# Labour's British Jobs Bonus: Potential increased job creation and local investment in industrial heartlands

Assessing the potential jobs and investment impacts of Labour's proposed British Jobs Bonus for offshore wind, onshore wind, solar and green hydrogen

## **Research questions**

- 1. What is the estimated increase in local investment in Britain's industrial heartlands due to the Labour Party's proposed British Jobs Bonus policy?
- 2. What is the estimated increase in local job creation in Britain's industrial heartlands due to the Labour Party's proposed British Jobs Bonus policy?
- 3. What is the estimated breakdown in job creation from the British Jobs Bonus between the nations of England, Scotland, Wales and Northern Ireland?

**Summary** 

Research questions

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Increased investment catalysed by British Jobs Bonus policy in target areas, by clean technology by year

<u>Increased Manufacturing and Construction/Installation jobs (direct & indirect) in target areas catalysed by British Jobs Bonus policy, by clean technology by year</u>

Breakdown by nation of increased jobs in 2030 catalysed by BJB policy, by clean technology

**Methodology** 

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This analysis was conducted by Mika Minio-Paluello and Anna Markova of Transition Economics on request from the Labour Party.

### **Summary**

This briefing estimates the potential increased investment and increased jobs in target areas in the UK's industrial heartlands that could be catalysed by the Labour Party's proposed British Jobs Bonus.

The analysis finds that the British Jobs Bonus can increase local construction and manufacturing investment from offshore wind, onshore wind, solar and green hydrogen development in target areas by £1.7bn in Year 1 of a Labour government, rising to £5.9 billion in Year 5.

In terms of jobs, it estimates that new jobs catalysed by the British Jobs Bonus could be 19,300 in Year 1, rising to 64,600 in Year 5. In 2030, this breaks down as 35,200 jobs in English regions, 19,300 jobs in Scotland, 5,800 jobs in Wales and 4,300 jobs in Northern Ireland.

The British Jobs Bonus can achieve significant positive outcomes, boosting local content in held back industrial regions and creating quality jobs. Ensuring that the capital grants achieve these outcomes (and are not merely handed over to boost profits) will depend on implementation and public sector resourcing, coordinating institutions, and implementing reinforcing supportive policies.

- A Labour government will need to ensure the investment capital grant support has
  enough accountability and institutional oversight so that government is able to
  assess and monitor investment and job creation levels. This will require having
  sufficient civil servants empowered to scrutinise and negotiate implementation, and
  that contracts have teeth. There are important lessons to learn from the US
  experience with the Inflation Reduction Act tax credits.
- The British Jobs Bonus should be situated within an industrial strategy delivered by coordinating institutions.<sup>1</sup>
- The British Jobs Bonus needs to be part of a web of longterm policies that reinforce one another, including renewables deployment targets, clear commitments going forward on Contracts for Difference, and public investment into supportive infrastructure (such as Labour's £1.8 billion to upgrade ports).

<sup>&</sup>lt;sup>1</sup> https://www.common-wealth.co.uk/publications/coordinating-the-green-prosperity-plan

#### What is Labour's British Jobs Bonus proposal?

As part of Labour's mission to "make Britain a clean energy superpower by 2030", Keir Starmer is setting out a plan aiming to boost Britain's wealth and jobs in Britain's industrial heartlands, including communities with historic and current ties to fossil fuel production like coal, oil and gas. The scheme will reward clean energy developers with a bonus if they invest in good jobs and supply chains in Britain's industrial areas.

The Labour Party's proposed "British Jobs Bonus" (BJB) aims to boost high-quality jobs for Britain's construction workers, engineers, electricians, and the wider energy industry. The new policy will see the way in which energy developers are awarded long-term contracts reformed so that firms are rewarded when they invest in Britain's industrial heartlands.

As part of its Green Prosperity Plan, Labour is allocating a fund of up to £500m a year over five years (£2.5 billion in a term) to provide capital grants to incentivise companies to manufacture in areas such as Scotland, the North of England, and Wales.

The plan will also make it a condition of entry to the Contract for Difference auctions that developers recognise and work with trade unions and ensure good wages and high standards. Labour has committed to work closely with energy workers and their unions to ensure that the process of decarbonising our economy is done with them and not to them.

# **Research questions**

- 1. What is the estimated increase in local investment in Britain's industrial heartlands due to the Labour Party's proposed British Jobs Bonus policy?
- 2. What is the estimated increase in local job creation in Britain's industrial heartlands due to the Labour Party's proposed British Jobs Bonus policy?
- 3. What is the estimated breakdown in job creation from the British Jobs Bonus between the nations of England, Scotland, Wales and Northern Ireland?

# **Findings**

Increased investment catalysed by British Jobs Bonus policy in target areas, by clean technology by year

Table 1: Increased CAPEX and MANEX catalysed by British Jobs Bonus policy, by clean technology by year						
		2025-2026	2026-2027	2027-2028	2028-2029	2029-2030
Clean Technology	Type of investment	(£ mns)				
Offshore Wind	MANEX	639.9	1,049.8	804.3	1,603.6	2,054.4
Offshore Wind	CAPEX	861.3	928.5	1,150.8	1,335.5	1,466.5
Onshore Wind	MANEX	97.8	587.1	591.5	765.2	879.0
Onshore Wind	CAPEX	0.0	0.0	0.0	0.0	0.0
Solar	MANEX	54.5	196.6	195.8	195.0	194.2
Solar	CAPEX	0.0	0.0	0.0	0.0	0.0
Green Hydrogen	MANEX	39.6	111.4	179.0	381.9	787.7
Green Hydrogen	CAPEX	53.4	98.6	256.0	318.1	562.3
Total investment catalysed by BJB Policy		1,746.4	2,972.0	3,177.5	4,599.3	5,944.1

# Increased Manufacturing and Construction/Installation jobs (direct & indirect) in target areas catalysed by British Jobs Bonus policy, by clean technology by year

Table 2: Increased Manufacturing and Construction/Installation jobs (direct & indirect) catalysed by BJB policy, by clean technology by year						
		2025-2026	2026-2027	2027-2028	2028-2029	2029-2030
Clean Technology	Job Type	Jobs catalysed	Jobs catalysed	Jobs catalysed	Jobs catalysed	Jobs catalysed
Offshore Wind	Manufacturing	6,326	10,379	7,952	15,854	20,311
Offshore Wind	Construction / Installation	10,264	11,064	13,714	15,914	17,476
Onshore Wind	Manufacturing	967	5,805	5,848	7,565	8,691
Onshore Wind	Construction / Installation					
Solar	Manufacturing	538	1,944	1,936	1,928	1,920
Solar	Construction / Installation					
Green Hydrogen	Manufacturing	392	1,102	1,769	3,776	7,788
Green Hydrogen	Construction / Installation	795	1,468	3,814	4,738	8,376
Total Jobs potentially catalysed by BJB policy		19,282	31,762	35,033	49,776	64,561

#### Notes

- The job creation listed per year is not cumulative. That is, jobs catalysed in 2025-2026 cannot be added on top of jobs catalysed in 2026-2027.
- These are direct & indirect jobs.

# Breakdown by nation of increased jobs in 2030 catalysed by BJB policy, by clean technology

Table 3: Breakdown by nation of increased jobs in 2030 catalysed by BJB policy by clean technology				
	England	Scotland	Wales	Northern Ireland
	Jobs catalysed	Jobs catalysed	Jobs catalysed	Jobs catalysed
Offshore Wind	19,649	14,737	2,267	1,134
Onshore Wind	4,888	1,521	1,304	978
Solar	1,200	240	240	240
Green Hydrogen	9,429	2,829	1,953	1,953
Total Jobs by nation	35,166	19,326	5,764	4,304

#### Notes:

- These are direct & indirect jobs
- These jobs will not be located "anywhere in England" or "anywhere in Scotland", but in the industrial heartland areas specifically identified during implementation.

# **Methodology**

#### **Research Questions**

- 1. What is the estimated increase in local investment in Britain's industrial heartlands and coastal communities due to the Labour Party's proposed British Jobs Bonus policy?
- 2. What is the estimated increase in local job creation in Britain's industrial heartlands and coastal communities due to the Labour Party's proposed British Jobs Bonus policy?
- 3. What is the estimated breakdown in job creation from the British Jobs Bonus between the nations of England, Scotland, Wales and Northern Ireland?

#### Methodology

- This analysis focuses on investment and jobs created through the British Jobs Bonus attached to Contracts for Difference for offshore wind, onshore wind, solar and green hydrogen. For the purpose of this analysis, when referring to all four of these technologies, we will refer to "clean technologies".
- 2. Annual deployment for each year from 2025-2030 of new offshore wind, onshore wind, solar and green hydrogen were based on Labour's 2030 targets for these clean technologies<sup>2</sup>, existing capacity in 2022<sup>3</sup>, and forecast or estimated deployment between now and 2025<sup>4</sup>.

Offshore Wind: 55 GW (fixed) + 5 GW (floating)

Onshore Wind: 35 GW

Solar: 50 GW

Green Hydrogen: 10 GW

https://policymogul.com/key-updates/24675/starmer-calls-for-a-bold-uk-mission-to-deliver-clean-power-by-2030

https://www.gov.uk/government/statistics/solar-photovoltaics-deployment

https://www.renewableuk.com/news/632004/UK-offshore-wind-pipeline-reaches-nearly-100-gigawatts--while-global-pipeline-hits-over-1100GW-.htm

https://www.renewableuk.com/page/UKWEDhome

https://www.gov.uk/government/publications/contracts-for-difference-cfd-allocation-round-3-results

<sup>&</sup>lt;sup>2</sup> Labour 2030 targets:

<sup>&</sup>lt;sup>3</sup> 2022 capacity

<sup>&</sup>lt;sup>4</sup> E.g. forecast deployment of offshore wind between 2022-2025 based on outcomes of the AR2, AR3 and AR4 Contracts for Difference rounds

https://www.gov.uk/government/publications/contracts-for-difference-cfd-second-allocation-round-results

- 3. Annual total capital investment to deliver these deployment targets are calculated for each of the clean technologies.
  - a. Green hydrogen capital expenditure £/kw cost levels were sourced from BEIS data<sup>5</sup>. These were multiplied with the annual deployment to give annual capital investment for green hydrogen.
  - b. Solar capital expenditure £/kw cost levels were sourced from BEIS data on electricity generation costs<sup>6</sup>. BEIS provides different £/kw cost levels based on the scale of solar plant. We assumed that 90% of the solar generation capacity deployed would be Large-scale, and 10% Medium-scale. Cost levels were then multiplied with the annual deployment to give annual capital investment for solar.
  - c. The Offshore Wind Industry Council has published forecasts for offshore wind capital expenditure (broken down between CAPEX and MANEX) in the years to 2030.<sup>7</sup> OWIC's data is based on reaching 47 GW by 2030. Instead of scaling investment levels in proportion from 47 GW to 60 GW, we have conservatively assumed that 60 GW (128% of 47 GW) will be delivered at only 110% of investment levels, to give our annual capex and manex investment for offshore wind.
  - d. Onshore wind capital expenditure £/kw cost levels were sourced from BEIS data on electricity generation costs<sup>8</sup>, and multiplied with the annual deployment to give onshore wind annual capex investment A. However, the BEIS data is widely seen as dated. To provide an alternative number for *onshore* wind, *offshore* wind capital expenditure £/kw cost levels were sourced from BEIS data on electricity generation costs<sup>9</sup>, and multiplied with the annual deployment to give offshore wind annual capex investment. This was compared with the *offshore* wind capital expenditure levels identified in 3.c above. This gives a ratio between the BEIS and OWIC investment cost models which was used to calculate another onshore wind annual capex investment B.
    - A median was taken between A (capex based on BEIS onshore wind costs) and B (capex based on BEIS onshore wind costs scaled by ratio of OWIC offshore wind costs / BEIS offshore wind costs) to give our final annual onshore wind annual capital investment numbers.
- 4. Transition Economics intelligence and industry analysis of the clean technology sectors was utilised to assess the level of increased local content that investment support at this level could realistically achieve (in an iterative process with Step 6 identifying the proportion of BJB support to increased investment).

https://www.gov.uk/government/publications/contracts-for-difference-cfd-allocation-round-4-results

<sup>&</sup>lt;sup>5</sup> https://www.gov.uk/government/publications/hydrogen-production-costs-2021

<sup>&</sup>lt;sup>6</sup> https://www.gov.uk/government/publications/beis-electricity-generation-costs-2020

<sup>&</sup>lt;sup>7</sup> https://www.owic.org.uk/\_files/ugd/1c0521\_9ffe327ec7da4522b7991226db27fee6.pdf

<sup>8</sup> https://www.gov.uk/government/publications/beis-electricity-generation-costs-2020

<sup>9</sup> https://www.gov.uk/government/publications/beis-electricity-generation-costs-2020

a. Solar: 5%

The UK will struggle to secure much of the supply chain in solar. Realistically, at best this will include manufacturing mounts and some assembly. 10 This increased local investment will all be manufacturing expenditure, as construction costs will already be localised.

b. Onshore Wind: 10%

Once over two thirds of the cost of a wind farm, turbine manufacturing costs continue to make up a significant part of the costs of onshore wind farms, despite dramatically falling prices over the past 15 years. We expect that the BJB will increase domestic manufacture of turbines / turbine components, but that the majority of turbines and components will continue to be imported.

This increased local investment will all be manufacturing expenditure, as construction costs will already be largely localised.

c. Offshore Wind: 14%

Boosting supply chains and UK content of offshore wind has been recognised as a key priority, with government policy interventions like the Offshore Wind Manufacturing Investment Support Scheme.<sup>12</sup> Projects currently tend to achieve ~48% undiscounted lifetime UK content - heavily weighted towards Operation & Maintenance once the wind farm is operational.<sup>13</sup> Barely a third of installation & commissioning capex is UK content. Less than a quarter of turbine manex and less than a sixth of balance of plant manex is UK content.

<sup>14</sup> Existing industry roadmaps<sup>15</sup> alongside our analysis of the underlying potential for expanded and upgraded port infrastructure to catalyse greater supply chain activity assessed that the BJB could increase both the domestic portion of MANEX and CAPEX (not total content) by 14%.

d. Green Hydrogen: 40%
As green hydrogen is a new and not yet mature technology, there is much greater potential to grow domestic supply chains, with government, industry

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https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2022/Jul/IRENA\_Power\_Generation\_Costs\_2021.pdf

 $\underline{\text{https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Energy-and-Resources/gx-er-deloitte-establishing-the-wind-investment-case-2014.pdf}$ 

https://www.climatexchange.org.uk/media/1463/main\_report\_-\_life\_cycle\_costs\_and\_carbon\_e missions\_of\_onshore\_wind\_power.pdf

https://www.gov.uk/government/publications/offshore-wind-manufacturing-investment-support-scheme-investment-programme

<sup>11</sup> https://energycentral.com/system/files/ece/nodes/508248/onshore\_wind\_prospectus\_fina.pdf https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2022/Jul/IRENA\_Power\_Generation\_ Costs\_2021.pdf

<sup>13</sup> https://guidetoanoffshorewindfarm.com/uk-content

<sup>14</sup> https://quidetoanoffshorewindfarm.com/uk-content

<sup>&</sup>lt;sup>15</sup> E.g. https://www.offshorewindscotland.org.uk/media/11937/bvga-local-content-roadmap.pdf

and independent analysis identifying particular opportunities in electrolyser and compressor manufacturing. <sup>16</sup> If policy interventions and investment take place early in a new government, our assessment is that the BJB could increase domestic content by 40%, spread between manufacturing and construction costs. <sup>17</sup>

- 5. Our technology-specific factors of increased local content generated by the British Jobs Bonus were applied to the annual investment levels calculated in the previous step, to identify the annual increased domestic investment delivered by the policy. For solar and onshore wind, the local content factors were applied to the total annual capital investment level, with the resulting figure identified as increased annual MANEX. For offshore wind, the local content factor was applied to the annual CAPEX and MANEX figures, to identify increased annual CAPEX and MANEX. For green hydrogen, the local content was applied to the annual capital investment figures, which were then divided between CAPEX and MANEX in the same proportion as offshore wind. This provides the output of "Increased CAPEX and MANEX catalysed by BJB policy in target areas by clean technology by year" in Table 1.
- 6. The British Jobs Bonus support of £2.5 billion over 5 years was allocated to each year, in proportion to the total increased CAPEX/MANEX ranging from £237 million in Year 1 to £806 million in Year 5. The BJB represents 13.6% of the BJB catalysed investment a significant proportion in relation to project margins and decision-making over suppliers. Alongside Labour's £1.8 billion commitment to upgrade ports and manufacturing sites to facilitate delivery and job creation in renewable power<sup>18</sup>, this appears competitive in relation to the IRA Bonus tax credits for clean energy production: 10% Bonus Credit for Domestic Content, plus a further 10% Bonus Credit for Siting in Energy Community or Low-Income Community.<sup>19</sup>

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https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/1092371/supply-chains-to-support-uk-hydrogen-economy-wood-template.pdf
https://www.renewableuk.com/news/639251/Surveying-the-UKs-Green-Hydrogen-Supply-Chain-Capa

<u>bility.htm</u>
<a href="https://www.gov.scot/publications/scottish-offshore-wind-green-hydrogen-opportunity-assessment/">https://www.gov.scot/publications/scottish-offshore-wind-green-hydrogen-opportunity-assessment/</a>
<a href="https://ore.catapult.org.uk/wp-content/uploads/2020/09/Solving-the-Integration-Challenge-ORE-Catapult.pdf">https://ore.catapult.org.uk/wp-content/uploads/2020/09/Solving-the-Integration-Challenge-ORE-Catapult.pdf</a>

https://www.gov.scot/publications/assessment-electrolysers-report/pages/1/

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data/file/1092371/supply-chains-to-support-uk-hydrogen-economy-wood-template.pdf

 $\frac{https://www.independent.co.uk/business/britain-losing-the-global-race-for-green-jobs-says-labour-s-miliband-b2309493.html}{}$ 

<sup>19</sup> P13

https://www.whitehouse.gov/wp-content/uploads/2022/12/Inflation-Reduction-Act-Guidebook.pdf

<sup>&</sup>lt;sup>17</sup> This is consistent with government-commissioned analysis estimating that manufacture of green hydrogen production equipment and plant construction ranges from £3,000 million to £4,900 million in 2030 across the three scenarios.

- 7. ONS multipliers were used to estimate the direct and indirect jobs resulting from the increased CAPEX and MANEX investment. There is no specific ONS multiplier for manufacturing or construction of clean technologies. We identified the most relevant manufacturing SIC as "C28 Manufacture Of Machinery And Equipment N.E.C.", and applied the Type I FTE Effect (FTE per £million x Type I FTE multiplier) to the annual MANEX for all four clean technologies, to calculate the direct and indirect jobs from manufacturing investment. We applied the Type i FTE Effect for "F41, 42 & 43 Construction" to the APEX for green hydrogen and offshore wind to calculate the direct and indirect jobs from construction investment in these sectors but with offshore wind we downgraded the multiplier by 80% due to lower labour intensity in relation to capital investment in offshore operations. This provides the output of "Increased Manufacturing and Construction/Installation jobs (direct and indirect) catalysed by BJB policy in target areas by clean technology by year" in Table 2.
- 8. A breakdown by nation (England, Scotland, Wales and Northern Ireland) of the increased jobs in 2030 by clean technology sector was estimated.
  - a. The Offshore Wind Industry Council publishes its estimate for the current breakdown in offshore wind jobs by the 8 English regions and 3 nations, based on a survey of employers operating within the sector, and uses this breakdown to forecast the location of increased jobs by 2030.<sup>20</sup> This analysis in this briefing focuses on construction and manufacturing jobs, not on operations and maintenance jobs, so we adjusted the OWIC breakdown in line with where future offshore wind farm development will take place based on the current pipeline of projects, and counterbalancing for current jobs in some places (e.g. East Anglia) being higher due to operations & maintenance.
  - b. Solar manufacturing jobs were apportioned equally to all regions and nations.
  - c. Onshore wind and green hydrogen jobs were largely divided up equally between regions and nations, but slightly weighted towards Scotland and Wales (in the case of onshore wind), and towards Scotland and away from East of England (in the case of Green Hydrogen).
  - d. This provides the output of "Breakdown by nation of increased jobs in 2030 catalysed by BJB policy by clean technology" in Table 3.
- 9. A lower, alternative estimate for job creation by 2030 from the BJB policy was conducted using an alternative and abbreviated methodology. This uses industry and government forecasts for job creation in offshore wind and green hydrogen and scaling these up in line with Labour's deployment targets (offshore wind from 47GW to 60GW, and green hydrogen from 5GW to 10GW), with an 80% efficiency factor for the increase (assuming that for every 10% increase in scale, there is only an 8% increase in jobs). Onshore wind and solar jobs were estimated based on applying the ratio of jobs per £ bn investment from offshore wind to the BJB stimulated increased investment for onshore wind and solar. This is seen as a low-range estimate, as it works from job totals for sectors as a whole, rather than focusing on the more

<sup>&</sup>lt;sup>20</sup> https://www.owic.org.uk/\_files/ugd/1c0521\_9ffe327ec7da4522b7991226db27fee6.pdf

jobs-rich areas of manufacturing and construction that the policy prioritises. It also doesn't take into account the past and current weaknesses to capture UK content in manufacturing and construction in offshore wind, and the future opportunity to increase UK benefit and jobs by boosting domestic supply chains. We therefore consider these numbers to be less rigorous, but have included them here for comparison and as a low-range estimate.

Low-range estimate: Jobs (direct and indirect) catalysed by BJB policy in 2030, by clean technology		
	Jobs catalysed	
Offshore Wind	16,664	
Onshore Wind	5,750	
Solar	2,055	
Green Hydrogen	6,480	
Total	30,950	

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