

Senedd Cymru

Pwyllgor yr Economi, Masnach a Materion Gwledig

Economi gwyrdd

Cyf: Tystiolaeth ychwanegol

Ymateb gan: Prospect Cymru

-

Welsh Parliament

Economy, Trade, and Rural Affairs Committee

Green economy

Ref: Additional evidence

Evidence from: Prospect Cymru



Apologies it has taken me a little while to send some additional information from the session I attended. We didn't cover all the questions and there was one in particular I wanted to make some comments on. I also attach copies of Prospect documents that I referred to. Please see below.

We've been told that the Welsh Government has a key role to play in supporting local, Wales-based supply chains. What actions would you like to see the Government, and others, taking?

We know that industry is supportive of getting rid of red tape, improving planning and permits for renewables, which will funnel investment into the sector. Going back to Orsted, one of their wind farms took 12 years to connect.

Going back to what organisations need to do to be competitive, the US and the EU's green industrial plan, has a strong element of local supply chain commitments.

We need to be driving the race for renewables. Welsh Government need to show that business can be confident that when it comes to going from concept to commercial, speed is not an issue. What some other European countries are doing. In Germany they're auctioning off 7GW of offshore wind and they had a requirement to deliver that before 2030. In the Netherlands they've got another 4GW, two of which is super complicated, integrated with hydrogen, and the requirement is five years to delivery from award.

We know the gap between what the UK is facilitating in terms of grid infrastructure, investment and supply chain, and our neighbours in Europe and other competitors is widening.

It looks likely in comparison to other countries we are missing out on the potential of jobs if we aren't able to attract business that want to take a first mover advantage.

We know that companies like Orsted really support Prospects report's for the UK to be bold, be ambitious and really get that supply chain investment moving. It would help us in renewables, it would help the national grid, it would help nuclear and the wider energy mix.

UK Government-backed guarantees for renewables developers have successfully reduced risks for investors but also created incentives to drive down costs. This has left too much supply chain work going to cheaper overseas manufacturers and failed to boost British industry.

If we have a UK public energy company, Wales-based supply chains need to be part of the Scale up domestic supply chains to support jobs and industry. Welsh Government needs to be a partner in a public energy company which should actively



engage in the projects it invests in to ensure parts and materials are bought from and made from across the UK. Energy should be at the heart of a wider green industrial strategy that invests in our domestic manufacturing capacity.

Action will be needed to ensure future development supports this supply chain. For example, Prospect has called for a commitment for new nuclear projects to commit to purchasing fuel from the UK's only nuclear fuel fabrication plant at Springfields in Lancashire to guarantee a long-term market for UK-produced fuel.

Regards,

Jane Lancaster
Assistant Secretary
Prospect Cymru





Delivering clean power

A mission for the energy system

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Delivering clean power

A mission for the energy system

Summary of recommendations	3
Introduction	4
Foundations of a clean power system	6
Pillar 1: Creating good jobs with a voice for workers	8
Pillar 2: Driving a race to the top in renewables	10
Pillar 3: Building a new generation of nuclear power	12
Pillar 4: Upgrading networks for the future	14
Pillar 5: Guaranteeing a fair deal for consumers	16
References	18



Prospect is the leading UK union for engineers, managers, and specialists.

We represent more than 156,000 workers across the public and private sectors, including thousands of members working in energy generation, transmission, distribution, and research roles around the UK.

Summary of recommendations

Foundations of a clean power system

1. Create a Net Zero Energy Agency to lead the energy transition
2. Set up a public energy generation company to invest in clean energy
3. Replace Ofgem with a new net zero energy regulator

Pillar 1: Creating good jobs with a voice for **workers**

4. Drive up working conditions by giving everyone a voice at work
5. Develop a net zero skills and training strategy
6. Establish a just transition fund for workers and communities

Pillar 2: Driving a race to the top in **renewables**

7. Accelerate public and private investment in renewables
8. Reform planning and permitting to speed up construction
9. Scale up domestic renewables supply chains
10. Support the deployment of flexibility and storage technologies

Pillar 3: Building a new generation of **nuclear power**

11. Back Great British Nuclear to deliver a nuclear programme
12. Invest in a range of nuclear technologies
13. Develop our nuclear expertise to export around the world
14. Protect our national capability in nuclear fuels

Pillar 4: Upgrading **networks** for the future

15. Deliver a programme of energy network upgrades
16. Establish the Future System Operator as a centre of technical expertise
17. Accelerate the delivery of offshore networks

Pillar 5: Guaranteeing a fair deal for **consumers**

18. Introduce a social tariff for those most in need
19. Fund a comprehensive retrofit programme to bring bills down
20. Put fairness and affordability at the heart of market reform

Introduction

The UK is suffering the consequences of years of failed energy policy. Over the last 18 months, rising energy bills have pushed millions into poverty and contributed to the worst inflation crisis in 40 years. Households and businesses have faced the genuine risk of energy blackouts as our over-reliance on global gas markets has become clear.

We are falling behind in the race for future green jobs, while energy workers confront the present reality of understaffing, overwork, and unsafe conditions. Meanwhile, the climate crisis continues to accelerate as we fail to cut emissions at the speed necessary.

Of course, our immediate challenges stem from a global energy crisis triggered by Russia's invasion of Ukraine. But they have deeper roots. Recent governments have lacked a clear vision or strategy for energy, favouring short-term fixes over meaningful reforms and failing to drive the investment needed to meet net zero and guarantee a secure energy supply.

In the power sector, the solution to these problems is clear. We need a national mission to roll out homegrown, low-carbon electricity from renewables and nuclear as quickly as possible. Both the government and opposition broadly recognise what is required, setting out ambitious targets to decarbonise the electricity system by 2035 and 2030 respectively.¹

But it is not clear that the transformation required to achieve these goals has yet sunk in. Over the next seven years we will need to deliver five times as much new electricity transmission infrastructure as we have in the last three decades, three times as much additional offshore wind capacity as we've ever built, and the first new nuclear reactors since the mid-1990s.² The scale of change ahead is truly staggering.

New ways of thinking

A national mission to deliver clean power will require new ways of thinking. For decades, energy policy has been governed by an outdated approach that puts too much faith in markets and fails to appreciate the role for an active government. The private sector will be central to mobilising the significant investment required over the coming years, but it cannot deliver a 21st century energy system on its own.

At the same time, energy workers cannot continue to be shut out of the conversation. We will not roll out



green infrastructure without people to plan, build, operate, and maintain it. That is an opportunity to create jobs, but those jobs must be secure and well-paid, which in turn requires giving workers a voice in their workplaces and in the policy debate.

Governments around the world acknowledge the need for a new approach to energy policy. In the US, the Inflation Reduction Act has recast the role of the state: offering hundreds of billions of dollars of subsidies and loans to build a clean energy economy that drives investment to communities left behind by globalisation. The EU has responded with a Green Deal Industrial Plan similarly ambitious in its goals for new green jobs and industries.

A mission-driven approach

This report sets out a mission-driven approach to decarbonising our power system. It is inspired by policies in the US, EU and elsewhere but goes further so Britain can lead the world in the green energy transition.

Instead of short-term fixes, we need an ambitious plan that is led by government not left to the market. That does not mean a return to a nationalised industry run from Whitehall, but an energy strategy actively shaped by government and delivered in partnership with businesses, workers, and communities around the country.

Fairness must be at the heart of every decision, ensuring all households have access to energy and no workers are left behind. While the climate crisis should be at the front of our minds, our ambitions cannot be limited to avoiding the risks of climate inaction: we should grasp opportunities to create good jobs, prosperous industries, and a better society in the process.

The rest of this report explores what this means in practice – outlining a new set of institutions and five pillars of action that can make a national mission to deliver clean power a success.

Foundations of a clean power system

A successful energy strategy must support several goals: reaching net zero emissions; ensuring energy security in the face of geopolitical threats; guaranteeing fair and affordable access to energy; and creating good green jobs across the country.

We need a new set of institutions to drive these goals forward. The Prime Minister's decision to establish a Department of Energy Security and Net Zero is not enough. Mission-driven governments need better ways of addressing complex issues that require long-term thinking, collaboration between government departments, and action across all of society.

A new role for government

They also need a more nuanced approach to intervention in markets, as the US and EU have recognised. Successful decarbonisation requires rolling out infrastructure at speed, developing new technologies, and scaling up domestic supply chains – regardless of whether those actions deliver short-term profits in existing markets.

While the US Inflation Reduction Act relies on loans and subsidies to create and shape markets, more widely there is growing understanding that direct public investment can help guide private capital towards social goals.³ By taking equity stakes in exchange for direct investment in energy, governments can ensure a return on public money spent. Over time, this means energy generated from our natural assets can help build up our national wealth.

This must be accompanied by better regulation of the private sector. The current crisis has demonstrated that Ofgem is not fit for purpose, failing to protect consumers from unfair practices, prevent suppliers going bust, or drive sufficient investment in net zero. After years of failure, a new system of regulation is desperately needed.





Prospect recommends:

- 1 Create a Net Zero Energy Agency** with responsibility for coordinating a national energy strategy. This should take a 'whole system' approach, considering cross-cutting issues (such as on planning, investment, and the workforce) and looking beyond electricity to the decarbonisation of transport, buildings, and industry. The agency should work across departments and levels of government, advised by a board made up of businesses, trade unions, and technical experts.
- 2 Set up a public energy generation company** to accelerate the rollout of homegrown, low carbon energy and support green jobs around the country. The Labour Party's plan to establish a public energy generation company, Great British Energy, is welcome.⁴ It should invest in a range of energy technologies, using its position between the state and the market to 'crowd in' private investment, promote decent work, and drive wider industrial policy goals.
- 3 Replace Ofgem with a new net zero energy regulator** tasked with delivering a resilient, affordable, and decarbonised energy system. The new body should focus on economic regulation and consumer protection. It should have a clear role in facilitating net zero investment, but responsibilities for strategic planning should be passed to the Net Zero Energy Agency and Future System Operator (see Recommendation 16).⁵

Pillar 1:

Creating good jobs with a voice for workers

Countries around the world understand that net zero offers a once-in-a-generation opportunity to rebuild their economies with new jobs and industries.⁶ In the UK, hundreds of thousands of workers will be needed over the coming decades in the energy sector alone.⁷

But there is no guarantee that green jobs will be good jobs. To build a fairer economy, they must be well-paid and secure, with decent working hours, opportunities for progression, and high health and safety standards.

This won't happen on its own: experience shows that strong trade unions are vital to delivering higher wages and better working conditions.⁸

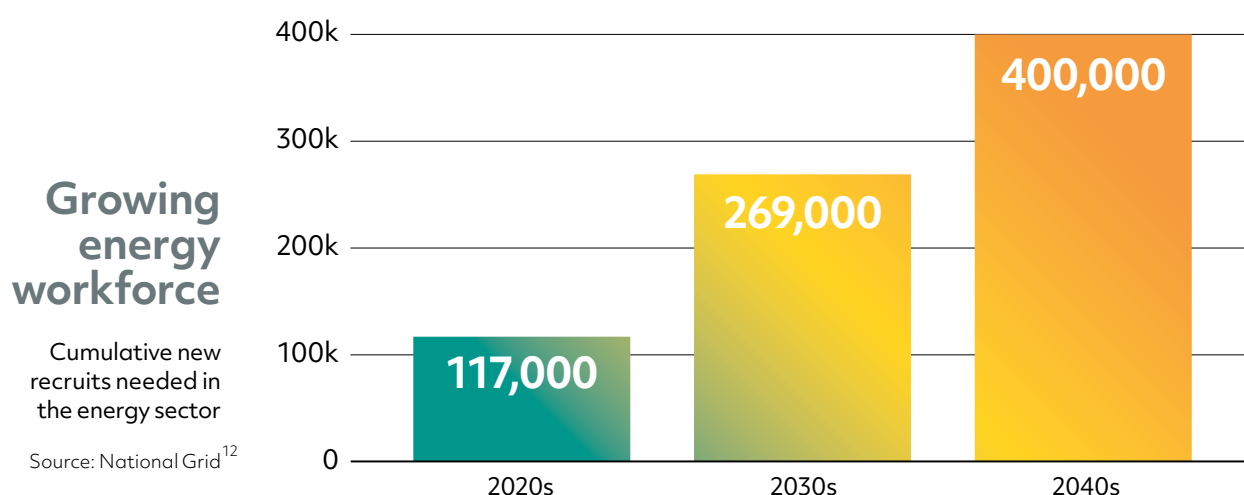
Investing in skills and a just transition

We will need to invest in the workforce to fill these jobs. There are several barriers to recruiting skilled

energy workers, from underfunded technical education to a failure to promote green careers in schools. The industry struggles from a workforce skewed towards older people approaching retirement and a lack of diversity that excludes a large talent pool of workers.⁹

Jobs in the energy sector require skills such as engineering, project management, and data science that are highly transferable and in demand across the economy.¹⁰ Without a plan to attract, train, and retain a skilled energy workforce our wider goals are at risk.

In all of this, Britain's history of poorly managed economic transitions cannot be repeated. Trade unions have led the campaign for a 'just transition' for workers and communities most affected by the shift to a green economy.¹¹ Given the scale of change ahead, it is vital that net zero leaves no one behind.





Prospect recommends:

- 4 Drive up working conditions across the energy industry** by giving everyone a voice at work. Trade union access and collective bargaining on pay and conditions should be promoted at every opportunity. A public energy generator should prioritise companies that engage with trade unions in its procurement decisions and non-price factors should be considered in the Contracts for Difference process. Every pound of public money spent should support well-paid, secure, unionised jobs.
- 5 Develop a net zero skills and training strategy**, building on the final report of the independent Green Jobs Taskforce.¹³ This should include promoting high quality STEM (science, technology, engineering, and maths) teaching in schools, reforming the adult education system to meet the demands of net zero, and developing targeted skills strategies for each industry and local area.
- 6 Establish a just transition fund** to support workers and communities dependent on high carbon industries. This should fund retraining costs and invest in local green industries. It could be capitalised with the significant windfall the Treasury will receive from offshore wind lease agreements – using the proceeds of the energy transition to ensure everyone benefits from it.¹⁴

Pillar 2:

Driving a race to the top in renewables

Renewables will form the backbone of our future energy system: providing a homegrown, zero carbon, and affordable supply of energy.

We've made good progress on the renewables rollout over the last decade, with the growth of offshore wind in particular contributing to falling emissions in the power sector.¹⁵

But with more than 40% of electricity still generated from fossil fuels – and demand expected to double by 2050 as we electrify transport and heating – we need to do much more to meet our net zero and energy security goals.¹⁶

Wasted opportunities

While going further and faster, we need to ensure the renewables rollout delivers tangible benefits for workers and communities. Successive governments

have promised waves of green energy jobs, but employment in the industry has grown much slower than expected.¹⁷

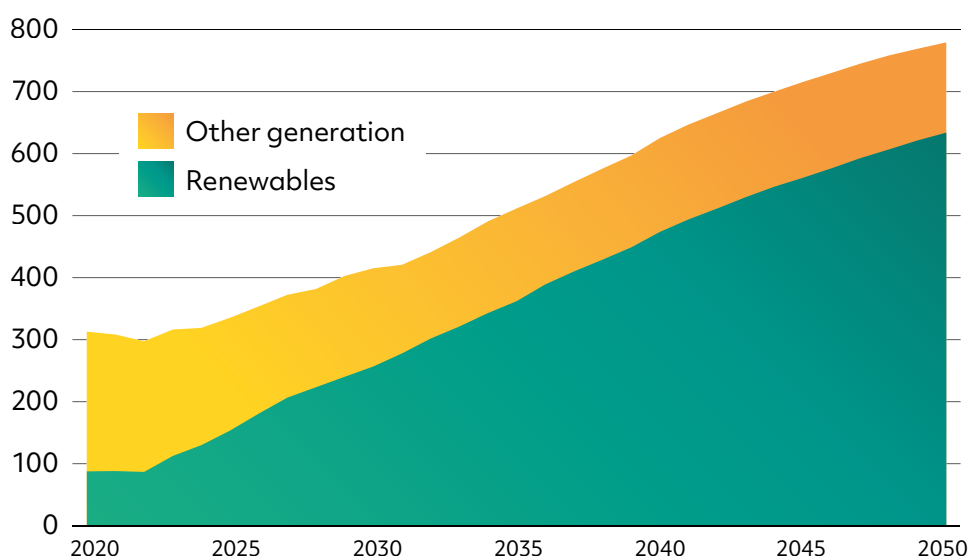
Government-backed guarantees for renewables developers have successfully reduced risks for investors but also created incentives to drive down costs. This has left too much supply chain work going to cheaper overseas manufacturers and failed to boost British industry.¹⁸

Pressure to deliver ever-cheaper renewable energy now risks undermining the rollout itself. Developers warn that rising materials prices and interest rates, along with the race for investment spurred on by US and EU subsidies, are putting British renewables projects under threat.¹⁹ The government needs a plan to speed up the renewables rollout, while driving a race to the top on jobs and standards in the industry.

Growing need for renewables

Terrawatt hours/
year electricity
generation, UK
*6th Carbon Budget
Balanced Pathway –
Illustrative mix*

Source: CCC²⁰





Prospect recommends:

- 7 Accelerate public and private investment in renewables.** A public energy generation company should directly invest in renewables projects, prioritising technologies struggling to attract private investment – whether newer and riskier technologies like floating offshore wind and tidal or more established ones. Clear roadmaps for the deployment of each technology and a review of low carbon investment incentives can help unlock private capital alongside this.
- 8 Reform planning and permitting** to get projects off the ground quicker. Renewables projects can take more than a decade to develop, but analysis shows this could be halved while maintaining high social and environmental standards.²¹ The government should set clear targets for planning and permitting timelines for both renewables projects and network infrastructure and review regulations to meet them. In the short-term, the de facto ban on onshore wind must be reversed immediately.
- 9 Scale up domestic supply** chains to support British jobs and industry. A public energy company should actively engage in the projects it invests in to ensure parts and materials are bought from and made in the UK. Energy should be at the heart of a wider green industrial strategy that invests in our domestic manufacturing capacity.
- 10 Support the deployment of flexibility and storage technologies** – from batteries and interconnectors to carbon capture and storage (CCS) and green hydrogen-fired turbines – that can deliver a reliable energy system with growing renewables. This should include investing in clean energy research and development and enabling the rapid rollout of new solutions.

Pillar 3:

Building a new generation of nuclear power

Greater use of renewables must be accompanied by technologies that can provide the energy we need whatever the weather. Energy storage and flexibility will play an important role in this, but nuclear is Britain's only proven technology offering a constant supply of low carbon energy at scale.

Most projections assume nuclear will be at the heart of our future energy mix, with the government targeting up to 24GW of capacity by 2050.²² However, years of inconsistent policies have left us with a dwindling nuclear fleet.²³

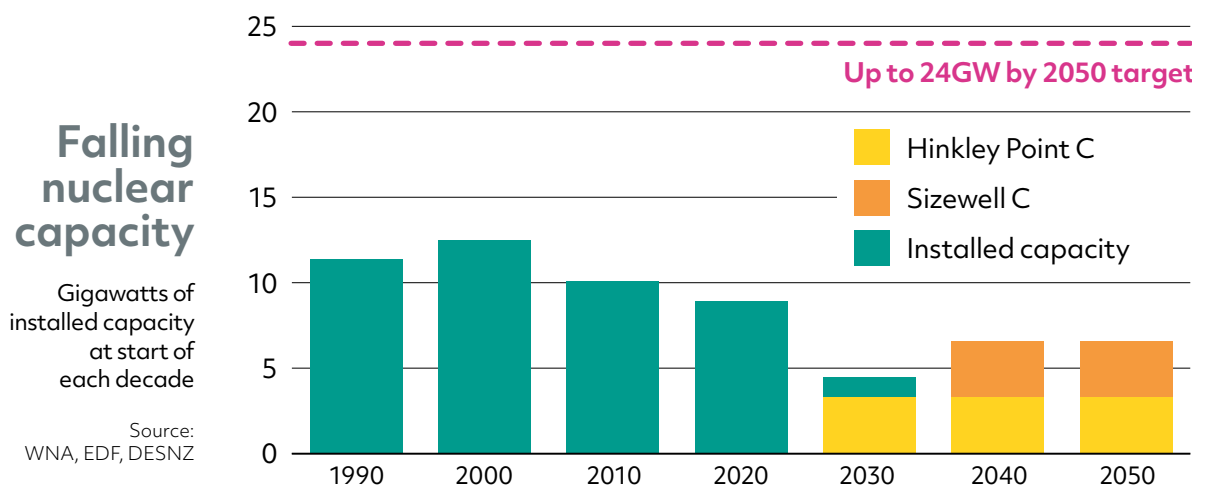
All but one of our existing reactors are due to retire by the end of the decade. Hinkley Point C and Sizewell C, the only two projects in the pipeline, will not make up for this shortfall alone so must be the start of a new generation of safe and secure nuclear power.

Government must lead the way

Nuclear power stations are complex infrastructure projects with upfront risks and long payback times that make private financing difficult. The UK government's reluctance to directly invest in nuclear has held projects back and, after repeated delays, Sizewell C is only moving forward with a 20% public stake.²⁴

The government's decision to establish the Great British Nuclear body is a welcome acknowledgement that it must lead the way on nuclear development but needs to be supported with significant public investment to be a success.

Nuclear is already a vital industry for the UK, employing tens of thousands of highly skilled, well-paid workers and supporting local economies around the country.²⁵ A British nuclear renaissance could build a leading net zero industry with significant export opportunities.²⁶





Prospect recommends:

11 Back Great British Nuclear to deliver a nuclear new-build programme. The most cost-effective way to develop nuclear is to build a fleet of reactors to the same design, benefitting from economies of scale and crowding in investment across the supply chain.²⁷ Great British Nuclear should be accompanied by substantial public investment in such a programme.

12 Invest in a range of nuclear technologies, ensuring Sizewell C gets to financial close and investing in further gigawatt-scale plants as well as new technologies such as small modular reactors (SMRs). A public energy generation company should provide early-stage funding for potential projects and take direct equity stakes in the most promising to bring private investors on board.

13 Develop the UK's nuclear expertise as part of a green industrial strategy. Great British Nuclear should invest in skills to train the thousands of workers needed for a domestic new-build programme. It should also support our world-leading fission and fusion research, fuel fabrication, and nuclear decommissioning sectors to capture global export opportunities.

14 Protect our national capability in nuclear fuel fabrication at Springfields in Lancashire. The current model of private equity ownership is unsuitable for Springfields, a strategic national asset that is the UK's only nuclear fuel manufacturing plant. Bringing the plant into public ownership is the only way to safeguard our domestic supply of nuclear fuel.²⁸

Pillar 4:

Upgrading networks for the future

Decarbonising the power system isn't just a case of building low carbon generation. Our energy networks also need extensive upgrades to ensure we can transport clean energy between where it is produced, stored, and used.

New grid connections need to be built to clean energy projects as infrastructure is rolled out. The transmission network – the high voltage lines that transport electricity across long distances – needs strengthening to carry electricity from renewables sites to the rest of the country, and all parts of the grid need to accommodate growing overall demand. National Grid says five times as much transmission infrastructure needs to be delivered in the next seven years as the last three decades.²⁹

An upgrade programme must deliver climate-proof networks, ensuring extreme weather events such as heatwaves and flooding do not lead to power cuts or safety risks.³⁰ And it should include a new approach to offshore connections, currently built on a project-by-project basis that is disruptive to coastal communities and ultimately adds costs to consumer bills.³¹

Holding back the energy transition

The slow pace of network upgrades risks becoming a barrier to the rollout of low carbon technology. Renewables developers report waits of up to a decade to connect new sites to the grid.³² Meanwhile, we could soon be paying more than £1 billion a year to electricity generators to constrain output that cannot be transported at peak times.³³

Inadequate regulation means network companies have systematically underinvested in the upgrades needed. Workers are at the sharp end of a broken system, with years of cuts leaving teams understaffed, overworked, and experiencing low morale.³⁴ A rapid increase in network investment is needed to meet the challenges ahead.





Prospect recommends:

15 **Deliver an energy network upgrade programme** with government, the energy regulator, and network companies working together on anticipatory investment in all parts of the grid. This should include strengthening both long-distance transmission and regional distribution networks to enable the rollout of renewables, electric vehicles, and heat pumps. A new net zero energy regulator (Recommendation 3) and planning reform (Recommendation 8) would help facilitate investment at the speed and scale necessary.

16 **Establish the Future System Operator** as a centre of technical expertise, running the energy system in real-time and advising government on future electricity, hydrogen, and CO2 transport and storage needs. The government has set out its plans to transform the current Electricity System Operator into a publicly run body.³⁵ This must have sufficient resources to attract and retain the skilled talent it will rely on.

17 **Accelerate the delivery of offshore networks**, reducing costs and disruption by limiting the number of individual connections to the onshore grid. As the government conducts its Offshore Transmission Network Review, it is vital to continue supporting 'pathfinder' projects to coordinate investment in offshore connections while a full regime is established.

Pillar 5:

Guaranteeing a fair deal for consumers

Current policies are failing to deliver the fair and affordable access to energy we all need. Typical energy bills have nearly doubled over the last 18 months, squeezing household budgets and driving millions into fuel poverty.³⁶

The government's Energy Price Guarantee has cushioned the impact of rising prices but failed to properly protect consumers or address the root causes of the energy crisis.

By stepping in, the government has implicitly acknowledged that the Ofgem price cap is insufficient. But while wholesale energy prices are expected to remain volatile for years, too little thought has gone into protecting households beyond the next 12 months.³⁷

Greener, fairer, warmer

Energy efficiency has so far been a missed opportunity to bring bills down. Britain has some of the coldest and leakiest houses in Europe, millions of which need upgrading to meet net zero.³⁸

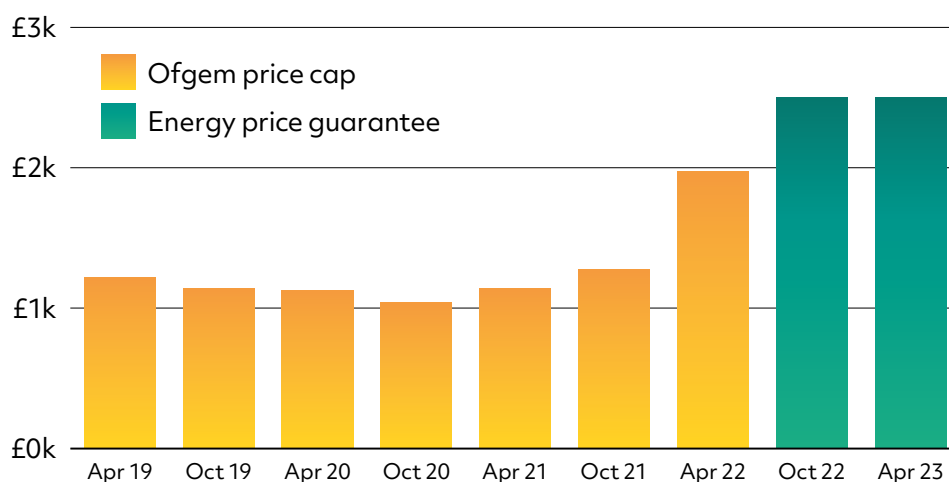
Getting on with a proper national retrofit programme could cut bills and emissions, give people warmer homes, reduce our dependence on imported gas, and create hundreds of thousands of jobs in the process.³⁹ Yet inconsistent government support is holding us back.

With low carbon energy now significantly cheaper than fossil fuels, net zero power could bring bills down over time, but policy and regulation will determine how these benefits are distributed.⁴⁰ Reforms to electricity markets could reduce costs and incentivise low carbon generation but must be carefully designed to avoid creating new sources of inequality. Fairness should be the cornerstone of reform.

Rising energy bills

Annual bill for typical household on default tariff

Source: Ofgem, DESNZ





Prospect recommends:

18 **Introduce a social tariff** to guarantee permanently lower energy costs for those most in need. This would offer a targeted discount for low income and vulnerable households, with their energy bills based on affordability rather than market rates. A new social tariff should be fairly funded through progressive taxation, offered by all energy suppliers, and designed to ensure everyone eligible receives it.⁴¹

19 **Fund a comprehensive retrofit programme** for homes and buildings across the country. This should provide a mix of loans, grants, and tax incentives for insulation and zero carbon heating. A government advice service should give people trusted information on the changes they can make to their homes and the financial support available.

20 **Put fairness and affordability at the heart of market reform.** The government's review of electricity markets arrangements (REMA) focuses on wholesale markets but should explicitly analyse the impact of changes on consumers to avoid any unintended consequences.⁴² Progress is needed on the parallel review of the retail market, which should consider fundamental reform of the ownership and regulation of energy suppliers.⁴³

References

Note: DESNZ refers to both the Department for Energy Security and Net Zero and its predecessor the Department for Business, Energy and Industrial Strategy.

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- 18 It is estimated that recent offshore wind farms in the UK have around 50% domestic content, while earlier projects had around a third domestic content. See: <https://www.gov.uk/government/publications/offshore-wind-sector-deal/>, <https://ore.catapult.org.uk/analysisinsight/the-economic-value-of-offshore-wind-benefits-to-the-uk-of-supporting-the-industry/>

- 19 <https://www.ft.com/content/74ff8ff7-8009-413a-8f2e-2a3c34695d78>, <https://orsted.com/en/investors/ir-material/financial-reports-and-presentations>, <https://renews.biz/84201/orsted-warns-hornsea-3-at-risk-due-to-soaring-costs>
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- 33 <https://www.nationalgrideso.com/document/194436/download>
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- 41 See Fair By Design's proposal for a social tariff: https://fairbydesign.com/wp-content/uploads/2022/07/2022_Solving-the-cost-of-living-crisis_v02-4.pdf
- 42 See government consultation here: <https://www.gov.uk/government/consultations/review-of-electricity-market-arrangements>. Citizens Advice set out some of the risks to considering wholesale reform in isolation from the retail market in their response: <https://www.citizensadvice.org.uk/about-us/our-work/policy/policy-research-topics/energy-policy-research-and-consultation-responses/energy-consultation-responses/citizens-advice-response-to-beiss-consultation-on-the-review-of-electricity-market-arrangements/>
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Delivering clean power

A mission for the energy system

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A green industrial strategy

for West Cumbria

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A green industrial strategy

for West Cumbria



West Cumbria needs a green industrial strategy to create good, long-term jobs and a stronger local economy.



Local employers, trade unions and politicians have been working on a proposal for green investment, developing an alternative to the proposed West Cumbria mine.



This project can be driven by local stakeholders, but needs national policy support on skills, procurement, finance and governance to move forward.



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West Cumbrian economy

Sellafield Ltd is a key anchor employer in West Cumbria, accounting in 2021 for 21,650 jobs¹ - equivalent to 28% of local employment. These are good, highly productive jobs. However, this level of employment is in gradual decline, with an estimated 1,500 fewer people working for Sellafield Ltd in West Cumbria in 2021 than was the case five years previously.

Jobs at Sellafield Ltd provided a mean annual wage of £45,700 in 2021, 35% higher than the UK average of £29,800. Yet, this is atypical of a West Cumbrian economy that has an ageing and generally less well qualified resident population.

Combined with challenges relating to West Cumbria's physical and digital connectivity, the sectoral structure of the West Cumbrian economy is

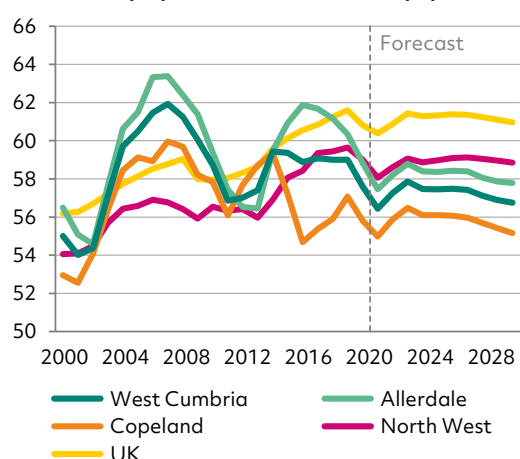
a major constraint. It is under-represented among larger employers and sectors expected to drive growth, regionally and nationally, and has a weak growth outlook.

A disproportionately high share of neighbourhoods are impacted by deprivation relating to education, skills, training and health.

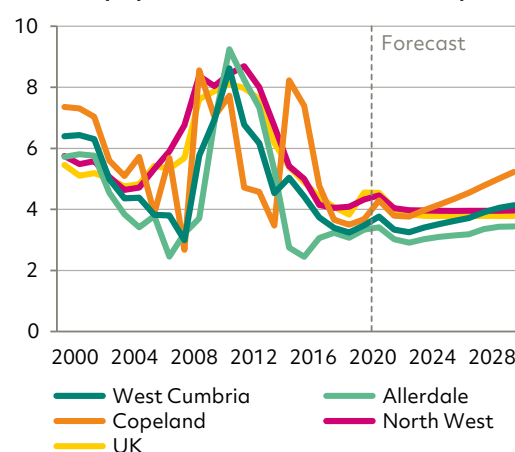
To use political terminology, West Cumbria needs 'levelling up'. Specifically, it needs more, good, green jobs, both to meet Sellafield Ltd's immediate and longer-term skills needs and to strengthen the economy beyond nuclear. Sellafield Ltd's needs cover a range of scarce and critical skills and those in high demand, and for many of these it is in national competition with the wider energy sector.

Resident employment and ILO unemployment rates, West Cumbria, North West, and the UK, 2000 to 2030

Resident employment rate (% of the 16+ population)



ILO unemployment rate (% of the economically active)



Source: Oxford Economics from ONS data

1 'The economic contribution of the NDA to the West Cumbria economy' Oxford Economics April 2022


A partnership for progress

Stakeholders across West Cumbria have contributed over the years to initiatives and plans that have not come to fruition. The current focus on the proposed coal mine is a consequence of the failure to deliver good, sustainable jobs despite promises to do so.

Whilst years of inaction cannot be reversed overnight, there is an urgent need to refocus on a green industrial strategy based on tangible projects that can quickly progress towards delivery.


This is the goal of a Prospect proposal developed in discussions over summer 2023 with the leader of Cumberland Council and representatives of Sellafield Ltd, the Nuclear Decommissioning Authority (NDA).

We hope that this can become the basis for a long-term strategic approach that delivers real benefits for workers in West Cumbria. But we cannot afford to ignore the urgent needs for improvement that will change the political and economic narrative.



Just having jobs in general. There's so many people that just want a good, stable job provides the sufficient income to pay the bills."

Amy (36)
Tutor, Workington



Nuclear is a very known and tested science. I don't understand why it's not used more."

Josh (25)
*Vehicle Technician,
Ewanrigg*



Priorities

Some of the initial priorities, building on preparatory work already underway by other stakeholders are:

- **An SMR for West Cumbria** – Great British Nuclear aim to bring two SMR project to Final Investment Decision by 2029. Rolls Royce SMR has proposed Moorside along with Wylfa Newydd and Trawsfynydd and as potential SMR sites and has stated in written Parliamentary evidence that: ‘As former nuclear power station sites, these locations have existing grid connections, meaning that the construction of extensive, new, costly grid infrastructure is not required for new SMRs². The proposal from Solway Community Energy is based on RR SMR technology, is entirely privately financed and ready to begin exploratory work on a non-exclusive basis on the Moorside site.
- **West Coast Renewables Park** – A hub for manufacturing and processing materials for the local green economy. The 130-acre brownfield site that formerly hosted Albright and Wilson’s Marchon chemical plant is ideally suited for such a development. The recently announced solar farm at Dean Moor at Branthwaite demonstrates potential demand for a local supply chain. Investment in the Port of Workington could create a viable case to site a gigafactory in West Cumbria. This facility should link up with local colleges to widen access to skills training.
- **Project Colette** – A proposed 1.2GW community owned wind farm³ which also includes possibilities for green hydrogen and steel production. Although Project Colette may take longer to deliver, the West Coast Renewables Park could kickstart enabling and supply chain activities.

2 <https://committees.parliament.uk/writtenevidence/109546/pdf>

3 <https://greenfinancecommunityhub.co.uk/project-collette/>



**The more we invest
in it for the future, not
just how environmentally
friendly it is, but also for
I guess the economy.
It’s a good thing.”**

Lewis (28)

*Hospital Activity Lead,
Workington*



Now is the time for renewal and the existing partners look forward to working with other stakeholders to realise a better future for West Cumbria.

There are some key challenges though a wider engagement programme can resolve them. The core requirements are ones of political leadership and governance.

Procurement

US experience following the introduction of the Inflation Reduction Act clearly demonstrates the benefits of an industrial strategy that uses incentives and conditionality to create domestic jobs.⁴ It has created more than 170,000 clean energy jobs in its first year and \$110bn investment in clean energy manufacturing, often in under-served communities.

Independent research commissioned by Prospect⁵ demonstrates that a stronger commitment to social value in procurement can create thousands of good quality jobs in areas of greatest need and strengthen UK security by boosting domestic supply chains. Yet Sellafield Ltd is under no obligations in this regard. Neither is there any mechanism for either Sellafield Ltd or supply companies to access work opportunities from overseas.

WE NEED

Public procurement regulations to be amended to provide for a social value approach to letting contracts.

“
I get confused that
there’s always talk about
climate change, but I mean up
the road we’ve got Sellafield,
nuclear power station. I can’t
understand why we aren’t
investing more in nuclear.”

John (60)

Shop Assistant, Dalton



⁴ <https://climatepower.us/wp-content/uploads/sites/23/2023/07/Clean-Energy-Boom-Anniversary-Report-1.pdf>

⁵ 'Design, build and maintain: Effective defence procurement' <https://library.prospect.org.uk/download/2023/00477>

Governance

West Cumbria's Industrial Solutions Hub (ISH) has potential to develop into a low carbon and renewables centre and to support the creation of a renewables park. There are successful examples of industrial diversification strategies in other nuclear and isolated communities:

The North Highland and Moray Space Cluster Strategy, funded by Dounreay Site Restoration Ltd (DSRL) and Highlands and Islands Enterprise (HIE) estimates that a Northern Space Cluster could create 740 jobs in the Highlands and Islands and boost the regional economy by £56m per year by the end of this decade. It is the first vertical satellite launch site to secure planning permission in the UK and could become Europe's first continental orbital spaceport.

Morlais is a Menter Môn tidal energy project covering a 35km² area of seabed off the coast of Anglesey. It aims to benefit local communities, the economy and help tackle climate change by using renewable energy to generate clean low carbon electricity. The first stage of the project focused on community and stakeholder engagement and securing consent from Welsh Government and Natural Resources Wales. This was achieved over a period of just two years, allowing for phased implementation of tidal energy devices.

Investment in the Advanced Manufacturing Research Centre in South Yorkshire has transformed a former coal mining area into a centre of manufacturing excellence applied across a range of sectors. It provides a hub for high quality, industry-ready employment and training. West Cumbria, by contrast, has dispersed training facilities and, with the exception of the National Nuclear Laboratory, there is no recognised centre of excellence in innovation.

However, the ISH itself is at a relatively early stage of development and may require further leadership and financial investment.

WE NEED

Government, learning from examples elsewhere, to commission independent expert analysis of the potential of the ISH and to develop a business case for investment that will deliver sustainable economic improvements.

Employment

Sellafield Ltd is already facing significant challenges in recruiting for a range of roles. These include specialist roles, for example in radiation protection, cyber security and AI, as well as operational roles. At present this demand does not seamlessly match local availability of skills, either because of national competition or, in the case of operational roles, perceived lack of access routes for the local population including NEETS in the 19-30 age group.

Sellafield Ltd, like other companies in the NDA Group, is subject to government controls over pay. Other nuclear employers, especially those operating in the private sector, are not subject to the same restraints and therefore can simply outbid Sellafield Ltd for the skills they require. This has led to increased reliance on agency supply workers, at higher cost but budgeted separately, working alongside an increasingly demoralised core workforce.

There is a potential home-grown solution to increasing employment of local people who are currently NEET. This can be characterised as 'target, improve and backfill'. In other words, large employers, including Sellafield Ltd, target existing workers with potential for development, invest in them, and backfill the roles they vacate. This may require a programme of 'community' or pre-apprenticeships, for example for the NEET cohort.

WE NEED

A revised approach to workforce investment at Sellafield, including as part of the current government review of NDA pay arrangements but also taking account of the need for a wider skills strategy to deliver the UK's nuclear ambition.

Redirection of a portion of unused funding from the apprenticeship levy to provide appropriate access to local employment.

A green industrial strategy

for West Cumbria

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A background image of a worker wearing a white hard hat and a high-visibility vest, using a power drill on a solar panel. The image is overlaid with a yellow grid and a red line graph with circular nodes.

Delivering good clean energy jobs

Five goals for the energy sector

prospect.org.uk



Delivering good clean energy jobs

Five goals for the energy sector

Introduction	3
Why clean energy jobs matter	4
Barriers to good work	6
A plan for the future	12
Endnotes	15



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Introduction

Prospect is the UK's leading energy trade union. We are proud to represent a growing membership of more than 22,500 workers in energy generation, transmission, distribution, retail, and research roles around the country. They are the engineers, scientists, managers, and specialists keeping our energy system running and driving us towards net zero.

We have over 100 years' experience of fighting for a better deal for energy workers and are committed to continuing to be a strong voice in a rapidly changing industry, with a growing membership in renewables.

Prospect wants the UK to build an affordable, reliable, and clean energy system that supports good jobs around the country. Politicians of all parties have repeatedly promised this is what the energy transition will achieve. However, government and the private sector have consistently failed to deliver the number of clean energy jobs* promised or ensure that those created are high-quality, well-paid, and unionised.

For several years, Prospect and other trade unions have been raising concerns about health and safety, pay, staffing levels, and other issues across the emerging clean energy industry. This paper outlines some of those challenges and a set of recommendations to address them.

* In this paper, 'clean energy jobs' refers to jobs in renewables, nuclear, electricity networks, and other technologies that will underpin a decarbonised energy system.

Delivering good work in clean energy PROSPECT'S FIVE GOALS:

- 1** **Creating clean energy jobs** that are accessible to a diverse workforce, including those transitioning from high carbon work.
- 2** **Guaranteeing fair pay** to recruit and retain energy workers and share the benefits of the energy transition.
- 3** **Improving working conditions** across the clean energy industry to ensure it supports secure jobs, with decent hours, fair treatment, and safe workplaces.
- 4** **Building a skilled workforce** with the range of technical, scientific, engineering, managerial, and digital skills needed to deliver the clean energy transition.
- 5** **Giving workers a voice** in their workplaces and the policy debate by enabling trade union organising and expanding collective bargaining.

Why clean energy jobs matter

Delivering **good clean energy jobs** will be one of the most important tasks facing the UK in the years ahead, with a clear 'green jobs' strategy presenting opportunities within the sector, as well as economic and environmental benefits:



- **The energy transition is an opportunity to build a stronger and fairer economy.** Analysis consistently shows there is potential to create a significant number of clean energy jobs in the UK.¹ There is extensive overlap between areas with potential to lead the clean energy economy and those targeted for 'levelling up'.² This is also a chance to create opportunities for a more diverse workforce, including those excluded from the labour market or historically under-represented in the energy sector.
- **The UK needs to expand its clean energy workforce to deliver lower bills, energy security, and climate leadership.** Modelling shows 400,000 new workers need to be recruited into the energy sector by 2050 to deliver net zero, including nearly 120,000 by 2030 alone.³ Growing the clean energy workforce requires making jobs attractive in a competitive labour market and building a pipeline of skilled workers coming into the industry.
- **Failing to deliver new opportunities for workers in high carbon jobs risks economic harm and undermining support for climate action.** High carbon jobs are geographically concentrated, risking deep damage to workers and communities if the transition is managed poorly.⁴ Polling shows that support for net zero is conditional on the costs and benefits of change being fairly distributed.⁵ Good clean energy jobs can help guarantee a 'just transition' for those most affected by decarbonisation.



Public attitudes to 'green jobs'

In August 2023, Prospect commissioned researchers at More in Common to examine public attitudes to 'green jobs'.⁶ Several insights emerged from two focus groups held in Great Yarmouth and West Cumbria:

- **Participants had clear views about what made a 'good job'** – highlighting good pay, stability, decent working hours, enjoyment, a sense of purpose, and employers that 'look out for you'.
- **Most participants were unfamiliar with the concept of 'green jobs'** and few associated green jobs with the energy sector.
- **Many had concerns that 'green jobs' would not be accessible** to people like them, due to

a belief they would require retraining and be poorly paid. Good jobs were a bigger priority than green jobs, but there was no opposition to green jobs.

- **There was scepticism that claims the UK could win the 'race for green jobs' or become a 'green superpower' sounded unrealistic** and focused on international competition, rather than the cooperation needed to address the climate crisis.

These discussions reinforced Prospect's view that the UK must deliver high-quality clean energy jobs and provide clear pathways into them for a diverse workforce.

BARRIERS TO GOOD WORK

Across the clean energy sector, there are barriers to **Prospect's five good work goals.**

1

GOAL: CREATING CLEAN ENERGY JOBS

⚠ Progress on the renewables rollout has failed to deliver enough new jobs in the UK. Successive governments have promised waves of clean energy jobs, but **employment in clean energy has barely risen since 2015** (when comparable figures begin).⁷

⚠ **Too little has been done to ensure clean energy jobs are accessible** to a diverse workforce. Industry data shows just 1 in 5 (21%) offshore wind workers are women and fewer than 1 in 10 (7%) are people of colour.⁸

⚠ **There is no UK-wide just transition strategy** to ensure the clean energy economy provides opportunities for those in high carbon jobs. The government has also failed to respond to the pivot to active industrial strategy in the US, EU and elsewhere with a plan to create clean energy jobs in the UK.

“There are so many people that just want a good, stable job that provides a sufficient income to pay the bills.”

– Prospect/
More in Common
focus group

2

GOAL: GUARANTEEING FAIR PAY

⚠ The energy sector has traditionally offered well-paid jobs, with widespread collective bargaining on pay. This remains true in parts of the sector, but **collective bargaining has declined significantly** – despite evidence it increases pay and reduces inequality.⁹

⚠ Some renewables workers face **low pay and a lack of pay transparency**. While the government has sought to close legal loopholes to ensure the minimum wage is paid to offshore workers, low salaries in the industry remain a concern.¹⁰

⚠ Public sector pay restraint is driving **deep real terms pay cuts** in much of the nuclear industry. Workers at the Nuclear Decommissioning Authority have been brought under government pay controls. Pay erosion risks workers moving to other employers, putting our energy goals at risk.

“People can’t afford to go into low paid jobs just because they’re green.”

– Prospect/
More in Common
focus group

3

GOAL: IMPROVING WORKING CONDITIONS

⚠ There is a staffing crisis in our electricity networks with widespread issues of understaffing, overwork, low morale, and unsafe conditions.¹¹ There is a particular problem of **long hours in distribution networks, driven by standby and on-call working.**¹² A third of distribution network staff on standby regularly work more than 16-hour days.

⚠ The renewables industry has **a poor record on health and safety.** In 2021, the rate of lost time to injuries in UK offshore wind was more than double that in the UK offshore oil and gas sector, which is itself a hazardous industry.¹³

⚠ **Poor working conditions** are a barrier to attracting a skilled and diverse workforce, as well as undermining promises to deliver high-quality clean energy jobs.


“When you’ve got a good job, you’re excited to go to that job. You’re excited to do it.”


– Prospect/
More in Common
focus group

4

GOAL: BUILDING A SKILLED WORKFORCE

 **The government is yet to outline a skills and workforce strategy** for the hundreds of thousands of new energy workers needed in the coming decades.

 Employers across the sector (including in renewables, nuclear, and networks) report **overlapping skills shortages** in areas such as engineering, project management, and data science that are vital to meeting our energy goals and are in demand across the economy.¹⁴

 The sector has **an ageing workforce** and faces a loss of skilled workers in the years ahead, with one-fifth of energy workers set to retire by 2030. 52,000 new recruits are needed this decade just to replace those expected to leave the workforce.¹⁵

“You can’t just rock up and install a wind turbine... You do need training.”

– Prospect/
More in Common
focus group

5

GOAL: GIVING WORKERS A VOICE

⚠ Strong trade unions are vital to improving pay and conditions, developing skills, and managing economic change.¹⁶ But reflecting wider trends, **trade union membership in the energy sector has been in decline** for decades – falling from 72% energy workers in 1995 to just 29% in 2022.¹⁷

⚠ Despite examples of good practice, several **employers in the renewables industry continue to resist engaging with trade unions.**

⚠ **Recent governments have failed to take a ‘social partnership’ approach** to the energy transition, consistently excluding trade unions from policy discussions.

“You want to feel appreciated for the work you do. You want to be recognised for the work you do.”

– Prospect/
More in Common
focus group

A plan for the future

Delivering good clean energy jobs should be a core goal of the UK's energy and industrial policy, which cannot be undermined by short-term politics. Many of these jobs will be in private sector, but the government has a central role to play in shaping the quantity and quality of them. It should use a range of tools to act on the issues of job creation, pay, conditions, skills, and worker voice set out above. **Government should:**

Drive investment into the clean energy sector

As Prospect set out in our Delivering Clean Power report in May, the UK needs to embark on a national mission to rapidly roll out homegrown, zero carbon electricity from renewables and nuclear.¹⁸ This is the best way to bring down bills and improve our energy security, while creating thousands of good, long-term clean energy jobs.

However, it will require a step-change in public and private investment across the energy system. A publicly owned clean energy generation company can help crowd in private investment in riskier technologies, including floating offshore wind and nuclear. There is also a strong case for public investment in port infrastructure to help develop renewables supply chains.

This must come alongside a plan to unlock private investment – with clear roadmaps for the deployment of clean energy technologies, sustainable pricing in Contracts for Difference auctions, strategic network planning, and reform of consenting processes.

Attach 'good jobs' conditions to public support

President Biden's Inflation Reduction Act shows the power of a coherent industrial strategy, helping create 170,000 clean energy jobs in its first year.¹⁹ Crucially, it has linked public support to strong conditions on pay, training, and local supply chains.

The UK should learn from this and attach 'good jobs' conditions to public support for clean energy projects. These could assess employers against a series of job quality benchmarks,



Great British Energy's role in delivering good jobs

Prospect welcomes the Labour Party's proposal for **Great British Energy**, a public energy generation company. It would have a unique position between the state and market, which could be used to drive forward the good clean energy jobs agenda:

- **Great British Energy (GBE) should have an explicit mandate to create and support good jobs**, alongside driving the UK's clean energy transition. Good jobs won't automatically be delivered by pursuing other policy goals.
- **GBE's projects must be properly funded and free from public sector pay controls** to ensure they can attract a skilled workforce. GBE should work closely with
- partners and suppliers in the private sector to promote good work beyond its immediate employees.
- **GBE should act as a 'model employer' in the energy sector.** This should include making significant investment in skills and collaborating with trade unions, businesses, and education providers to build a pipeline of workers coming into the sector.
- **GBE should adopt the social partnership approach common in public energy generation companies across Europe.**²⁰ It should be governed by an independent board with government, industry, and trade union representatives.

including decent pay, health and safety, workforce diversity, and engagement with trade unions. A 'good jobs test' should be at the heart of a reformed Contracts for Difference scheme, with government exploring how it could be aligned to seabed leasing and public procurement processes.

This could be accompanied by a 'good jobs duty' for Ofgem and other public bodies in the energy sector, ensuring they promote good work and investment in skills at every opportunity.

Develop a clean energy workforce strategy

Engineering and technical skills shortages cannot be solved by individual employers or parts of industry alone. The government needs to lead long-term workforce planning to ensure we have the workers to plan, build, operate, and maintain a clean energy system. Overlapping skills needs in renewables, nuclear, energy networks, and other large infrastructure projects mean this must be done on a 'whole

energy system' basis. We can again learn from the US, where the Department of Energy's Office of Energy Jobs plays a vital role in coordinating efforts to deliver high-quality clean energy jobs, diversify the workforce, and address skills shortages.²¹

The government should clarify the role of different public bodies – including Ofgem, the Future System Operator, and local government – in developing a similar approach in the UK. This should be rooted in robust skills projections, with an explicit focus on delivering a just transition and engaging with businesses and trade unions.

Empower workers and give them a seat at the table

Trade unions must take responsibility for recruiting members and expanding collective bargaining. We do not expect decades of declining membership to be fixed by government alone. However, policy changes can empower people to organise in their workplaces and lower barriers to growth in largely non-unionised parts of the economy like renewables. This should include:

- Introducing a physical and digital right of access to workplaces that enables trade unions to communicate with workers and make the case for union membership.
- Reducing excessive barriers to statutory union recognition by lowering ballot thresholds and enabling online ballots.²²

More widely, trade unions should be at the heart of economic and energy policy discussions and included in all relevant taskforces, consultations, and advisory bodies. You cannot deliver good jobs without giving workers a seat at the table.



Endnotes

- 1 See Climate Change Committee literature review <https://www.theccc.org.uk/publication/a-net-zero-workforce/>
- 2 <https://www.ippr.org/files/2020-07/transforming-the-economy-after-covid19-july2020.pdf>, <https://www.ukonward.com/wp-content/uploads/2022/12/Onward-Green-Jobs-Red-Wall-Report-1.pdf>
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- 6 More in Common-Prospect green jobs focus groups, held in August 2023 with a mix of participants from More in Common's 'Loyal National' segment living in Great Yarmouth and West Cumbria.
- 7 <https://www.ons.gov.uk/economy/environmentalaccounts/bulletins/finalestimates/2021>
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- 10 https://library.prospect.org.uk/documents/201900836_briefing_what_happened_to_all_the_green_jobs, <https://www.gov.uk/guidance/minimum-wage-seafarers-and-other-people-working-at-sea>
- 11 See Prospect's 2022 energy workforce survey <https://prospect.org.uk/news/prospect-energy-workforce-survey-highlights-stress-fatigue-and-heavy-workloads>
- 12 'On-call' or 'standby' employees are those expected to be available for work outside of their regular hours. See <https://www.acas.org.uk/working-time-rules/employees-who-are-on-call-or-sleep-in>
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- 20 EDF, Orsted, Statkraft and Vattenfall all have employee representatives on their boards. <https://www.edf.fr/en/the-edf-group/edf-at-a-glance/governance/board-of-directors>, <https://orsted.com/en/who-we-are/our-organisation/management/board-of-directors>, <https://www.statkraft.com/about-statkraft/organisation/board-of-directors/>, <https://group.vattenfall.com/who-we-are/corporate-governance/board-of-directors>
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- 22 These proposals are supported by a range of other organisations. See <https://economy2030.resolutionfoundation.org/reports/putting-good-work-on-the-table/>, <https://www.tuc.org.uk/sites/default/files/2019-09/Astrongervoiceforworkers.pdf>, <https://www.ippr.org/files/2018-06/cej-trade-unions-may18-.pdf>



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