



TEMPLEBOROUGH BIOMASS POWER PLANT POWERING A RENEWABLE FUTURE

GENERATING



OF GREEN
ELECTRICITY

SUPPLYING



HOMES WITH
ENERGY

SAVING OVER



TONS OF CO₂
A YEAR

“

Our renewable energy biomass power plant will generate clean, green energy using waste wood as a fuel and so is great for the environment. We plan to open in August 2017 when our plant will generate just over 41MW of green electricity which is enough to supply 78,000 homes and save over 150,000 tons of CO₂ every year.

”

We would like to welcome you to the first project newsletter for the Templeborough Biomass Power Plant. We hope that this and the following newsletters will help to keep you up to date with everything that's happening in our project, including our construction and commissioning activities. We will also do our best to answer any questions you might have.

Our project is one of a growing number of renewable energy projects across the UK which generate clean and safe forms of power from renewable sources which never run out. Even more importantly, renewable energy generation contributes to cleaning up our environment by reducing the climate change gasses we generate to produce our energy needs, thus helping to protect our environment. We plan to open our renewable energy plant in August 2017 when it will generate around 41MW of green electricity, which is enough to supply over 78,000 homes and save over 150,000 tonnes of CO₂ every year.

Who are we?

We are Templeborough Biomass Power Plant Ltd., an independent renewable energy generation company established to build a power plant at Ickles Weir on Sheffield Road, Rotherham. The final elements of the required planning permissions were granted by Rotherham Metropolitan Borough Council in late 2014 and the £160m required to build the plant was approved by our investors, Copenhagen Infrastructure II K/S, a Danish infrastructure fund, in March 2015, allowing the project to get started.

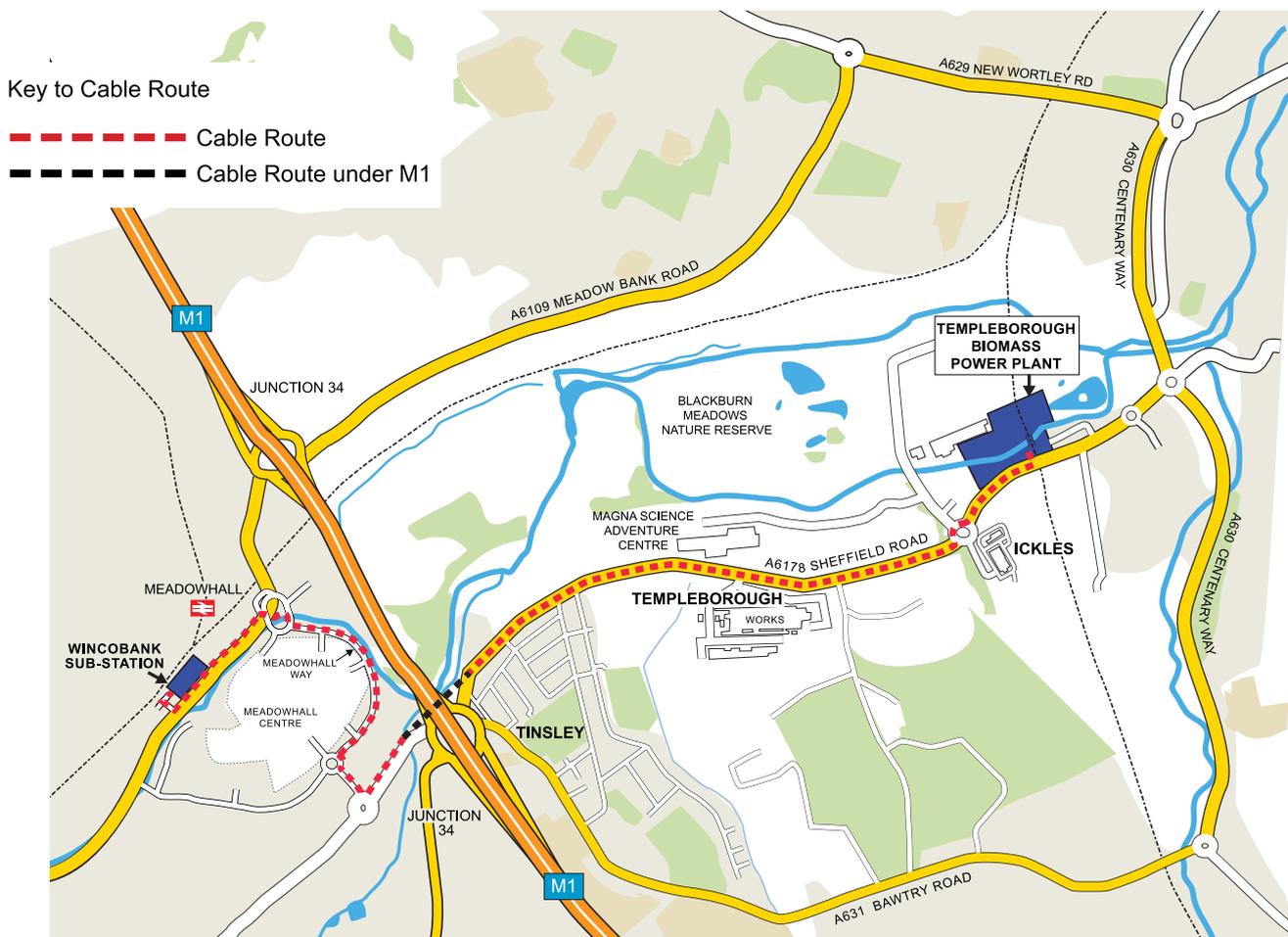
Templeborough Biomass has contracted with a consortium of Birmingham-based Interserve Construction Ltd. and Babcock & Wilcox Vølund from Denmark, who will build the power plant and supply all the equipment. Interserve is one of the UK's foremost construction and support services companies and Vølund have a history in power generation which dates back to 1898. When our plant starts operating, the fuel, which will be recycled waste wood, will be sourced locally by Stobart Biomass Products Ltd., a subsidiary of Stobart Group who also part own the Eddie Stobart logistics company.

Where can you find us?

People have lived, worked and battled at the site of our new power plant for thousands of years. The Roman fort at Templeborough was situated close by and Neolithic and bronze age remains have also been found in the area. A medieval mill appears to have been built on the south bank of the River Don which was later converted into an oil mill and then a steel rolling mill. The area on the north bank of the Don was developed as Bessemer steel works in 1871, which then spread to cover the entire site and beyond by 1892.

	2015				2016				2017			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
WORK AT THE SITE												
Site Clean-up												
Piling & Foundations												
Foundation Works												
Equipment Erection at Site												
ELECTRICAL CABLE WORKS (SHEFFIELD ROAD AND MEADOWHALL)												
Streetworks in Sheffield Road												
Streetworks around Meadowhall												
Pull cable through the installed ducts												
PREPARATION FOR OPERATION												
Commissioning Main Systems												
Testing												
Start of Operations												

Project Timeline - Tentative/Indicative project timeline for information purposes only – subject to change.



We value this history and the contribution other industries have made before us; steel which has supported the industrialisation of the UK and contributed to the war effort, making shell quality steel billets and bars, tank components and gun forgings. We are proud to continue this industrial tradition and place the area at the forefront of the new environmental revolution as one of a growing number of biomass plants in the country.

How will our project work?

Our project will use waste wood biomass to generate electricity. The waste wood fuel will largely be collected locally, from municipal waste sites where it is segregated from other wastes, from construction sites, and from other industrial and commercial waste collection, after which it will be processed and shredded for use as a fuel in our biomass plant. Waste wood not collected and used in this way is often disposed in landfill, where it decomposes releasing methane, a gas around 20 times more harmful to the environment than CO₂.

In common with other biomass materials, trees capture energy and CO₂ through the process of photosynthesis and when the wood is burned as a fuel, release only the same amount of the CO₂ they captured when they grew. The energy released is used to boil water, which turns to steam and then into rotational energy through a steam turbine from which electricity is generated by an electrical generator. The electricity is fed in to the national grid for everyone to use.

This is essentially the same process as is used in coal fired power stations, some of which are currently being converted to run on biomass instead. Biomass is much better for the environment than coal and other fossil fuels as the carbon dioxide being released is not 'new'. This means that the CO₂ in the plant material being burned is already part of our balanced atmosphere as it was only relatively recently absorbed by those same plants and trees that are now being burned. Fossil fuels however release CO₂ which was absorbed thousands of years ago, and so is not part of today's atmosphere, dangerously adding to the CO₂ levels which are part of the cause of global warming.

What's happening now?

The work we've carried out on site so far has seen us demolish and crush over 3,000m³ of concrete and remediate 30,000m³ of earth weighing around 55,000 tonnes. As all the old bricks and concrete have been re-cycled for use as hard core and the bulk of the earth has been re-used, removal of materials from the site has been minimised.

Once the site had been remediated ready for construction, piling to create the foundations for the heavy buildings and equipment that will make up the renewable energy plant started. We are using augered (or screw) piles, which are far less noisy to put in place than traditional driven piles. We carried out a successful test pile in mid July and started piling in earnest in early August.



Artist impression of Templeborough Biomass Power Plant

What's happening next?

Piling works will continue for another few months, but in parallel we will shortly start laying the concrete foundation blocks of the plant. Away from the site, a new cable has to be laid to carry the electricity generated at the plant in to the national electricity grid where it can be used by everyone. We started excavating for the cable ducts along Sheffield Road in Rotherham during June.

The route we are taking is approximately 4.5 km long, leaving our site and joining the A 6178 Sheffield Road at Ickles, it then travels westwards along Sheffield Road through Templeborough, past the Tata Steel works and the Magna Centre. It passes under the M1 Motorway at Junction 34 (South) and continues along the A6178 before turning north westwards along Vulcan Road to join Meadowhall Way. The cable will then be buried in the verge most of the way around Meadowhall Way running northwards, eventually crossing the River Don and then travelling southwesterly along Meadowhall Road, the A6109, to join the Northern Power Grid electricity substation at Wincobank

During the brief periods we might be working outside your house or business we will look to minimise disruption and ensure you are able to move in and out with the least possible inconvenience to yourselves. We will also try and have as little impact as possible on the movement of traffic by laying the cable in ducted sections and pulling the cable into these afterwards. Using this system allows us to disturb only a short section of road at a time whilst laying the ducts and means the cable itself can be pulled through the ducting systems quickly and efficiently. Work in the Meadowhall area will be undertaken at night from 7pm to 7am to ensure we minimise any inconvenience to you.

What are the benefits to your local community?

We know that a project like ours is bound to have an impact on you and your community as we build it so we want to make sure as much of that as possible is positive. One of the main benefits our project brings is jobs, so whenever they can our contractors will look to employ from the local area, regionally and then nationally. Now the construction period has begun they currently have 40 personnel on site. This number will increase as the site grows and develops, peaking at about 350 as the construction process progresses, creating even more opportunities for local employment.

Once the construction and commissioning of our plant has taken place and we are generating renewable energy we will once again look to employ skilled local people to operate and maintain the plant. Both we and our contractors will make use of local businesses like catering, office supplies, taxis and house rental and other accommodation as well as buying some of our construction materials nearby - all of which supports the local economy. We are also committed to ensuring we cooperate with local schools, businesses and community groups that might have an interest in what we are doing.

How can we work with you?

We know that to create the best positive impact for you and your community we need to work closely together. It is vital to us that we build a strong relationship with you and those affected by our activities, particularly during the construction period, so we will always do our best to communicate effectively, listen to your comments and opinions and try hard to ensure our project works for everyone who lives in and visits the area. We will do our best to ensure you have all the information you need about our project, what we are doing and when. Communication works best when it's a conversation so we also need you to talk to us, ask any questions, tell us of any challenges and help us be the best neighbours we can be. We have set up a dedicated point of contact for you and want to encourage you to get in touch and stay in touch as our project progresses.

So if you have a question, comment or something you would like to share with us please contact

Tim Forrest
Templeborough Biomass Power Plant Ltd.
Sheffield Road, Rotherham S60 1FA

Mobile number – 07756 674294

Email – info@templeboroughbiomass.com Website: www.templeboroughbiomass.com