

National Policy Forum – Green Recovery consultation

GMB Union response

Introduction

GMB Union welcomes the Labour Party's commitment to aligning stimulus measures to environmental objectives, and we welcome the intention to maintain and create sustainable, high-quality, and unionised jobs in response to the coronavirus crisis.

GMB, which traces its origins to the organisation of Beckton Gas Works in the 1880s, represents workers in energy generation, supply, and servicing. GMB also represents workers in the energy sector's construction and manufacturing supply chains, alongside many other industries. All our members are billpayers and energy consumers.

Our response to the Labour Party's consultation is based on the following principles:

- Support for existing low-carbon projects – including in new nuclear power generation plans – should be advanced alongside investment in new industries.
- Short-term stimulus measures should be part of an integrated plan for securing lasting, high quality jobs, that does not prejudice the strategic decisions that need to be taken over the future of the gas industry.
- Investment should be targeted at measures that deliver the best balance between short-term stimulus and delivery of long-term, high-quality employment, and low-carbon energy generation capacity.
- It should be recognised that investment in the green economy has frequently failed to realise the workforce benefits (including the creation of employment in the UK) that was promised.
- Learning from the mixed record of past retraining and redeployment programmes, the priority for a stimulus package should be securing existing jobs, and supporting the greening of UK industry in close consultation with the workforces affected.

1. What sectors do you believe are the priorities for investment from government, for a green recovery programme to build a stronger, more resilient future economy? How can this investment reduce regional inequalities as well as address the climate crisis and environmental degradation?

GMB recognises and supports the need for combining stimulus investment with environmental objectives. However, if this policy is to carry public support then we believe that the **fulfilment of the Labour Party's historic social mission must be an integral part of that plan.**

It should be recognised that – from an employment perspective – not all green investments offer equal value. As is discussed in more detail later in this response, significant public subsidies in support of certain technologies – including offshore wind – have yielded only limited and poor-quality employment in the UK. A number of companies have emerged in the sector that are at best indifferent, and are at worst actively hostile, to the principle of trades unionism. It should also be recognised that, if environmental objectives are not coupled with social priorities, then high-quality jobs will be needlessly lost in the established and unionised energy generation sectors.

We note with concern that some economists have recently argued that the Treasury should invest in renewable technologies because 'renewable energy generates more jobs in the short run ... [while] in the long run, renewable energy conveniently requires less labour for operation and maintenance ... this frees up labour as the economy returns to capacity.'¹ The clear implication of this argument is that employment should be cut in the gas industry. This policy objective represents a direct attack on well-paid, unionised workers (full-time median earnings in the sector are 35 per cent above the average for all industries²). **There is no justice in a transition from skilled work to the unemployment lines.**

GMB believes that an equitable economic recovery will be built on the back of these jobs. Cutting employment in the gas industry would reduce aggregate demand, and devastate the communities that rely on those jobs. Labour market

¹ Hepburn et al., *Will COVID-19 fiscal recovery packages accelerate or retard progress on climate change?*, Oxford Smith School of Enterprise and the Environment, 06 May 2020, page 8 <https://www.smithschool.ox.ac.uk/publications/wpapers/workingpaper20-02.pdf>

² ONS, Annual Survey of Hours and Earnings 2019, Table 16.7a

data confirms that – while energy supply accounts for 0.5 per cent of employment – these jobs are particularly concentrated in certain areas, and a programme of winding down employment would have acute and negative local effects.

UK Parliamentary constituencies - SIC code 35: Electricity, gas, steam and air conditioning supply as share of employment³

Constituency	% of employment
Houghton and Sunderland South	14.6
Stockport	12.9
Warwick and Leamington	5.3
Nottingham East	5.2
South Leicestershire	5.1
Morecambe and Lunesdale	4.8
Perth and North Perthshire	4.3
Cardiff North	4.2
Bosworth	3.8
Stalybridge and Hyde	3.6

Following the economic shocks of the Thatcher and Major years and the experience of deindustrialisation in the UK, a strong body of evidence has accrued on how ‘mass unemployment events’ can have lasting negative effects on the earnings and health of displaced workers and their communities.⁴ The ongoing, intergenerational social scarring (sometimes referred to as hysteresis) associated with such events is a major public policy concern.⁵ **GMB could not endorse**

³ Data taken from the ONS’s Business Register and Employment Survey (BRES) for 2018, the latest year for which figures are available. Data is for Great Britain as comparable figures are not available for Northern Ireland.

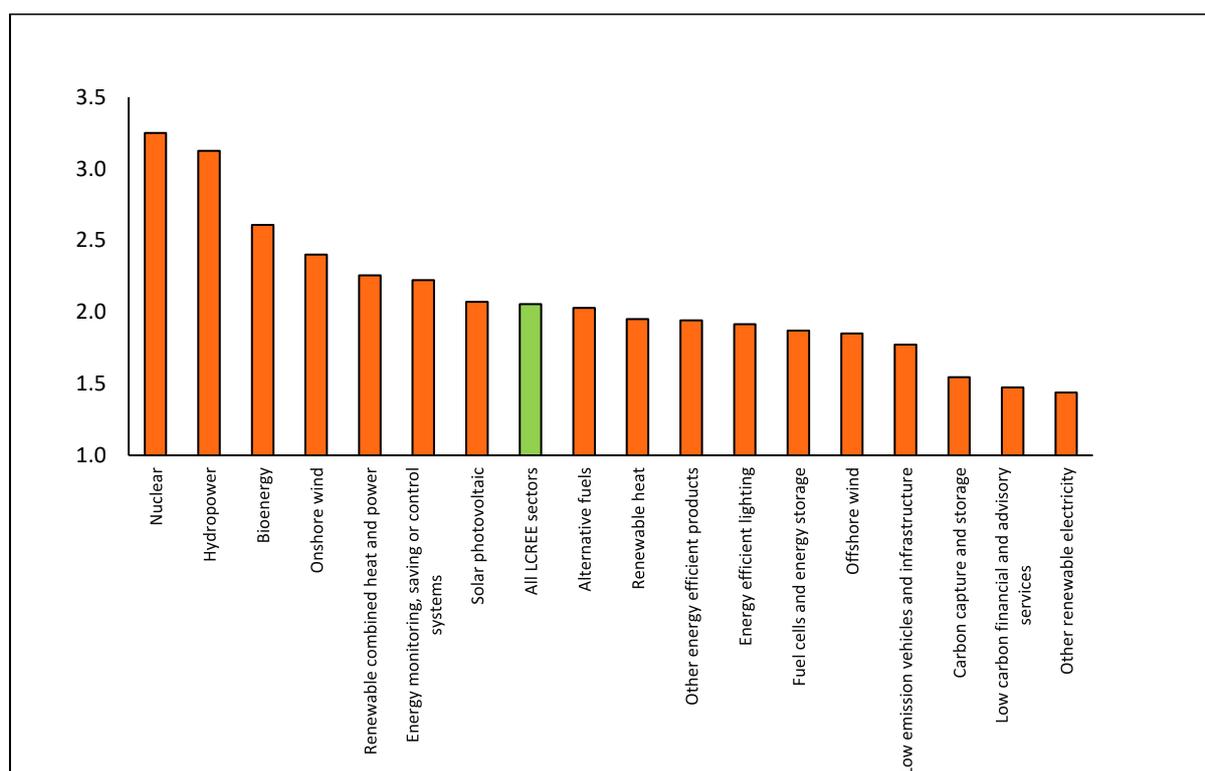
⁴ See Davies et al., *Mass Unemployment Events (MUEs) – Prevention and Response from a Public Health Perspective*, Public Health Wales, 2017
[http://www.wales.nhs.uk/sitesplus/documents/888/Watermarked%20PHW%20Mass%20Unemployment%20Report%20E\(15\).pdf](http://www.wales.nhs.uk/sitesplus/documents/888/Watermarked%20PHW%20Mass%20Unemployment%20Report%20E(15).pdf)

⁵ See discussion in IPSOS Mori/BEIS, *How to measure the prosperity impacts of UK shipbuilding*, 2017, pages 34 to 36
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/641541/uk-shipbuilding-prosperity-impacts-report.pdf

proposals that were predicated on the erosion or winding down of the gas industry. We urge the Labour Party to adopt a policy of focusing investment on those technologies that deliver and sustain high-quality employment while reducing the UK's carbon footprint.

Public funds should be targeted at those industries and projects that provide the best balance between short-term job creation and long-term, high-quality employment. ONS analysis has found that the employment multipliers in the Low Carbon and Renewable Energy Economy (LCREE) vary considerably. Nuclear energy, hydropower, and bioenergy all have high employment multipliers: nuclear has a multiplier of 3.3, which implies that every job in nuclear energy supports a further 2.3 jobs across the wider economy.⁶ By contrast, offshore wind has a relatively low multiplier effect, and the employment return on investment is lower than the average for all LCREE sectors.

ONS estimates of LCREE employment multipliers, 2018⁷



⁶ These effects would be greater if induced effects (Type II multipliers) were taken into account.

⁷ ONS, Low Carbon and Renewable Energy Economy (LCREE) Survey direct and indirect estimates of employment, UK, 2014 to 2018, 16 January 2020

<https://www.ons.gov.uk/economy/environmentalaccounts/adhocs/11120lowcarbonandrenewableenergyeconomy/lcreesurveydirectandindirectestimatesofemploymentuk2014to2018>

This disappointing employment return on substantial public investment is reflected in GMB's experience. The historic Burntisland Fabrications (BiFab) yards have been reduced to shadows of their former selves, while taxpayer-subsidised offshore developers have placed lucrative orders for jackets overseas. In 2014, BIS stated that the offshore wind industry could support 30,000 jobs in the UK supply chain by 2020.⁸ In reality, only 6,100 jobs were estimated to be indirectly supported by offshore wind in 2018 across the UK (the latest year for which figures are available).⁹ The STUC has catalogued a litany of unrealised jobs projections arising from renewables in Scotland.¹⁰ Just 29 per cent of capital expenditure on offshore renewables is retained in the UK, according to developers' own published figures, which are not subject to independent external audit.^{11 12}

There would be significant opportunities for the UK supply chain if renewables orders could be secured domestically. While figures on the UK steel content in offshore wind development are not available, the Moray East and Neart na Gaoithe projects alone are estimated to require between 212,700 and 319,500 metric tonnes of steel between them.¹³ In reality, orders are primarily sourced from foundries and yards in Spain, the United Arab Emirates, and Indonesia. Unfortunately, our experience suggests that securing a higher UK content will prove challenging without changes in developers' approaches, investment in UK facilities, and reforms to the Contracts for Difference auction mechanism.

⁸ Answer to Written Parliamentary Question 902151, on Reshoring, 23 January 2014
https://publications.parliament.uk/pa/cm201314/cmhansrd/cm140123/text/140123w0002.htm#140123w0002.htm_wqn70

⁹ ONS, Low Carbon and Renewable Energy Economy (LCREE) Survey direct and indirect estimates of employment, UK, 2014 to 2018

¹⁰ STUC, *Broken Promises and Offshored Jobs*, 2019
http://www.stuc.org.uk/files/Policy/Research_Briefings/Broken%20promises%20and%20offshored%20jobs%20report.pdf

¹¹ RenewableUK, *Offshore Wind Industry Investment in the UK 2017 Report on Offshore Wind UK Content*, September 2017
https://cdn.ymaws.com/www.renewableuk.com/resource/resmgr/publications/Offshore_Wind_Investment_V4.pdf

¹² Answer to Written Parliamentary Question 13545, on Windpower: Seas and Oceans, 14 February 2020 <https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2020-02-06/13545/>

¹³ BEIS, Steel procurement pipeline, January 2019
<https://www.gov.uk/government/publications/steel-public-procurement>

There are however immediate opportunities for investment in sectors that offer the most effective combination of low carbon power production and high employment returns. **Securing investment in the Sizewell C and Moorside nuclear plant proposals is essential** if the UK is to retain a reliable power baseload as much of the existing nuclear fleet is retired in the years ahead.

GMB is a signatory to the Hinckley Point C 'best in class' industrial agreement, which is seen as a model that could be applied to other projects of national significance. The project, which will employ 5,600 people on site during the peak of construction, has acted as a catalyst for training in skills that risk being lost to the UK without a throughput of comparable engineering construction work. GMB has also worked with employers to improve workforce diversity on the project.¹⁴

The Sizewell C Development Consent Order application has been submitted, and GMB is looking to BEIS to give approval to this essential project at an early a stage as is practicable. Enabling works could be initiated on site ahead of this point, providing an important boost to the ailing civil construction industry in the East of England.

The high multiplier effect of hydropower projects could justify state support for projects that have received planning permission but would require subsidies to operate. GMB recognises that home insulation projects may have a positive role to play, and that these projects are attractive to policymakers as they are comparatively easy to scale up. However, it should be borne in mind that the jobs created leave a relatively weak economic footprint in the long run.¹⁵ Stimulus investments in this area should therefore be combined with more long-term approaches.

Decisions taken today should form part of an integrated strategy for reducing emissions in a way that meets the UK's future energy requirements. GMB believes that renewable energy sources have an important role to play as part of a balanced energy mix. However, the variable nature of renewable energy production, and the challenges of matching production to demand, requires the dependable baseload provided by nuclear, and the adjustable output enabled by gas (especially during times of seasonal peak demand).

Although the mass installation of heat pumps may seem like an attractive option for stimulus spending, there are in practice significant barriers to implementation.

¹⁴ <https://www.energyvoice.com/other-news/201200/union-in-talks-with-nuclear-project-as-report-reveals-equality-could-take-200-years/>

¹⁵ Hepburn et al., op cit., page 10.

As the CCC has acknowledged, the workforce required to deliver such a programme does not exist.¹⁶ A significant uptake in heat pump usage would place demands on electricity generation and transmission that could not be accommodated without significant investment (a 20 per cent increase in heat pump penetration would lead to a 14.3 per cent increase in peak electricity demand).¹⁷ Heat pumps' relative inefficiency in cold temperatures and in industrial settings means that they cannot provide a universal solution to the decarbonisation of heating.

The high-quality jobs in the gas industry, and the flexibility they bring that keeps the lights on and the production lines moving, could be preserved through investment in biomethane and hydrogen. A strategy that embraced these technologies could decarbonise the gas grid without dislocating the industry's workforce, and would avoid a write-down in the sunk costs of the capital value of the gas transmission network (which would likely be in excess of £20 billion).¹⁸

The UK is in some ways ideally placed to take advantage of these very low carbon means of heating homes and businesses, powering vehicles, and generating power. The UK's natural wind resources could be used to produce green hydrogen, for which the only carbon costs are those associated with initial infrastructure works. Blends of up to 20 per cent hydrogen have been safely achieved in the HyDeploy project without changes to existing appliances¹⁹ and the programme of replacing metal pipes with polyethylene has helped to prepare the network to carry hydrogen into homes.

The growth of regional hydrogen 'hubs' – from HyNet in the North West to H21 in Leeds – offers significant potential for regeneration effects on a regional and local

¹⁶ 'It is not feasible to ramp up installation rates of heat pumps straight away to the current level of gas boiler sales (over a million per year) from the current level of 20,000 per year, not only due to the lack of market development but also because there are not enough qualified heat pump installers.' The Climate Change Commission, *Net Zero – The UK's contribution to stopping global warming*, May 2019, page 176

<https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/>

¹⁷ J. Love et al., The addition of heat pump electricity load profiles to GB electricity demand: Evidence from a heat pump field trial, *Applied Energy*, 204 (2017), pages 332–342.

¹⁸ The combined Regulated Asset Value of the 'big eight' gas distribution networks was estimated to be £19.8 billion in 2019: <https://www.sgn.co.uk/sites/default/files/media-entities/documents/2020-03/Moodys-Investors-Service-Southern-Gas-Networks-published-27-February-2020.pdf>

¹⁹ <https://www.itm-power.com/news/hydeploy-uk-gas-grid-injection-of-hydrogen-in-full-operation>

level. Investment in hydrogen would also support the development of the UK's nascent Carbon Capture Utilisation and Storage (CCUS) industry.

We recognise that – as with biomethane – there is a cost gap to be overcome before hydrogen can be commercially viable. However, studies have indicated that the production of green hydrogen (via offshore electrolysis) already covers its costs in some niche commercial applications, and will be commercially viable at scale in a decade if current cost trajectories continue (mirroring the reduction in costs achieved in other renewable technologies over the last decade).²⁰

85 per cent of homes (around 24 million households) are connected to the gas grid,²¹ and an invasive policy of removing existing gas boilers is likely to meet significant consumer resistance. GMB would support a requirement that all new home boiler installations should be 'hydrogen-ready' by an appropriate notice period, which could be 2025.

The Institution of Engineering and Technology has said that 'fundamental to the deployment of hydrogen is a comprehensive and robust transition programme.'²² There is an opportunity for a national multi-year plan to be developed to transition the existing transmission network and domestic appliances, which would provide a steady throughput of work and provide certainty over the future of the UK's gas industry. Such a programme could draw inspiration from the successful project to convert the UK from town gas to natural gas in the 1960s and 1970s (and learn from the more recent experience gained in transitioning the Isle of Man from Liquefied Petroleum Gas/air gas to natural gas). However, **central government support and strategic direction is urgently required** if the UK is to avoid a repeat of the experience of offshore wind, when a *laissez-faire* approach resulted in the UK

²⁰ Glenk and Reichelstein, Economics of converting renewable power to hydrogen, *Nature Energy*, 4 (2019), pages 216–222.

²¹ The rate of households connected to the gas grid in England can be calculated from Table 10 of the BEIS Fuel poverty detailed tables 2020, published 30 April 2020 (<https://www.gov.uk/government/statistics/fuel-poverty-detailed-tables-2020>). In 2018, 86.8 per cent of homes in England were connected to the gas grid. When this rate is applied to the UK as a whole (27.8 million households in 2019), it produces a total of 24.1 million homes connected to the gas grid. Household population figures are taken from the ONS, Families and households in the UK: 2019, 15 November 2019 <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/families/bulletins/familiesandhouseholds/2019>

²² Institution of Engineering and Technology, *Transitioning to hydrogen: Assessing the engineering risks and uncertainties*, 2019, page 40 <https://www.theiet.org/media/4095/transitioning-to-hydrogen.pdf>

failing to build up a strong, exporting supply chain at a time when competitor nations did not hesitate to support their own industrial development.

While we recognise that the Government has funded some research into the development of hydrogen technology, **the committed innovation funding of up to £121 million²³ is deeply inadequate compared to the commitments made by other nations.** Over two hundred thousand homes are already powered and heated by hydrogen in Japan, and Germany recently set aside €7 billion to fund its emerging hydrogen strategy.²⁴ GMB would support a comparable investment, spread across construction, operations, and research and development, as part of the UK's green stimulus package.

2. How do we support people who have lost employment during this crisis to move into environmental growth sectors? How can we ensure that such jobs are decently paid, with quality training, and offer representation by trade unions? What lessons can be learned from past programmes current support and international examples?

Our response to this question is intended to also answer question 4 (on the scope for redeploying people from industries which are facing crisis).

GMB supports investment in high quality training and redeployment initiatives, but we also note the mixed record of such programmes and the difficulties of assessing their effectiveness.

The UK has an unhappy history of low-quality retraining schemes, from the YTS programme of the Thatcher era through to Government-led policy responses to job losses associated with deindustrialisation in the 2000s. Experience suggests that general skills training is of limited value, and that many older workers find it difficult to realise the benefits of retaining schemes.²⁵ Workers with other protected characteristics may be particularly poorly served by retraining schemes: in the case of the Remploy network, which employed disabled workers

²³ Answer to Written Parliamentary Question 47436, on Hydrogen: Renewable Energy, 22 May 2020 <https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2020-05-15/47436/>

²⁴ <https://www.dw.com/en/germany-and-hydrogen-7-billion-to-spend-but-no-strategy-yet/a-53719746>

²⁵ See BIS: Economics Paper 6, Learning from Britain's successful sectors: an historical analysis of the role of government, March 2010; and Research Paper 212, Feasibility Study: The economic impact of industrial plant closure in the UK, with an emphasis on energy intensive industries, April 2014.

prior to the final withdrawal of subsidies in 2012, only 57 per cent of former employees who agreed to take part in a support and tracking programme were in work in 2014.²⁶

Even when workers are able to secure alternative employment, many find it difficult to find work of comparable quality. In one study of former MG Rover employees, two thirds of the former MG Rover workers reported three years after the group's collapse that they earned less in their new roles – averaging a reported real-terms annual reduction of £5,640 – and researchers reported that 'ex-MGR workers moved into jobs with lower levels of autonomy, challenge and skill use, and fewer opportunities for progression than other workers in the UK.'²⁷ Similar results have been reported from surveys of former shipyard employees who were subject to mass layoffs.²⁸

These perceived limitations of retraining and redeployment were also reported from green retraining schemes introduced during the last recession. In the United States, the Green Jobs Program attracted criticism due to its low success rate in securing employment in relevant industries (with a reported conversion rate of 38 per cent), although wider benefits were reported due to raised environmental awareness amongst people who completed the programme, even if they did not secure employment directly in the green economy.²⁹

GMB believes that, due to the limitations of state supported retraining schemes suggested by this experience, **the priority should be on saving jobs by securing the future of existing industries where it is feasible to do so.**

Where investment is made in retraining and redeployment programmes, trade unions have an important role to play in improving outcomes and labour standards. GMB has extensive experience of delivering union learning projects, and there should be extensive consultation with unions and industry on the content of retraining courses. The evidence suggests that specific skills training

²⁶ Written Parliamentary Answer 218625, on Remploy, published 18 December 2014 <https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2014-12-15/218625/>

²⁷ Bailey et al., Plant closures and taskforce responses: an analysis of the impact of and policy response to MG Rover in Birmingham, *Regional Studies*, *Regional Science*, 1:1 (2014), page 67.

²⁸ Tomaney et al., Plant Closure and the Local Economy: The Case of Swan Hunter on Tyneside, *Regional Studies*, 33:5 (1999), pages 401 – 411.

²⁹ Mundaca and Richter, Assessing 'green energy economy' stimulus packages: Evidence from the U.S. programs targeting renewable energy, *Renewable and Sustainable Energy Reviews*, 42 (2015), page 1181.

may be more effective for securing good quality reemployment than generalised skills training.

Where industries and programmes are supported as part of a green stimulus package, the funding should be conditional on clear commitments to labour standards, the pursuit of good industrial relations, and trade union access and recognition rights that significantly exceed the legal minimums. Our experience of recent organising in sub-contractors of major state-funded projects (and in particular, HS2) is that **voluntary agreements with project delivery bodies are of little value unless they are written into contracts or otherwise given legal status**. If a stimulus package involved the passage of primary legislation then GMB would welcome serious consideration of the introduction of a statutory employment relations code of practice to secure high labour standards on supported green economy projects.

3. How should sector-specific support for business during this crisis be used to both protect and promote employment and to pursue our climate and nature objectives?

GMB represents workers in a variety of industries that are likely to require tailored support packages that outlast general coronavirus support schemes, from aviation to cash-in-transit and taxi and private hire, to ceramics and construction.

We recognise that a number of European countries have attached environmental conditions to sector-specific support packages, including the French government's bailout of Air France-KLM, and GMB supports the general principle of greening existing industries. We would expect the details of environmental conditions to be subject to meaningful consultation and negotiation with workers in those industries.

7. How can measures you are proposing in this recovery and renewal period improve quality of life — for example around walking, cycling and public transport, and improving access to nature? What habitats are you especially concerned about and want to see more support for and focus on?

GMB members have repeatedly expressed concern over the degradation of natural habitats through our union's democratic structures. We support progressive transport policies, and we support the reversal of central government and local authority cuts to bus services over the past decade.

One difficult issue to navigate is the fact that, by its nature, renewable energy is a diffuse source, and methods of capturing it generally require large land-takes in areas that have not been subject to urban development. The impact of solar farm development on biodiversity is not well understood,³⁰ and there is evidence that wind farms can have a negative impact on bird populations.³¹ **Care is needed to avoid making environmental measures the enemy of habitat preservation.**

The land-take from renewable sources can be mitigated through the continued inclusion of nuclear and gas within the UK's energy mix as much denser means of energy generation, subject to investment in carbon reduction measures discussed elsewhere in this response, and the enforcement of the highest safety standards in relation to the disposal of waste products.

8. In providing responses to 1-7, please can you indicate to us what considerations of cost-benefit analysis are relevant (and, if such analysis has not been undertaken, what sources of information would be necessary to understand costs and benefits); and which institutions would be required to enable effective delivery? In particular what is the role of public and private investment and different ownership models?

It is a source of the frustration that, in economic evaluations of previous and current schemes such as the Green Deal and the Energy Company Obligation, little attention has been paid to workforce impacts, and it is hard to draw evidence-based conclusions about the effects of these programmes on jobs, skills, and wages.

The problem is compounded by the fact that environmental sector jobs are generally not identifiable within official surveys, such as the Labour Force Survey or the Annual Survey of Hours and Earnings, and the ONS's LCREE Survey does not collect information on wages, hours worked, or skills.

Better monitoring and evaluation of the workforce impacts of green investments would contribute towards greater public awareness of policy decisions in this area, and align the UK with international best practice.

³⁰ BSG Ecology, *Potential ecological impacts of ground-mounted photovoltaic solar panels: An introduction and literature review*, 2019 <https://www.bsg-ecology.com/wp-content/uploads/2019/04/Solar-Panels-and-Wildlife-Review-2019.pdf>

³¹ Thaxter et al. Bird and bat species' global vulnerability to collision mortality at wind farms revealed through a trait-based assessment, *Proceedings of the Royal Society B*, 284 (2017)

Research commissioned by GMB from the consultancy Tussell, which specialises in public contracting data, suggests that when public sector bodies directly procure renewable energy components (as opposed to subcontracted spending awarded by the winners of Contract for Difference auctions), a greater share of value is retained in the UK, boosting multiplier effects. It can be inferred that **a public sector delivery body would deliver better value for money and support a lasting economic recovery**. GMB would welcome further engagement on the development of this policy area.

10. What other issues/points do you think are important? What are the Covid-19 challenges of delivering such a programme and how might they be overcome?

GMB has engaged with BEIS and a number of other Departments on a range of sector-specific concerns regarding the wider return to work, including in the energy, manufacturing, and construction sectors. The details are outside the scope of this response, but we would be happy to discuss specific concerns or arrange briefings on individual sectors with the Labour frontbench.

One area of concern that applies to any stimulus package with an infrastructure element is the lack of unified policy responsibility for construction in Government. Instead, responsibility is split on a project-by-project basis across Departments, which gives rise to siloed ways of working, and has resulted in the absence of a mechanism for raising broad sector concerns, including in relation to skills shortages and employment standards.

This absence of a Minister with overall strategic responsibility for construction is likely to hinder the delivery of any stimulus package that is brought forward. GMB would welcome Labour's consideration of a proposal to appoint a Shadow Minister for construction who can lead engagement with construction workers and industry on this important issue.

Conclusion

GMB welcomes the Labour Party's shadow BEIS and Treasury teams' interest in and engagement on these important policy questions. We look forward to supporting the Labour Party's continued policy development in the areas raised by the consultation document over the course of this Parliament.