

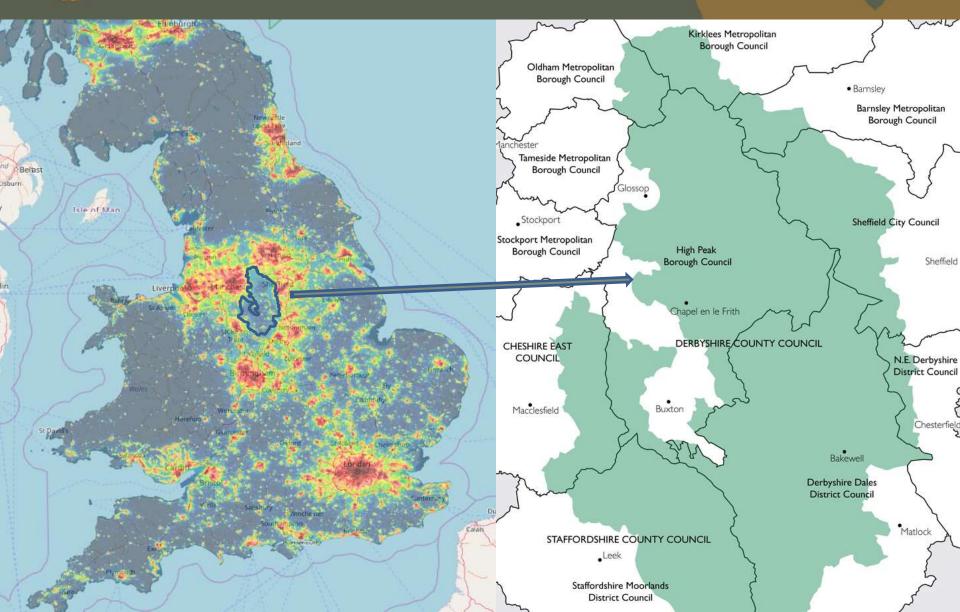


Opportunities and Challenges in the use of nature-based solutions to reduce carbon emissions for the Peak District National Park





Peak District National Park: location





Peak District National Park: benefits

Benefits within the Peak District National Park

Benefits to the surrounding regions

Benefits for the UK and the globe























UK priority species in the wider Peak District













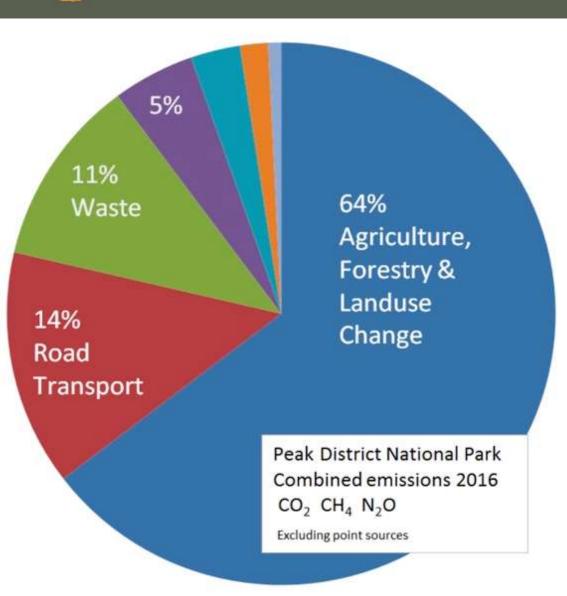






'Carbon' and the Peak District





- Agriculture, Forestry and Landuse Change
- Road Transport
- Waste Treatment and Disposal
- Combustion in Commercial, Institutional, Residential and Agriculture
- Other Transport and Mobile machinery
- Combustion in Industry
- Nature



Healthy peatland benefits

- ➤ Natural flood risk management slows delivery of water from the headwaters, around 30% reduction in peak discharge from large storms
- Good raw water quality, avoiding £ millions spent on treating discoloured water
- Reduces the risk of wild fires and boosts biodiversity
- ➤ **Peat is the UK's largest carbon store** healthy peat locks in (sequesters) carbon, but blanket bog in poor condition releases more carbon than it takes in. In the Peak District alone, 20 million tonnes of carbon is stored in the peat.







Progress to date





Peatland restoration in the Peak District

The challenge – to restore one of Europe's most degraded habitats

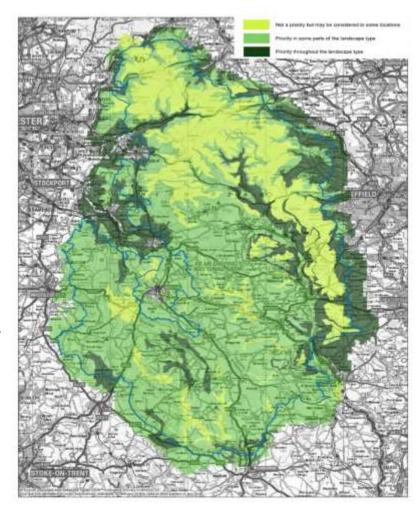
- The response Moors for the Future Partnership, established 2003.
 PDNPA accountable body secured over £35m funding
 Transformed 33sq km of damaged peat so far, which has avoided 62,000 tonnes of carbon loss



Forestry opportunities

Woodland expansion – 'the right tree in the right place'

- Expanded tree cover helps reduce the impact of climate change, aids biodiversity & complements the 'special qualities' underpinning the National Park's designation
- We are undertaking 'opportunity mapping' of the National Park to identify the most suitable locations and methods
- ➤ We want to move away from the notion of 'single land use' forestry to a broader understanding of a 'wooded landscape'





Our ambition for woodland

- ➤ Working with Forestry Commission & others to plant 176 ha of trees annually across the National Park and 5,280 ha in total by 2050
- ➤ An overall increase in land cover of 3.67% (more than double the Government's 25 year Environment Plan targets)
- New and increased tree cover will tackle biodiversity loss and climate change, but also mitigate wider landscape change, eg from Ash Dieback
- In line with Government's emerging national Tree Strategy







Current Situation

- Visitors and residents reliant on private cars for transport
- Park situated between major urban areas so high through-traffic
- Industry situated around Park reliant on freight

Options and Opportunities

- Infrastructure developments e.g. White Peak loop, recreation hub/spoke public transport options
- Electric vehicle charging
- Sustainable transport options used to influence and educate visitor behaviour within and outside the Park towards low-carbon lifestyles









Concluding thoughts

- Scope and reach of influence high
- Leverage opportunity arising from Landscapes Review, ELMs, public awareness and interest in the environment
- Nature-based options bring multiple benefits beyond the ambition to zerocarbon
 - Improved biodiversity
 - Reduced environmental mitigation costs
 - Rural employment opportunities
 - Amenity value enhanced health and wellbeing
- All options require expertise, partnership working and substantial financial resources to implement







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