

Appendix 2. Max Ambition Pathway

A number of pathways have been modelled. See the main report. The Max Ambition pathway is the most ambitious. Please note that this is just one pathway under review.

Under this pathway the following would need to be implemented:

- Sales of zero emissions cars to reach ca. 50,000 / year by 2038. Fewer than 7,000 zero emission cars were sold in 2018.
- Increase walking by 80% (from 528 million km to 900 million km) and cycling by 20 times (from 119 million km to 2.6 billion km) compared to today
- Public transport capacity increases by 55% compared to today.
- Retrofit of 680k homes to reach EPC C or better.
- 665k heat pumps installed, or 141 / day from 2025 to 2035. West Yorkshire currently has fewer than 1,800 heat pump systems installed.
- 100% of peatland restored to minimise emissions.
- 170 hectares of new forest planting. There is currently 9,500 hectares of woodlands / forest in West Yorkshire.
- Diet change to reduce meat and dairy consumption by 32%.
- Generating enough electricity from onshore wind and solar within West Yorkshire to cover the power demands of over 324,000 homes. Onshore wind and solar currently provide the electricity demands of just under 50,000 homes
- Energy from waste carbon capture and storage deployed from 2030.
- Electricity infrastructure investment enabling 71% higher annual demand.

This pathway is estimated to achieve an 82 percent reduction in carbon emissions by 2038. West Yorkshire could reduce emissions fully, achieving its net zero carbon target, by also:

- reducing remaining emissions through a combination of increased ambition relating to the implementation of specific measures and/or applying innovative emission reduction technologies. Potential areas that could generate additional savings include increasing the amount of land allocated to the planting of trees, generating a higher amount of electricity from large-scale solar farms, maintaining the levels of remote working seen throughout the COVID-19 pandemic, and providing funding / R&D support for innovative emission reduction technologies.

Please note - These are the emerging results of Task 1 only and there is no preferred pathway at this stage. Task 2 and 3 will continue to build on this work and explore with stakeholders how to fully achieve the Net Zero Carbon 2038

target. See paragraph 2.17 to 2.19 of the report for further details on these plans.