



West Midlands
Combined Authority

Environment Board

Date	27 February 2020
Report title	HS2 - Environment and Climate Change Elements
Portfolio Lead	Environment, Energy & HS2 - Councillor Ian Courts
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Recommendation(s) for action or decision:

The Environment Board is recommended to:

- (1) Receive the update from Peter Miller (Environment and Town Planning Director, HS2) and Tim Robins (Head of Environment, HS2) on the climate change and sustainability plans.
- (2) Consider, in light of this update, how we organise to maximise the combined environmental programmes associated with the construction of HS2

1. Purpose

#WM2041 outlines ambitious goals and targets in relation to environmental outcomes. We want to maximise the collaboration with large infrastructure projects that are coming to the region to support delivery of these projects. The Board presentations from HS2 will enable us to understand the potential from this project.

2. Background

- 2.1 The WMCA has previously been involved in Environment and Landscape Boards linked to HS2. At the last meeting of the Environment Board, it was agreed that we would transition and mainstream the HS2 Environment & Landscape workstream/Board strategic remit into the WMCA Environment portfolio (the paper is an Appendix to this report). Cllr Courts has since been invited by HS2 to sit on the national HS2 Green Corridor Steering Group meetings.

Input provided from HS2

- 2.2 The presentation from them will cover carbon outcomes, experience and aspirations and how that might tie with and influence the growth strategy alongside HS2. The aim is to move towards carbon free end to end journeys and the future will realise cleaner and greener places for people to live in and wildlife to thrive. Getting on the right trajectory is vital to realise bigger and better outcomes in conjunction with stakeholder groups.
- 2.3 Transport is the largest emitting sector producing 27% of all UK greenhouse gas emissions; road transport makes up around a fifth of the UK's total GHG emissions. HS2 will help to cut annual transport emissions from cars, road freight and domestic aviation and support the UK's transition to a net-zero economy by 2050.
- 2.4 HS2 will transport over 300,000 passengers a day and offer some of the lowest carbon emissions per passenger km - 7 times less than passenger cars and 17 times less than domestic air travel. HS2 trains will be highly energy efficient, powered by electricity from an increasingly decarbonised electricity grid and be one of the most carbon efficient, long distance transport options in the UK.
- 2.5 In the future, with electricity generation fully decarbonised, travelling on HS2 will be a zero-carbon activity. In addition, the extra capacity HS2 creates on existing train lines will take hundreds of thousands of cars and lorries off the roads and reduce the need for internal flights – cutting carbon emissions, improving air quality and easing congestion.
- 2.6 HS2 aims to build the most sustainable highspeed railway in the world and is driving innovation in design, construction and operation to minimise its entire carbon footprint. We're designing the railway to be energy efficient and to minimise energy demand across all HS2 assets and during operations. Our stations are being designed to achieve zero carbon emissions from day to day (regulated) energy consumption and will be BREEAM 'Excellent' rated. This is being achieved by – amongst other initiatives – optimising use of daylight and natural ventilation, specifying efficient systems for heating, cooling and lighting, using smart building controls, metering systems and incorporating on/near site renewable energy generation and other technologies that minimise carbon emissions from our energy supply.

- 2.7 Interchange Station will provide dedicated pedestrian and cycle access and be fully integrated with local buses, taxis and private vehicle options. In addition, the station will be linked to the NEC, Birmingham International Station and Birmingham Airport via an automated people mover carrying up to 2,100 passengers per hour in each direction.
- 2.8 By contributing to reductions in UK transport carbon emissions and building sustainable, climate resilient infrastructure, HS2 will support the UK's contribution to achieving UN Sustainable Development Goals 12 and 13 and delivery on the Paris Agreement.

HS2 Locally

- 2.9 HS2 take the environmental cost of construction very seriously. That is why we're delivering an unprecedented programme of tree planting and habitat creation alongside the new railway. Across the WMCA region, mitigation works have already been completed which include 19 habitat creation sites, 4 bat houses, 40 ponds (for GCNs, reptiles, toads and otters) and with over 77,000 trees planted. Our mitigation works, once complete, will total approximately 150ha of woodland habitat creation, 5ha wetland habitat and 136 ha of grassland habitat across the region.
- 2.10 In addition, HS2 is seeking to work with a number of stakeholder groups across the WMCA region in support of delivering additional environmental benefits. Of the opportunities currently being considered, a number centre upon the Cole and Blythe river catchments. One such example is the Hollywell Brook realignment (a tributary of the R. Blythe). This is seeking to introduce new mitigation features to the watercourse such as providing additional flood compensation, widening of the stream, introducing riffles and meanders and will work with the Environment Agency through detailed design to establish additional improvements.
- 2.11 This type of collaborative work is in addition to the funding that is also made available to community groups and landowners throughout the region from both the Community Environment Fund (CEF) and Woodland Fund. To date, over £115,000 has been awarded to local environmental projects under the CEF, such as the award made to The Birmingham Civic Society who received £44,500 funding to provide tree planting opportunities in locations within Birmingham. The planting locations are within communities who will experience disruption during the construction of HS2. The Society, supported by Birmingham City Council and Birmingham Tree People, will engage with local communities and schools to plant trees, with follow-up sessions being delivered throughout the seasons to support communities to take ownership of the trees, learn about their life cycles, seed gathering and growing trees from seed. In addition, the local community will also be invited to take part in tree warden training where they will be trained in simple tree care methods as well as basic wood working skills using hand tools, to make use of the materials trees provide.

3. Financial Implications

There are no direct financial implications of this report.

4. Legal Implications

There are no direct legal implications of this report.

5. Equalities Implications

There are no identified implications of this report

6. Inclusive Growth Implications

Inclusive growth comes from organisations working together to transform peoples' lives by developing new ways of positive change in communities. The WMCA is committed to promoting inclusive growth across the West Midlands so that all residents and communities can benefit from investment and opportunities.

7. Geographical Area of Report's Implications

All of the WMCA constituent member geographies.

8. Other Implications

No other implications have been identified.

9. Schedule of Background Papers

Attached is the note from October 2019 Environment Board outlining the remit around HS2.