

# Infrastructure and the environment

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# Infrastructure and the environment

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With a renewed focus on building new critical infrastructure and upgrading existing schemes, the impact on the environment is rightly a growing concern. Building new infrastructure not only requires the use of considerable natural resources: it also has a significant impact on the area around the scheme. However, done properly by experienced practitioners, the damage can be minimised and in many cases, the environment can even be improved over the long-term.

We believe that the onus is on the infrastructure industry to ensure that we understand the environmental impacts of the processes and materials we use.

Balfour Beatty VINCI's (BBV) aim on any scheme is to work with the environment and to leave a positive legacy. That is why we make sure our actions speak louder than our words. For example:

- Protecting the environment is a headline issue in France and any controversy could have posed serious risks to the SEA Tours-Bordeaux scheme. Intensive planning ensured, however, that Tours-Bordeaux had minimal impact on the environment, including all 220 protected species identified along the route. The project was the first to collaborate with and enlist the support of local environmental groups, a strategy which won widespread public support.
- VINCI has established The Biodiversity Foundation, which provides long-term support for projects aimed at protecting and restoring the environment in the regions crossed by the new line. It has funds totalling €5m for 2012-2017.

We are committed to responsible sourcing, which is why we embed in our supply chain contractual requirements and control procedures to source, report and evidence utilisation of legally sourced material, for example, BREEAM infrastructure compliant timber.

- Our commitment to responsible sourcing leads us to investigate circular economy opportunities that bring local benefits, for example, the reuse of demolition materials in local community projects. We use our in-house expertise to maximise environmental reuse solutions and challenge industry standards.
- On the M3 project, we are working closely with Highways England to deliver their 2020 No Net Loss target.
- On SEA Tours-Bordeaux, our central environmental team mitigated impacts to 4,200ha of species and habitats and created 2,500ha of compensation with no environmental incidents.
- BBV is committed to the Charter for Sustainable British Steel, ensuring we only source carbon steel reinforcement for concrete through BES 6001 approved steel mills and fabricators.



**Image:** Translocation of the forest at the A21 Tonbridge to Pembury Dualling project.

## Case study: Translocation of ancient woodland in Kent

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The aim of the Tonbridge to Pembury dualling scheme is to upgrade a 2.5 mile section of the A21 in Kent from single to dual carriageway, adding a lane in each direction and improving the road layout. The scheme will make journeys on the A21 safer and more reliable and deliver a fivefold return on investment for the UK economy.

The A21 runs through exceptionally beautiful and protected countryside, including nine hectares of ancient woodland. Understandably, there is increasing public and regulatory pressure to retain or replace established wildlife habitats during project design and delivery. Although ancient woodland cannot be replaced, in this case we drew on the latest techniques of a process known as translocation to ensure that the unique characteristics, wildlife habitat and local species of the area will be retained in a new, larger area of woodland.

Translocation involves moving plants and animals from the original location to another where there are similar features. This approach improves their chances of survival and minimises biodiversity loss. While translocation is never the first choice, when there are no other options companies such as BBV are able to use these techniques.

Building on experience gained from schemes such as the Channel Tunnel rail link and Heathrow Terminal 5 and using dedicated environmental and conservation specialists, we are becoming increasingly skilled at translocation.

Our work on the scheme involved coppicing (a method of woodland management) and replanting the shrubs and topsoil to an 18 hectare site next to the scheme, a process that doubled the total area of woodland. The original soils contain long-established wild flowers such as bluebells. Moving the soil as well as the rootballs ensures the native species remain in the same area of Kent.

Before translocation we took steps to remove all the dormice (a protected species) from the area. This was done by clearing woodland and hedgerow habitat suitable for dormice in a phased manner, directing them towards areas of retained habitat nearby. In addition to the translocation, we planted locally grown native trees and shrubs and sowed woodland wild flowers. It takes many years for newly planted or newly sown habitats to mature. According to all metrics, however, the translocation is progressing well and a year later, there are positive signs that the woodland is regenerating.



**Image:** The dormouse species that was relocated at the A21 Tonbridge to Pembury Dualling project.

# About Balfour Beatty VINCI

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In 2008, Balfour Beatty and VINCI Construction set up a strategic alliance to deliver major infrastructure projects in the UK.

Balfour Beatty is the UK's largest infrastructure contractor and VINCI Construction is France's leading construction company and a major global player. Having successfully worked together on various Crossrail projects, we have recently been awarded the £45.4 million Smart Motorway Programme Package 1, which starts with the 18km stretch of the M5 between junctions 4a and 6 near the South West of Birmingham. Subject to statutory approval, we will then work with Highways England on the M6 between junctions 2 to 4 near Coventry and the M4 between junctions 3 to 12, Heathrow to Reading.

Balfour Beatty and VINCI have also joined forces to pursue work on High Speed 2, utilising the expertise acquired by both companies on High Speed 1 and VINCI involvement in the €8 billion Tours-Bordeaux high speed rail project in France, and Balfour Beatty's extensive work on transport networks across the UK and overseas.



**Image:** A Balfour Beatty employee at work in the London Power Tunnels.

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