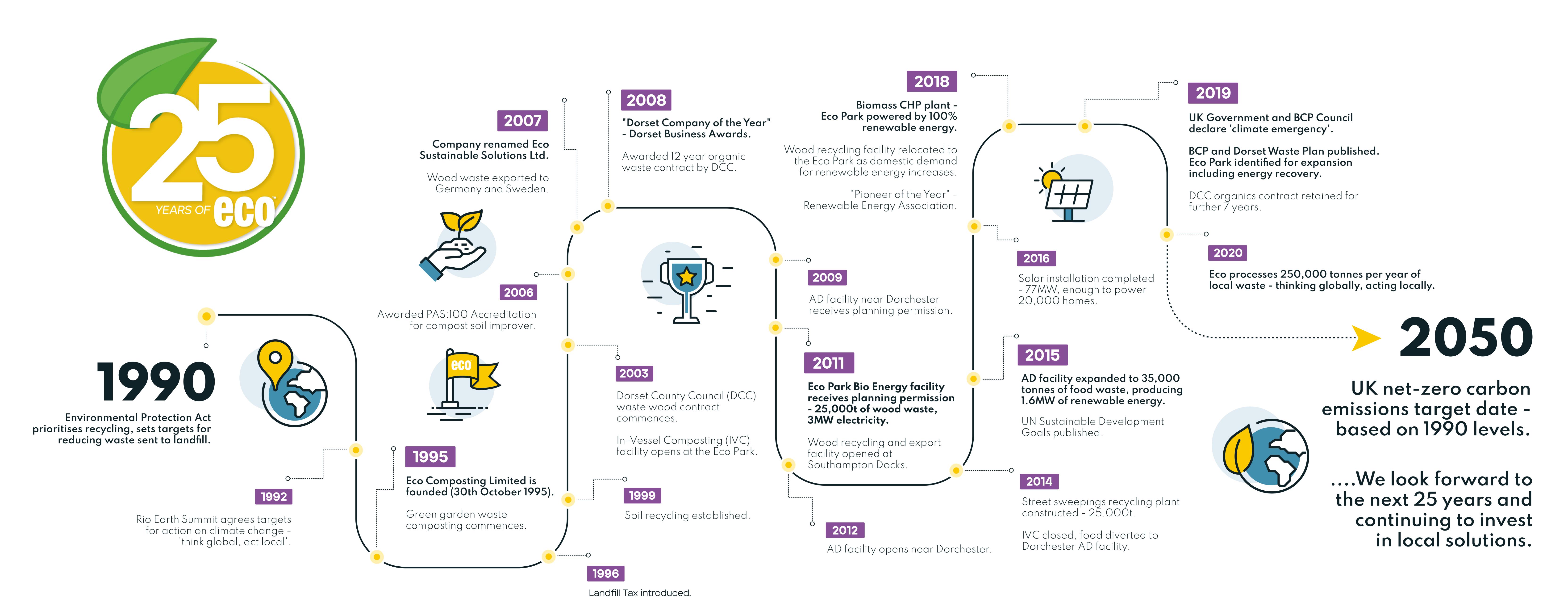
# Ecco Park

Eco Sustainable Solutions Ltd (Eco) has a proven track record in solving local waste and energy challenges and preserving our environment.

Whilst recycling remains at the heart of what we do, the company has organically grown over its 25-year history to operate three sites and employ 45 people.

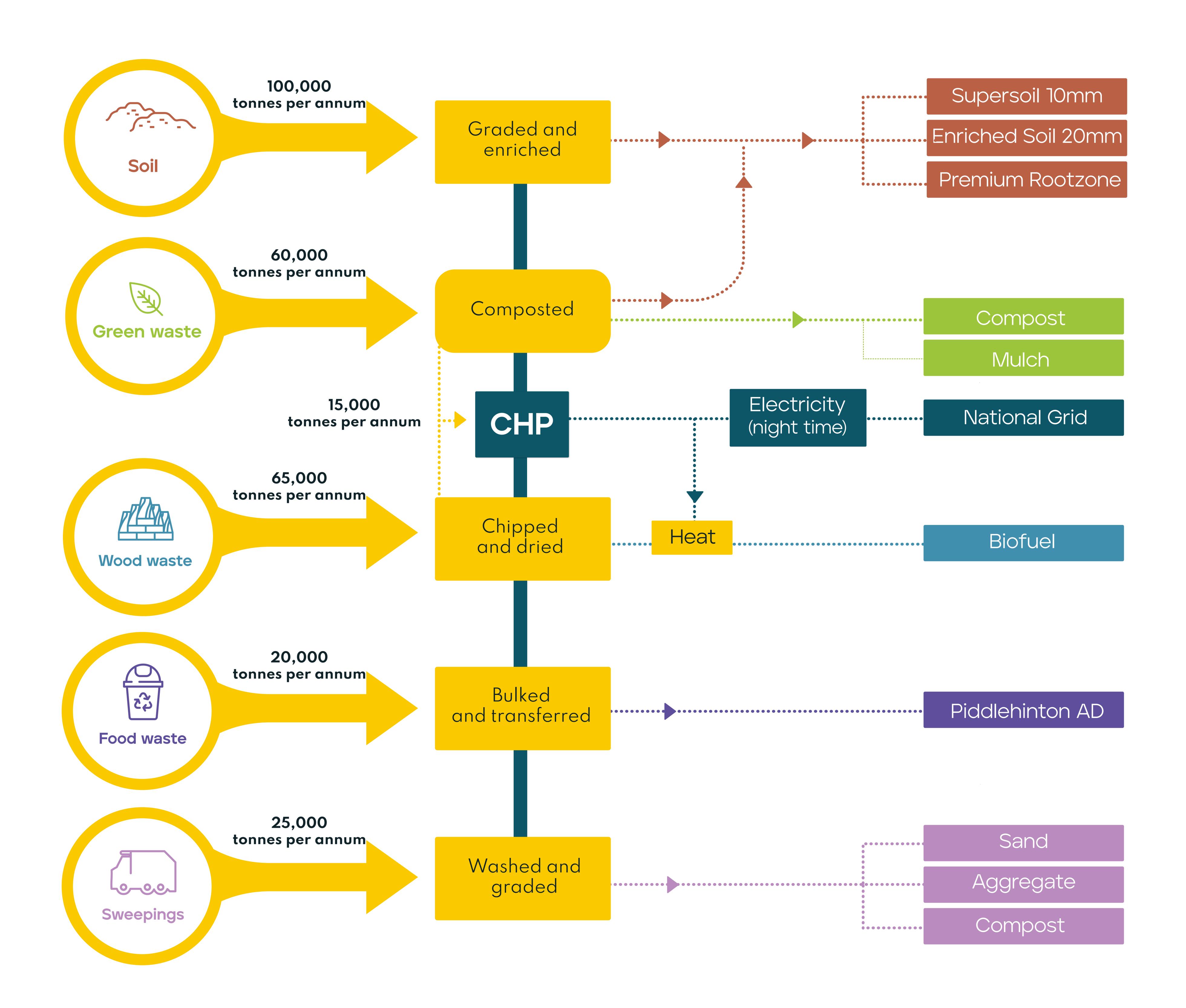
We process more than 250,000 tonnes of the local community's waste each year. This waste is put back to good use through natural horticultural and agricultural soil improvers, mulches and fertilisers as well biofuels and energy.

As we celebrate a quarter of a century of solving environmental problems, we are also looking ahead to the challenge of helping the local community to address the climate emergency.



#### Eco Sustainable

#### ---- Solutions explained!



We process more than 250,000 tonnes of the local community's waste each year, putting it back to good use.

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# Our 1 millionth tonne of green waste composted in 2020!

The Eco Park is powered by renewable energy from our on-site Combined Heat and Power (CHP) plant - we even use the heat! Food waste is transferred to our Anaerobic Digestion plant near Dorchester and turned into renewable electricity and soil improver.

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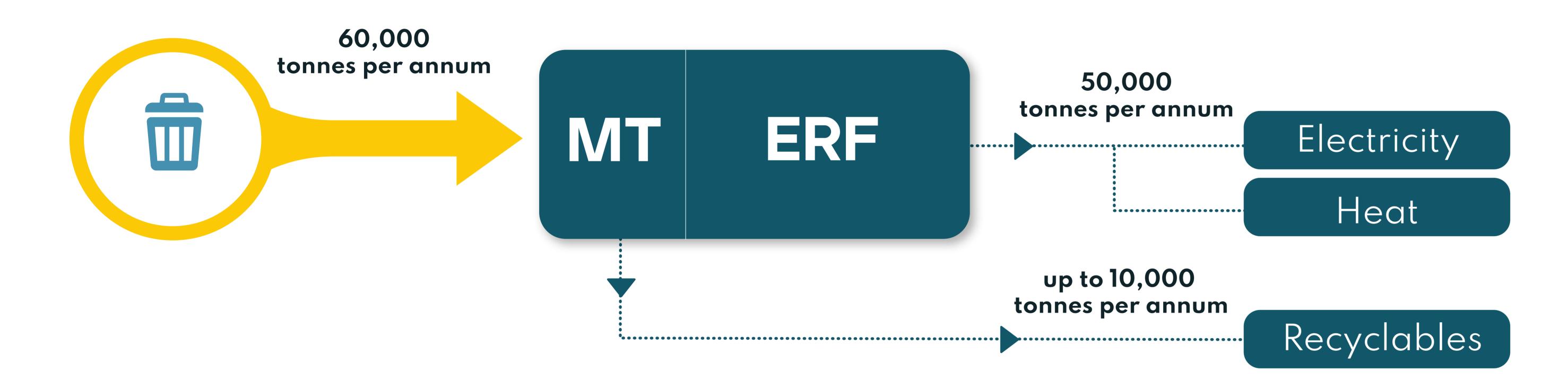
Our Eco Park at Parley is carbon positive – we save more carbon than we use.

Surrounding the Eco Park on land owned by the company, we have installed 77MW of solar panels, generating enough renewable power to supply over 20,000 local homes.

### We want to help solve the current waste challenge and tackle the climate emergency by continuing to invest in technological solutions.

Our proposed Chapel Gate Energy Recovery Facility (ERF) will process leftover residual waste to recoup more valuable recyclable materials before recovering energy from the remaining waste.



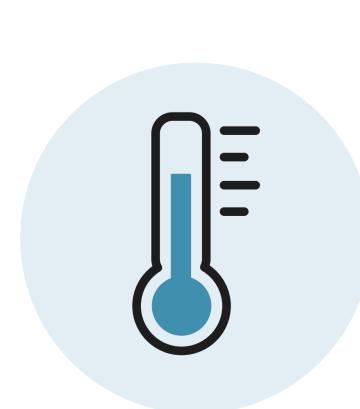


All waste is tipped inside a building kept under negative air pressure, containing any smell. After any remaining recyclable materials are extracted and sent for reprocessing into new products, the remaining waste (such as contaminated paper and card, plastics and other similar materials that cannot be recycled) becomes a fuel.

The fuel is combusted to recover the embedded energy and generate steam which drives a turbine, creating low carbon electricity for local businesses or homes and the National Grid. The remaining heat can also be used nearby to heat buildings or in manufacturing.





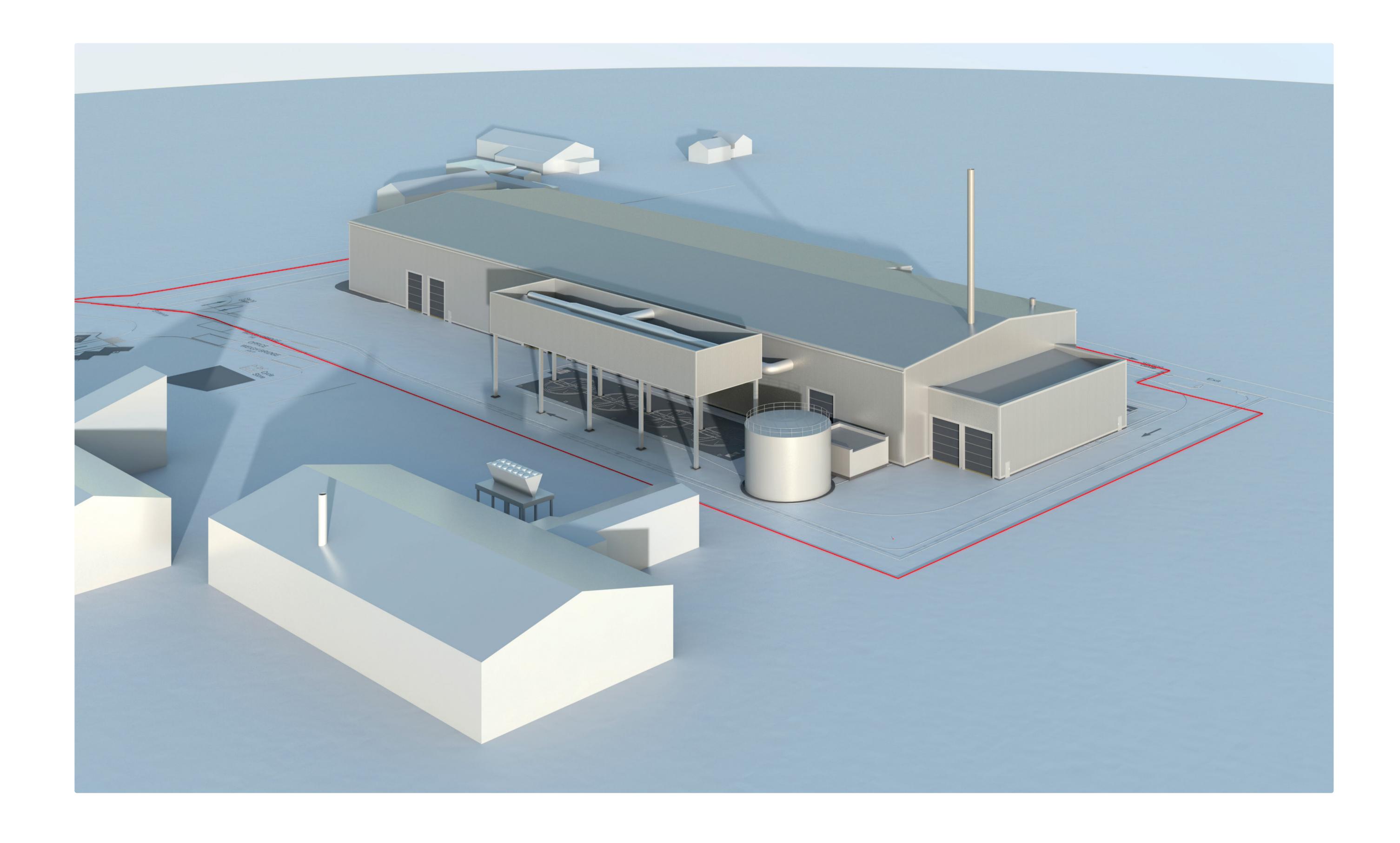


The facility will generate 3.4MWe of electricity for export, and around 11.5MWth of heat.

### What will it .....o look like?

The ERF will look similar to the existing biomass CHP plant that powers the site, with a taller chimney stack.

At 16 metres, the proposed ERF building is lower in height than the permitted 17.9 metre tall biofuel plant that it will replace. The building design is a standard agricultural style shed very similar to but smaller than the aircraft hangars at the airport.

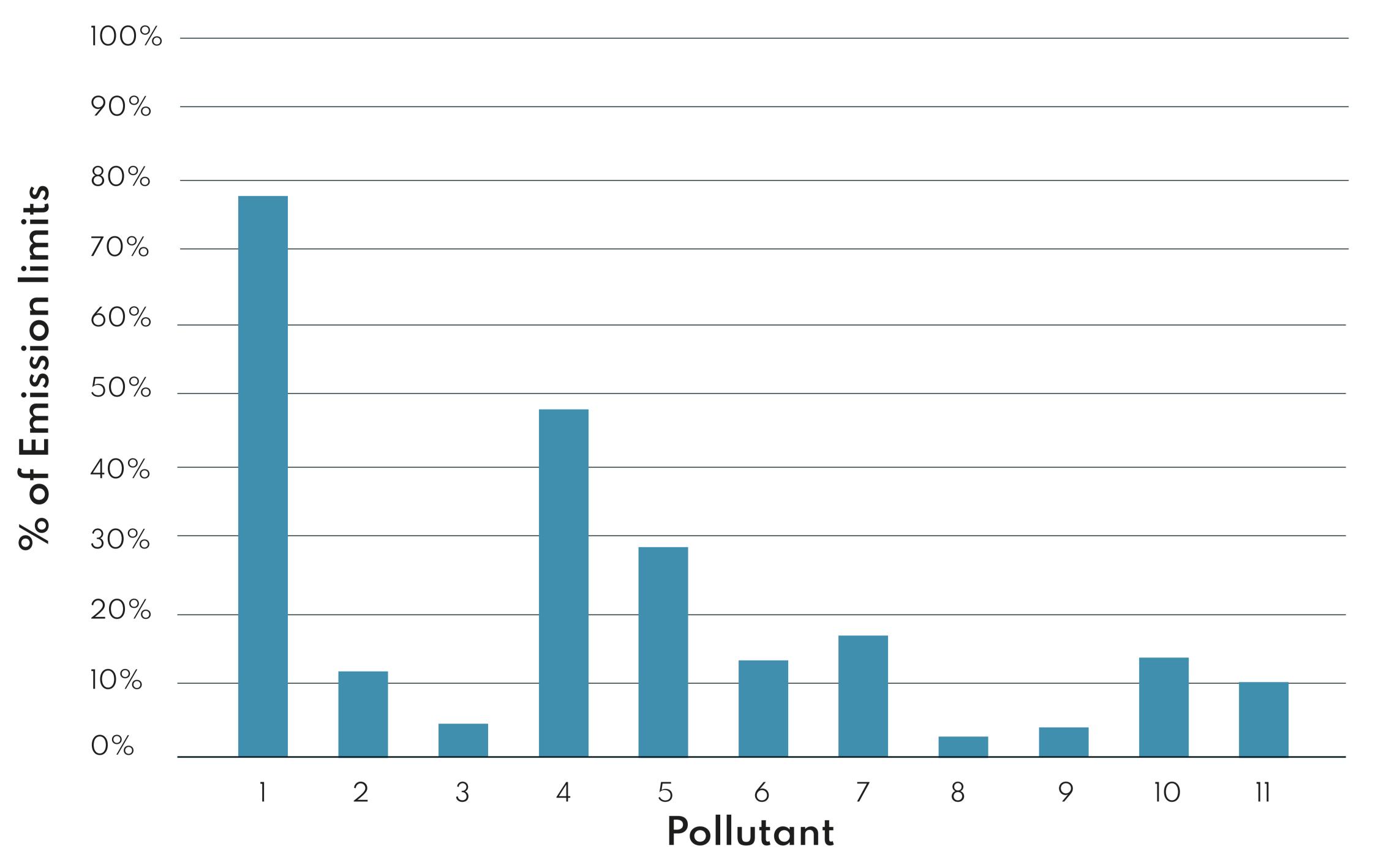


### What about emissions?

Emissions from ERFs are tightly controlled, and closely monitored by the Government's regulator (the Environment Agency) against strict permit conditions. An ERF can only operate once it secures an environmental permit from the Environment Agency.

All waste facilities including ERFs must demonstrate they can meet emission limits which are set in order to protect human health and the environment.

#### Mean of typical monitored emission data from 43 UK EfW plants, as a percentage of current emission limits



- 1. Oxides of nitrogen
- 2. Particulates
- 3. VOCs
- 4. Hydrogen chloride
- 5. Sulphur Dioxide
- 6. Carbon monoxide
- 7. Ammonia
- 8. Cadmium and thalium
- 9. Mercury
- 10. Other metals
- 11. Dioxins and furans

#### Will it .....o smell?

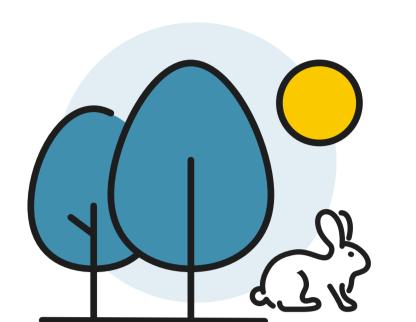
No. Residual waste brought to the new facility will be tipped inside a building before being mechanically sorted to remove recyclable materials.

The building will be under a negative pressure meaning that air will be drawn into the building. This air will be used in the ERF and any odour in the air will be treated through the combustion process.

### What about wildlife ...... and habitats?

Having been custodians of the local land for over half a century (originally as farmers), we understand and value its ecology. We intend to build on recent biodiversity enhancement initiatives delivered via habitat restoration by:

• Securing the long-term management of the landscape infrastructure.

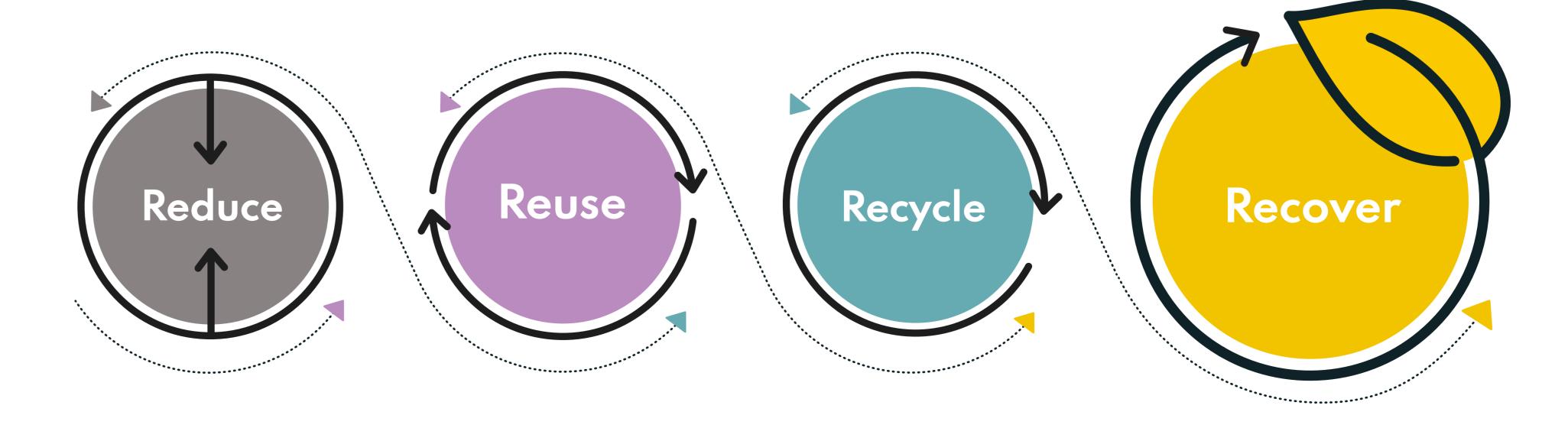


- Protecting and managing retained trees and hedgerows.
- Further integrating the site into the surrounding landscape through establishment of new screen bunding and mounding.
- Creating, maintaining and enhancing features of biodiversity value.
- Ensuring that legally protected species are not impacted by the proposals.
- Restoration and long-term management of former/degraded heathland.
- Establishing a flexible management and maintenance regime able to respond to changing needs or objectives.

# Education, employment supply chain opportunities

We are also proposing a visitor and education centre on site to promote the three Rs – Reduce, Reuse, Recycle. This is essential if communities are going to win the war on waste. Even when Eco's ERF is operational, Dorset and BCP Councils will still be paying to export waste out of the area.

The very best thing is to reduce the amount of waste we all produce at home, at work, at school or out shopping.



## What about traffic ......o and active travel?

Waste services are essential and waste miles are inevitable, however the ERF will reduce the total miles travelled by local waste that is currently transported out of the area.

The following tables provide a worse-case analysis of traffic on the local highway network during the peak morning and evening periods.

#### Baseline traffic movements

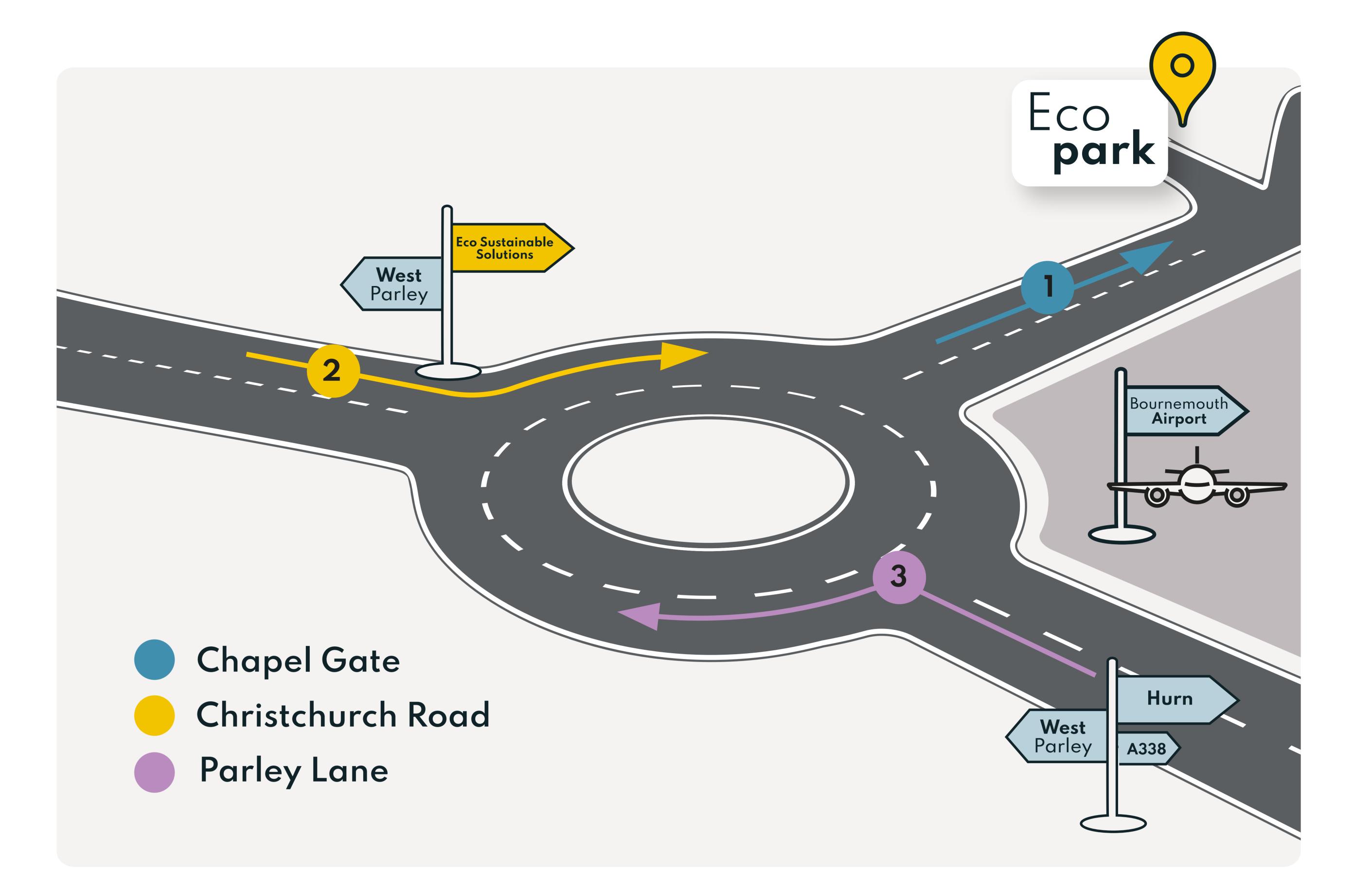
Time Period	Chapel Gate (east of roundabout)	Christchurch Rd (west of roundabout)	Parley Lane (south of roundabout)
<b>AM Peak</b> (08:00 - 09:00)	909	1,798	1,873
<b>PM Peak</b> (17:00 - 18:00)	759	1,684	1,635

#### Project traffic movements (including the operation of the ERF)

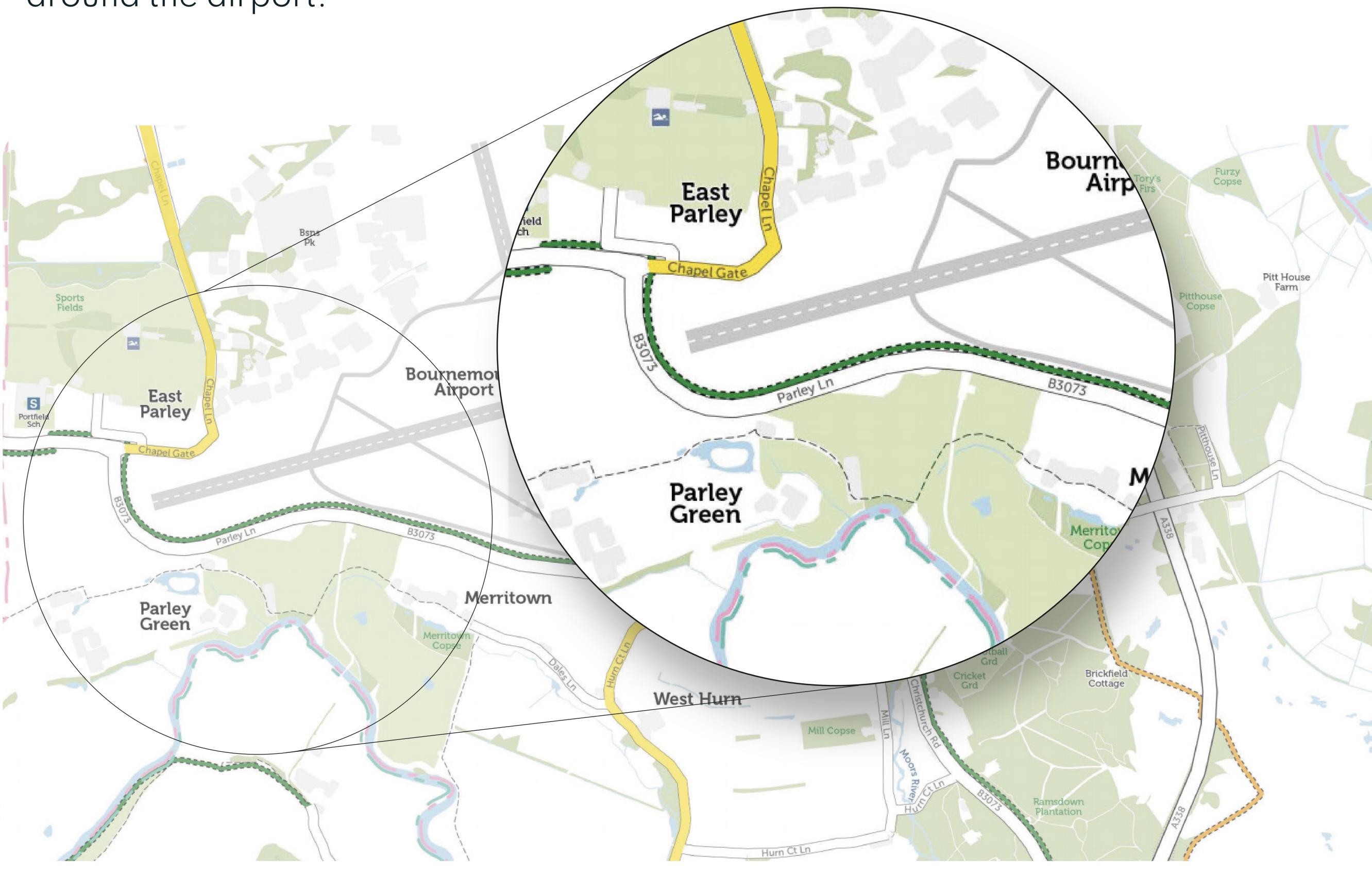
Time Period	Chapel Gate (east of roundabout)	Christchurch Rd (west of roundabout)	Parley Lane (south of roundabout)
<b>AM Peak</b> (08:00 - 09:00)	946	1,835	1,894
<b>PM Peak</b> (17:00 - 18:00)	772	1,691	1,641

#### Percentage change in traffic movements

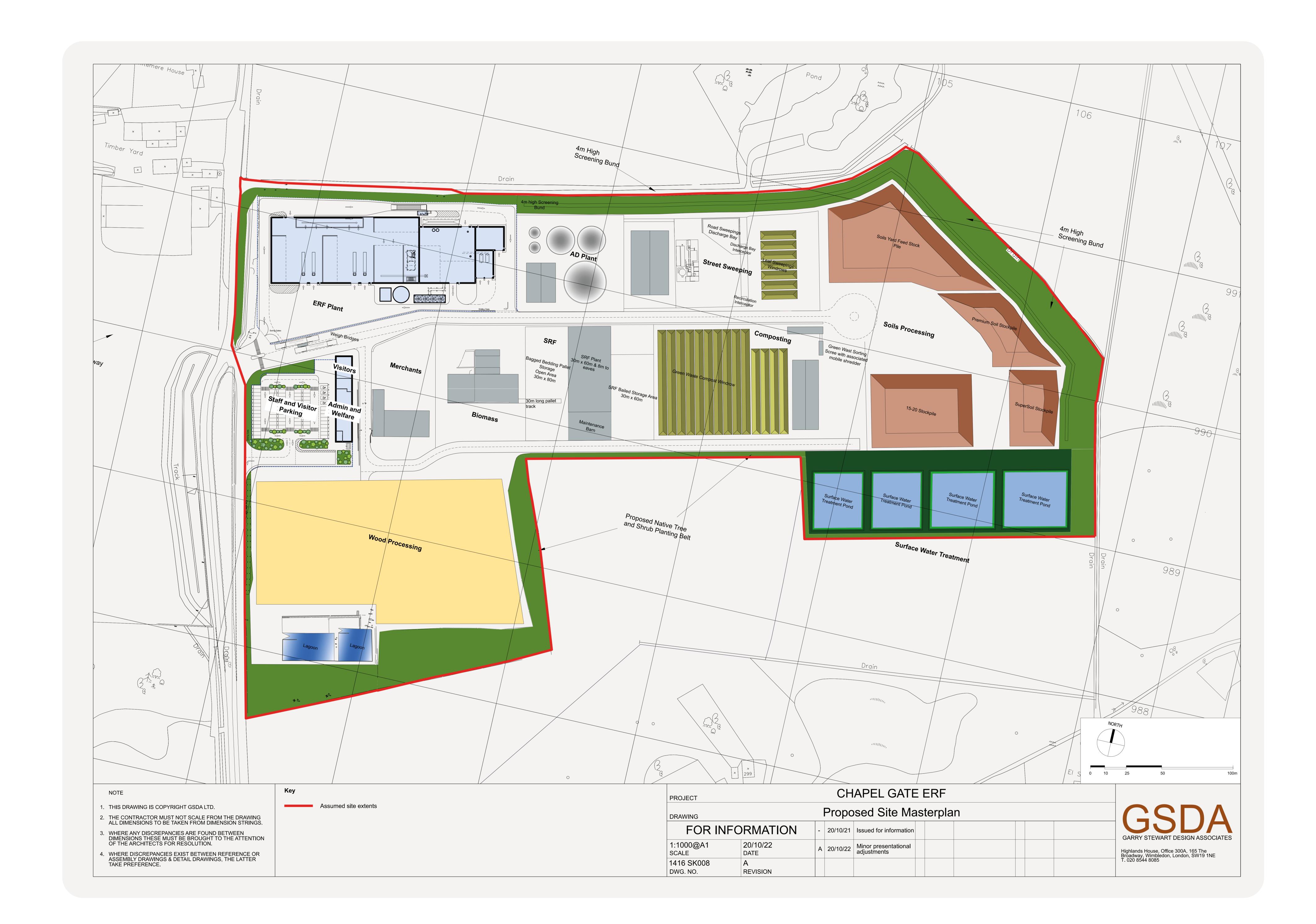
Time Period	Chapel Gate (east of roundabout)	Christchurch Rd (west of roundabout)	Parley Lane (south of roundabout)
<b>AM Peak</b> (08:00 - 09:00)	4.0%	0.9%	1.1%
<b>PM Peak</b> (17:00 - 18:00)	1.7%	0.4%	0.4%



Whilst waste and recycling vehicle journeys are essential, what we can do is help to make non-essential car journeys safer and more convenient by bike or on foot, hence our keenness to support 'active travel' opportunities through land in our ownership around the airport.



#### Eco Park .....o master plan





View at Site Entrance on Chapel Lane



View from Land to the South of the Site



View from East Parley Common



View from Parley Common