



## Response to the Scottish Government's Energy Strategy and Just Transition Plan (ESJTP) consultation

May 2023

### Key points

- The ESJTP fails to meet its stated purpose and falls short of providing the concrete Routemap necessary to deliver a just transition of Scotland's energy system.
- With energy bills soaring, climate targets missed, and job promises broken; more targets without the detail of how they will be realised is unacceptable.
- A public energy company and greater local authority ownership of energy is essential for retaining the benefits of the energy transition, supporting local supply chains, and creating jobs across Scotland.
- For workers in the sector today, there can be little faith that the coming transition will be well-managed and protect their livelihoods based on this ESJTP. For communities, it barely touches upon the impacts they can expect.
- The ESJTP fails to outline basic steps necessary to ensure a just transition for offshore oil and gas workers through declining production of North Sea oil and gas including funded transition support, training programmes, or job and skills audits.
- There is little serious analysis for how future energy supply will correlate with demand, and the vital challenge of energy storage in a net zero energy system is not addressed.
- The ESJTP is a continuation of the failed approach of prioritising inward investment and private ownership in the energy sector. There is insufficient detail for how the Scottish Government will deliver on energy ambition while creating jobs and retaining benefits across communities in Scotland.

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## Context

Our energy system is failing to serve the people of Scotland. Energy bill increases are estimated to have pushed 35% of households in Scotland into fuel poverty from October 2023.<sup>1</sup> From oil and gas companies like BP, to distribution network operators like Scottish Power and Scottish and Southern Energy, energy companies have seen huge rises in profits just as massively inflated energy prices drop through people's doors.

The market has failed to deliver affordable or secure energy, and privatised renewable projects have failed to deliver on job promises. A decade of policy based on more competition and opening natural resources and monopolies to privatisation has failed. Now households are facing a cost-of-living crisis thanks to a regime that has embedded financial profiteering. A consistent and large majority of the public, across the political spectrum, supports taking energy back into public hands and this should be seen as a key component of ensuring our future energy system serves workers and the climate.

As we look to tackle the climate crisis by building our renewable energy capacity and low carbon solutions across the economy, a rapid transformation of our energy system is essential. The Energy Strategy and Just Transition Plan (ESJTP) should have provided the concrete steps the Scottish Government is taking to deliver this transformation, but it has fallen far short.

Despite criticisms from the Just Transition Commission, UK Committee on Climate Change and Audit Scotland, it remains unclear how stated ambitions will be realised.<sup>2</sup> With energy bills soaring, climate targets missed, and job promises broken; more targets without the detail of how they will be realised is unacceptable.

The STUC will continue to demand necessary steps to deliver a just transition from both the UK Government, Scottish Government, and local authorities. This response focuses on changes the Scottish Government must make to the ESJTP to turn their rhetoric into reality.

## Vision and Route Maps

The vision laid out in the Energy Strategy and Just Transition Plan could bring significant benefits to people across Scotland. There are opportunities to secure thousands of new jobs while reducing people's energy bills, making travel more affordable and cutting emissions. However, none of these outcomes are guaranteed and we are way off course at present.

The Scottish Government's Energy Strategy and Just Transition Plan (ESJTP) falls short of providing the concrete and detailed path necessary. The ESJTP does not lay out the basics for an energy strategy, which should include the anticipated levels of demands for and supplies of energy in their various forms. We should expect to see what will be done, when and how, within a range of probabilities, regarding electrification and decarbonisation in each sector; the sources of the required growth of renewable energy, in particular electricity; and the trajectory for oil and gas

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<sup>1</sup> Based on the Scottish Government modelling of fuel poverty with the Energy Price Guarantee at £2,500: <https://www.parliament.scot/chamber-and-committees/questions-and-answers/question?ref=S6W-14736#:~:text=With%20the%20increase%20in%20the,will%20be%20in%20fuel%20poverty.>

<sup>2</sup> Just Transition Commission: <https://www.gov.scot/publications/just-transition-commission-letter-to-cabinet-secretaries-14-april-2023/>, UK Committee on Climate Change: <https://www.theccc.org.uk/2022/12/07/scotlands-climate-targets-are-in-danger-of-becoming-meaningless/>, Audit Scotland: <https://www.audit-scotland.gov.uk/news/government-must-improve-climate-set-up>

production. The current document is a re-statement of existing policies, and on the most important matters, it asks questions rather than taking positions.

Crucially, the ESJTP pays little attention to the implications of an energy transition on the existing workforce. It is insufficient to assume that because the Scottish Government predicts new jobs will be created in the low carbon economy, this will deliver a just transition. Providing the certainty that is necessary for workers faith in just transition requires clear standards on Fair Work or union rate, accessible information on the skills profile of predicted jobs and those held by existing workers, and the details of upskilling and transition support for those who will be affected by transition.

The ESJTP should have provided the step change demanded by trade unions and workers across the country. The decarbonisation which has taken place in Scotland so far has largely come from the closure of fossil fuel power stations and the continuation of deindustrialisation through offshored manufacturing. The beneficiaries of the growth in renewable energy have been multi-national companies, including many of our European neighbours state-owned companies. Reliance on the market to deliver just transition objectives has failed. There is an urgent need for the Scottish Government to take control of the transition with comprehensive policy roadmaps, investment, and greater public ownership.

Since the 1970s when the just transition concept emerged through the trade union movement, we've repeatedly seen the protection of the environment and our local communities led by workers. In the absence of adequate policy and investment from the Scottish Government, workers through their trade unions will continue to organise within their industries to drive the delivery of a just transition from the bottom-up; creating transition plans, securing investment for communities, and democratising our economy through public ownership and greater voice for workers.

## Preparing for a Just Energy Transition

The ESJTP states that purpose of Just Transition Plans is to:

- maximise the economic benefits of Scotland's transition to net zero, including ensuring a pipeline of skills for net zero jobs.
- ensure fair distribution of opportunities, benefits, and risks, including consideration of community benefits, and how to adapt to the impacts of climate change.
- ensure an inclusive and fair process via co-design with stakeholders, trade unions and the public.

The draft ESJTP fails to serve these purposes and preparations are insufficient. Specifically, there is little serious development beyond existing policies for securing new jobs on Fair Work or union rate terms in the energy sector. It is assumed that the increase in renewable capacity will lead to a distribution of benefits and risks despite the track record of failure in this approach so far. There is no development of adaptation policy whatsoever, with just a commitment to create a different policy document to be published in 2024. These sectoral Just Transition Plans must consider the consequences of climate impacts for workers and surrounding communities as relevant to the sector, as well as what changes may be necessary for the infrastructure and sector to become more resilient to a changing climate.

To turn the ESJTP into a Just Transition Plan that meets the purpose stated and provides the detailed steps necessary to begin a just energy transition, there are key omissions to be addressed and further development necessary in line with the three stated purposes.

## Workforce planning

The ESJTP considers the overall trends anticipated across the energy sector as oil and gas production declines and low carbon activity increases. It states that there could be an overall increase in jobs as early as the mid-2020s. However, beyond forecasts for overall job figures across the sector there is no detail for how the Scottish Government will secure a just transition for energy workers.

The actions which the Scottish Government and others will have to take to ensure that energy transformation does in fact lead to the creation of new jobs in Scotland are not set out; nor is there any statement about how they will ensure that they will be secure and well-paid. The absence of significant attention to public ownership, conditionality, fair work, and collective bargaining in a document which is meant to describe a just transition, calls into question whether the idea of a just transition is properly understood.

### **In addition to overall job figures, the ESJTP should provide:**

- Analysis of the forecast quality of these jobs in terms of pay and Fair Work or union rate, as well as an outline of how the Scottish Government will use its power to ensure collective bargaining coverage and high-quality work in the sector.
- Estimations for the number of workers currently in the energy sector, their age, their roles, and their existing skills.
- A forecast for the skills required in 2030 and 2045 in the energy sector, how these overlap with the existing skills of energy workers, and what targeted and accessible support is being created to facilitate their transition.

The existing programmes restated in the ESJTP, including the Green Jobs Workforce Academy, are not useful in their current form and ought to be redeveloped based on the needs and expectations of workers in the energy sector. Through their unions, workers should be involved in the design of the training and career development processes needed. The contributions of employers to paying towards the upskilling of their workforces will need to be spelt out and tied down.

### **Immediate recommendations for workforce planning in the Energy Strategy should also include:**

- Through Skills Development Scotland (SDS), conduct and regularly update analysis forecasting long term trends in skills demand in the context of the climate transition.
- Review and expand funding available to Further Education colleges to develop courses covering emerging skills gaps and shortages for the climate transition in line with this long-term assessment.
- Launch a targeted retraining funding initiative for oil and gas workers, available to all workers regardless of their employment status, with fast-tracked support available to those under threat of redundancy. Employers who want to participate should be required to demonstrate that they are supporting jobs with pay and conditions in line with national collective agreements (or Fair Work where those agreements don't exist). Courses and qualifications should include Recognition of Prior Learning processes.
- Through the Green Jobs Workforce Academy or SDS, provide tailored advice to oil and gas workers that takes into account their experience without 'going back to the start'.
- Trial and institute a paid time off to train support scheme specifically for fossil fuel workers, or more broadly for workers in sectors shrinking due to major technological change.
- Skills programmes (e.g., apprenticeships) to attract new workers into the energy industry should follow recruitment best practice and prioritise promotion to attract historically

marginalised groups, including women, BAME people, and disabled people, which where appropriate can include quotas and recruitment targets.<sup>3</sup>

There are currently no training schemes that provide workers with paid time off to retrain (unless the employer offers it) which will exclude a large proportion of the workforce who work on ad hoc contracts. Workers also face costly training barriers when individually switching industries.

Workers throughout the transition should also have the freedom to choose to retrain to other industries (not just within energy). A potential solution is a government-backed jobs guarantee, done by:

- Supporting the conversion of entire supply-chain workplaces to service zero carbon industries, where possible
- Guaranteeing 90% of workers' wages while they retrain
- Obligating companies to facilitate workers' redeployment, or else pay a levy.
- Guaranteeing wages for a defined period for workers who leave the industry due to its decline.
- Instituting a general Jobs Guarantee (across the economy) for anyone in long-term unemployment, particularly for badly impacted areas

**In this context, the ESJTP should commit to exploring a general Jobs guarantee** for the long term unemployed on at least a Living Wage for anyone (regardless of occupation) who has faced unemployment for six months or more, with a focus on retraining in line with the needs of the climate transition.

## Public ownership, community wealth, and investment

Beyond the workforce planning, the ESJTP uses GVA as a secondary way to consider the benefits of reaching net zero in the energy sector. This metric alone is not useful for considering how to maximise economic benefits for workers and communities since it includes company profits alongside pay and local economic benefits. For workers in the sector today, there can be little faith that the coming transition will be well-managed and protect their livelihoods based on this ESJTP. For communities, it barely touches upon the impacts they can expect.

### **The ESJTP should:**

- Set out the predicted economic benefits through the transition and policy to ensure these will be retained within Scotland and spread across communities, and not extracted for profit.
- Present the anticipated risks for local communities particularly in areas like Aberdeen of the transition and targeted policy to ensure risks are mitigated.

Securing benefits, as well as mitigating risks, will require a greater degree of control and intervention by the Scottish Government. Yet there is no reference to the essential step of creating a Public Energy Company, supporting local authorities to deliver low carbon heat, or ensuring public finance and equity stakes across the transition. Public ownership in energy is key to achieving a just transition by supporting domestic manufacturing, providing clear routes to transition for workers and in ensuring benefits are retained and spread throughout communities.

It is already clear that those benefitting from decarbonisation to date have been large multinational renewable companies, not workers and communities across Scotland. Research commissioned by the

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<sup>3</sup> [https://stuc.org.uk/files/Policy/STUC\\_Green\\_Jobs.pdf](https://stuc.org.uk/files/Policy/STUC_Green_Jobs.pdf)

STUC showed that the Scottish Government's ambitions for the roll-out of renewable energy could create up to 70,000 Scottish jobs, or it could create less than 9,000.<sup>4</sup> The difference depends on the policies put in place by government. Without an immediate change in approach, the lower estimate is far more likely as profits will continue to flow out of Scotland to multi-national energy companies with little stake in creating jobs and building local supply chains domestically. **The ESJTP should commit the Scottish Government to establish a Public Energy Company to drive new renewable generation projects while securing work in domestic supply chains, promote the development of low carbon and district heating, and supporting municipal energy companies across local authorities.**

There are repeated references to the importance of investment for delivering a transition to net zero in the energy sector, however there is ultimately no real detail of what is required or where it will come from. The Scottish Government's investment plan over this parliament, it says, amounts to almost £5billion; Annex I is a list of energy sector funding and finance. There is no suggestion that these will be sufficient – but a search for an assessment of the total sums needed across the economy, or individual sectors, will be in vain – let alone timescales. Much larger flows of investment from both public and private sectors will be needed. **The ESJTP should include fiscal projections; and plans to both incentivise and require private investment in the enterprise-level investments needed to transform every sector so that they can hit our emissions reductions targets.**

### Co-design and inclusion

The commitment to co-design just transition plans is vital for their legitimacy amongst workers and affected communities, as well as their likelihood of success. Unfortunately, the process for developing the ESJTP was not sufficiently inclusive or accessible. For those who were able to participate in the earlier consultation process, it is not clear how their engagement has shaped the plans content. Those most likely to be negatively affected by transition were not central to the process and there will be limited recognition of the input given by those who were able to participate.

Beyond those most likely to be affected by the transition, there is also insufficient consideration of wider equality issues within the energy sector, including diversity of the workforce and how this will be addressed. For example, disability and race are mentioned once alongside a few scattered references of women. Important questions about the impact of changes in the cost of energy on poor and vulnerable households are likewise neglected.

Workers and communities should be actively involved in driving the transition, not just seen as passive potential beneficiaries. A just transition requires ongoing participation in the move to net zero, not just consultation. Greater levels of collective bargaining in the energy sector are vital as well as increasing local authority and community ownership of energy projects to further democratise the energy system. **Future Just Transition Plans must involve meaningful worker-led design of plans for their sector, as well as clear recognition and involvement of marginalised groups whose future are or will be affected by changes in the sectors. The impact of their involvement in determining policy must be demonstrated.**

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<sup>4</sup> [https://stuc.org.uk/files/Policy/STUC\\_Green\\_Jobs.pdf](https://stuc.org.uk/files/Policy/STUC_Green_Jobs.pdf)

## Chapter 3- Energy supply- Scaling up renewable energy

### Targets, planning and monitoring

With regards to targets and monitoring for energy supply, the ESJTP does not provide what we would expect out of a strategy. There are broad overviews of each potential renewable sector, but targets are not built into a broader supply side strategy that manages the reduction of fossil fuels and growth of renewables to meet a selection of demand projections. Stating overall targets for particular technologies and leaving the private sector to deliver them is not a strategy.

This section will cover key omissions from the ESJTP's supply side strategy, focusing on offshore wind, job creation, workers' rights, community benefit and a just transition for offshore oil and gas workers.

### Scotland's energy future

Over the coming decades and with the right energy strategy, Scotland could see:

- An enormous expansion in renewables generation capacity - primarily offshore and onshore wind, tidal stream, and wave power - to meet growing energy demand and for export.
- Significant quantities of zero-carbon hydrogen produced through electrolysis, used to power transport (HGVs, ferries, trains), heavy industry, some heat, and storage for electricity to cope with renewables intermittency.
- A thriving domestic supply chain for wind energy, and both domestic and export supply chain for tidal stream, wave, floating offshore wind and hydrogen electrolysis technology.
- Significant expansion in energy storage, including hydro storage.
- Buildings on the gas grid transitioned to district heating or hydrogen, and the electricity network reinforced and expanded, to support significant electrification of heat and transport and expansion of renewables.
- Development of Carbon Capture and Storage.

The SSTUC's [Green Jobs in Scotland](#) 2021 report recommended three shovel-ready projects costing £630 million in public investment that can create an immediate term boost of 9,000 direct and supply-chain jobs for two years (Table 2.3).

**Table 2.3**  
**SHORT-TERM INFRASTRUCTURE PROJECTS FOR ECONOMIC RECOVERY: ENERGY**

Project	Score	Scotland jobs multiplier (direct & supply chain, jobs / £ million invested)	Public Investment (£ billion)	Avg jobs (direct & indirect) over 2-year stimulus period	Outcome
R&D for hydrogen electrolysis, tidal stream and wave energy	17	15.90	0.20	1,908	Develop Scottish technology for this decarbonisation pathway.
Upgrade ports and shipyards for offshore wind supply chain	17	22.24	0.33	5,782	One new port capable of handling towers and foundations for the upper range of wind turbine size; and upgrades to existing ports and shipyards.
Build manufacturing facilities for offshore (including floating) wind turbines	15	16.00	0.10	1,325	Campbelltown wind turbine towers factory upgraded to handle offshore contracts. A new nacelle factory built.
<b>Total</b>			<b>0.63</b>	<b>9,015</b>	

Source: Transition Economics analysis



These are only three examples of immediate projects that could be funded by public investment. A key policy question for the future direction of Scotland's energy mix is what method of electricity generation to use to address the intermittency of renewable energy sources. With the estimated levelised cost of wind energy projected to stay below that of gas power stations, wind energy is hard to rival as the mainstay of Scotland's future power supply.

But the combination of intermittency in wind levels and fluctuations in demand for electricity - both seasonally and daily - mean that there is a need for electricity sources that can either produce a baseload constant or more flexible "on-demand" supply. Hydro is and will remain a significant zero-carbon source but cannot resolve the challenge alone.

**The ESJTP should, as stated above, provide projections for anticipated supply and demand of different forms of energy. The strategy should include answers to what a diverse energy mix looks like in Scotland and potential solutions to storage questions being pursued.**

With the right policies, Scotland's transition to a low-carbon economy could create up to 367,000 jobs. However, without the right policies, job creation could be less than 131,000. The [Green Jobs in Scotland](#) report offers energy balancing technology options and models of long-term job creation opportunities in decarbonising energy.<sup>5</sup>

The considerable attention to skills in the document implies that the ESJTP believes that supplying skills for jobs we assume will materialise is enough. In reality, our renewable energy industry is currently dominated by multinational companies which offshore jobs (and the related emissions) overseas. A planned energy transition necessitates major changes in employment patterns and skills demands, as well as substantial support to help workers whose job roles may be reduced or end entirely.

### Job creation in onshore and offshore wind

As an example of the need to address skills, ownership, and quality job creation together, we can look to Scotland's experience with onshore and offshore wind.

The most recent employment figures show that between 2020 and 2021 there was a rise in employment in Scotland's Low Carbon and Renewable Energy (LCRE) economy of 36%, from 20,700 to 28,300. By comparison, there have been substantially higher increases in turnover, the total income made by businesses in the sector, of 67%.<sup>6</sup>

Despite the increases in employment and turnover overall, the sectoral analysis reveals that increases in jobs are spread across several areas while turnover is largely concentrated in onshore and offshore wind. 80% of the £3.5billion increase in LCRE turnover is from onshore and offshore wind. These two sectors now account for 53% of turnover in the LCRE economy, but only 23% of total jobs.

We are beginning to see a rapid rise in turnover, particularly within offshore and onshore wind, that is not matched with proportionate increases in jobs. The consequence is that Scotland is increasingly seeing fewer jobs per million pounds of turnover in the LCRE economy than at any other time on record. In offshore wind, this has plummeted from more than seven jobs per million pounds of turnover, to just over one.

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<sup>5</sup> [https://stuc.org.uk/files/Policy/STUC\\_Green\\_Jobs.pdf](https://stuc.org.uk/files/Policy/STUC_Green_Jobs.pdf)

<sup>6</sup> For figures and further analysis of the ONS LCRE 2021 data, see Appendix 4.

The widening gap between jobs and turnover shows the structural weaknesses of this sector. Offshore wind specifically reveals the consequences of a natural resource opened up to profit extraction for multinational companies. The potential 25GW of new offshore renewable capacity through ScotWind leasing will mean turnover can be expected to continue to soar for diminishing jobs and community benefits.

This is a failure of industrial policy that means workers and communities in Scotland do not benefit from Scotland's natural resources. It has serious implications not only in terms of jobs but also in terms of tax revenues, transparency, and economic democracy.

**Scotland can do better. A proper industrial strategy considering procurement, planning, licencing powers, public ownership, and investment must be pursued if we are not to entrench these failures further.**

The Energy Strategy should direct the Scottish Government to:

- Establish a Publicly Owned Energy Company with a remit including leading onshore and offshore renewable energy generation projects.
- Explore the potential to take equity stakes within projects licensed during the first round of Scotwind and ensure a minimum stake within future rounds.
- Direct investment into the renewables supply chain, particularly towards ports and infrastructure necessary for wind projects, through the Scottish National Investment Bank.

### Supply chain development

With regards to reaching offshore wind targets, job creation has failed to materialise in manufacturing, with key components including foundations, towers, nacelles, and sub-stations imported from other countries. Part of the problem is the private ownership of ports in the UK and Scotland specifically, unlike other European countries which hold significant public stakes in their ports. Decades of underinvestment by private owners has left Scotland's engineering and maritime support infrastructure with limited capacity and unable to scale up quickly.

Private owners of ports or manufacturing sites will only invest in upgrades when there are signed contracts with offshore wind developers, and then only upgrade in line with imminent guaranteed wind farm deployment – limiting economies of scale and the potential to pre-emptively develop capacity. The Free Ports agenda will exempt ports from existing protections, which will in turn weaken workers' rights and jobs quality, undermine environmental protections, and reduce community benefits. It has not yet been explained how the Scottish Government will ensure 'Green' Free Ports are substantively different to those in the rest of the UK.<sup>7</sup>

Despite the large offshore wind project pipeline in Scotland, there is not a single major 'hub' port in Scotland providing co-located assembly and fabrication on a scale comparable to the facilities that have been developed in the past 10 years in Denmark, the Netherlands or Germany, where there is much more public ownership of and investment into ports.<sup>8</sup>

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<sup>7</sup> For further information regarding concern over the development of Free Ports and Green Free Ports, see: [https://www.unitetheunion.org/media/3649/freeports-briefing\\_080221.pdf](https://www.unitetheunion.org/media/3649/freeports-briefing_080221.pdf)

<sup>8</sup> <https://www.crownstatescotland.com/news/new-research-on-net-zero-opportunities-for-scotlands-ports>

There are potential offshore wind construction and manufacturing hubs in North East Scotland (including Aberdeen, the Cromarty Firth and the Inner Moray Firth), North West Scotland (Arnish and Kishorn), and Forth and Tay (including Methil, Dundee, Rosyth and Leith).

**The ESJTP should take key strategic decisions now to:**

- Clarify that to achieve its existing core mission of supporting “the just transition to net zero emissions by 2045”, the Scottish National Investment Bank can use an active ownership approach towards companies in which it has invested, to encourage greater domestic procurement and more local supply chains.
- Direct the Scottish National Investment Bank to build on its investment into the expansion of Aberdeen Harbour by investing into and taking equity stakes in more Scottish ports.<sup>9</sup> These should prioritise brownfield sites and incorporate community demands for siting.
- Expand the scale of the Scottish National Investment Bank, enabling it to make more and larger investments into transition infrastructure.
- Use the Scottish National Investment Bank to build on UK investment schemes supporting offshore wind manufacturing and retooling, with additional Scottish support schemes.
- Create public stakes in manufacturing (i.e. rather than providing grants to businesses, invest and take equity stakes in manufacturing sites). Maintaining active equity stakes can ensure that job quality remains high, and procurement is supporting further local content from supplier industries.
- Add conditionality to licensing rounds (administered by the Crown Estate and Crown Estate Scotland), to boost investment into domestic supply chains by making licenses conditional on creation of local supply chain jobs.
- Beyond future licensing rounds, strict conditionality should be applied throughout the supply chain to all grants, procurement contracts, permissions and planning decisions and other forms of government support.

### Tidal stream and wave power

Unlike wind power (where Scotland’s supply chains must catch up with established competitors internationally), tidal stream and wave power remain at an early state. With prototypes still in development, Scotland has the opportunity to secure itself as a global leader in the development, manufacturing and installation of tidal stream and wave power.<sup>10</sup>

A supply chain survey conducted on behalf of the Marine Energy Group found that a Scottish marine energy technology sector of 1GW installed capacity could generate around £2.4 billion of expenditure, of which £1.3 billion could be retained in Scotland.<sup>11</sup> On current levels of investment Scotland risks losing its tidal stream supply chain companies to Canada or France, where governments are offering clearer financial support and more ambitious deployment plans.

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<sup>9</sup> <https://www.thebank.scot/portfolio/port-of-aberdeen>

<sup>10</sup> [https://stuc.org.uk/files/Policy/STUC\\_Green\\_Jobs.pdf](https://stuc.org.uk/files/Policy/STUC_Green_Jobs.pdf)

<sup>11</sup> [https://stuc.org.uk/files/Policy/STUC\\_Green\\_Jobs.pdf](https://stuc.org.uk/files/Policy/STUC_Green_Jobs.pdf)

## Workers' rights

### Collective bargaining

Over the past few decades Scotland has undergone an increasing shift to casualisation across the economy, alongside legislation that is ever more aggressive to trade union organising. Collective bargaining agreements protected 80% of workers in the UK in the early 1980s. Today, this is down to 38%.<sup>12</sup>

In the offshore renewables industry, there is currently no sectoral collective bargaining deal covering offshore workers, and nothing equivalent to the Energy Services Agreement in offshore oil and gas. Even energy companies like Scottish Power, that have traditionally participated in collective bargaining for their onshore generation and distribution assets, have resisted carrying over their own collective bargaining agreements when establishing and separating out their renewable energy divisions.

Every renewable energy job should be covered by a sectoral collective agreement, negotiated with trade unions and employers at the table, that covers pay, health and safety, and benefits at work - including for workers on payroll, off-payroll or in self-employment. Government should require, enable and enforce the collective agreement through all available levers including licensing agreements, Crown Estate lease auctions, Contracts for Difference, and legislation. Every energy worker, regardless of contract status, should have union representation and the ability to influence decisions in their union branch and workplace.

#### **To enable this, the Energy Strategy should lay out plans to:**

- Use licensing or Contracts for Difference conditions to enforce a right to sectoral collective bargaining, a right to union representation at work and a right to union access at work, that covers both payroll, off-payroll and self-employed workers.
- Convene talks with employers and trade unions across the energy industry, modelled on examples like the NAECI process, to reach a collective agreement on offshore energy terms and conditions, to cover both payroll and self-employed workers, across the offshore oil and gas and renewables sectors.
- Provide funding and support to trade unions to enable worker participation in just transition planning processes, including through learning programs and training for stewards and health and safety representatives.

### Migrant workers

An ongoing concern with offshore renewable development is the conditions and treatment of migrant workers. There are offshore workers regularly working at sea for months on end for poverty pay. Work by the RMT Union has revealed that offshore energy companies regularly charter vessels operated by foreign agency crew paid less than the UK legal minimum and well below collectively bargained rates of pay in trade union agreements:

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<sup>12</sup> <https://www.gov.uk/government/statistics/trade-union-statistics-2021>

- On SSE's Beatrice wind farm, crew working for contractor Seaway Heavy Lifting were paid less than £5 per hour while working 12-hour days seven days a week in 2018.<sup>13</sup>
- On Ørsted, Macquarie Group and Sumitomo Corporation's Race Bank wind farm, Norwegian contractor Østensjø Rederi paid catering crew £6.75 per hour in 2019.<sup>14</sup>
- On SSE and Total Energies Seagreen wind farm, crew members working for contractor Fugro were earning as little as £3.60 an hour in 2019.<sup>15</sup>

If Scotland is to rapidly expand its offshore wind capacity, we must protect the rights and lives of seafarers. **The Energy Strategy should address this by:**

- Allocating funding for adequate monitoring and enforcement of National Minimum Wage and other rights at work offshore, by funding International Transport Federation Inspectors.
- Directing Crown Estate Scotland to include domestic employment conditions in leasing agreements for fixed and floating offshore wind and other renewable energy projects in waters off the Scottish coast.

### Maximising social benefits to local communities

In the draft Energy Strategy, communities are seen as potential beneficiaries but not as partners or leaders in the processes of change and development. Community ownership of energy production can drive forward local energy transitions in an inclusive way if existing barriers are addressed and greater support provided, particularly for low-income communities.

At present, these projects are too often muddled together with local (private) ownership and community benefits received passively. Community Wealth Building does not get a mention, even though the reason for locally rooted finance is to ensure returns on investments recycled back into the local economy, rather than returns heading offshore.

ScotWind is an example of where the ESJTP 'welcomes the commitments' from developers to invest in the Scottish supply chain, but ignores the structural failing of the leasing round, where few of the successful bids were from domestic companies, and previous experience (as outlined below) shows that multinational companies regularly offshore work and put less back into local communities.

The ScotWind auction of January 2022 massively undervalued Scotland's offshore energy resources and placed a low and arbitrary maximum ceiling on the amount that competitors could bid for their development. On a comparative basis, similar offshore wind auctions in the US and England since have raised up to 40 times as much as ScotWind.<sup>16</sup>

Beyond the undervaluation, the promises of supply chain protections are unlikely to be met. Only a little over a third of the minimum investments committed to ScotWind will take place in Scotland.<sup>17</sup> Conditions on these minimum commitments all but guarantee that it would be more profitable for companies to break the majority of these commitments. Even in the best-case scenario, only around half of ScotWind's investments will take place in Scotland.<sup>18</sup> **As been recommended by others such**

<sup>13</sup> <https://www.theguardian.com/uk-news/2018/oct/21/migrants-building-beatrice-windfarm-paid-fraction-of-minimum-wage>

<sup>14</sup> <https://www.grimsbytelegraph.co.uk/news/grimsby-news/offshore-wind-minimum-wage-grimsby-2819861>

<sup>15</sup> <https://www.energyvoice.com/renewables-energy-transition/211782/contractor-in-hot-water-for-mistakenly-underpaying-workers-at-giant-scottish-wind-project/>

<sup>16</sup> <https://commonweal.scot/policies/scotwind-one-year-on/>

<sup>17</sup> <https://commonweal.scot/policies/scotwind-one-year-on/>

<sup>18</sup> <https://commonweal.scot/policies/scotwind-one-year-on/>

**as Common Weal, the ESJTP should commit to an inquiry into how it got the ScotWind auction so badly wrong and what steps it will take to redress these errors ahead of the next round of renewables development in Scotland.**

## Public ownership

By privatising its oil resources, the United Kingdom has missed out on an estimated £400 billion in public revenues from North Sea oil, if compared to Norway's policies.<sup>19</sup> While in Britain the upstream oil and gas sector is fully in private ownership, Norway has retained a majority stake in the oil company Equinor (formerly Statoil), as well as controlling partial stakes in oil fields through the State Direct Financial Interest. This has allowed Norway to build up a sovereign wealth fund which is now one of the largest investment vehicles in the world and funds the Norwegian welfare state, including free healthcare and higher education for all.

Offshore wind is one of Britain's greatest natural resources and will play a central role in the UK's energy and industrial future in the 21st century. Unlike oil and gas, it will never run out. And yet, our wind - a common resource - is being privatised and risks following the same path as oil and gas. Just one single offshore wind turbine in Fife is owned by the UK Government-funded Offshore Renewable Energy Catapult.

Other than this, profits flow to private and foreign public entities that own the wind farms. Since the spike in gas prices, electricity generators able to sell at the wholesale price have made extreme profits. Leaked Treasury analysis revealed estimates that UK gas producers and electricity generators could make excess profits totalling £170 billion over the next two years, 40% of which is estimated to come from electricity generators, including wind farms like Sheringham Shoal and Hywind.<sup>20</sup>

Privatisation of the UK's energy generation has also watered-down job quality and hindered the development of a well-trained workforce large enough to rapidly roll out clean power at the scale needed. The lack of public ownership of support infrastructure has made the situation worse. As well as having publicly owned companies developing offshore wind, other North Sea countries have benefitted from greater levels of public ownership of ports.

Privatised ownership of the UK's ports means that upgrade decisions are based on business confidence in future demand. The rapid rate of offshore wind rollout compared to the relatively long lead-time for port upgrades means there is a continual under-supply in suitable port capacity. The free ports agenda won't resolve this, as it threatens to weaken workers' rights and jobs quality, undermine environmental protections, and reduce community benefits. New national and regional public energy companies could build new offshore wind farms, like Ørsted of Denmark, Statkraft of Norway, or Vattenfall of Sweden.

If new public energy companies in the UK aimed to replicate the scale of the planned 2030 clean generation targets of their peers in Sweden, Germany, or France, they could build anywhere between 27 GW and 77 GW of renewable generation capacity, accelerating decarbonisation. Public ownership, at a national and local authority level, can play a key role in delivering a just transition for energy workers by ensuring employment pathways exist for high-carbon workforces and creating safe, well-

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<sup>19</sup> <https://resourcegovernance.org/blog/did-uk-miss-out-%C2%A3400-billion-worth-oil-revenue>

<sup>20</sup>

<https://cdn.sanity.io/files/h61q9gi9/global/a1c10cd37fe6ff1b9e1545f966cc2c5b204b001c.pdf?facts-about-our-renewable-assets-july-2022-equinor.pdf>

paid, and unionised jobs. It creates institutions that can drive sustainable industrial strategies and can give significant influence over procurement and industrial investments, allowing a prioritisation of local supply chains and job creation.

Rather than billions of pounds in profits being syphoned over to shareholder dividends or support state-spending elsewhere, revenues could be reinvested in local communities or returned to households. Greater local authority ownership can help to democratise the energy system and ensure local energy resource brings the highest possible level of reinvestment. Additionally, greater public ownership of ports can enable upgrade decisions to be taken sooner and at greater risk than has historically been the norm, leading to more domestic manufacturing and construction in the offshore wind supply chain.

The Energy Strategy should outline how the Scottish Government will:

- Set up a public energy company, empowered to invest into and develop new renewable generation, including offshore wind and tidal stream.
- Take ownership stakes in privately owned ports and strategic maritime support infrastructure, where current owners are failing to upgrade or invest in line with the needs of the climate transition.
- Assist local and combined authorities to set up regional public energy companies, investing and building new renewable generation within and beyond their local geography.

## Chapter 3- North Sea oil and gas

### Oil and gas workers and communities

In considering North Sea oil and gas, the ESJTP lays out three key points related to workers and communities and action being undertaken by the Scottish Government:

- To take action to build a skilled, resilient energy workforce of the future, we are supporting reskilling of oil and gas workers through an offshore skills passport as part of our Just Transition Fund.
- £75m Energy Transition Fund to support five key transition projects in the North East and our £100m Green Jobs Fund provides capital across Scotland to support green industries and the green jobs associated with them.
- £500m Just Transition Fund will support the North East and Moray to become one of Scotland's centres of excellence for the transition to a net zero economy.

The ESJTP references a survey where oil and gas workers identified several key barriers to moving to low carbon jobs. These included “not wanting to leave their current job; not being able to find equivalent good pay and a lack of information around reskilling/retraining and job opportunities.” The ESJTP then references the projects above as the Scottish Government's contribution to addressing these concerns.

It is concerning that the ESJTP does not provide any response to one of the main barriers identified by workers that renewables jobs are – on a whole - lower paid and more insecure than oil and gas. There is no attempt to address job conditions in renewables to attract oil and gas workers.

Moreover, there have been multiple reports released over the past few years, including [Offshore](#) (2020) and [Our Power](#) (2023) that repeatedly show oil and gas workers are not aware of or able to access the re-skilling or re-training support provided by the government. The ESJTP's direct support for offshore oil and gas workers from the £500 Just Transition Fund currently focuses on funding for

OPITO to design an offshore skills passport. The offshore skills passport also does not address the ongoing issue that self-employed or off-payroll workers are shouldering the costs of their training.

**The ESJTP could have outlined clear support from the Scottish Government for workers including:**

- Offering offshore workers in Scotland training support to meet the requirements of the passport if needed for transitioning from oil and gas to other offshore industries (or prior to its setup, to meet existing training requirements for oil and gas workers seeking to work in renewables). Funding should be open to self-employed and off-payroll workers and cover wages lost as well as training costs.
- Establishing a programme under the Green Jobs Workforce Academy to support individual workers to access training pathways that suit them, alongside a programme to support workers from underrepresented groups or backgrounds to access opportunities within the offshore energy sector.
- Supporting Scottish Further Education colleges in receiving industry body accreditation for delivering offshore skills passport aligned courses and carrying out RPEL assessments.

**The ESJTP should include clear logistical and monetary support for offshore workers to transition.**

**Some examples include:**

- Ensuring that all funding for companies, and contracts and procurement where relevant, should be conditional on companies having involved their workforce in transition planning.
- Through the Green Jobs Workforce Academy or SDS, providing tailored advice to oil and gas workers that takes into account their experience without ‘going back to the start’.
- Trialling and instituting a paid time off to train support scheme for fossil fuel workers, or more broadly for workers in sectors shrinking due to major technological change.

Additionally, the ESJTP makes reference to the impact of phasing out oil and gas on the North East more broadly, but in its example of work being done on this, points to the Energy Transition Zone in Aberdeen which “will receive £26 million from the Scottish Government to become a focal point and catalyst for high-value manufacturing, research, development, testing and deployment with significant opportunities in offshore wind, hydrogen, and carbon capture and storage.”

The Energy Transition Zone is a well-known site battle for local communities who are adamantly against its construction. The ETZ would be built over St Fittick's Community Park, the last freely accessible green-space in Torry, Aberdeen – a historically marginalised, low-income area of Aberdeen. Using the ETZ as an example of community development goes directly against the principles of co-design, community benefit and just transition.

## Chapter 4 Energy Demand

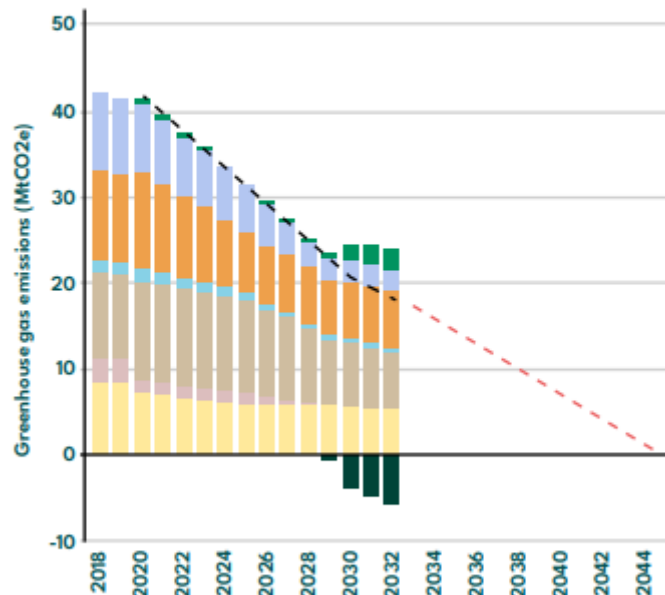
It is worrying that the ESJTP content regarding energy demand is largely disconnected from the question of energy supply or storage. A serious strategy would outline how projected change in energy demand ties together with energy supply in a measurable way. It is not possible, based on the ESJTP, to assess whether ambition in growing low carbon energy supply is concurrent with projections for increased electrification or decarbonisation goals in energy demand. Similarly, the challenges and opportunities of energy storage, transmission and distribution infrastructure and decentralised energy sources are major gaps in the strategy.

As previously stated, the Scottish Government has repeatedly missed annual climate targets. To meet net zero emissions by 2045, decarbonisation has to accelerate, and this means reducing and decarbonising energy demand. The Scottish Government set out its sector-specific targets for emissions reduction in December 2020. As Figure 1.1 below demonstrates, current targets to 2032



require much faster decarbonisation than was estimated in 2018-2020 and reaching net zero by 2045 (red dotted line) requires decarbonising at a steady and slightly increased rate following the targets to 2032 (black dotted line represents totals).<sup>21</sup> The stacked bar columns represent existing sector specific government targets to 2032.

**Figure 1.1**  
**SCOTLAND'S DECARBONISATION HAS TO ACCELERATE TO MEET NET ZERO BY 2045**



Source:  
Transition Economics graph using Scottish Government data

While these figures show a gradual reduction, it is important to note that this may not always be the most optimum goal for decarbonisation or just transition outcomes. Certain interventions (for example, a large-scale household energy efficiency retrofit programme) can achieve a significant reduction in emissions in a relatively short amount of time, and will provide more economic benefit (e.g., boost to manufacturing and job creation) if done in a rapid coordinated fashion rather than a trickle. The ESJTP chapter on demand does not engage in this level of detail and overlooks the potential positive and negative consequences of actions around tackling energy demand.

Changes to how energy is supplied and used across the economy will have significant impacts in sectors such as heating, transport, and industry. While acknowledging future Just Transition Plans in some of these areas, it remains concerning that the ESJTP has not provided significant new policy or details on how existing policy will achieve desired outcomes. **The ESJTP should provide more detail of the implications on energy demand of the Energy Strategy and ambitions to meet net zero. Future JT Plans must demonstrate alignment with energy supply expectations set out in the ESJTP.**

There are massive opportunities through the decarbonisation of energy demand to create new jobs, reduce air pollution and fuel poverty as well as creating accessible and affordable public transport and reducing energy bills. These changes could be transformative for workers across the economy and low income and vulnerable people. However, as with all aspects of securing a just transition, these opportunities are not guaranteed. Equally, in many aspects delivering a just transition in these

<sup>21</sup> [https://stuc.org.uk/files/Policy/STUC\\_Green\\_Jobs.pdf](https://stuc.org.uk/files/Policy/STUC_Green_Jobs.pdf)

sectors is about rectifying existing inequalities in Scotland. Air pollution and fuel poverty are disproportionately faced by those on lower incomes, the elderly or disabled people. Often with schemes such as interest free loans for electric vehicles or home insulation, it is those on higher incomes who benefit the most. There is the potential for changes in transport and heating to exacerbate inequalities if the Scottish Government does not provide support to ensure those with the greatest ability to pay contribute the most and that schemes prioritise those with the greatest need.

Our response in this section focuses on the material considerations which should feature in the ESJTP for achieving just transition outcomes, in terms of managing risks, securing opportunities, and spreading benefits.

## Heat in Buildings

The bulk of the ESJTP content on Heat in Buildings is focused on the commitment to invest £1.8billion in decarbonising homes and buildings over this parliament. This commitment was originally made in the 2021 Bute House Agreement<sup>22</sup> and built upon an original commitment made in the Scottish Government's Programme for Government in September 2020 to invest £1.6billion.<sup>23</sup>

Nearly three years after the initial announcement by the Scottish Government, it remains unclear how this investment is designed to ensure decarbonisation of heating, create new jobs, or prioritise those in fuel poverty. The investment sits alongside a target to decarbonise 1 million homes and the equivalent of 50,000 non-domestic buildings. We would echo the concern raised by the Just Transition Commission that this is a significant area of concern for a just transition.<sup>24</sup> We are unclear on the progress in reaching the 2030 target and the ESJTP provides no detail of how the investment is supporting the delivery of the target or wider just transition objectives.

Scotland's 2.62 million existing dwellings, 20,000 public buildings, and 180,000 other buildings including 200 million square feet of office and retail space all need to be retrofitted to require minimal energy input.<sup>25</sup> However, Scotland also needs new additions to the housing stock, including an estimated 10,600 new affordable (including social rent) homes per year over the next five years (2020-2025) to clear the backlog of unmet housing need.<sup>26</sup> **The Just Transition Plan for buildings expected later in 2023 must set out more concretely how investment will deliver on targets for energy demand and new heating systems.**

Energy companies continue to make billions of pounds from energy bills in people's homes across Scotland and the rest of the UK. Our housing stock is low quality, inefficient and draughty. New homes are being built that will need to almost immediately be considered for retrofit. There is an urgent need to align new building standards with ambitions for decarbonisation, and to provide local authorities with the funding necessary to deliver retrofit schemes. The proposed Domestic Building Environmental Standards Bill brought forward by Alex Rowley MSP would ensure new build housing meets Passivhaus standards and should maintain international best practice on the definition and metrics for what constitutes 'Passivhaus' quality.

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<sup>22</sup> <https://www.gov.scot/news/agreement-with-scottish-green-party/>

<sup>23</sup> <https://www.gov.scot/publications/protecting-scotland-renewing-scotland-governments-programme-scotland-2020-2021/>

<sup>24</sup> <https://www.gov.scot/publications/just-transition-commission-letter-to-cabinet-secretaries-14-april-2023/>

<sup>25</sup> [https://stuc.org.uk/files/Policy/STUC\\_Green\\_Jobs.pdf](https://stuc.org.uk/files/Policy/STUC_Green_Jobs.pdf)

<sup>26</sup> [https://stuc.org.uk/files/Policy/STUC\\_Green\\_Jobs.pdf](https://stuc.org.uk/files/Policy/STUC_Green_Jobs.pdf)

The retrofit of all homes could create between 32,000 and 98,000 jobs in Scotland while the installation of District Heating schemes could create 23,000.<sup>27</sup> However, there are significant shortages in skills in the construction sector including for plumbers, plasterers, and electricians. The lack of coherent planning and delivery is holding back the creation of skills pipelines in these sectors.

While a number of energy transitions have been detrimental to working class communities, the United Kingdom's conversion from 'town gas' to 'natural gas' between 1968 and 1976 involved converting around 40 million appliances for 14 million customers, mostly households. Working alongside 12 regional gas boards, the Government took a central coordinating role, with a nationalised Gas Council giving the state direct control of the required investment.<sup>28</sup>

Sweden's transition to district heating is another example which has enabled high security of supply, low carbon dioxide emissions, and efficient use of available heat sources.<sup>29</sup> Evidence from across Europe also shows the key role of municipalities in the energy transition – delivering publicly owned renewable energy and delivering retrofitting programmes. Lessons can be learned from both of these examples about the scale of Government intervention require to ensure a comprehensive and successful street by street transition of residential heating.

Done wrongly, decarbonising our homes could push costs onto tenants, increase fuel poverty and lead to work needing to be redone. But done correctly it could reduce our emissions, tackle fuel poverty, and create green jobs across Scotland.

A number of steps need to be taken. Investment needs to be scaled up with appropriate resources to support Local Authorities develop and deliver new Local Heat and Energy Efficiency Strategies. Local Authorities hold important information on local housing conditions and can help identify those who would be classed as low income and so the new National Energy Agency should be designed to support action at a local level. Investment in advice and support services are needed and investment in skills and training is a huge challenge.<sup>30</sup> Regulation and rent controls are required to ensure tenants are not left to pay for the bill of refurbishment. Fundamentally however, a more direct approach to delivery is needed with publicly owned companies delivering a 'whole house retrofit' approach.

## Energy for transport

Transport is Scotland's largest single source of greenhouse gas emissions and responsible for more than a third of all emissions. Transport emissions have not fallen since 1990, despite reductions in other sectors. Air pollution is estimated to cause more than 1700 attributable (premature) deaths in Scotland each year.<sup>31</sup> In many of our city's streets, air pollution breaches legal limits. If we are to address climate change and air pollution, then we need to support more people to get out of cars and into buses, trains, and active travel.<sup>32</sup> Most energy use from transport in Scotland come from private car use. Expanding public and active travel to make it more affordable, accessible, and safe is vital for reducing energy demand in transport and brings significant opportunities.

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<sup>27</sup> [https://stuc.org.uk/files/Policy/STUC\\_Green\\_Jobs.pdf](https://stuc.org.uk/files/Policy/STUC_Green_Jobs.pdf)

<sup>28</sup> [https://stuc.org.uk/files/campaigns/Homes/Our-Homes\\_briefing.pdf](https://stuc.org.uk/files/campaigns/Homes/Our-Homes_briefing.pdf)

<sup>29</sup> [https://stuc.org.uk/files/campaigns/Homes/Our-Homes\\_briefing.pdf](https://stuc.org.uk/files/campaigns/Homes/Our-Homes_briefing.pdf)

<sup>30</sup> [https://stuc.org.uk/files/campaigns/Homes/Our-Homes\\_briefing.pdf](https://stuc.org.uk/files/campaigns/Homes/Our-Homes_briefing.pdf)

<sup>31</sup> [https://stuc.org.uk/files/campaigns/Buses/Our-Buses\\_briefing.pdf](https://stuc.org.uk/files/campaigns/Buses/Our-Buses_briefing.pdf)

<sup>32</sup> [https://stuc.org.uk/files/campaigns/Buses/Our-Buses\\_briefing.pdf](https://stuc.org.uk/files/campaigns/Buses/Our-Buses_briefing.pdf)

Across Scotland, 29% of households don't have access to a car. This rises to 41% in Edinburgh and 46% in Glasgow and Dundee.<sup>33</sup> The current car-centric approach to transport in Scotland is detrimental for working people. Low-income households are less likely to have a car, with many in deprived communities cut off from accessing public services and engaging in society.

The Scottish Government has an opportunity through its just transition plans – both the ESJTP and the upcoming plan for transport - to develop a comprehensive approach to transport policy. This includes incentives for public transport and disincentives for private car use, which in turn will reduce air pollution for communities in densely populated areas.

Despite the opportunity for securing just transition outcomes, the ESJTP is once again light on detail around how it is supporting delivery in this sector. There is no recognition in the ESJTP of the potential benefits for communities of reduced energy demand through expanded public and travel infrastructure. STUC commissioned research estimates the potential for up to 60,000 jobs over the next ten years with the right green transport policies.<sup>34</sup> Instead, the ESJTP sections on transport are largely taken up with case studies of specific projects in Scotland, rather than any clear vision and road map for delivery.

Transport is another area where local delivery is crucial. Bus networks across Scotland are increasingly unaffordable and serve the financial interests of owners, rather than the people who use them. Recent powers given to local authorities to take back ownership of their bus networks must be supported with the funding to do it. At a national level, public ownership of ScotRail and the Caledonian Sleeper, should be an opportunity to reinvigorate the network after the impacts of covid-19 on the number of passengers. Affordability is a key issue but recent consideration of a reduction in services and of key platform and other station staff runs contrary to the ambitions of reducing energy demand in transport.

Local authority owned bus networks, alongside the nationalisation of key rail operations, should be the beginning of an integrated, accessible, and affordable transport network in Scotland. Reducing energy demand from transport, reducing emissions, and delivering a just transition relies upon it.

## Energy for industry

Energy use in Scotland's industries is drawn from a wide range of sectors including food & drink, petrochemicals, and glass and cement manufacturing. There are important sites of employment in these sectors across communities in Scotland and many involve processes which are energy intensive or considered hard to decarbonise. Development of new technologies and greening of processes is essential for securing a just transition in these sectors. The skills and experiences of workers in the sectors will be crucial to realising the Scottish Government's ambitions in industrial energy demand and emissions.

At the same time, there are opportunities for new jobs and reinvigoration of domestic manufacturing through the transition in industry. With the right support and investment, green steel production could sustain 1,200 jobs in Scotland with expanded re-manufacturing by using existing parts already in use having the potential for up to 4,700 jobs.<sup>35</sup>

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<sup>33</sup> <https://www.transport.gov.scot/publication/scottish-transport-statistics-no-38-2019-edition/chapter-1-road-transport-vehicles/>

<sup>34</sup> [https://stuc.org.uk/files/Policy/STUC\\_Green\\_Jobs.pdf](https://stuc.org.uk/files/Policy/STUC_Green_Jobs.pdf)

<sup>35</sup> [https://stuc.org.uk/files/Policy/STUC\\_Green\\_Jobs.pdf](https://stuc.org.uk/files/Policy/STUC_Green_Jobs.pdf)

Site specific just transition plans for these sectors will be crucial to securing changes to industrial processes where necessary, particularly to utilise the experience of workers onsite and to secure jobs on site. The forthcoming Just Transition Plan for the Grangemouth Area will be an important test for how the Scottish Government takes forward ambitions in energy for industry. Workers through their trade unions on site must play a major role in shaping and delivering the Just Transition Plan.

## Appendices

### Appendix 1: Nuclear

To meet energy needs in Scotland, and the rest of the UK, an energy mix including nuclear is needed. The Scottish Government should overturn its opposition to new nuclear in the ESJTP.

As Scottish nuclear power stations reach end of generation, we face a growing energy gap. Some of this demand can, and should, be met through increased use of renewable energy sources, however, we still need reliable baseload clean energy which nuclear can provide.

Nuclear energy is a dependable and safe source of energy which also provides well paid, skilled domestic jobs. There are 3600 businesses right across the UK involved in the supply chain for the development of Hinkley Point C and new nuclear in Scotland could provide benefits to a number of companies in Scotland working in the nuclear supply chain.

Small Modular Reactors (SMR), in particular, could create high value jobs in research and construction.

New nuclear could also help provide "a just transition" for former oil and gas workers through providing high-quality, long-term employment, both in construction and throughout the supporting infrastructure and supply chain.

### Appendix 2: A just transition in Thurso / Dounreay

The STUC visited Thurso and Wick in March 2023 to hear from workers about issues related to just transition in the region. Thurso has a population of 7,320 people, and sits in the wider region of Caithness, with a resident population of 26,486. The question of just transition for Thurso centres around Dounreay, the nuclear plant commissioned in 1955. The site is currently in decommissioning, and provides over 2,000 jobs for the region.

From attending a Thurso and Wick Trades Union Council meeting and discussions with Dounreay trade union reps, we heard a clear call from the community for support and investment into the area. There are intersecting issues at play:

- Any economic growth in the area will have to contend with the existing challenge of shortages in labour supply across all jobs in the region;
- The relatively functional public transport in the immediate area, buses run by Stagecoach, is subsidised by UK Government for workers coming to and leaving Dounreay. There is concern about what will happen to these lifeline transport options when decommissioning is complete;
- Connectivity is poor. Commercial flights to Edinburgh have stopped, with the most recent Public Service Obligation only covering flights to Aberdeen, and trains are not catered despite the journey to Inverness from Wick taking over 4 hours;

- Healthcare and education services are fragile. People frequently need to travel to Inverness for basic services like maternity care; and
- The economy in the area is a mix of high value jobs and communities, alongside incredibly fragile rural communities, some of whom live off grid.

Community and trade union members had a clear vision for what a just transition could look like. The workers and communities were interested in the potential opportunities brought by Small Modular Reactors given existing connections to high voltage transmission infrastructure from the past use of Dounreay. However, given the Scottish Government's ongoing opposition to new nuclear power, they have presented proposals to reconstitute the site at Dounreay for alternative energy projects including battery storage and green hydrogen. Ultimately, while SMRs could present a new opportunity in nuclear, the priority for this community is in securing a future for the workforce and replacing the economic contribution of Dounreay for the local area. They also offered proposals for Caithness acting as a test site for Government initiatives such as free public transport.

Most importantly, after Richard Lochhead MSP visited the area in his capacity as Minister for Just Transition, he suggested they develop a proposal for just transition initiatives in the area. They did just that, and have received no real response from the Government. This proposal, shared below, is included within the STUC's consultation response as an example of locally led just transition planning, bringing together multiple stakeholders, and should be reviewed and supported by the Scottish Government.

Focus North's proposal for the future of their community is copied below:

### **Proposed Just Transition pilot area in Caithness and Sutherland**

Caithness and Sutherland encompass many of the issues are likely to be faced by mainland Scotland during the Just Transition process in a microcosm.

The region comprises 8.5% of Scottish land area but only 0.75% of the Scottish population. This population of less than 40,000 includes coastal communities, fishing and fish farming communities, agricultural communities (including crofting), dispersed remote and hard to reach communities and urban centres with a mix of some affluent areas juxtaposed with some of the poorest council wards in Scotland.

The regional economy is unusual for a largely rural one with a mix of large and small employers, multiple employment sectors represented, and a sophisticated supply chain supporting the highly complex and demanding nuclear decommissioning programme at Dounreay. The region also contributes a skilled workforce to the oil and sector, commuting to Aberdeen or internationally.

The **Energy sector** (Key sector from MtF1 ) is extremely important in the region, with the legacy decommissioning of the Dounreay nuclear site, Offshore and onshore wind developments, hydrogen production development, and significant power storage and transmission infrastructure being undertaken across the region. Higher levels of curtailment in the grid offer interesting opportunities in Locational Marginal Pricing and smart grids as well as capacity to develop green hydrogen production.

**Buildings and construction** (Key sector from MtF1 ) approaches will be vital as major projects are undertaken over the coming years –Sutherland Spaceport, Onshore windfarms, Support infrastructure for Offshore Wind Farms; affordable housing to support these, and repopulation initiatives need to be developed; if these are to be successfully undertaken, issues around skills, staff availability, and transport need to be addressed. A high proportion of local buildings are old, and as a result bringing them up to modern energy standards will be a challenge. Heating systems in remote

and rural locations are predominantly either solid or hydrocarbon fuelled, or entirely electric - these will need modernising, amongst a population that already suffers high levels of fuel poverty; The two northern urban conurbations around Thurso and Wick are served by stranded gas networks and hence ideal for developing alternative fuels and heating systems.

**Transport** (Key sector from MtF1 ) - there are significant challenges around public transport, particularly in more rural areas with virtually no public transport provision to the West of the region. Travel to work, healthcare and other services often require long distance travel making the use of private vehicles unavoidable. To undertake the transition to low carbon transport will require innovative approaches. The infrastructure to support mass transition to electric vehicles will be expensive to install relative to the size of the population. The bus services in the urban conurbations are highly dependent on Highland Council (school pupils) and Dounreay (workforce) contracts. The decommissioning site's needs have changed markedly since the COVID-19 pandemic, and there is an upcoming opportunity to entirely reshape how the future requirements might be met. During the Focus North stakeholder engagement prior to the partnership relaunch poor transport links were identified as the second most important issue amongst students and Focus North launch event attendees. 78% of the attendees who completed the survey rated better transport links as an essential requirement, and only 29% of college students interviewed rated regional transportation as 'good' or better. Partners are engaging with Scottish Government's place demonstrator programme seeking to include some initial factfinding on this issue.

**Land use and Agriculture** (Key sector from MtF1 ) - the natural capital of the Caithness and Sutherland area can only be characterised as a vital Scottish asset. The Flow Country, which has applied to UNESCO for recognition as a World Heritage site in February '23 dominates much of the interior of the area; Crofting is 1 Making the Future, 2nd Just Transition Commission Initial Report - 14 July 2022 still an important part of the rural economy, and needs to adopt new practices to successfully transition to the low carbon economy; issues around 'Green Lairds' and how to ensure communities are not disadvantaged by distant investors; Wind farm developments are vital to ensure Scotland meet its net zero targets, but it will be unjust if all of the burden of the development of these is felt locally but little of the benefit accrues to local communities.

It can be seen from the description above that the issues faced locally are equally a microcosm of many of the issues identified by the Just Transition Commission, with additional pressures as faced by many remote populations. The region faces challenges around: - healthcare and social care provision; Public transportation; Fuel poverty which is higher than the national average; Skills and staff availability; Dounreay – the biggest local employer providing well paid jobs - continues to move inexorably towards closure.

The predicted decline of just under 20% in the population and increasing demographic imbalance over the next 15 years already make it stand out as an area that requires concentration of effort. The urgent need to transition to a low carbon economy adds to these pressures but at the same time offers the prospect of dealing with some of the longer-term structural issues. The region has multiple large-scale projects being developed in the energy and space sectors, and a major local employer with a goal to help diversify the local economy. If carefully co-ordinated these can provide the opportunities to deal with long standing problems and achieve a Just Transition. The challenge is to capitalise on these opportunities ensuring that those benefits that can be attracted to the region, are. Timely investment will avoid these opportunities going elsewhere.

Focus North is the evolution of The Caithness and North Sutherland Regeneration Partnership (CNSRP) which was established in 2007 and still comprises the main public and private organisations with interest in economic growth. Originally set up to help address the impacts of Dounreay

decommissioning, the partnership is now much more focused on economic sustainability and maximising local benefits of the significant opportunities arising in the region.

Focus North partners are: - The Caithness Chamber of Commerce; Dounreay Site Restoration Limited; The Highland Council; Highlands & Islands Enterprise; The Nuclear Decommissioning Authority; UHI North Highland, Skills Development Scotland; and The Scottish Government. It is worth noting that the local university campus, UHI North Highland incorporates the Environmental Research Institute which undertakes world leading research specialising in natural capital such as peatland management and restoration. Since inception Partners have helped to create and sustain hundreds of jobs but recently evolving challenges and opportunities have triggered a revisioning of the partnership. Just Transition principles are being built into the plans resulting from this process, but the transition could be accelerated and simultaneously could provide a practical road map to the Just Transition process in other areas of Scotland.

With a regional population of less than 40,000 and existing compact, collaborative, and cohesive local organisational networks mean that:

- Mobilisation of activity could be achieved quickly and at low cost through these existing organisational structures. **(Co-ordination)**
- The scale of the projects necessary to permanently address local issues would be pilot scale activities elsewhere. With modest investments solutions these could be developed and could then be scaled up at lower risk in other areas. This would be a highly effective use of public funds, solving regional issues with pilot scale activity that would not then need to be replaced with scaled up solutions, as might be the case in more urban locations. This process would also provide solutions to remote and rural areas that are often left behind with key needs often unmet (Meeting the Justice guiding principle and the **Engagement, participation, and equalities** Strategic priority.).

Initial work strands would concentrate on:

- **Workforce planning**, (Strategic priority identified in MtF1 ). This would dovetail with work already commenced to identify issues and solutions. This would address immediate short-term issues but allow a clear vision of what the needs of the new energy economy would be. This would be supported by crystallising a Renewable Energy Academy based at UHI North Highland by building on its existing specialisations in Engineering in conjunction with research outputs from UHI North Highland's Environmental Research Institute (ERI).

**Action: - Develop a regional talent attraction, development, and retention plan and implement it supported by a Renewable Energy Academy; Use this as a blueprint to develop the skills element of an Energy Road map to net zero supported by research from ERI as required.**

- **Close the investment gap** - One of the Strategic priorities identified by the Just Transition Commission, which identified the need to invest at least two per cent of GDP to create highly skilled, secure, well-paid jobs, tackle inequality, and to build an innovative industrial base and more resilient social and physical infrastructure. With the current cost of living crisis, and intense pressure on governmental budgets one of the key goals must be to attract as much private investment as practicable to help meet this target.
- In the partnership (CNSRP then) submission to the Just Transition Commission call for evidence we noted that "Public sector support would be best utilised to identify feasibility, run pilot activities in partnership with business and academia and communicate the benefits of these approaches." We continue to believe that this approach is by far the best use of public funds, seeking to co-develop and co-invest for community benefit with commercial businesses. With Onshore and Offshore wind farm developments, other energy storage and



transmission projects and a Space Port all in active development in the region a planned approach is vital if the benefits are to be maximised. (Meeting the **Co-ordination** guiding principle. Synergistically leveraging private funding in this way would also allow more rapid development (meeting the **Urgency** guiding principle) and a higher likelihood of success (Meeting the **Credibility** guiding principle).

**Action: - Develop approaches and metrics to ensure private investment and public investment align to meet business need and societal strategic priorities.**

- **Transport** – Developing a model to provide “A transport system that meets remote and rural needs”. This would integrate work under way on hydrogen trials for the rail network, air travel through the Sustainable Air Test Environment (SATE) project and seek to identify opportunities to accelerate the conversion to, electric, hydrogen and other alternative fuel sources for public transport and heavy goods vehicle movement. A collaborative Transport Forum all of the relevant key partners already exists and meets regularly. Once again, this existing organisation would enable the short cutting of developing a cohesive regional approach.

**Action: - Develop pilot activities to identify solutions and use these to develop a regional plan, which could then be implemented.**

Adopting a cohesive regional approach to developing the solutions needed for a just transition would demonstrate urgency, commitment, and leadership. This would also redress long standing inequalities in an area that has numerous hard-to-reach and marginalised communities. Such an approach could then be rolled out nationally, and a successful demonstration of a Just Transition could become part of Scotland’s contribution to the international effort in the transition to a low carbon economy.

## Appendix 2: Our Power

Over the past two years, Platform and Friends of the Earth Scotland came together with offshore workers to build demands for a just energy transition. These workers developed 10 demands covering training and skills, pay, job creation, investment, and public ownership.

The organisations then surveyed over 1000 additional offshore workers and over 90% agreed with these demands. This plan is comprehensive in scope, transformative in scale and deliverable now. The 10 demands include implementation pathways that are fully costed, as well as examples of where similar proposals have worked elsewhere. The demands are supported by the STUC, Unite Scotland, RMT, PCS, UNISON Scotland and many other labour and climate organisations. The 10 demands are as follows:

### Our Transition

1. Workers at the centre of transition planning
2. Clear accessible pathways out of high carbon jobs
3. A training regime built to keep workers safe instead of for profit
4. Invest in domestic manufacturing and assembly for renewables

### Our Rights

5. Collective bargaining with strong rank and file union representation across the whole offshore industry
6. Establish universal rights and a wage floor across the UKCS
7. Effective and trusted grievance and whistleblowing procedures

## Our Energy

8. Public ownership for the public good
9. Reorganise the tax system for public good
10. No community left behind

The full report is available to view [here](#).

## Appendix 3: STUC's Energy Conference 2023

The STUC's Energy Conference in March 2023 brought together trade unionists, policymakers, and relevant stakeholders to consider how to tackle bills, climate, and jobs crises by ensuring a just transition and building trade union power.

The first panel titled, 'Setting the context – the crises we face' brought together expert speakers focused on jobs and conditions, energy bills and the climate crisis. Its objective was to create a shared level of knowledge about the concurrent challenges facing our energy system.

In breakout groups following the first panel, participants identified the following problems:

- Lack of public education and appropriate narratives
- Market ideology
- Lack of collectivism
- Lack of planning and funding for training
- Lack of investment and infrastructure
- Lack of clarity on what success looks like

The second panel titled, 'Our demands – building a new energy system' brought together expert speakers focused on the policies necessary to tackle the systemic causes of an energy system that drives the climate crisis, oversees soaring energy bills, and fails to retain jobs and economic benefits in communities. The session outlined the structural changes necessary to rebuild our energy system and set out what decision-makers at all levels could do to get this underway.

In breakout groups following the second panel, participants identified the following demands for the future of the energy system in Scotland:

- Democracy:
  - o Reduce the disproportionate power and influence companies have with government
  - o Develop specialised skills in the civil service to deliver the energy transition in-house
  - o Transparency around lobbying in government, education about the private market and a public campaign on how the energy system works
  - o Changing regulation of the energy industry
- Public ownership:
  - o Increased public procurement in Scotland
  - o Important to explore the diversity of publicly owned options: nationally owned companies, municipal and community owned energy
- Investment:
  - o Rent controls tied to retrofitting and housing stock quality
  - o Long term planning including refinancing by government and a corresponding timeline
  - o A just transition fund going directly to workers rather than distributed through employers, to handle issues with employment status affecting eligibility
  - o Increase and utilise the Scottish National Investment Bank
- Jobs and unions:

- More money in transition and skills training
- Mandating sectoral collective bargaining agreements through licensing and regulatory structures
- Job creation in retrofitting and decarbonising shipping
- Investment in current workforce with new technology and skills, as well as investing in apprenticeships
- Recognition and implementation of the offshore training passport for workers in the offshore industry
- Universal jobs guarantee as a potential strategy
- Rectifying the different terms and conditions for migrant workers in offshore energy industries

The third panel titled, ‘Organising for change: What can we do now?’ brought together expert speakers who have been organising for a new energy system to tackle rising energy bills, deliver an energy transition and retain jobs and economic benefit in communities. Discussion focused on how workers across Scotland could organise to change our current energy system.

Participants then broke into breakout groups where they reflected on the panel and explored organising initiatives they were already involved in and what they thought was possible in their communities.

Tools and resources participants identified included:

- ‘Just transition’ education – how to develop a just transition strategy in your sector, courses, case studies of success stories, infographics, help developing specific asks for workplaces
- Resources to call out greenwashing: audits of what has been said, done, cut, etc.
- Creating spaces in the trade union movement like the ‘climate cafes’ - which leave room for hopes, fears, ideas and learning across generations
- Statistics and infographics on Scotwind
- A change in education
- A change in supply side strategy by the Scottish Government

Full notes as well as recordings of each panel can be found [here](#).

## Appendix 4- STUC analysis of ONS 2021 Low Carbon and Renewable Energy economy statistics

*May 2023*

### Introduction

This report reviews the latest data from the Office for National Statistics on the Low Carbon and Renewable Economy in Scotland in 2021. The analysis builds upon previous STUC (Scottish Trades

Union Congress) reports into the Low Carbon and Renewable Energy Economy, *Broken Promises and Offshored Jobs*<sup>36</sup> and *Scotland's Renewable Jobs Crisis & Covid 19*.<sup>37</sup>

Starting in 2015 (for reporting year 2014) the Office for National Statistics (ONS) 'Low Carbon and Renewable Energy Survey', is the primary source of official information on the LCRE (Low Carbon and Renewable Energy) economy. This report provides analysis on the latest figures released in February 2023.

The data for 2021 reveals a changing context from previous years with a significant increase in jobs following several years of stagnation. However, alongside these rises in employment is a substantially higher increase in company turnover. Without rapid intervention to secure work in the renewables supply chain, as well as more credible planning in wider LCRE sectors, the gap between jobs and turnover will continue to widen and the opportunity of a just transition will be lost.

For workers in high-carbon industries, as well as those seeking decent work across the economy, effectively managing new opportunities in the LCRE economy is vital. Without adequate planning for how climate policy will be delivered, there can be no concurrent analysis of the number of workers required, the skills needed and how to fill that pipeline where skills do not exist through transition support or workers joining the sector. The lack of credible planning for delivering climate policy is a fatal limitation to securing a just transition for the workforce in Scotland.

Research commissioned by the STUC estimates that with the right policy and funding, Scotland could see job creation up to 367,000. However, these jobs are not guaranteed as past broken promises have shown. The approach to date of prioritising inward investment over public control and leaving transition to the market has failed. The latest set of figures from the ONS demonstrate once more that an industrial strategy is urgently needed to prevent further extraction of wealth at the expense of workers and the climate.

### Methodology and limitations

It is important to note that there has been significant volatility in the energy market in between 2020 and 2021, from the Covid-19 pandemic, gas storage shortages in Europe and the Russian invasion of Ukraine. However, the ONS LCRE data continues to provide the most comprehensive overview of the state of the sector in relation to employment, company turnover and wider business activity.

The ONS survey estimates direct and indirect employment for the UK, measured as full-time equivalent (FTE). In previous years, the ONS included indirect estimates for Scotland, but 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) for all figures presented by the ONS.<sup>3</sup> In certain years and sectors, figures are not provided either due to confidentiality or because they are below a minimum level of employment or turnover.

### Key data from 2021

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<sup>36</sup>

<https://stuc.org.uk/files/Policy/Research/Briefings/Broken%20promises%20and%20offshored%20jobs%20report.pdf>

<sup>37</sup> [https://stuc.org.uk/files/Policy/Research-papers/Renewable\\_Jobs\\_Crisis\\_Covid-19.pdf](https://stuc.org.uk/files/Policy/Research-papers/Renewable_Jobs_Crisis_Covid-19.pdf)

## LCRE Overview – Employment and turnover

The most recent employment figures show that between 2020 and 2021 there was a rise in employment in Scotland’s Low Carbon and Renewable Energy economy of 36%, from 20,700 to 28,300.<sup>38</sup>

Figure 1



Alongside the increase in total employment within the LCRE economy, there have been substantially higher increases in turnover, the total income made by businesses in the sector, of 67%.

Figure 2



Following several years of stagnation in terms of employment and turnover, the latest figures suggest that the LCRE economy is beginning to grow overall. However, turnover has increased by 67%, compared to the increase in employment of 36%.

### Sectoral view

Within the figures for the LCRE economy overall, there are crucial differences within specific sectors which more clearly demonstrate the concerning trends emerging.

The total increase in employment between 2020 and 2021 is largely drawn from increases within the six sectors highlighted in the table below.

Table 1

Direct employment (FTE)				
Sector	2020	2021	Increase	% increase
Offshore wind	2,200	3,100	900	41%
Onshore wind	2,600	3,300	700	27%
Renewable heat	1,100	3,500	2,400	218%
Hydropower	800	2,000	1,200	150%
Energy efficient lighting	700	1,300	600	86%
LEVs and infrastructure	200	2,000	1,800	900%

There have been minor increases in employment within sectors such as bioenergy and energy monitoring, savings, and control systems as well as a decline in employment in sectors including solar and nuclear.

The total increase in turnover of around £3.5bn has followed turnover in the wind sector of £2.8bn detailed in the table below.

Table 2

Turnover (£m)				
Sector	2020	2021	Increase	% increase
Offshore wind	600	2,594	1,994	332%
Onshore wind	1,098	1,983	885	81%
<b>Total</b>			<b>2,879</b>	

These figures show that increases in employment and turnover within the LCRE economy are not equally shared between sectors. In FTE terms, overall job rises have largely been drawn from across six sectors. However, the rise in turnover is disproportionately drawn from offshore and onshore wind only. Of the approximately £3.5bn increase in turnover in the LCRE economy between 2020 and 2021, around 80% is from offshore and onshore wind.

We are beginning to see a rapid rise in turnover, particularly within offshore and onshore wind, that is not matched with proportionate increases in jobs. Offshore and onshore wind now account for 53% of turnover in the LCRE economy, but only 23% of total jobs. After years of warnings by workers and trade unions across the energy sector, the consequences of having no industrial strategy at a UK or Scottish level are increasingly clear. Offshored manufacturing, huge profits for multi-national energy companies and the crumbs of employment where the whole cake was promised.

Beyond the wind sectors, notable growth in jobs has been seen in other key areas for the energy transition including Renewable Heat, Electric Vehicles and Infrastructure, Hydropower and Energy Efficient Lighting. These sectors cover key areas for building a net zero economy including how we travel, how we heat our homes and how we build energy storage for intermittent renewable power. However, the Scottish Government has come in for scathing criticism for a lack of policy to deliver on their climate targets. The UK Committee on Climate Change and the Just Transition Commission have demanded credible delivery and investment plans to turn rhetoric around climate and just transition into meaningful change.<sup>39</sup> These sectors present an opportunity to grow decent work outwith new renewable generation projects.

<sup>39</sup> <https://www.theccc.org.uk/2022/12/07/scotlands-climate-targets-are-in-danger-of-becoming-meaningless/> and <https://www.gov.scot/publications/just-transition-commission-letter-to-minister-for-just-transition-employment-and-fair-work-december-2022/>

## Broken promises and opportunity lost

### Broken Promises

Through numerous strategies, the Scottish Government has made promises for significant numbers of jobs in the LCRE economy. 2020 was repeatedly a key target date for these promises, which have all been emphatically missed.

- *Harnessing Scotland's Marine Energy Potential (2004)* – stated the potential for 7,000 direct jobs in the marine industry by 2020.

This strategy paper considered the job creation potential in the wave and tidal energy sectors exclusively. There is no specific wind or tidal sector within the ONS categories, however **the latest figures for “Other renewable electricity” where wind and tidal would most likely fit based on current categories, are less than 100 jobs.**

- *Low Carbon Economic Strategy (2010)* – stated that jobs in the low carbon economy in Scotland could grow by 4% a year to 130,000 jobs in 2020.

This strategy provided a more comprehensive overview of the Scottish Government's ambition for the low carbon economy. While the categories within the low carbon economy in this strategy are not clear, **this projection is substantially lower than the ONS LCRE total for 2021 of 28,300.**

- *2020 Routemap for Renewable Energy in Scotland (2011)* – stated that there could be up to 40,000 jobs in renewable energy, including 28,000 jobs in offshore wind.

This Routemap set out job potential in renewable energy generation sectors which largely correlate to sectors included within the ONS LCRE data such as renewable heat, offshore wind, and bioenergy for example. **The latest figures for 2021 show the total employment in these sectors is just 13,500, with only 3,100 from offshore wind.**

### Opportunity Lost

Job promises have been made speculatively and without sufficient intervention to secure the potential opportunity from increased activity in the LCRE economy. The widening gap between turnover and jobs within offshore wind demonstrates the root of the issue. For example, despite the 332% increase in turnover for offshore wind companies between 2020 and 2021, jobs have only risen by 41%.

In fact, across the entire LCRE economy over the ONS recording period, the proportion of jobs relative to turnover is falling. In offshore wind, there has been a total collapse in jobs created in relation to turnover.

Table 3

Jobs created per £million turnover								
	2014	2015	2016	2017	2018	2019	2020	2021
All sectors	3.96	4.13	4.04	3.68	3.58	3.76	3.97	3.25
Offshore wind	7.37	-	-	-	6.10	2.92	3.66	1.20

The data shows that Scotland is increasingly seeing fewer jobs per million pounds of turnover in the LCRE economy than at any other time on record. In offshore wind, this has plummeted from more than seven jobs per million pounds of turnover, to just over one.

If the 2014 level of 7.37 jobs for every million pounds of turnover, then there would have been 19,118 jobs in 2021 in offshore wind alone, compared to the actual figure of just 3,100. The collapse in jobs numbers in relation to turnover has led to the lost potential of over 16,000 jobs in offshore wind in 2021.

Previous STUC analysis of the LCRE economy has highlighted the importance of building an industrial base to ensure the greatest possible employment and economic benefit domestically from increases in renewable energy generation, particularly offshore wind. The trajectory of employment in relation to turnover seen in offshore wind is the consequence of years of inadequate planning and investment into manufacturing and fabrication capacity across Scotland.

Furthermore, the STUC has previously highlighted the domination of sectors such as offshore wind by large multinational companies. With turnover increasing dramatically in comparison to employment, we are witnessing the extraction of huge amounts of wealth from Scotland's natural resources without a comparative return. The absence of a publicly owned company in this sector will result in the continued extraction of vast wealth for companies but broken promises and opportunity lost for workers.

### Recommendations

Despite a growth in employment and turnover between 2020 and 2021, predictions of employment in the LCRE economy have not been realised. Instead, the LCRE economy is characterised by overseas financial interests, a limited industrial base and precarious work.

This is a failure of industrial policy that means workers and communities in Scotland do not benefit from Scotland's natural resources. It has serious implications not only in terms of jobs but also in terms of tax revenues, transparency, and economic democracy.

The Scottish Government has a target to increase renewable generation capacity by 20GW by 2030 from the current 12GW. Beyond the growth necessary in renewable energy generation, tackling the climate crisis relies on expansion of energy efficiency, low carbon heating systems and public and active travel.

These objectives are an opportunity to significantly increase jobs in the Low Carbon and Renewable Energy economy. However, the increasing gap between jobs and turnover shows the structural weaknesses of this sector for workers across Scotland. Offshore wind is a sector opened up to private profit and is seeing a consequent decline in return in relation to employment at the same time as turnover rockets.

Furthermore, the Scottish Government has failed to meet 5 of the last 7 annual climate emission reduction targets. The opportunities to capture job potential from the wider low carbon economy beyond renewable generation relies upon credible planning, backed up concrete policy and investment. Inadequate plans and policy to deliver on climate targets will not a foundation from which to ensure a just transition for workers.



Scotland can do better. A proper industrial policy considering procurement, planning, licencing powers, public ownership, and investment must be pursued if we are not to entrench these failures further.

To reverse the trends demonstrated in this report, and to ensure the maximum potential employment and benefit can be captured for workers across Scotland, the Scottish Government should:

1. Establish a Publicly Owned Energy Company with a remit including leading onshore renewable energy generation projects as well as taking equity stakes in larger offshore projects.
2. Direct investment into the renewables supply chain, particularly towards ports and infrastructure necessary for wind projects, through the Scottish National Investment Bank
3. Create credible delivery plans including the involvement of local authorities, for a rapid roll-out of energy efficiency, low carbon heating systems and an expansion of low carbon transport solutions.

## Appendix 5- Summary: STUC research of key workplaces, sectors, and industries for just transition

The STUC commissioned Transition Economics to carry out workplace mapping research for key sectors and companies where there are significant job implications of a just transition. They focus on energy, transport, construction, manufacturing, waste, and agriculture and provide information on four questions:

1. What are the largest workplaces and companies within these sectors?
2. Which workplaces, companies and places are likely to grow their workforce in the coming years?
3. Which workplaces, companies and places within the low-carbon economy have significant organising potential for trade unions?
4. Which workplaces, companies, and places within the high-carbon economy, are particularly important to be engaged with as part of a Transition.

The data and resources produced through this research provide a clear foundation from which to consider the implications for just transition within workplaces, for communities and in specific local authorities. By providing sectoral as well as more specific local and company analysis, they present key areas which will be affected by transition policy including within the existing low-carbon economy, in the emerging low-carbon economy and in high-carbon sites facing the greatest challenge in decarbonising.

These must be sites of targeted and bespoke planning, policy, and investment to ensure no workers or communities are left behind. Workers in these sites, sectors and areas must be part of planning for a transition to ensure the process and outcomes are just.

This briefing paper provides an overview of the research undertaken and examples of the key information it provides.

### **1. Largest workplaces and companies within targets sectors**

The research uses ONS data to highlight concentrations of employment in the target sectors across specific locations in Scotland. The includes council wards and local authorities with a significant number of jobs in a narrow industrial sector, and local authorities with a nationally significant number of jobs in a particular industrial sector. For example:

- There are 4,000 workers in the Dunfermline Central council ward, where Amazon's distribution facility is based, in the *transport* industrial sector.
- There are 10,000 workers in the Aberdeen City council area working in *support activities for petroleum and natural gas extraction*, representing 6.24% of all employment within the council area.
- There are 400 workers in the North Lanarkshire council area in the *manufacture of articles of concrete, cement, and plaster*, representing 26.67% of the total employment from that industrial sector across Scotland.

A wider set of data sources has been used to show the largest individual employers across the target sectors. For example:

- Diageo Scotland have 3,137 employees across the UK, including a number at its bottling plant in Leven, and are headquartered in Edinburgh according to Insider's Scotland 500 list.
- The Robertson Group have won 37 construction project contracts to a value of £344m in the last twelve months according to market intelligence company Glenigan.
- Barr holds 39 waste processing contracts with local authorities in Scotland, the most of any other company.

## **2. Expected workplaces, companies, and places in target sectors for workforce growth**

The second strand of research identifies where there is expected job growth within target sectors due to the climate transition between 2023-2030. It focuses on job creation by infrastructure projects, by company and by subsector. The research is based on likely job creation given current policy and investment, rather than the full potential of jobs in a better policy environment.

These are expected growth areas and a range of social, economic, and financial factors will affect their viability and whether they do grow as forecast. Ensuring a just transition through the growth of new industries must mean securing Fair Work or union rate with workers voice embedded and the maximum opportunity for wealth to be retained within communities.

### Infrastructure projects

Public sector-initiated infrastructure projects include £600m on the R100 Superfast Broadband project taking place across Scotland as well as £200m for the electrification of the railway lines between Aberdeen and the central belt.

Private sector-initiated infrastructure projects include a £50m investment into the Port of Leith and £750m in the Zenobe Battery Parks in Kilmarnock.

### Companies

There are several companies operating in the low-carbon transition already, existing companies looking to move into the low-carbon transition and emerging start-up companies. From the operations of these companies, and the requirements of the climate transition, there are significant growth opportunities identified.

- AMTE Power forecast 215 jobs for their battery manufacturing operations in Dundee and Thurso.
- Howden have a current workforce of 350 in Renfrew and are looking to diversify from O&G into green hydrogen through the production of heat exchangers and hydrogen compressors.

- SSE Renewables are a large existing company with union recognition and many operational and under development renewables projects across Scotland.

### Subsectors

There are many key areas of the climate transition which can be seen as overarching projects to be taken forward across different companies, areas, and projects. They represent priority areas for action where there is potential job growth through the transition. For example:

- Heat network installation could create between 200 – 3,000 jobs across Scotland.
- Peat restoration could create between 100 – 300 jobs in rural Scotland.
- The production of hydrogen derived chemicals could see the maintenance of current job levels in Grangemouth.

### **3. Organising potential in the low-carbon economy**

The Scottish Government through its Fair Work Action Plan and support for Just Transition has recognised the importance of trade union recognition and workers voice to achieve co-production and a fairer economy. The third strand of research builds on the projects and companies identified in the previous section as having greatest potential for collectivised workplaces. To determine their organising potential, each is assessed against seven criteria including the concentration and number of employees, existing union activity, whether they are to be delivered by the public sector and access opportunities (digital and/or physical).

Each project is scored from 0 – 3 on each criteria to produce a total score. The higher the score, the greater the organising potential based on the criteria. The results include:

- The highest score of 14 for the Scottish Water Investment Programme primarily due to the high number of employees, existing union recognition and the opportunities for leverage (e.g., public procurement).
- Peatlands restoration provides a far lower score of 3, due to disparate employment across rural areas and subsequent access challenges as well as the lack of existing union activity or national collective agreements.
- The DFDS ferry service from Rosyth to Zeebrugge brings a score of 8 amongst the companies with expected growth due to their concentrated employees, existing union activity and collective agreement but reduced by the lack of access opportunity.

This information is intended to be informative rather than instructive and there are many projects and companies which do not score highly but have significant strategic importance.

### **4. High-carbon workplaces, companies, and places important to a Just Transition**

The final strand of research uses SEPA data to identify Scotland's highest emitting industrial sites and adds additional sites considered high-carbon and nationally significant across manufacturing, transport and gas network and boiler service sectors.

These sites are identified as important to a Just Transition given the importance of ensuring transition support is in place. They are subsequently assessed on their transferability to low-carbon activities based on their technology or skills, as well as whether they are at risk of closure if there is little to no identified transferability.

Each workplace is allocated to one of four categories (*examples in italics*)

1. Able to manufacture the same output in the future and decarbonise with existing technology. *Caledonian Paper Mill, manufacture of paper and paperboard, in Irvine*

2. Able to manufacture the same output in the future and decarbonise with technology that is not mature yet. *Tarmac Ltc, manufacture of cement, in East Lothian.*
3. Retool to manufacture and alternative output. Flotta Terminal, supporting petroleum and natural gas extraction activities, in Orkney.
4. Highly likely to close at some point. MVV Baldovie Incinerator, treating non-hazardous waste, in Dundee.

*For further information on the research carried out by Transition Economics, please contact Ryan Morrison ([rmorrison@stuc.org.uk](mailto:rmorrison@stuc.org.uk)) or Gabrielle Jeliaskov ([gjeliaskov@stuc.org.uk](mailto:gjeliaskov@stuc.org.uk)).*