



Building a Sustainable Railway

Crossrail will create a significant legacy across the board for London and the UK by bringing new jobs, new life to communities, a significant reduction in transport congestion and the creation of a new 1,500 acre nature reserve.

Crossrail will enhance the attractiveness of public transport by reducing current levels of crowding on the Tube, particularly in the central area. It will also improve the frequency and reliability of Network Rail services, reducing the need for many passengers to interchange at these stations.

The railway will create a range of new direct and faster journey opportunities and improve accessibility across parts of the south east and London, particularly from south east London and Kent, by the provision of a new rail crossing of the River Thames between Custom House and Abbey Wood.

It will make a reduction in transport related carbon dioxide emissions in London and the south east as customers switch from forms of transport such as cars and existing diesel rail services (which result in greater carbon dioxide emissions) to Crossrail services.

Crossrail is investigating a range of energy efficient materials and systems with the aim of reducing its carbon footprint by reducing energy demand during operation and construction stages. This includes regenerative braking, lighter trains, daylight and natural ventilation, inclined and traction lifts, and energy efficient escalators.

Crossrail trains will use 'regenerative braking' to return energy to the electrical supply system, potentially saving 20 per cent of total energy consumption on the type of high density commuter service that Crossrail will be offering.

The Crossrail journey time savings, and relief of crowding, will cause some people to switch from private cars to rail. It is estimated that this will result in 15,000 fewer car journeys being made within London during the morning peak period.

The sustainability during the project's construction has been increased through reduction in road transport by using rail and water transport and using 'consolidation centres' to reduce the number of vehicle movements. More than two thirds of all material excavated from the project will be transported by boat along the Thames for use in landscaping projects. These include a new 1,500 acre nature reserve at Wallasea Island on the Essex coast.

