



# PROTOS

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Environmental

This is Protos, a Peel Environmental company, is proposing updated plans for an Energy from Waste (EfW) facility on Plot 8 at Protos. This is the same plot as the previously consented 95MW facility, which was approved in 2009 and subsequently implemented.



We are bringing forward a reduced-scale facility in response to market conditions and aim to submit a planning application to Cheshire West and Chester Council in summer 2016.

## A REVISED PLAN

The updated facility will:

Generate up to 35MW of energy

Use up to 350,000 tonnes of waste per year from the surrounding area to create much-needed energy

Create up to 300 jobs during construction and up to 50 jobs once operational

Deliver connectivity improvements to the site via road, rail and canal infrastructure

Feature significant ecological improvements

Signal further investment into the Protos site, which recently became part of the Cheshire Science Corridor Enterprise Zone

## COVANTA

Powering Today. Protecting Tomorrow.

### OUR PARTNERS

We are currently working with Covanta, an experienced company with a global network of energy generation and material processing facilities.

Covanta continue to hold an interest in the plot with a view to renewing the partnership at Protos.

The facility would be delivered alongside other partners who would be responsible for the supporting site infrastructure such as road improvements.

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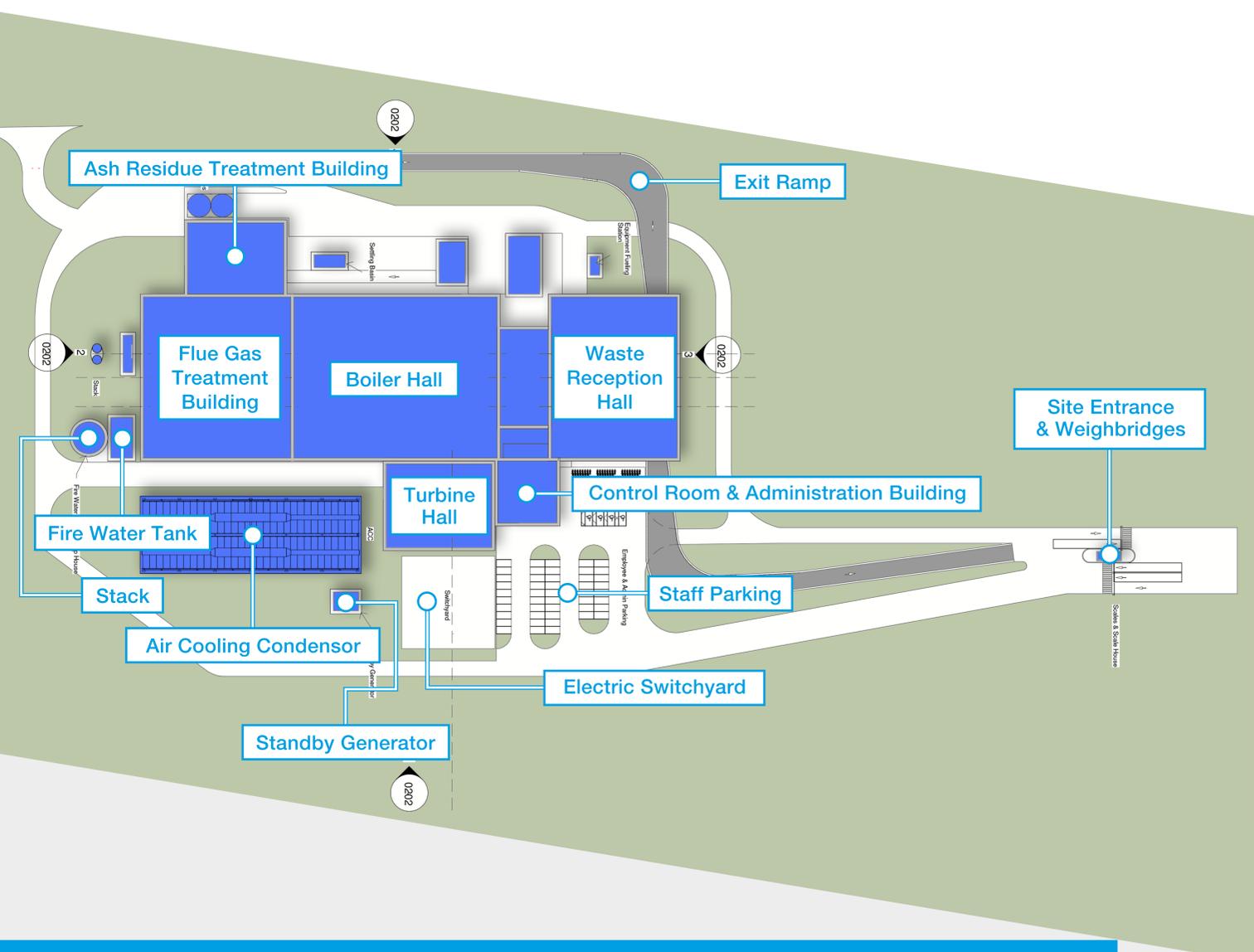


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## THE PROPOSED FACILITY

Our updated facility will create jobs, generate energy and be located on the same 10 hectare plot as the consented plans. The associated infrastructure including rail connection; dry cargo canal berth and ecological areas will also still be delivered.

It is proposed that the facility would use proven and environmentally-sound technology to recover energy from residual waste left after recycling. This could include household, commercial and non-hazardous industrial waste to be sourced predominantly from the region.



The layout and function are broadly similar to the consented scheme. This includes:

- Process buildings to house kit
- A 100m stack – as previously proposed
- A reduction in the scale of some of the buildings
- Internal site roads to provide vehicle access
- Parking for staff and visitors

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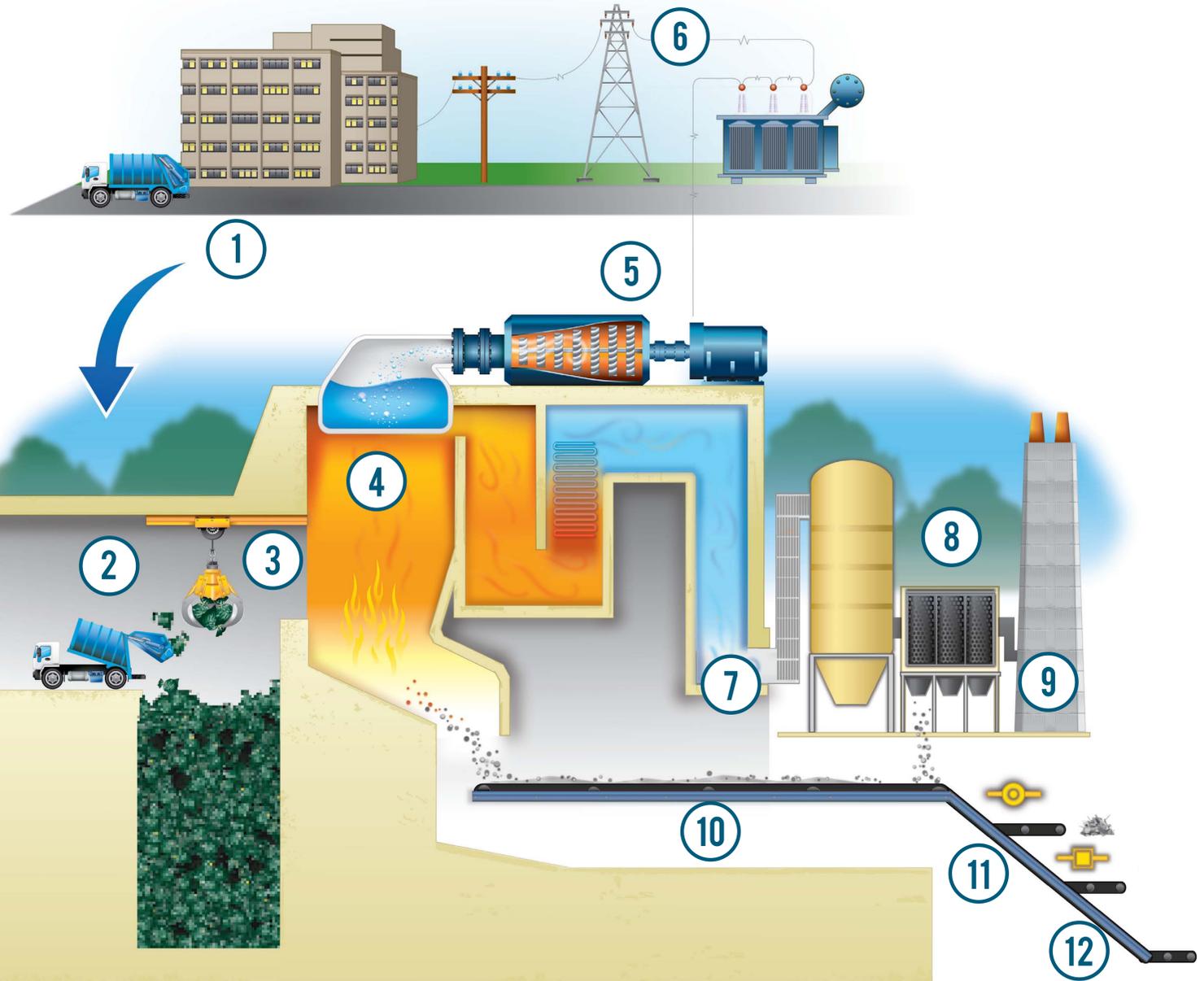


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## THE EFW PROCESS

- 1** Post-recycled municipal solid waste is picked up at your home or business.
- 2** Waste is delivered and temporarily stored in a bunker. We maintain the building around the tipping and bunker area under negative pressure and use this air in the combustion process to control odour.
- 3** The waste is fed into a combustion chamber and burned at extremely high temperatures in a self-sustaining process.
- 4** Heat from combustion boils water to create steam.
- 5** The steam turns a turbine-driven generator to produce electricity, or may sometimes be used directly for heating or industrial processes.
- 6** Electricity is distributed to the grid and used to power homes and businesses.
- 7** State-of-the-art air pollution control equipment is used to cool, collect, and clean combustion gases. The equipment operates under stringent UK and EU standards.
- 8** We control emissions of particulate matter primarily through a baghouse (fabric filter).
- 9** Emissions and other operating criteria are continuously monitored to ensure compliance with UK and EU standards.
- 10** Residual material from the combustion process is collected for processing and metals extraction.
- 11** Ferrous and non-ferrous metals are extracted for recycling.
- 12** Remaining residual materials are beneficially reused or disposed of in a landfill.

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## A ROBUST APPLICATION

We have been planning Protos for over a decade and therefore have a detailed understanding of the site and surrounding area. This is based on extensive environmental assessments and studies carried out as part of the initial planning process.

As the facility has been reduced in scale, most impacts will be the same or less than previously identified. The application will be supported by assessments that consider aspects including transport; noise; air quality; and flood risk.



### TRANSPORT

A transport statement will be submitted that updates previous studies. This will consider current and future vehicle numbers in the context of proposed road improvements already being delivered as part of the wider Protos project.

We expect a slightly lower number of HGVs travelling to and from the site than previously anticipated.

### AIR QUALITY

Much work has been done to address air quality since the original consent in 2009. A revised air quality assessment will be submitted as part of the application. Safeguarding will continue to be a core part of the building's design, with control measures and negative air pressure used to avoid the release of dust or odours.

This Is Protos is committed to supporting previously-agreed air quality monitoring in the area.



### OTHER STUDIES

Our detailed understanding of the site's ecology has been further developed with ongoing ecological studies. We remain committed to delivering the ecological areas on site and are working with Cheshire Wildlife Trust to deliver these.

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