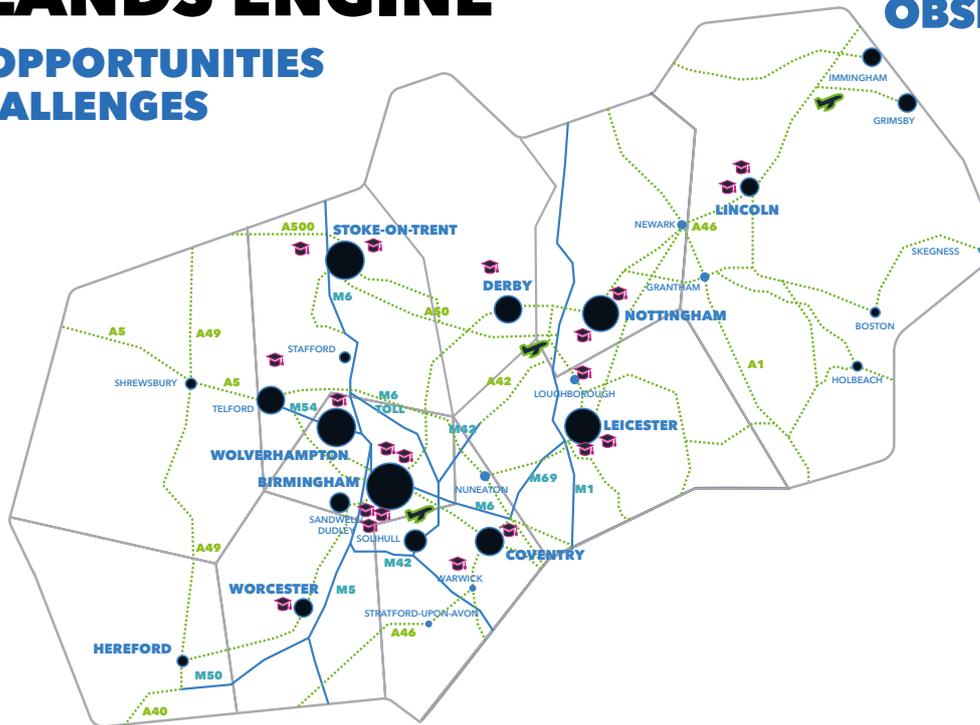


MIDLANDS ENGINE

GREEN OPPORTUNITIES
AND CHALLENGES

OBSERVATORY

GREEN SECTOR
AND ITS POTENTIAL

- **1 in 4** energy and low-carbon jobs in England are based in the Midlands
- The low-carbon and environmental goods and services sector is worth **£26.6bn** p.a.
- The Midlands is home to the **world's biggest offshore windfarm in Lincolnshire**
- There are more than **10,500 low-carbon and environmental goods and services businesses**
- Potential for nearly **200,000 jobs in low-carbon sectors by 2050** across the Midlands. This would equate to **16.4% of low-carbon jobs in the UK** - above any other area including the North West at 14.4% and Yorkshire and the Humber at 14.2%
- **The Ten Point Plan** for Green Growth in the region has the potential to create **196,000 new green jobs, boost the economy by £24.2bn and reduce CO₂ emissions by 36% by 2041**
- The **Midlands Engine Hydrogen Technologies Strategy** centres around plans for a Midlands Hydrogen Technologies Valley. It has the potential to create or safeguard **167,000 jobs, boost the economy by £10bn and reduce CO₂ emissions by 29% by 2041**
- **Manufacturing opportunities** in the low-carbon sector could create an **additional 39,000 jobs and £4.2bn in gross value added (GVA)**.

EMISSIONS, AIR QUALITY
AND WASTE

- **56,009 kt CO₂e emissions** were produced in the Midlands Engine area in 2020
- Of these emissions, **industry** accounted for the highest proportion at **32.4%** (18,153 Kt CO₂e) compared to England overall at 19.7%
 - **Transport** accounted for **31.6%** (17,695 Kt CO₂e) compared to England overall at 35.9%
 - **Domestic** accounted for **24.6%** (13,798 Kt CO₂e) compared to England overall at 30.2%
- Carbon dioxide emissions for the region equated to **5.4 tonnes per capita** in 2020. This was above the England average of 4.3 in 2020. Carbon dioxide emissions were 2.0 kt per km² for the region compared to **1.8 kt per km²** for England in 2020
- The number of **bad days for air quality** (rated 4 or more) was **24 days** for the **West Midlands** and **26 days** for the **East Midlands** in 2021
- More than **4.9m tonnes of local authority waste were collected** in the region in 2020/21.



However...

- **Carbon dioxide emissions have decreased by 9.9%** or 6,133 Kt CO₂e since 2019. Longer term, **carbon dioxide emissions have decreased by 39.5%** or 36,643 Kt CO₂e since 2005
- **The amount of waste landfilled is decreasing year on year.** Only 8.7% of waste collected was landfilled in 2020/21, as waste that is incinerated (50.6%) and recycled-composted (39.0%) increased
- The Midlands generated **8.6m MWh of renewable electricity in 2020** with nearly 2.7m MWh generated from offshore wind and over 2.1m MWh generated from photovoltaics
- **HS2 will see a new green corridor created** along its route between London and the West Midlands - an area the size of 4,600 football pitches where 7m new trees and shrubs will be planted
- **92,362 ultra-low emission vehicles are licensed** in the region as of the 2nd quarter of 2022.

TRANSITION TO NET ZERO

- **Although the West Midlands has not been producing a particularly high proportion of new green jobs, the jobs created are generating an above average number of additional jobs.** This is probably due to the region's strength in advanced manufacturing, which typically draws upon an extensive supply chain
- **The East Midlands is 3rd in employees' perception of the environmental friendliness of their workplaces.** It is also the 5th highest region in the proportion of job adverts that are considered green (1.2%).

However...

- Transitioning to net zero in the region would mean **499,115 jobs require upskilling, 519,785 jobs will be in demand and 3,439,700 jobs will not be affected**
- The Midlands is likely to be highly impacted by a net zero transition, due to its significant **concentration of heavy manufacturing industries.** It has the **highest percentage of jobs (40%) within high emitting industries** characterised by constituencies with large industry, manufacturing and aviation employers. **The East Midlands** is the most **extremely economically vulnerable area** impacted. Of 37 extremely vulnerable areas, 8 (22%) are within the East Midlands.



FUEL POVERTY

- **16.5% (718,995) of households in the region were fuel poor** compared to 13.2% England-wide in 2020. This has **increased by 2.9% or 20,101 households** for the region since 2019 while a 0.6% decline was seen across England.

However...

- **51% of all domestic dwellings in the region had A-C Energy Performance Certificates** as of the 2nd quarter of 2022. This has increased by 3.6 percentage points compared to the 2nd quarter of 2021.

NATURAL CAPITAL

- The region has natural assets that bring many **benefits to people and businesses**
- Physical characteristics across the area vary significantly. They include both low-lying ground such as the **broad flat flood plains of the Rivers Tame and Trent**, and steep dramatic landscapes such as those in the **Peak District National Park**. Landcover is predominantly enclosed **farmland**, but **large urban centres include Nottingham, Birmingham and Lincoln.**

However...

- Pressure on the region's diverse landscapes from human activity has led to both **losses and gains for biodiversity.** The rate of this change appears to be increasing. There are many pressures on wildlife including **agricultural management, urbanisation, pollution, hydrological change, woodland management and invasive non-native species**
- To counteract these pressures, there should be a major increase in carefully **targeted tree cover** and the **restoration of other habitats, such as peatlands, heathlands and grasslands.**

