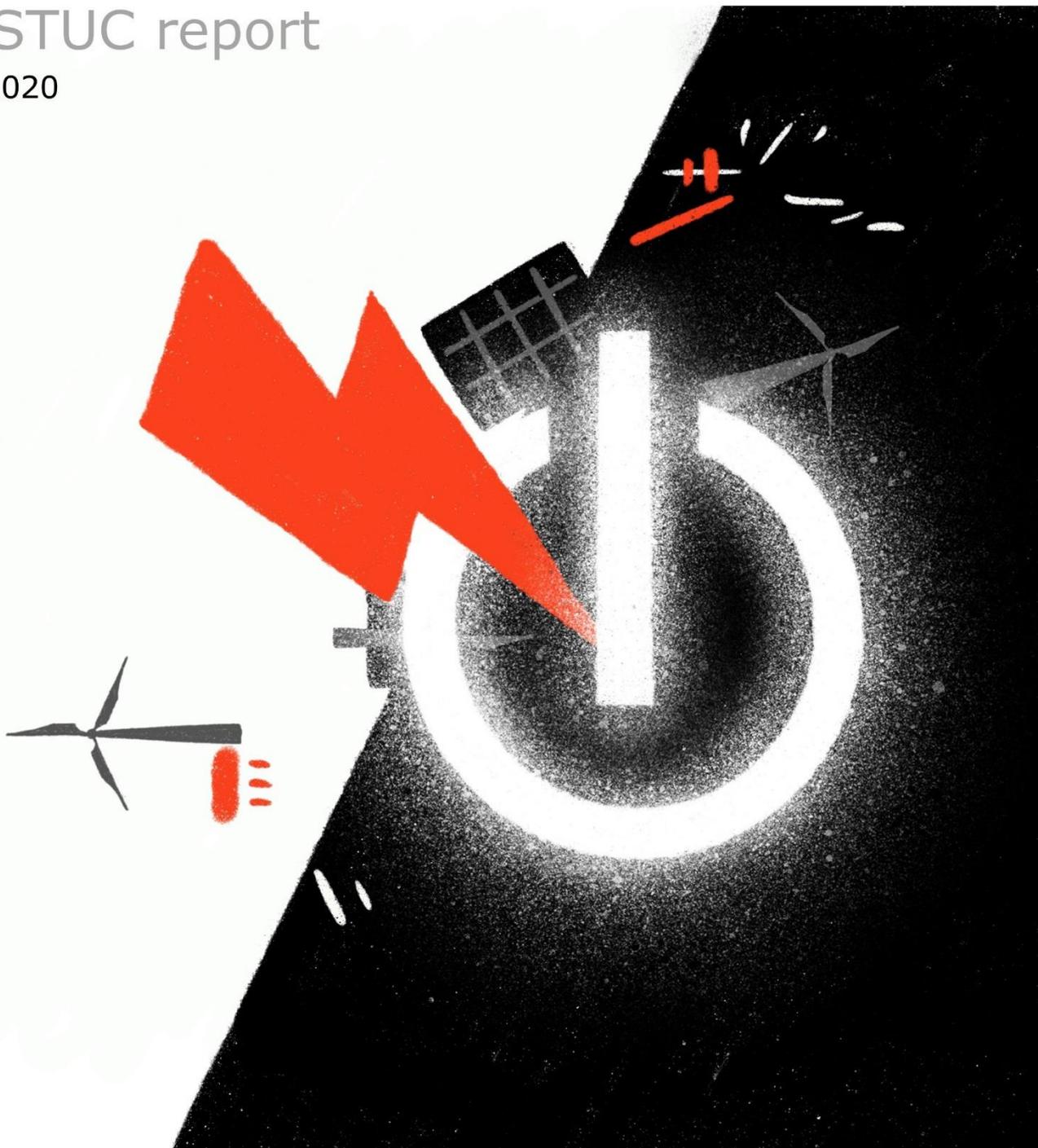


Scotland's Renewable Jobs Crisis & Covid 19

stuc

An STUC report

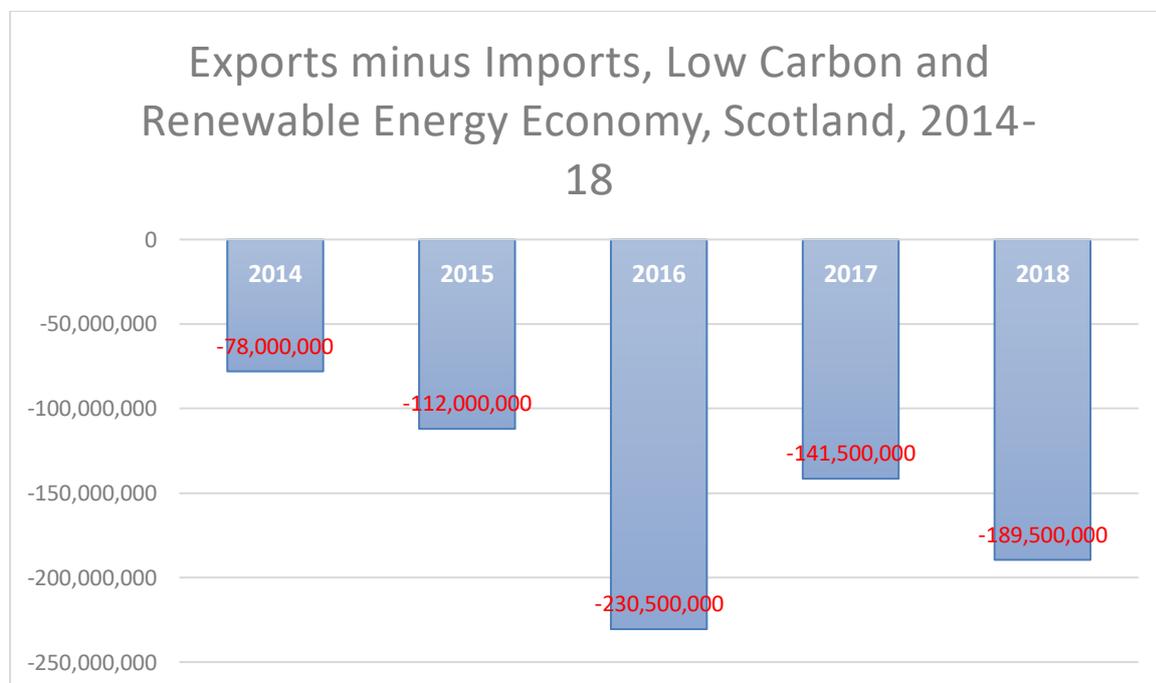
June 2020



Executive Summary

This report analyses ONS data to examine Scotland's low-carbon economy. It finds that employment in Scotland's low-carbon and renewable energy economy (LCRE) flatlined between 2014 and 2018. Despite past promises of 130,000 jobs by 2020,¹ direct employment in 2018 was 23,100, down from 23,400 in 2014.

By looking at imports and exports data, the report concludes that a trade deficit and a sector dominated by private and overseas interests are the primary reason behind this lack of employment. Scotland's LCRE economy imported more goods and services than it exported to the tune of £189.5 million in 2018, up from £141.5 million in 2017 and £78 million in 2014. While the fallout from coronavirus is not yet clear, a long supply chain dependent on imported goods risks Scotland being exposed to economic shocks moving forward.



¹ In 2010 the Scottish Government's Low Carbon Strategy predicted employment (direct and indirect) in Scotland's low carbon sector could increase to 130,000 by 2020: <https://www2.gov.scot/resource/doc/331364/0107855.pdf>

The report highlights specific issues with the offshore wind sector, with employment falling from 2,000 in 2017 to 1,700 in 2018.² This is despite the installed capacity of offshore wind increasing more than 250 percent, from 246MW to 623MW, in the same period.³ Bar one demonstration turbine off the coast of Leven, all of Scotland's offshore wind is controlled by overseas state-owned companies and private corporations. EDF's £2 billion Neart Na Gaoithe (NNG) offshore windfarm off the coast of Fife and SSE and Total's £5.7 billion Seagreen offshore windfarm off the coast of Angus, highlight how these entities have limited interest in building Scotland's supply chain. Despite Scottish-based firms, such as Bifab and CS Wind, able to do the work, manufacturing work is set to be offshored and then shipped several thousand miles around the world on diesel-burning barges. Far from being 'the Saudi Arabia of renewables', as a previous First Minister said,⁴ workers and communities in Scotland are currently missing out in the transition to a low-carbon economy.

The report concludes there are two 'green recovery' scenarios. In the first scenario, we continue to throw money at the market. While this might help meet Scotland's climate targets in the short term, in the longer-term it will mean: we fail to create an industrial base in the LCRE economy; employment will continue to flatline; economic inequality will increase as wealth from Scotland's resources is captured by corporations and unaccountable overseas interests; emissions associated with the manufacture of low-carbon energy content will increase as content is shipped long distances from countries with poor employment conditions and less stringent climate standards; and, communities and workers across Scotland will lose all faith in the concept of a Just Transition.

The second scenario is one in which Scotland's renewable resources are held in common through a publicly owned energy company and a national infrastructure company, which benefits from the cheap cost of borrowing to invest in renewable generation and the Scottish supply chain; where planning consents and subsidies are only granted on condition of developers providing work to local contractors; collective bargaining agreements with trade unions in Scotland are mandated; and where workers and communities have real power to hold governments and corporations to account for social, economic and environmental outcomes. The report makes recommendations to make this second scenario a reality.

² The coefficient of variation is 27-34 for offshore wind in 2017-2018, so this should be treated with a degree of caution.

³ National Statistics - Energy Trends: UK renewables (2020) Data from 'Renewable electricity capacity and generation (ET 6.1 - quarterly)' <https://www.gov.uk/government/statistics/energy-trends-section-6-renewables>

⁴ <https://www.theguardian.com/business/2011/may/29/snp-hopes-new-wave-can-carry-scotland-to-independence>

Introduction

As we try to rebuild our economy following coronavirus, there has been a lot of talk of a green recovery, including from the UK Chancellor, Richi Sunak.⁵ In Scotland, more than eighty organisations have written to the First Minister calling on her to 'build back better' and reduce climate emissions.⁶

Addressing the climate emergency is vital, but the shape of any green recovery is of crucial importance. If it is to gain social support, it must be designed in a way that reduces inequality and provides a just transition for workers.

Initial signs are not encouraging. The UK Government is consulting on proposals for 'freeports' as a way to stimulate the economy,⁷ yet we know these tax-free zones simply divert economic activity, encourage tax avoidance, and lead to higher profits not higher wages.⁸ The Scottish Government's Programme for Government outlines plans to attract finance capital by 'bringing to market a £3 billion portfolio of projects over the next three years'.⁹

Crown Estate Scotland has recently announced plans to lease Scotland's seabed for £8 billion worth of offshore wind projects,¹⁰ yet it appears the plans do little to encourage investment in the local supply chain or to improve poor working practices. At the same time, the collapse in the oil price, as well as risking the loss of thousands of highly-skilled workers in the North Sea, may make investment in offshore wind more appealing.

⁵ Business Green (2020) 'Reports: Chancellor preps green jobs 'revolution'
<https://www.businessgreen.com/news/4015986/reports-chancellor-preps-green-jobs-revolution>

⁶ Friends of the Earth Scotland et al (2020) <https://foe.scot/resource/just-green-recovery-letter-first-minister/>

⁷ UK Government (2020) 'Freeports consultation'
<https://www.gov.uk/government/consultations/freeports-consultation>

⁸ Danson, M (2019) 'BiFab and the Neart na Gaoithe Offshore Wind Farm'
<https://bellacaledonia.org.uk/2019/07/01/bifab-and-the-neart-na-gaoithe-offshore-wind-farm/>

⁹ Scottish Government (2019) 'Protecting Scotland's Future: the Government's Programme for Scotland 2019-2020' <https://www.gov.scot/publications/protecting-scotlands-future-governments-programme-scotland-2019-20/pages/2/>

¹⁰ Crown Estate Scotland (2020) 'ScotWind Leasing Seabed leasing for new offshore wind farms'
<https://www.crownestatescotland.com/media-and-notice/news-media-releases-opinion/green-light-for-multi-billion-pound-investment-in-scotlands-net-zero-economy>

The Fife Ready for Renewal campaign demonstrates that workers and communities are ready and willing to support the low-carbon transition.¹¹ However, they need the opportunity to work and to see wealth flow back to their community. That will only be delivered if government and business fundamentally change their approach to developing the low-carbon economy.

Methodology and Limitations

This report analyses the Office for National Statistics Low Carbon and Renewable Energy Economy (LCRE) Survey. Based on a survey of 24,000 businesses, this is the primary source of official information on the LCRE economy and includes information on turnover, employment, investment and trade.¹²

The ONS survey estimates direct and indirect employment for the UK,¹³ measured as full-time equivalent (FTE). Last year, the ONS included indirect estimates for Scotland, but this year the methodology for estimating indirect employment in Scotland is being reviewed so indirect estimates are not included.

There are limitations to the data, with coefficients of variation (CVs) ranging up to 64% for certain Scottish figures presented in the ONS data.¹⁴

Given the report uses data on current LCRE jobs, this means it does not look in any depth at potential green jobs of the future, which do not currently exist to any significant degree, such as carbon capture and storage and hydrogen production.

¹¹ The Fife Ready for Renewal Campaign involved hundreds of Bifab workers and community members: <https://scottishtuc.blog/2019/06/24/fife-comes-together-to-stand-ready-for-renewal/>

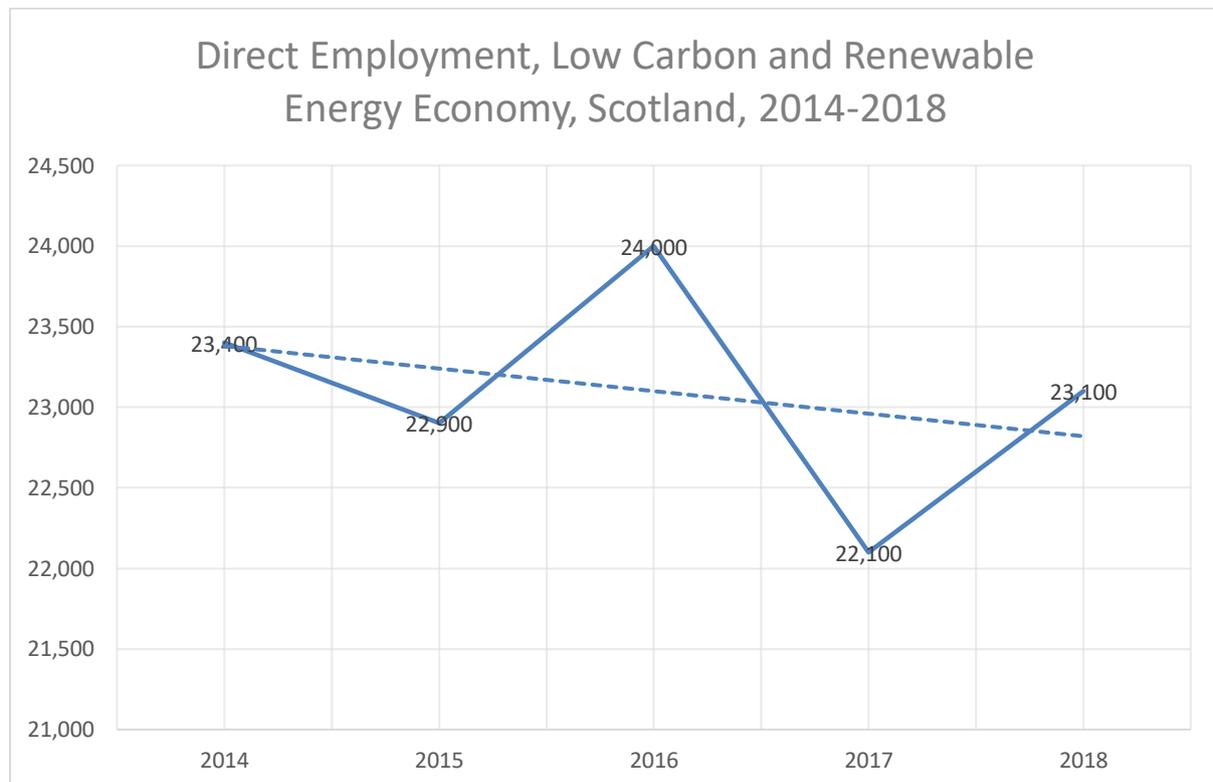
¹² ONS (2020) 'Low carbon and renewable energy economy, UK: 2018' <https://www.ons.gov.uk/economy/environmentalaccounts/bulletins/finalestimates/2018>

¹³ Businesses are asked which sectors they operate in and then how many full time equivalents (FTEs) work in this sector. It include all employees paid directly from payroll(s).

¹⁴ The CV is a measure of the standard of error of an estimate, with smaller CVs being more accurate than larger CVs. A rough guide to CVs is: less than 10% is very good, 10% is good, 20% is acceptable. CVs that are greater or equal to 20% should be used with caution. CVs for each estimated figure is presented in the data spreadsheets - 'Low carbon and renewable energy economy, UK: 2018' <https://www.ons.gov.uk/economy/environmentalaccounts/bulletins/finalestimates/2018>

Employment in the Low Carbon and Renewable Energy Economy

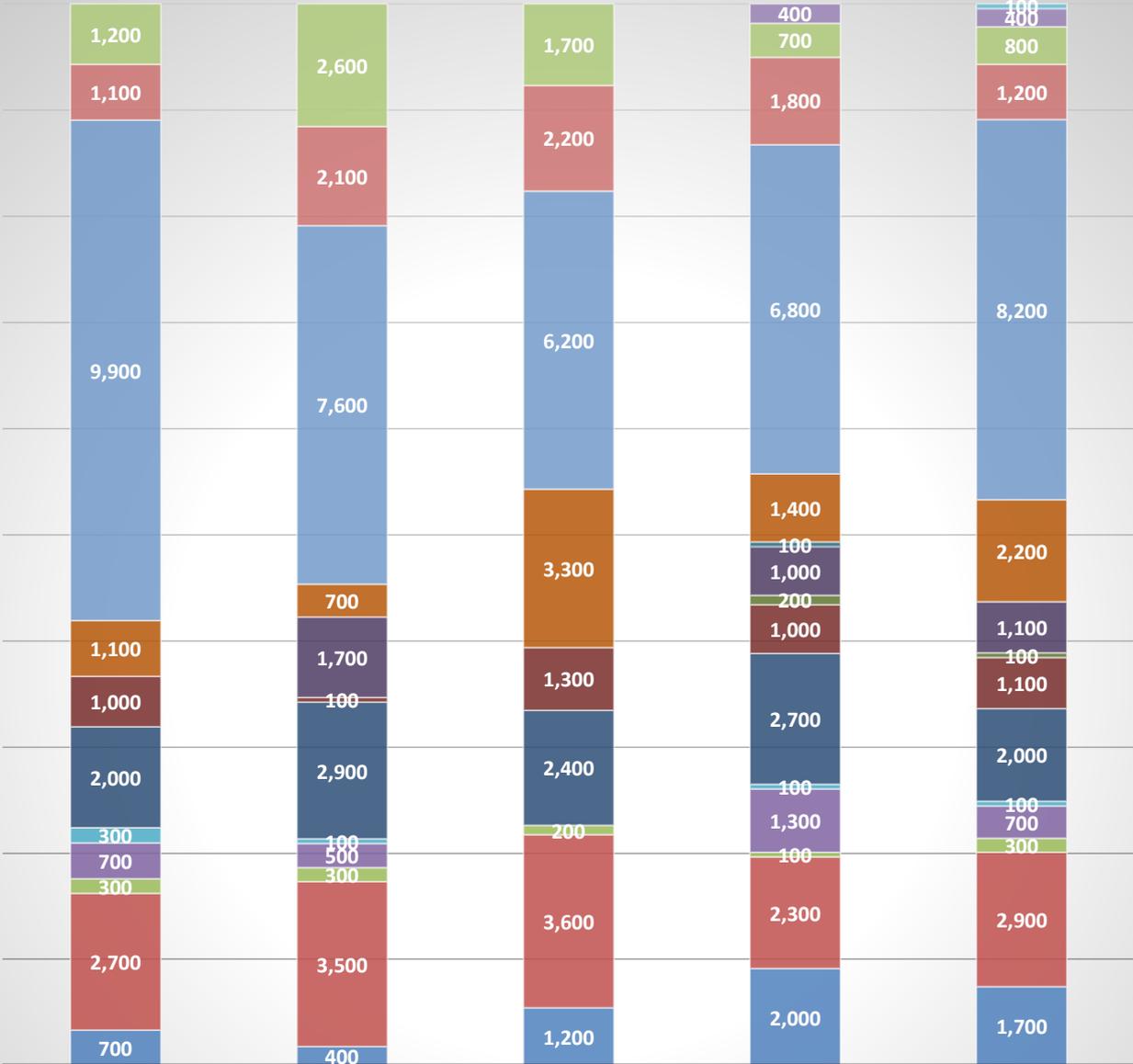
The most recent employment figures show that between 2014 and 2018 employment in Scotland's low-carbon and renewable energy economy flatlined. Despite being promised 130,000 jobs by 2020,¹⁵ direct employment in 2018 was 23,100, down slightly from 23,400 in 2014.



Far from being 'the Saudi Arabia of renewables', workers and communities in Scotland are missing out in the transition to a low carbon economy. The bar chart below shows the distribution of jobs by sector between 2014 and 2018.

¹⁵ In 2010 the Scottish Government's Low Carbon Strategy predicted employment (direct and indirect) in Scotland's low carbon sector could increase to 130,000 by 2020: <https://www2.gov.scot/resource/doc/331364/0107855.pdf>

DIRECT EMPLOYMENT BY SECTOR, LOW CARBON AND RENEWABLE ENERGY ECONOMY, SCOTLAND, 2014-18



2014 (23,400 FTE) 2015 (22,900 FTE) 2016 (24,000 FTE) 2017 (22,100 FTE) 2018 (23,100 FTE)

- Offshore wind
- Onshore wind
- Solar photovoltaic
- Hydropower
- Other renewable electricity
- Nuclear
- Renewable heat
- Renewable combined heat and power
- Bioenergy
- Alternative fuels
- Energy efficient lighting
- Other energy efficient products
- Energy monitoring, saving or control systems
- Low carbon financial and advisory services
- Low emission vehicles and infrastructure
- Fuel cells and energy storage

The table above shows that in 2018, 36% of LCRE jobs were in energy efficiency products, 13% in onshore wind, 10% in energy efficiency lighting, 9% in nuclear and 7% in offshore wind.

Of particular concern is the estimated 15% fall in offshore wind jobs from 2000 in 2017 to 1,700 in 2018.¹⁶ This is despite installed capacity in offshore wind increasing more than 250 percent from 246MW to 623MW.¹⁷ It seems we have a long way to go before Scotland gets anywhere near the potential 28,000 direct jobs in offshore wind by 2020 predicted in the 2010 Low Carbon Economic Strategy.¹⁸

Why have low-carbon jobs not grown?

Below we look at some potential theories why low-carbon jobs have not grown.

1. There is not a lack of businesses

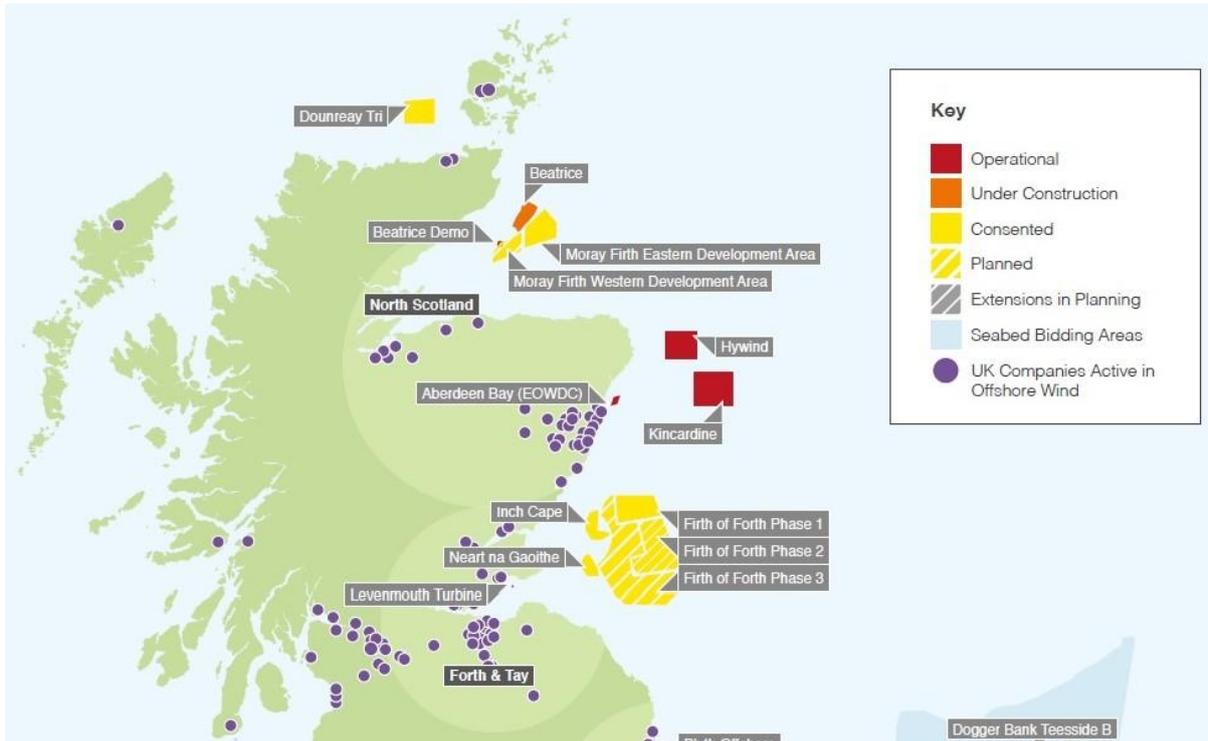
The lack of direct employment isn't due to a lack of LCRE businesses in Scotland. In 2018, there were 10,500 businesses employing 23,100 people. In offshore wind there were 500 businesses employing 1,700 people.

The renewables industry trade body, RenewableUK has produced a map of offshore wind companies operating across the UK. A map of Scotland detailing these companies is shown below.

¹⁶ The coefficient of variation for offshore wind in 2017-2018 is 27-34, so this should be treated with a degree of caution.

¹⁷ UK Government National Statistics (2020) 'Energy Trends: UK renewables', data from 'Renewable electricity capacity and generation (ET 6.1 - quarterly)' <https://www.gov.uk/government/statistics/energy-trends-section-6-renewables>

¹⁸ Scottish Government (2010) 'Low Carbon Economic Strategy', p.47 states that offshore wind "offers the potential for 28,000 direct jobs and a further 20,000 jobs in related industries and £7.1 billion investment in Scotland by 2020" <https://www2.gov.scot/resource/doc/331364/0107855.pdf>



Source: RenewableUK¹⁹

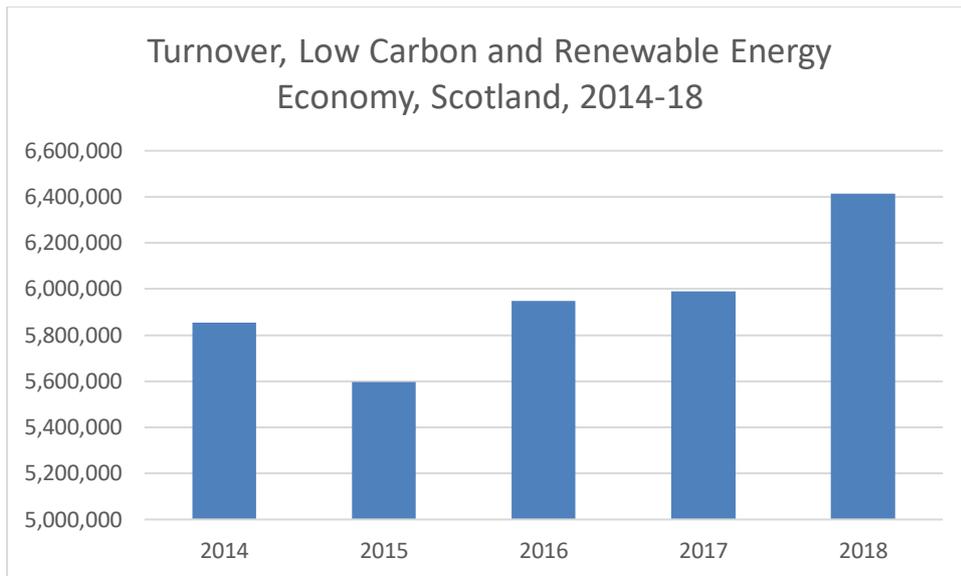
The map shows that businesses operate across a number of regions in Scotland, although they are mostly concentrated in the Central Belt and Aberdeen. The coronavirus crisis may lead to pressures on a number of these businesses. In these circumstances, worker buyouts should be investigated wherever possible.

However, the number of businesses compared to the number of employees in offshore wind and across the LCRE economy suggests we do not have a lack of businesses and rather than considering ways to stimulate low-carbon start-ups, more consideration needs to be given to growing existing businesses.

2. It is not simply due to a lack of turnover

The lack of jobs in the LCRE economy does not appear to be simply explained by a lack of turnover. The table below shows LCRE turnover in Scotland between 2014 and 2018.

¹⁹ RenewableUK website: <https://www.renewableuk.com/Page/SupplyChainMap>



Over the past five years while employment has flatlined, turnover has increased by 10%, from £5.8 million to £6.4 million. While an increase in turnover would be welcome, and would likely lead to an increase in employment, it is clear a number of businesses are still turning over significant sums of money without benefiting Scotland's communities in the form of employment opportunities.

3. Scotland imports most of its technology, manufacturing and construction work

It is widely recognised that growing employment in the LCRE economy depends on having an industrial base for manufacturing and construction. As far back as 2005, the Scottish Executive's Forum for Renewable Energy Development in Scotland (FREDS) stated:

“The key point about employment impacts, though, is that much depends on the extent of domestically produced inputs. Technology sourced locally would have a considerably higher domestic employment impact than imported technology. Employment generated would also be higher to the extent that Scottish-based firms were able to export their technology.”²⁰

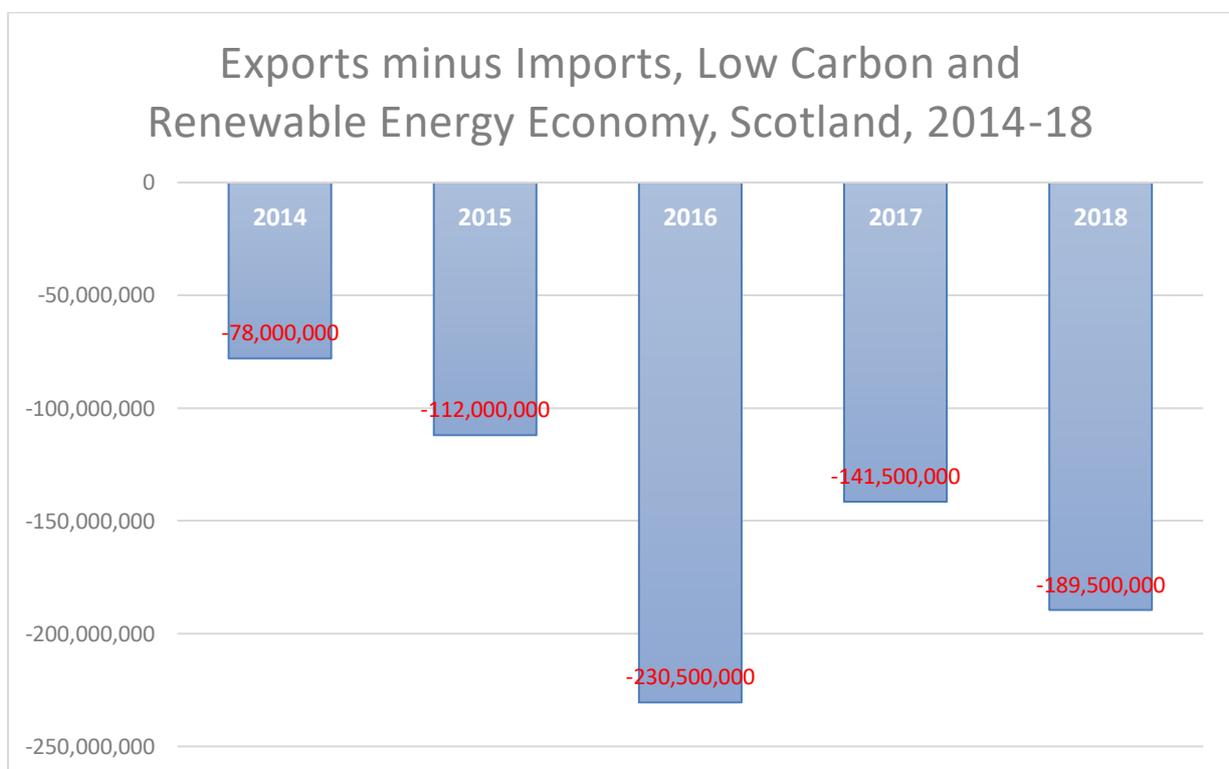
Similarly, in 2011 Audit Scotland said:

²⁰ FREDS (2005) 'Scotland's Renewable Energy Potential: Realising the 2020 Target' <https://www.webarchive.org.uk/wayback/archive/20180519015759/http://www.gov.scot/Publications/2005/09/09144010/40137>

“To ensure sustained economic benefits, there needs to be a network of Scottish companies capable of supporting the renewable energy sector (a supply chain)”.²¹

Unfortunately, the latest data shows that Scotland’s LCRE balance of trade, measured by exports minus imports, was £189.5 million in 2018. The table below shows this is an increase from £141.5 million in 2017 and £78 million in 2014.

We do not yet know the full fall-out from the Coronavirus, but a supply chain which is dependent on imports is likely to be less resilient and more exposed to economic shocks moving forward.



Data for offshore wind imports in 2018 has been suppressed for confidentiality reasons, meaning a full analysis of the trade balance for offshore wind is not possible. Concerningly however, the trade deficit for the low carbon electricity group, encompassing offshore wind, onshore wind, solar photovoltaic, hydropower, other renewable electricity, carbon capture and storage and nuclear, increased from minus 105 million in 2017 to minus 202 million in 2018.

²¹ Audit Scotland (2013) ‘Renewable Energy’ http://www.audit-scotland.gov.uk/docs/central/2013/nr_130912_renewable_energy.pdf

Moreover, the imports of offshore wind were up between 2016 and 2017 and exports were down between 2017 and 2018. A number of recent offshore wind projects, such as EDF's NNG windfarm off the coast of Fife, have also been criticised for shipping content to Scotland from South East Asia.

Renewable UK states that current UK content on offshore wind projects is 48%.²² According to SSE's report into the Beatrice Offshore Wind Farm, Scotland fairs worse still:

"Beatrice supported 19,110 years of employment in the UK during the development and construction phases, of which 7,180 were in Scotland. This included workers directly employed on site, those employed because of Beatrice's supply chain contracts, as well as the employment supported as a result of these workers spending their salaries."²³

That represents under 38% Scottish 'content' in Scotland's largest operational offshore wind farm.

Following publication of STUC's Broken Promises report last year,²⁴ the Scottish Government convened two high-level roundtables with unions, industry and Ministers.²⁵ However, newly published proposals by Crown Estate Scotland appear to do little to encourage local supply chain content.²⁶

4. Scotland's LCRE economy is dominated by private and overseas state-owned companies

The ONS survey contains estimates of business acquisitions and disposals in the LCRE economy. The latest data shows acquisitions in offshore wind UK increased significantly between 2017 and 2018.

²² <https://www.renewableuk.com/news/491745/Offshore-wind-industry-announces-targets-to-employ-3000-apprentices-and-a-more-diverse-workforce.htm>

²³ SSE (2019) 'Beatrice: Building for the Future – Socio-economic Benefits & Learnings'

²⁴ STUC (2019) 'Broken Promises and Offshored Jobs'
http://www.stuc.org.uk/files/Policy/Research_Briefings/Broken%20promises%20and%20offshored%20jobs%20report.pdf

²⁵ Scottish Government (2019) 'Offshore wind summit commits to way forward'
<https://www.gov.scot/news/offshore-wind-summit-commits-to-way-forward/> and (2020) 'Offshore wind summit'
<https://www.gov.scot/news/offshore-wind-summit-1/>

²⁶ Crown Estate Scotland (2020) 'ScotWind Leasing Seabed leasing for new offshore wind farms'
<https://www.crownestatescotland.com/maps-and-publications/download/476>

However, the ONS data tells us little about the ownership structure of the LCRE economy. For that, we have to look to previous research showing that much of Scotland's LCRE economy is in private and foreign hands.²⁷ Half of the UK's offshore wind is estimated to be owned by publicly-owned companies from other countries, such as Ørsted from Denmark, EDF from France, and Red Rock from China. 42 percent is owned by foreign private companies, like Iberdrola from Spain (who own Scottish Power) and Innogy from Germany. Seven per cent is owned by UK private companies, like SSE and Centrica. Just one offshore wind turbine is in public ownership – the Offshore Renewable Energy Catapult demonstration project in Levenmouth.²⁸

A lack of concern about this ownership structure is leading to serious issues in Scotland's LCRE economy. While state-owned companies are generally more ethical than private companies, they do not behave as ethically outside their home country as they do within it. Many are initially subsidised by their Government to gain market share and have a history of directing contracts to suppliers in their home countries.²⁹

Once granted permission to operate, foreign companies, whether public or private, care little about maintaining a strong 'social license' or 'social contract' with workers and communities. Legislation and policy mechanisms are, therefore, needed create a level playing field that is in the interests of developers as well as workers.

The view from the ground: recent examples of Scotland's failure to create domestic employment in the low-carbon economy

Below we look at three recent examples of companies and projects that highlight some of these issues and the impact on the workers involved.

1. EDF and Neart Na Gaoithe

²⁷ Labour Energy Forum (2017) 'Who owns the wind, owns the future: Why we need public ownership of offshore wind in the UK' https://labourenergy.org/wp-content/uploads/2017/08/Who-owns-the-wind_2017_Labour-Energy-Forum.pdf

²⁸ <https://labour.org.uk/press/peoples-power-labour-announces-plan-offshore-windfarms-public-stake/> and <https://www.thenational.scot/news/18289660.scotland-must-act-now-stop-renewable-energy-squandered-just-like-oil/>

²⁹ OECD (2018) 'State-Owned Enterprises and Corruption: What Are the Risks and What Can Be Done?' https://www.oecd-ilibrary.org/governance/state-owned-enterprises-and-corruption_9789264303058-en and <https://www.thenational.scot/news/18289660.scotland-must-act-now-stop-renewable-energy-squandered-just-like-oil/>

EDF, the French state-owned electric utility company, is building its new £2 billion Neart na Gaoithe (NNG) offshore wind farm less than 15 km off the coast of Fife. EDF, which has recently partnered with Ireland's state energy company EBS,³⁰ has subcontracted Italian multinational Saipem to deliver the manufacturing work for the 54 turbine project.

The foundational steel structures known as 'jackets' required for the windfarm are made locally in Bifab's yards in Methil and Burntisland, yet while the windfarm will be almost visible from the yards, EDF has intimated that only eight out of 54 jackets will be contracted locally. The rest are set to be built in a tax avoidance zone in Indonesia, where the minimum wage is less than a pound an hour. They will then be shipped across the world one and two at a time, with each jacket releasing up to 4,500 tonnes of CO₂.³¹ This is the equivalent of putting 53 million cars on the road for a day.³² Adding this to annual carbon emissions totals would seriously hamper progress in meeting the Scottish Government's laudable aims to cut carbon emissions to net zero by 2045.

All this is despite the project being subsidised through the contract for difference mechanism to the tune of £114 per megawatt hour. Current costs of offshore wind have tumbled to about £40 per megawatt hour, meaning EDF, and its partners, will make a fortune from the project.

2. CS Wind

CS Wind in Machrihanish is the only site in the UK that manufactures onshore and offshore wind towers. Formerly Wind Towers (Scotland), the firm was acquired by South Korean manufacturer CS Wind Corporation in 2016 with a promise to invest tens of millions and create 160 jobs on top of the existing workforce of 134. It recorded a profit of £7.1 million in 2018 but in October last year, announced the loss of 73 jobs.³³

It is now sitting idle, with six skeleton staff maintaining the factory. It is understood to be awaiting a decision on Ørsted's Hornsea 2 project in

³⁰ <https://www.edfenergy.com/media-centre/news-releases/construction-neart-na-gaoithe-offshore-wind-farm-project-go-ahead/>

³¹ Based on calculations from the International Council on Clean Transportation.

³² Calculation based on average annual miles and average emissions performance of a new car.

³³ <https://www.heraldscotland.com/news/18285203.government-agency-wins-court-order-keep-troubled-scots-wind-tower-factory-running/>

Yorkshire, which could see 40 towers being fabricated, providing work for around twelve months on site.

There are fears it is being ‘wound down’ with Highlands and Islands Enterprise, who had previously invested almost £3 million into the site (on condition that business operations are maintained), winning a court order to lock the gates and prevent equipment from being removed by the Korean owner.³⁴

3. ScottishPower Renewables, coronavirus and health and safety

Last month, ScottishPower Renewables restarted construction of the 50MW Beinn an Tuirc 3 wind project after the Scottish Government updated guidelines on essential construction work during lockdown.³⁵ Workers from Ireland were ferried across to undertake this work without being tested or quarantined, leading to complaints from the community council that people were being put at risk.³⁶

The offshore wind industry does not have a good health and safety record. Based on figures produced by the offshore wind industry, the rate of accidents is twice as high in that sector than in offshore oil and gas.³⁷

4. SSE and Seagreen

The next major test in Scotland’s renewables contract merry-go-round is the Seagreen project in the Firth of Forth. Owned by Scottish and Southern Energy, but with a stake from French oil company Total,³⁸ it was recently successful in winning a ‘Contract for Difference’ from the UK Government. The £5.7 billion windfarm is one of the most significant construction projects ever undertaken in Scotland and will see up to 114 turbines being placed 16 miles off the Angus coastline.

Contracts for the project could be hugely important to the future of Bifab and CS Wind, but late last year, reports emerged that SSE want to

³⁴ <https://www.heraldscotland.com/news/18292882.cs-wind-exec-says-theres-no-concern-hies-scots-court-order-keep-going/>

³⁵ <https://renews.biz/60140/covid-19-scottishpower-restarts-beinn-an-tuirc-3-construction/>

³⁶ <https://www.heraldscotland.com/news/18431440.coronavirus-kintyre-health-alarm-revival-wind-farm-work-using-irish-workers/>

³⁷ Kardahji, N, *Prospect* (2020) ‘How do we kick start the next UK renewables boom?’ <https://prospect.org.uk/news/how-do-we-kick-start-the-next-uk-renewables-boom/>

³⁸ <https://www.energyvoice.com/otherenergy/225688/total-looks-to-bid-for-multi-million-stake-in-sse-scottish-wind-project/>

offshore the work to China’s Guangdong province.³⁹ More recent reports suggest this has been scrapped in favour of European sites, but Bifab would miss out.⁴⁰ In early June, the company announced a number of contracts, with Managing Director Jim Smith proclaiming it would see ‘the first green shoots of economic recovery along Scotland’s east coast’.⁴¹ While the turbines are to be manufactured in the Isle of Wight, no mention was made of where the jackets would be manufactured.

Early works on the project have begun and evidence has emerged that Fugro Marine, a Dutch multinational contracted to undertake survey work, have been paying Filipino seafarers \$3.40 per hour – far below the National Minimum Wage never mind the National Living Wage.⁴² Unfortunately, due to a number of loopholes and a lack of enforcement, this is commonplace in the offshore wind sector as detailed in the table below.

Operator	Vessel & Route	Basic pay	Flag of vessel	Rating Nationality⁴³
AllSeas	Pioneering Spirit, Brent Delta decommissioning project (completed May 2017)	£3.75 p.h.	Malta	Non-EEA
Heerema	Thialf, Murchison decommissioning project (completed July 2017)	\$45 per day	Panama	Filipino
Seacosco	Seacosco Yangtze Great Yarmouth-UKCS (Offshore Wind)	\$2.34 p.h. (Able Seafarer)	Marshall Islands	Filipino
Up Offshore	Up Agate (Sunderland, laid up)	\$3.61 p.h.	Panama	Indian
Manfill Limited	Fairline Surveyor, Barrow-Irish Sea (Offshore wind)	\$4.95 p.h. (Cook)	UK	Filipino
Manfill Limited	Fairline Surveyor, Barrow-Irish Sea (Offshore wind)	\$5.96 p.h. (Oiler)	UK	Filipino
Gulf Marine Services	GMS Evolution 6104, Blyth-UKCS (offshore wind)	\$2.44 p.h. (Able Seafarer)	Panama	Filipino

³⁹ <https://www.dailyrecord.co.uk/news/politics/outrage-jobs-scotlands-biggest-offshore-21123016>

⁴⁰ <https://www.thecourier.co.uk/fp/business/business-news/1350992/bifab-to-miss-out-on-significant-contract-for-seagreen-offshore-wind-farm/>

⁴¹ <https://www.energyvoice.com/opinion/243584/seagreen-wind-project-to-create-400-jobs-and-bring-1bn-benefit-to-scotland-sse-director-says/>

⁴² <https://www.energyvoice.com/otherenergy/211782/contractor-in-hot-water-for-mistakenly-underpaying-workers-at-giant-scottish-wind-project/>

⁴³ Non-UK nationalities being paid below the UK National Living Wage of £8.21 per hour (25 years and over).

Horizon Geosciences	Horizon Geobay, Invergordon-Inch Cape Wind Farm	£4.20 p.h. (Able Seafarer)	Panama	Filipino
Fugro	Fugro Pioneer, Aberdeen-Seagreen, Wind Farm	\$3.40 p.h. (Able Seafarer)	Bahamas	Filipino
Cable Enterprise	V Ships, Southampton-Channel (cable laying)	\$3.11 p.h. (Cook)	UK	Filipino
Cable Enterprise	V Ships, Southampton-Channel (cable laying)	\$3.85 p.h. (Engine)	UK	Filipino
Niem N-Sea	Aberdeen-UKCS, Offshore Supply	\$3.47 p.h. (Steward)	Bahamas	Portuguese

Source: RMT analysis based on ITF Inspections & individual contracts of employment

Recommendations

It is clear that policy change from Government is needed. Below we make key recommendations for the Scottish and UK Government, to ensure that future development in the LCRE benefits workers and communities in Scotland and the environment.

1. Ensure Scotland's Publicly Owned Energy Company invests in renewable generation

A successful energy transition relies on major investments and infrastructure upgrades over the coming 15 years. The UK Government estimates 95 GW of new capacity is required at a cost of £110 billion, while others suggest the cost may be more like £150 billion.⁴⁴ Unfortunately, the private sector is not delivering this – clean energy investment has collapsed since 2015.⁴⁵

Ultimately, in a capital-intensive industry like energy, especially where new infrastructure is required like offshore wind, public companies have an edge, as it is far more cost-efficient for the public sector to borrow than it is for the private sector. That explains why the majority of the UK's offshore wind sector is owned by the public sector (unfortunately it is just

⁴⁴ Mika-Minio Paluello (May 2018) Presentation to Workshop on Publicly Owned Energy Companies, Edinburgh <https://heatandthecity.org.uk/wp-content/uploads/2018/05/Mika-Minio-Paluello-Publicownership-of-large-energy-infrastructure.pdf>

⁴⁵ Environmental Audit Committee (2018) 'Green finance: mobilising investment in clean energy and sustainable development' <https://www.parliament.uk/business/committees/committees-a-z/commonselect/environmental-audit-committee/inquiries/parliament-2017/green-finance-17-19/>

not the UK public sector). It is even more the case post-coronavirus with the cost of public borrowing at record lows.

The Scottish Government has proposed establishing a publicly owned energy company, but the Government's outline business case is for a retail supplier to buy and sell energy from the existing market. This will not change the regeneration mix and is likely to fail, given the small profit margins in retail. This is the most inopportune time possible to launch a new retail supplier. The energy supply sector is in crisis. Only last month, OVO Energy, which bought the retail division of SSE in January, and is the second largest energy supplier in the UK, announced the loss of 2,600 jobs, mostly in Scotland, to cut costs. In the past year, 20 smaller energy supply companies have closed.⁴⁶ The sensible government intervention in energy supply, would be for the UK Government to take the entire supply sector into public ownership by taking over the 'big six'.⁴⁷ Current proposals are a bit like changing the person who delivers your pizza – but not the restaurant, the chef, or the ingredients – you still end up with the same pizza.

Rather than focus on supply, Scotland's publicly-owned energy company must be established as a generation company that is able to borrow to invest in new renewable energy projects, in partnership with private sector partners if needed. It should also be open to partnerships with local authorities (who have access to land and buildings) to establish generating subsidiaries. Local authorities in turn should be facilitated to develop partnerships with other public bodies, communities, co-ops and local private companies to maximise renewable generation with local benefits.

Given the cost of public borrowing is very cheap at the moment, the use of pension funds, which require a return, is perhaps not ideal. However, where long-term investment is needed and a return is likely, there may be a case for the Scottish Government creating investment vehicles/projects for public sector pension fund investment.

2. Establish a National Infrastructure Company

As emphasised by the Infrastructure Commission, there is a clear need to ensure infrastructure is focussed on the move to a net zero carbon and

⁴⁶ <https://www.bbc.co.uk/news/uk-scotland-scotland-business-52714205>

⁴⁷ UNISON (2019) 'Power to the People'
<https://www.unison.org.uk/content/uploads/2019/06/UNISONenergypublicownershipreport0619.pdf>

inclusive economy.⁴⁸ As well as energy, this is crucial in terms of transport, heat and buildings. Provisional research for the STUC has outlined how a stimulus package worth £13 billion could create 140,000 jobs in the next two years.⁴⁹ Given falling rates of investment, higher costs of borrowing and the need for a planned and integrated economy-wide approach, this cannot be delivered by the private sector.

The Infrastructure Commission has been asked to consider the potential for the Scottish Government to establish a National Infrastructure Company. Informed by a clear, long term industrial strategy for manufacturing, this could be a crucial actor in designing, investing and managing low-carbon infrastructure developments. Work undertaken for Commonweal has outlined a model for how this might work, through a body with direct Ministerial accountability partnering with local authorities (not subject to the same borrowing limits as the Scottish Government) in order to design, build, finance, manage and own facilities across Scotland.⁵⁰

One obvious priority for this body would be improving the energy efficiency of buildings. This is the most cost-effective emissions reduction policy with extremely short pay-back times. It also provides the most jobs, given the labour-intensive nature of the manufacturing and installation of energy efficient measures. By its very nature, improving the energy efficiency of buildings is territorially located throughout Scotland, benefiting employment in rural areas, as well as in areas of high multiple deprivation, and lending itself to partnership work with local authorities. Improving the energy efficiency of homes also provides a range of social benefits, reducing fuel poverty and improving health outcomes by reducing excess winter deaths and childhood asthma.

Beyond buildings, investment in cycling and walking infra-structure generates more jobs mile-for-mile than road, and projects for extending cycle paths and walking routes should be prioritised.⁵¹

The Caley Railworks could be taken into public ownership, building new, low and zero emission railway stock and electrifying the mainline network,

⁴⁸ Infrastructure Commission for Scotland (2020) 'Phase 1: Key findings report – A blueprint for Scotland' <https://infrastructurecommission.scot/page/key-findings-report>

⁴⁹ Transition Economics for STUC (2020) www.stuc.org.uk/files/Scotland_Report.pdf

⁵⁰ Commonweal (2017) 'Building Scotland's future now: A new approach to financing public investment' <https://commonweal.scot/policy-library/building-scotlands-future-now-new-approach-financing-public-investment>

⁵¹ Transition Economics for STUC (2020) www.stuc.org.uk/files/Scotland_Report.pdf

to ensure we have a first-class public transport system to rival and reduce private car use. It is widely accepted that electrification is the viable green energy source for long distance/mainline trains, whereas hydrogen and battery cell technology are suited to the different demands on branch and rural lines. Re-constituting the facility at St Rollox to meet this new demand would be a major step forward in securing a new generation of skilled rail engineering jobs in Scotland for the long term.

Public ownership of the Ferguson Marine Engineering facility on the Lower Clyde also presents the Scottish Government with excellent opportunities to invest in green shipping technology, for the new CalMac ferries fleet and the increasingly diverse range of vessels required in the North Sea.

The lack of standardisation of low and zero emission fuels across the shipping and other transport sectors will require state investment for projects using hydrogen, battery and other low or zero emission fuels. The Scottish National Investment Bank must play a role here.

3. A moratorium on developments unless they deliver jobs locally and support fair work

Crown Estate Scotland has recently announced plans to lease Scotland's seabed for offshore wind projects estimated to be worth £8 billion.⁵² If private and overseas developers are going to be given control over Scotland's natural resources to make a profit, then the quid-pro-quo must be that they bring economic value and support employment locally. If they do not, developments should not be given consent.

A report by the United Nations Conference on Trade and Development: Local Content Requirements and The Green Economy highlights that local content provisions are common in other parts of the world:

“Among the developed countries, Canada (in Ontario and Quebec), the EU (in Spain, Italy, France, Greece and Croatia) and the United States have used local content requirements in some form to stimulate the growth of renewable energy projects”.⁵³

There are various mechanisms for this in Scotland.

⁵² Crown Estate Scotland (2020) 'ScotWind Leasing Seabed leasing for new offshore wind farms' <https://www.crownestatescotland.com/media-and-notice/news-media-releases-opinion/green-light-for-multi-billion-pound-investment-in-scotland-net-zero-economy>

⁵³ https://unctad.org/en/PublicationsLibrary/ditcted2013d7_en.pdf

In order to secure an 'option agreement' to investigate an offshore wind site from Crown Estate Scotland, developers have to submit a Supply Chain Development Statement, outlining how they plan to engage with and utilise the supply chain to develop their projects.⁵⁴ Once the project has been taken through planning, the extent to which the supply chain commitments have been achieved will be assessed before granting a lease and, if appropriate, contractual remedies will be applied under the Option Agreement. While this process could be used to push up standards, there is no requirement to meet any level or location of supply chain impact and they will not be used in the assessment or scoring of applications. Effectively, a supply chain statement sourcing content from Indonesia will be treated in the same manner as a supply chain statement sourcing content from Scotland. This fails to "ensure that our renewables supply chain benefits from the expansion of offshore wind in our waters, leading to the creation and retention of Scottish jobs" which the previous Scottish Government Economy Secretary promised at the start of the year.⁵⁵

Having been awarded option agreements, developers still need to secure other regulatory consents, including from Marine Scotland. Under section 36 of the Electricity Act (1989), applications to build and operate power stations within the Marine Environment in Scotland are made to the Scottish Ministers for consent. Applications are considered by Scottish Ministers where they are in excess of 1 MW for offshore wind farms. Such applications cover new developments, as well as modifications to existing developments. Applications below these thresholds are made to the relevant local planning authority. Applications to Scottish Ministers for power stations need to be accompanied by an Environmental Statement, which describes the effects the development is likely to have on the environment.

Environmental impact assessments should be used to consider the carbon costs of transportation of content. As the NNG windfarm project shows, the carbon emissions associated with shipping turbine jackets from Indonesia to Fife can be hugely significant. The environmental impact assessments for new developments must, therefore, account for these hidden carbon costs before permission is granted.

⁵⁴ Crown Estate Scotland (2020) 'ScotWind Leasing Seabed leasing for new offshore wind farms' <https://www.crownestatescotland.com/maps-and-publications/download/476>

⁵⁵ <https://www.gov.scot/news/offshore-wind-summit-1/>

It is not just the quantity of jobs that is important, it is also their quality. Fair work, an aspiration the Scottish Government say they are committed to, requires effective voice through a trade union, but currently much of the low-carbon sector is characterised by exploitative working practices and a failure from companies to recognise trade unions. Worker exploitation in Scotland's Offshore Wind Supply Chain must be prevented by good employment standards agreed with trade unions and applied at the initial planning stage with developers and their network of contractors and sub-contractors. In addition, the offshore energy sector and supply chain must be covered by sectoral collective bargaining agreements and fully enforced employment and health and safety legislation.

Training programmes, including those supporting the diversification of jobs and skills from the offshore oil and gas industry will also be an essential feature of Scotland's capacity to build, install and maintain the new generation of offshore wind farms required to ensure a just transition to a net zero carbon economy by 2045. Existing standards used by OPITO in the offshore oil and gas industry should be adapted by Government and delivered as the standard for offshore wind to avoid duplication, which is already a barrier to offshore workers seeking to transfer from offshore oil and gas to offshore wind. Addressing the demographic deficit of an ageing workforce and tackling the gendered occupational segregation within manufacturing and energy sectors, which is likely to impact on the level of work based skills and experience within these sectors over the next 10 years, should also be addressed through significant investment in apprenticeships.

Should developers not commit to providing jobs locally, not undertake environmental impact assessments covering transportation of materials, or fail to recognise unions, they should be prevented from benefiting from Scotland's natural resources.

4. Replace the Contract for Difference subsidy mechanism

Contracts for difference are the UK Government's main mechanism for supporting low-carbon electricity generation. Government auctions off renewable projects to private developers to produce energy for fifteen years. It effectively establishes a guaranteed, risk-free, publicly subsidised income stream for developers. Contracts are awarded solely on price and there is no requirement to create local employment or benefit local communities. As with the offshore oil and gas sector, offshore wind projects are attended by a complex, three-tiered supply chain which can be harder to regulate. The contracts serve to push risk down the supply

chain, leading to multiple levels of sub-contracting. It leaves outsourced precarious workers at the bottom, often unable to negotiate with the project owner.

This funding mechanism is funded by a levy on consumers' bills rather than through general taxation, disproportionately impacting on low-income households. The proportion of a typical domestic electricity bill devoted to green subsidies grew 70% between 2015 and 2019, and by 2025 is forecast to grow 150% on 2015 levels.⁵⁶

Reducing this complexity, as the TUC has called for,⁵⁷ would improve workers' rights and allow the contractor workforce greater redress from the developer/contract holder. The UK Government's Contracts for Difference process should be replaced with an offshore licensing system that places local employment, trade union recognition and public control at its heart. This should be funded through progressive taxation rather than a flat levy on household bills.

Conclusions

This report has outlined the failure to create jobs in our LCRE economy, due to a sector dominated by private and overseas interests that import goods and services rather than creating employment locally.

Moving forward, there are two future scenarios to meeting climate targets.

In the first scenario, we continue to throw money at the market. While this might help meet Scotland's climate targets in the short term, in the longer-term it will mean: we fail to create an industrial base in the LCRE economy; employment will continue to flatline; economic inequality will increase as wealth from Scotland's resources is captured by corporations and unaccountable overseas interests; emissions associated with the manufacture of low-carbon energy content will increase as content is shipped long distances from countries with poor employment conditions and less stringent climate standards; and, communities and workers across Scotland will lose all faith in the concept of a Just Transition.

⁵⁶ Kardahji, N, *Prospect* (2020) 'How do we kick start the next UK renewables boom?' <https://prospect.org.uk/news/how-do-we-kick-start-the-next-uk-renewables-boom/>

⁵⁷ TUC (2018) 'Shifting the Risk' <https://www.tuc.org.uk/research-analysis/reports/shifting-risk>

The second scenario is one in which Scotland's renewable resources are held in common through a publicly owned energy company and a national infrastructure company, which benefits from the cheap cost of borrowing to invest in renewable generation and the Scottish supply chain; where planning consents and subsidies are only granted on condition of developers providing work to local contractors; collective bargaining agreements with trade unions in Scotland are mandated; and where workers and communities have real power to hold governments and corporations to account for social, economic and environmental outcomes.

The second scenario is the future that should be supported by all who are serious about tackling climate change and reducing inequality.

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