Jobs for a green recovery

Levelling up through nature
This policy insight is based on research into the jobs impact of investment in nature restoration across Britain by WPI Economics, commissioned by Green Alliance. The analysis was limited to Britain because data on nature restoration potential was not available for Northern Ireland. The longer research report, Green renewal – the economics of enhancing the natural environment, can be found at www.green-alliance.org.uk/resources/Green_renewal_WPI. Interactive maps with more detailed spatial data can be found at wpi-economics.github.io/Green_alliance_maps/. All recommendations in this report are Green Alliance’s own.
The government has pressed the importance of nature restoration and reaching net zero, as part of a green recovery from the pandemic, to ensure that the return to growth is sustainable. Against this backdrop, Green Alliance commissioned WPI Economics to consider the potential of new green job opportunities across Britain.

The evidence is clear that green jobs should be at the heart of government’s levelling up programme. Those towns and smaller cities struggling most with unemployment before the pandemic will have the highest labour market risk as the economy opens up again. But our analysis shows these areas have the highest potential for environmental improvements and, therefore, the greatest opportunity for green jobs growth.

Just three types of environmental enhancement: improving woodland, peatland and urban parks, could create 16,050 jobs across the 20 per cent of British constituencies experiencing the most severe employment challenges. Two thirds of the best land for tree planting is in constituencies with higher than average labour market challenges, with 112,00 hectares of this land in ‘Red Wall’ areas. Constituencies close to peatland in the Pennines have higher labour market challenges, and lower forecast job growth than similar places elsewhere.

In short, better nature equals more jobs, whether that is 5,000 roles developing new woodlands or 11,000 creating new parks. What is more, these jobs are available at entry and graduate level, improving prospects for local economies and individuals long term in areas like digital skills in Yorkshire or research and development in Wales.

Environmental improvements could also help to level up local economies in other ways, raising productivity through improved physical and mental wellbeing. Almost half a million people live in neighbourhoods across the country with no trees or green spaces. The pandemic has exacerbated inequalities, with low paid, insecure work hit the hardest. Well paid, secure green jobs will improve people’s financial prospects and the places they live and work.
Why a healthy environment means a healthy economy

Improving nature brings both long and short term economic benefits. And well designed nature restoration schemes can help to drive a green recovery. Here are four reasons why:

**Economic stimulus post-Covid**
There are green jobs in ready to go projects, especially in areas of significant underemployment, helping economic recovery and environmental goals at the same time. Investing in green initiatives produces more jobs per £1 invested than traditional infrastructure like fossil fuel power generation.

**Increased productivity**
A healthier environment would directly increase productivity, via tourism, fishing or agriculture, but also indirectly, through improved air quality, urban cooling and reduced sickness.

**Reduced economic damage**
A thriving natural environment mitigates the impact of weather events and climate change, saving money.

**A future facing economy**
Future prosperity relies on restoring our stock of natural capital, which means green jobs will have a long term impact and future.

All this means nature investments have a high cost-benefit ratio, with £4.60 back for every £1 invested in peatland, £2.80 back in woodland, and £1.30 back for salt marsh creation.
Covid-19 has exacerbated risks to jobs

Reopening the economy following pandemic lockdown will allow many jobs to return. But many will not. While government action has reduced the risk of unemployment, 850,000 more people are forecast to be unemployed by the end of 2021 than was expected before the pandemic. Those on long term furlough will have suffered a loss of skills, while many wanting full time work will only be able to find part time employment. These issues will be particularly acute in areas that were already experiencing underemployment. The greatest combination of pre- and post-pandemic unemployment will be in large and medium sized towns and smaller cities. This research therefore supports the focus on ‘levelling up’ across the regions, addressing inequalities that have only grown during the pandemic.

Labour market challenge score, by constituency

<table>
<thead>
<tr>
<th>Labour market challenge score</th>
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<tbody>
<tr>
<td>Very high &gt;155</td>
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<tr>
<td>High &gt;118 &lt;=155</td>
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<tr>
<td>Average &gt;82 &lt;=118</td>
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<tr>
<td>Low &gt;46 &lt;=82</td>
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<td>Very low &lt;=46</td>
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Top 10 constituencies by labour market challenge score:

1. Washington and Sunderland West
2. Wolverhampton South East
3. Derby South
4. Kingston upon Hull East
5. Brent Central
6. Ealing, Southall
7. Easington
8. Edmonton
9. Northampton North
10. Blackpool South
Areas of Britain with the greatest labour market challenges contain much of the land identified as having the most potential for habitat restoration. For instance:

- two thirds of the most suitable land for planting trees is in constituencies with worse than average labour market challenges;
- coastal constituencies with seagrass habitats (an underwater flowering plant that absorbs carbon 35 times faster than tropical rainforest and provides nursery habitats for juvenile fish) have greater labour risk than others, driven by a higher proportion of people on furlough and lower expected increase in employment.

Investing in nature projects in these areas will bring good jobs to the places that need them most. Nature improvements also have a huge societal and financial value, creating spaces for people to exercise, cleaning air and water, and preventing damage from extreme weather caused by climate change.

“Improving green infrastructure in neighbourhoods without green space could create 10,800 jobs and could be targeted at areas that have the worst labour market challenges.”

Hectares potentially available for new woodland, by constituency²

Woodland opportunity (hectares per constituency)

<table>
<thead>
<tr>
<th>Category</th>
<th>Range</th>
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<tbody>
<tr>
<td>Very high</td>
<td>27,500–45,800</td>
</tr>
<tr>
<td>High</td>
<td>18,500–27,500</td>
</tr>
<tr>
<td>Average</td>
<td>9,500–16,500</td>
</tr>
<tr>
<td>Low</td>
<td>4,300–9,300</td>
</tr>
<tr>
<td>Very low</td>
<td>0–4,300</td>
</tr>
</tbody>
</table>

Two thirds of the land most suitable for new tree planting is in constituencies with the highest labour market challenges.
Locations of current and historic seagrass meadows and labour market challenge score, by constituency

Current and historic seagrass locations

- Very high: > one
- High: > one <= five
- Average: > five <= one
- Low: > four <= two
- Very low: <= four

Labour market challenge score

Constituencies with potential for seagrass restoration have a higher proportion of people on furlough and poorer employment prospects.
Labour market challenge scores of constituencies within 20 miles of the Great North Bog initiative

Labour market challenge score

<table>
<thead>
<tr>
<th>Score</th>
<th>Value Range</th>
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<tbody>
<tr>
<td>Very high</td>
<td>&gt;155</td>
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Constituencies close to the Great North Bog initiative have greater than average labour market challenges.
“Sixty three per cent of those newly unemployed in 2020-21 are under 25.”

Sixty three per cent of those newly unemployed in 2020-21 are under 25. This demographic will also suffer from the longer term economic scarring caused by the pandemic. Investments in nature have the potential to bring:

- immediate entry level jobs with transferable skills: for example, machinery operation in land management or hazard assessment in tree cultivation;
- roles that require long term development of high level academic qualifications or professional accreditation: for example, AONB research officers pursuing PhDs or others earning licences in protected species care.

Payrolled employees in the UK (absolute change from February 2020 to February 2021, seasonally adjusted)\(^5\)

Unemployment is affecting the young most

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Change</th>
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<tbody>
<tr>
<td>0–17 years</td>
<td>−147,387</td>
</tr>
<tr>
<td>18–24 years</td>
<td>−289,422</td>
</tr>
<tr>
<td>25–34 years</td>
<td>−174,435</td>
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<tr>
<td>35–49 years</td>
<td>−108,749</td>
</tr>
<tr>
<td>50–64 years</td>
<td>31,826</td>
</tr>
<tr>
<td>65 years +</td>
<td>−4,511</td>
</tr>
</tbody>
</table>
Yorkshire Peat Partnership

Yorkshire contains 27 per cent of the UK’s blanket bog, a rich habitat and important store of carbon. The Yorkshire Peat Partnership works to restore degraded bog and is a leading innovator in remote sensing techniques to monitor restoration. NASA Landsat and Copernicus Sentinel satellites are used to quickly assess how large areas of peatlands are recovering, while drone pilots capture high resolution imagery that informs future restoration. Jobs on this project are highly skilled, especially in digital and high tech manufacturing along a growing supply chain.
Technical lab work, project management and stakeholder engagement, alongside boat hire and seasonal contractors, are just some of the range of skills and roles involved in a partnership between WWF, Swansea University, Project Seagrass and Sky Ocean Rescue. The UK’s biggest seagrass restoration scheme shows the validity of research and business partnerships in environmental restoration.
How the government can roll out new green jobs across the country

Adapting, and going beyond, recent policy announcements would help to level up the UK by delivering more green jobs. To stimulate this, the government needs to:

1. **Widen the scope of levelling up funding to include the environment**

The Green Recovery Challenge Fund (GRCF) has already shown the strong demand for green jobs: even after the scheme’s funding was doubled, it was still heavily oversubscribed. Meanwhile, the Levelling Up Fund (LUF) has 60 times the funding of the GRCF to improve local infrastructure, but this does not include environmental projects. Widening the LUF’s definition of infrastructure to include environmental regeneration would allow regions with labour market risks to create more green jobs, with local authorities adapting projects to suit their unique environmental circumstances.

2. **Equip the UK Infrastructure Bank (UKIB) to deliver green jobs**

The UKIB is mandated to drive net zero and level up the country. The Treasury has promised that the bank will review natural capital investments, but there is no timeline. The sooner the bank finalises this, the sooner communities will benefit from the job creation potential of nature-based investment. The bank’s role in supporting local authorities will be particularly important for the tailored local investments needed for varying ecosystems. Given the risk of these projects for private investors, the bank will play a leading role in securing private investment in nature services. When these services become established and less financially risky, the bank can step back to allow private finance to flow.

3. **Use long term, stable funding commitments to build the natural capital sector**

To encourage the creation of new short and long term green jobs, the government will need to signal to the private sector that they will be an enduring part of the UK economy. Alongside the UKIB, the government should publish a long term environmental investment plan setting out the role it sees for public and private finance. Underpinning this with regulation, for example an Office for Carbon Removal, would give the private sector the confidence to drive the development of a wide range of jobs. Publishing long term strategies on peat and afforestation would be central to increasing the supply of environmental jobs.
4. Support local authorities in green skills development

A long term commitment to increasing ecosystem services will help to overcome the loss of environmental skills in local authorities. For example, Northern England has seen skilled employees go to Scotland since the Scottish Government’s Peatland Strategy has been in effect. Beyond developing local authority expertise to recognise the potential of natural capital investments, the Green Jobs Taskforce should also work with local authorities to deliver skills strategies that reflect dynamic local environments. This would secure long term labour market development away from those sectors that will shrink due to decarbonisation of the economy.

5. Ensure green economic governance by the Treasury

The levelling up benefits of green investment shows a healthy environment is integral to a healthy economy. For the Treasury to be able to deliver regional economic benefits over the long term, nature and climate should be at the heart of its decision making. For example, through testing overall spending against climate and nature targets, and including natural capital stocks and flows in its economic monitoring. This can start with making sure jobs in the environment sector are captured in an updated set of Standard Industrial Codes.
WPI Economics, May 2021, Green renewal - the economics of enhancing the natural environment, analysis for Green Alliance. This uses an index where 100 reflects the average constituency. It is constructed from four measures: underemployment before the pandemic; the increase in underemployment in the year to September 2020; the proportion of the working age population on furlough and the Self Employment Income Support Scheme in January 2021; forecast change in employment based on sectoral risk.

WPI Economics research using data from: RSPB, ‘Nature must be at the heart of woodland expansion’, storymaps.arcgis.com/stories/1ea3da7bc65847dddb087bb17121c2a91. Each group contains 20 per cent of the land area with potential for new woodland. Just 11 constituencies are in the Very High group, with 529 constituencies in the Very Low group but both contain 20 per cent of the total opportunity.


Moors for the Future Partnership, 2020, The Great North Bog – vision; and WPI Economics, op cit

HMRC, 2021, ‘Earnings and employment from Pay As You Earn real time information, UK: March 2021’
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Acknowledgements
Thanks to the following for their advice and assistance: WPI Economics, Prue Addison, Matthew Stanton, Hannah Conway, Toby Roxburgh, Jamie Audsley, Georgie Holmes-Skelton and Matt Rayment.

This policy insight is part of Green Alliance's work for the Green Renewal coalition, which seeks to ensure a green recovery from the pandemic. The Green Renewal project works across the economic policy agenda to ensure green measures, including private finance and public infrastructure, deliver strong economic growth and high quality jobs across the UK.

We are grateful to the National Trust, RSPB, The Wildlife Trusts, Wildlife and Countryside Link, ClientEarth, WWF and the Woodland Trust for their support of this research.

Green Alliance
Green Alliance is a charity and independent think tank, focused on ambitious leadership for the environment. With a track record of over 40 years, Green Alliance has worked with the most influential leaders from the NGO and business communities. Green Alliance's work generates new thinking and dialogue, and has increased political action and support for environmental solutions in the UK.

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Registered charity no 1045395
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