



Kier Transportation

Sustainability Strategy



Our Strategy

July 2023: Kier Highways became Kier Transportation

- **Highways – Railways – Aviation – Sea Ports**

We continue to take the same One Planet approach to sustainability.

Ensure that the key elements – economic, nature, social – are balanced

Strategy aligns with key government drivers – for example:

PPN 06/20 – Social Value

PPN 06/21 – Carbon Reduction

Aligns with the Kier Group
Sustainability Framework

Aligns with our clients'
ambitions

Kier Transportation's
Driving For A Sustainable World and One Planet Action Plan

Contract / Project level sustainability Working Groups



**18% of our
Fleet are now
EV or Hybrid**



**38 apprentice
opportunities
created in
FY23**



Carbon:

- **Science-Based Targets** verified (1.5°C pathway)
 - Net-Zero Scope 1&2 by 2030
 - Absolute 50% Scope 3 reduction by 2030 – net-zero by 2045
- **PAS2080 & Carbon Trust R2NZ** accreditation underway
 - Ensures governance and management systems have carbon at their heart
- Scope 1&2 ambition driven by Fleet & Plant Transition Plan
- Scope 3 ambition will rely on collaboration across the value chain
 - Increasing ECI opportunities – to fully utilise the expertise of our supply chain
 - Trialling new technologies and materials – and sharing results / best practice



**Over 1,500
hours of
volunteering
contributed by
KH staff in
FY23**



Social:

- Social Value Quality Mark Level 2
- Have a network of Social Sustainability Coordinators
 - Coordinate educational activities (school visits etc)
 - Organise volunteering events (often with our supply chain)

Nature:

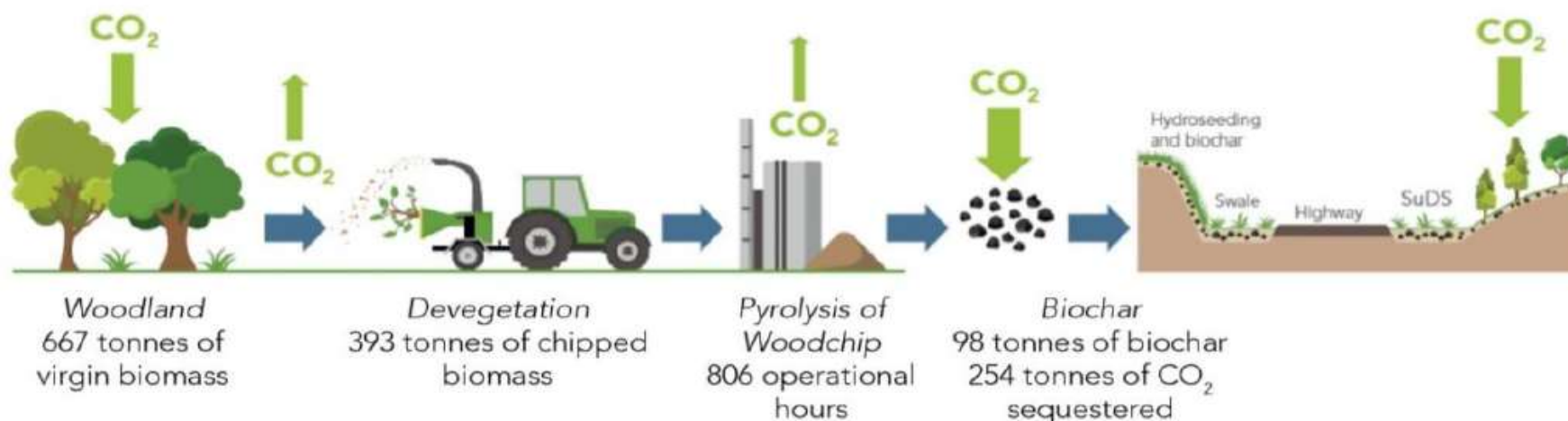
- We will help clients meet BNG targets
- Large-scale re-planting / habitat improvements now included on all large projects
- Feasibility / trials of biochar



**Latest Eco
Welfare cabins
can save you
100kgCO₂e /
week – even in
winter***

Carbon – Biochar

- Kier has self-funded a study to look at the feasibility of using biochar in construction.
- Biochar is essentially a charcoal produced by combusting plant matter at a high temperature in the absence of O_2 (pyrolysis).
- This 'locks in' the carbon otherwise released to the atmosphere as the material rots down or was burnt in O_2 .
- We are also working with Terrafix and Swansea University to study how biochar interacts with heavy metals, hydrocarbons and microplastics.
- Following feasibility we will look at a site trial using vegetation, such as that from ash dieback, that requires removal.



Carbon

- Fleet & plant is the key to achieving our scope 1 & 2 net zero 2030 target
- Fleet & plant make up approx. 90% of our Scope 1 & 2 emissions.
- Transition of fleet and plant to alternative fuels by 2030.

Handheld Plant:

- Several hundred items of handheld plant have been transitioned to electric to date. The remainder to be switched in the next few months
- Once complete, a saving of around **373 tCO₂e** emissions each year, compared to fossil fuel versions.
- From a cost perspective (hire + fuel saving) extra cost of £14,104*
- Carbon Reduction Return on Investment (CRRoI) = 26.4 kgCo₂e per £1 *

*Indicative costs at start of the transition. Costs will vary with fuel and electricity costs



Carbon – Handheld Plant

Lessons learnt:

For the business case ensure the fuel saving is clear as at first glance the switch to electric can appear higher cost.

Consider DSEAR and get fire safe charging units in place to avoid ad hoc charging.

Review the HAVS for the electric plant. They are not always less.

Right tool for the right job.

Have an opportunity for people to try and raise concerns and bust any myths.



Nature -A417 Missing Link

- The A417 Missing Link is a National Highways project to dual a 3-mile stretch of road in the Cotswold Area of Outstanding Natural Beauty (AONB).
- To help reach our biodiversity targets, we'll be planting 6 miles of hedgerows and 25 hectares of woodland and creating new habitats for birds, bats and bees.
- **Ecological mitigation to date has included:**
 - Reptile fencing
 - Reptile translocation
 - Adder relocation and telemetry (radio tracking)
 - By July 25 adders had been safely relocated





Roman Snails

Largest land snail in
north-west Europe

Roman snail fencing

Roman snail
translocation

Roman snail
hibernacular build



Artificial Badger Sett Creation

- An artificial badger sett has been completed on the scheme.
- The sett location was finalised, and the series of chambers and tunnels were installed in the bank with plenty of soil deposited on top.
- Once the new structure has settled, it will be planted with native species, so it will blend in with the landscape.
- To encourage the badger clan to start using the sett, spoil and bedding from the existing sett were added along with food.
- Over the next few weeks the team will be monitoring the sett to see if there are any signs the badgers have started to use it, these signs include finding footprints and hairs.
- Cameras have also been set up to see how many badgers might be using it.



Communities - A585

- The A585 has historically been heavily congested between Windy Harbour and Skippool and typically has 3000 vehicle movements / hr peak.
- The National Highways scheme here is to build an offline bypass which includes three new bridges.
- Secant piled walls provide earth retention and foundation support for the bridge abutments and wing walls.
- Kier worked with Flannery Plant Hire to use their new Swiss designed Brexfor technology on the scheme.
- This technology was used to process the pile heads of the secant wall of a new bridge structure.

*Picture taken from Flannery BRC Brexfor Pile Head Milling Case Study



Benefits of Brextor Technology

- The Brextor mills the base for an optimal connection of the piles to the base.
- Dramatically reduces construction time, transport and requires less space as it can work vertically.
- Milling process removes fracture forces ensuring pile integrity remains.
- Reduced cracks and spalling.
- This increased efficiency results in less impact on the local community in terms of noise and emissions to air.
- Reduces the number of operatives needed to complete the work.



Environmental Sustainability adding Social Value

- Formby Beach Clean. Representing our Windy Harbour colleagues. Joined by colleagues from Kier Construction & Utilities, we spent the morning litter picking a stretch of beach and into the dunes.
- SDF/A66 (collaborative effort) Foxglove Nature Reserve, Catterick Garrison provides a tranquil area for serving & ex-military personnel to aid their recovery of PTSD & other injuries. Great support from Kier Transportation, National Highways, Jacobs, Costain, Winvic, Jointline & Concrete Repairs Ltd. We did coppicing and general woodland maintenance
- In Area 3 regenerated Oliver Battery Primary School's outdoor area removing overgrown vegetation, installing a gravel path around the pond and rebuilding the old viewing area (pontoon) as well as adding safety rails for the children. Finally, colleagues planted trees, shrubs and flowers along the inside fence line so that insects such as butterflies could come and visit and who knows, maybe even inspire a future ecologist at Highways!





Thank you

