the immediate area.



#### The benefits:



- Clean, low carbon, renewable energy production (3.7MW electricity or 17MW heat, or a combination thereof).
- £30+ million of private investment in the local area, encouraging a further £10 million of wider investment projects for Consett.
- Up to 70 new jobs during the construction/commissioning phase, with 35 new green jobs in operations, maintenance, support and the wider supply chain.
- Fully compliant with Durham County Council's Waste Policy (2020 County Plan).

## ...and a catalyst for:





- Possible private connections to local housing developments supplying low carbon heat/power via a 'power purchase agreement'.
- Possible supply of power to a new district hospital and care village on the Derwent View site.
- New regeneration including a £6 million solar farm providing up to 7MW of zero carbon energy and smartgrid infra-structure for LV distribution.
- A dedicated community energy company generating local power for local residents and reduced energy costs of up to 20% compared to current tariffs (helping towards reducing fuel poverty).
- More certainty, reliability and constant power supplies for homes and businesses.

It will make Consett an exemplar to other towns and communities, and enable businesses to manage their waste responsibly whilst reducing carbon emissions.





Hownsgill Energy Centre will be located on an existing (active) industrial estate that is home to a local transport depot, warehouse facilities, manufacturers and other commercial businesses. It is a strategic employment site and a location identified by Durham County Council for future development.

The facility has been specifically designed to be one of the UK's smallest facilities of this nature:

- 22m high building, 28,000 sq ft area with 50m high stack ie 1/3 of the size of Tesco Consett.
- Fully-contained building with advanced technologies (controlling/eliminating all odours)
- Storing up to three days fuel (maximum level) at any one time.





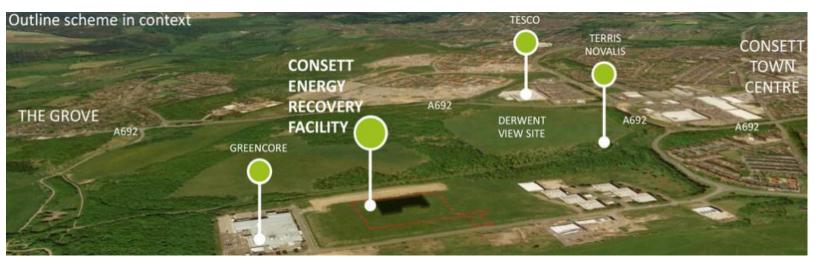






- 1. Taken from Starbucks
- 2. Taken Knitsley Lane
- 3. Taken from Chequers (in front of tree line which obscures the view from nearby homes)





#### The most advanced technologies, processes and filtration systems:

Host Bioenergy Installations is one of Europe's leading bioenergy specialists delivering advanced energy from waste facilities worldwide.

At Hownsgill, state-of-the-art furnace, flue and gas technologies will ensure that renewable heat, power and steam are generated with negligible emissions levels. Highly controlled processes are designed to handle high ash loads at extreme temperatures, with three stages of filtration ensuring all unwanted elements are destroyed, collected and disposed of safely.















Business waste (commercial/industrial) is not dealt with by Durham County Council. Non-hazardous, non-recyclable items are classed as refuse derived fuel (RDF) and are suitable for Hownsgill Energy Centre.



Example of how the fuel bales will look for transportation to the site.



Materials will be processed at external waste management centres, not at Hownsgill.



Fully contained/sealed vehicles will transport during working hours only (9am-5pm Mon-Fri).



Vehicles will unload when inside, once roller shutters are fully closed.



Fuel is burned at extreme temperatures to generate heat to a steam boiler driving a steam turbine, producing clean renewable energy.



Water vapour (steam) will be seen from the plume AND NOT harmful emissions. This will dissipate within 20 metres of the facility.



Local residents will benefit from cheaper power supplies via a new community energy provider.





# **Examples of RDF waste to be used:**



- Non-recyclable wood fragments
- Non-recyclable paper and cardboard
- Non-recyclable fabrics
- Redundant furniture, carpet and underlay
- Non-recyclable packaging
- Non-recyclable plastic
- Non-recyclable business waste

### ...and where will this come from?:



- Local factories
- Local schools
- Local offices
- Local shops
- Items from domestic skips (eg home improvements)

All of the above from within a 10 mile radius of the facility.

Play below>>>











We need to take ownership and responsibility now for the waste we produce on a community level.

We cannot continue to turn a blind eye, not knowing or caring how our waste is disposed of, when we have the opportunity to instead, turn our own waste into renewable energy, generating green heat and power for Consett.



For more details go to www.hownsgillenergycentre.co.uk