



Just Transition Conditionalities

Building a Toolkit for Scotland



Just Transition
Commission

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Cover image supplied by the University of the Highlands and Islands. Two employed apprentices working on their SVQ 2 (Performing Engineering Operations) qualification. In this photo they are undertaking an assessment for one of their artefacts that is linked to the hand fitting unit.

Co-chairs' introduction

The Commission's remit provides for Scottish Ministers to make specific requests for advice on an ad hoc basis. This research report forms part of our response to a number of requests for the Commission to provide advice to support the Scottish Government in developing a practicable strategy for achieving greater alignment between its approach to conditionalities and the delivery of a just transition.

The research findings will inform the Commission's formal recommendations in its final report early in 2026. Our work on this topic is intended to support delivery of tangible gains, whether in the form of more security for workers, environmental protection and resilience measures, enhanced community wealth building and an expanded domestic supply chain for sustainable industries.

This independent research report is intended to provide useful information, evidence and analysis on the following topics:

- The existing approach to applying conditionalities in Scotland
- The concept of just transition conditionalities, i.e. conditionalities aligned with just transition principles and deliverables in the Scottish context
- International examples of applied good practice and key learnings
- A just transition conditionality toolkit.

While Grangemouth forms the primary case study for this report, the findings are applicable to a broad range of priority areas of focus for just transition delivery.

To prepare this research, the Commission instructed Riyoko Shibe at the University of Glasgow. We are hugely grateful to Riyoko for all their work this year in bringing together such a helpful and instructive set of findings on a very complex range of subjects. The work has been informed by specialist input from a large number of people who took time to share their knowledge through interviews and in writing, both from within the Scottish Government and in our wider policy community. We are grateful to everyone who contributed to developing our understanding of this key topic.

This research should not necessarily be taken, in whole or in part, to be the Commission's consensus view on a particular subject. The information, evidence and analysis provided in this report is intended to support policymakers and others with decision making power in underpinning progress towards a just transition.



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Introduction

The primary purpose of this research report is to support the Just Transition Commission by informing any advice it may wish to provide to the government regarding the use of conditionalities on access to public support and finance to help achieve a just transition. The report is also intended to support policymakers in understanding different options and approaches to conditionalities. The research arises from the specific context of the situation at Grangemouth following the closure of the refinery in April 2025, in which the topic of conditionalities and the goal of a just transition has been prominent, but has yet to be clearly operationalised. This introductory chapter sets out the principal elements of this context and the methods employed in the analysis.

This report supports an enhanced understanding of the conditionality options that recipients of the Grangemouth Just Transition Fund (JTF) could be tied to. It investigates proposals recommended by the Just Transition Commission and supported by the Scottish Government including commitments such as ensuring fair work for employees, and some level of community investment, with proposals including profit-sharing mechanisms and equity stakes. It looks at the current approach to conditionalities in Scotland, how this could be enhanced, and reviews risks and issues. It outlines examples of good practice in Scotland, the UK, and internationally. A toolkit of options is presented that relates to the context of industrial closure, decarbonisation and job losses, and the question of how best to redeploy existing skills. Though primarily related to Grangemouth, the findings are also applicable to the wider economic development of Scotland and the UK as we continue the transition to a low carbon economy.

a. Overview and context

In April 2025, Petroineos ceased refining operations at Grangemouth. 400 out of 500 direct jobs are expected to be shed, and a further 2,800 jobs across the supply chain are at risk. A briefing published by the Just Transition Commission in the wake of the initial closure announcement in November 2023 identified the threat that the closure posed to a community and local economy dependent on a single private employer. It advised urgent need for protections for Grangemouth to secure its long-term prosperity.¹

To help achieve this aim, the Scottish Government announced a £25 million Just Transition Fund (referred to hereafter as either the Grangemouth JTF or the Grangemouth Fund) for Grangemouth in February 2025. Conditionalities were recognised as key to realising the full social, environmental and economic potential of the Grangemouth Fund, with development of a series of just transition conditionalities set out as a critical next step in the revised Grangemouth Industrial Just Transition Plan, published by the Scottish Government in June 2025. A near-term action (actions taking place now and across the next twelve months with an urgent priority) to ensure a just transition for Grangemouth was to “[maximise] the reach of public funding particularly for workers and the wider community.”²

The Just Transition Plan outlines a further long-term action, to be developed over the next 3 to 5 years, to develop a supply chain plan which increases opportunities for Small and Medium-sized Enterprises (SMEs) to access and participate in the cluster. Conditionalties should support this aim. 98% of businesses (in all sectors except in oil and gas, finance and insurance) in Scotland are SMEs. Small businesses are defined as those with 0 to 49 employees and medium businesses as those with 50 to 249 employees.³ This report focuses on this business context and recognises that rigid conditionality requirements could be unattainable for SMEs with limited capacity and resources. A balance must be struck between a conditionality programme that encourages good business practice, but which is flexible and proportional to ensure SMEs are supported to adapt their behaviour.

Though connected to the Grangemouth JTF, with a primary focus on grants, investment and contracts awarded by the Scottish Government, the report presents an opportunity to consider how a strategic approach to conditionalties linked to the high-level goal of achieving a just transition could be adopted elsewhere in Scotland and the UK. For example, in 2021, the Scottish Government established its first JTF for the North East and Moray, a £500 million ten-year commitment to projects that contribute towards the net zero transition in the region.⁴ The first two years of implementation ran from 2022 to 2024 and saw a combined spend of over £47 million across 24 projects.⁵ Another opportunity is the UK government's National Wealth Fund, which has committed £200 million to new opportunities in the Grangemouth industrial cluster.⁶

Conditionalties are also an important mechanism in strengthening just transition planning in the Scottish economy beyond industry and the energy sector. In Scotland, there are a range of levers and institutions that support economic growth which together account for a substantial resource capacity. This includes not just grants, but also loans, procurement, equity, financial guarantees, and licencing, as well as enterprise agencies like Scottish Enterprise and the Scottish National Investment Bank.⁷ If deployed systematically and in a coordinated way, these combined mechanisms could take a proactive, market-shaping role in just transition planning and delivery.⁸ A robust conditionality programme, which helps foster a symbiotic relationship between government and business, would be an important step in strengthening the economic value of these levers. This would require a level of innovation to enhance the current approach and move closer to the many international examples being used successfully to achieve environmental, social and economic objectives.

b. Just transition conditionalties planning in Scotland

The Grangemouth Industrial Just Transition Plan detailed that recipients of the £25 million Just Transition Fund must be tied to certain social, environmental and economic obligations. It outlined that:

Public funding directed towards the Grangemouth Industrial Cluster will consider conditions that support fair work, community benefits, equity stakes, profit sharing mechanisms, and environmental needs.⁹

The need for conditionalities attached to the Grangemouth JTF follows from advice by the Just Transition Commission in the wake of the closure announcement. In July 2024, the Commission published a briefing identifying challenges and opportunities in relation to efforts to achieve a just transition at the Grangemouth industrial cluster. This emphasised more creative models of investment and funding in the form of green conditionalities to make benefits from investment more robust, secure and long-lasting, and importantly, transferrable to the community, workforce and environment. It detailed that:

In cases where industrial operators seek public investment/subsidy to support work required to deliver the energy transition, this presents a clear opportunity to achieve long-term return on investment via conditionality, profit-sharing mechanisms and/or equity stakes linked to just transition needs, particularly for local communities.¹⁰

This was not the first time a recommendation has been made to investigate just transition conditionalities in Scotland. In 2021, the first Just Transition Commission argued that strategic conditionality on public investment was a crucial tool for delivering a just transition. It stated:

For the transition to be just, and for it to gain any traction with workers and communities, we must be prepared to attach conditionality to funding streams to build and strengthen local supply chains that nurture competitive advantage.¹¹

The first JTC advised in favour of strengthening the value of public funding through conditionalities attached to emissions reductions and fair work approaches. The Commission asserted that “this is not a call for protectionism, but rather a more holistic way of defining best value in public sector funding.”¹²

The Scottish Government’s programme for government 2021 to 2022, *A Fairer Greener Scotland*, included a response to the Commission’s recommendations on conditionalities which stated that:

To support businesses in transitioning to net zero, we will consult on applying conditionality to public funding including a requirement for large businesses to complete annual public disclosure on how climate change will affect their business, and the role of Just Transition Plans.¹³

The Bute House Agreement’s (BHA) shared policy programme incorporated this commitment. The BHA was the power-sharing agreement between the Scottish Government and Scottish Greens agreed in 2021, and which ended in April 2024. The shared policy programme was intended as the framework for government from 2021 to 2026. It underlined the need to align public sector funding with wider social and environment benefits listing fair work, the just transition to net zero, and elimination of tax avoidance to support the long-term equity of the economy. It emphasised:

We therefore agree to work with employers, unions, local authorities and other stakeholders to ensure that by 2025 conditions are applied to the scoring criteria for all public sector grants, where it is proportionate and relevant to do

so under current legislation. These conditions shall also be applied to relevant, tailored non-financial support provided by enterprise agencies.¹⁴

The BHA underlined the goal of applying conditionality that is both “proportionate and effective in delivering real benefits, without placing unnecessary burdens on recipients of public sector grants and support” and identified the need for developing monitoring and evaluation frameworks to track progress.

Just transition conditionalities as set out by the BHA included payment of the living wage and worker voice (with trade union recognition presented as an example);¹⁵ implementing mechanisms to ensure recipients of grants do not engage in avoidance; and for large businesses, consultation on annual public disclosures, publication of just transition plans, and commitment to reduce Greenhouse Gas (GHG) emissions.¹⁶ Since the ending of the BHA in 2024, efforts to develop just transition-specific conditionalities at a government level have stalled.

The Scottish Government does, though, actively apply some conditionalities which have developed those set out by the BHA. Since 2023, two Fair Work First principles have become mandatory for firms receiving public grants: payment of at least the real Living Wage and providing effective worker voice (defined as creating “a meaningful, safe and constructive environment where [workers’] views are encouraged, listened to and have influence on organisational decisions”¹⁷). Effective worker voice was also set as a mandatory condition on the 2025-2026 funding round for the North East and Moray JTF.¹⁸

c. Methods

This report was written through (i) a desk-based review of existing literature, and (ii) seventeen structured interviews with experts and stakeholders. These are listed below in Table 1 along with their relevance to the research.

The analysis in this report does not necessarily reflect the views of stakeholders interviewed, and while views and insights offered by interviewees have informed the research, these are typically not attributed to specific people or organisations.

Table 1: description of interviews

Stakeholder	Description
Common Weal	Common Weal is a thinktank in Scotland and has researched into the Scottish energy sector on topics including ScotWind, publicly owned energy, community benefits from renewables, and the Green Freeports.
Community Wealth Building lead	Former Community Wealth Building (CWB) advisor to the Scottish Government. CWB encourages use of local supply chains, anchoring local business, and other mechanisms, to generate and circulate wealth in communities.
Forth Valley College	Forth Valley College is Grangemouth’s local college that trains INEOS and Petroineos apprentices as well as more generally much of the local workforce employed in the industrial cluster. Since the closure of the refinery the college has received government funding

	to support the reskilling of the Petroineos and INEOS O&P workforce directly impacted by redundancies.
Future Economy Scotland	Future Economy Scotland is a thinktank that develops economic policy to decarbonise, democratise and decommodify the Scottish economy. It has published two reports with the UCL Institute for Innovation and Public Purpose on industrial strategy for Scotland.
Scottish Enterprise	<p>Scottish Enterprise (SE) strategy team leading on net zero and fair work policies, and Head of Grangemouth Transition.</p> <p>SE is Scotland's national economic development agency. It leads on investment enquiries in Grangemouth and sits as a Co-Chair on the Grangemouth Just Transition Programme Board and on the Industrial Just Transition Leadership Forum.</p>
Scottish Environmental Protection Agency (SEPA)	<p>SEPA is Scotland's environmental regulator.</p> <p>One of SEPA's activities is to monitor industrial activity that causes harmful pollution of air, water and land, which could cause harm to communities and the environment. Grangemouth is Scotland's largest industrial cluster and carbon emitter and home to natural wildlife habitats subject to international and national conservation treaties and measures.</p>
The Scottish Trade Unions Congress (STUC)	Just transition and fair work leads.
SSE	<p>The Director of Sustainability for SSE Renewables and the Head of Social and Economic Sustainability for the SSE Group.</p> <p>SSE is a private multinational energy company based in Scotland. The company was the first in the world to publish a just transition strategy.</p>
Unite the Union	<p>Unite Senior Representative at Grangemouth Petroineos.</p> <p>Policy and regional officers leading on the Inverness & Cromarty Firth Green Freeport and the Forth Green Freeport.</p>
Scottish Government	
Adaptation	Climate change Team Leaders and Senior Policy Advisor leading on the business, economy and finance chapter of the Scottish National Adaptation Plan (SNAP3).
Critical Energy Infrastructure and Commercial Projects	Grangemouth leads involved in just transition planning and delivery including development of the Grangemouth Industrial Just Transition Plan.
Fair Work	Fair Work Policy Officers leading on the Scottish Government Fair Work First strategy.
Green Freeports	Green Freeports Policy and Delivery Unit.
Just Transition	Just Transition leads involved in just transition policy and the Just Transition Fund.
Procurement	Procurement Policy Managers leading on sustainable procurement strategy and fair work.

Section 1: What is conditionality?

Conditionalities are a well-established tool used by governments and financial institutions to shape the behaviour of firms.¹⁹ This report focuses on conditionalities used to enhance good governance practices, capacity and delivery of strategic priorities.²⁰ It applies Mazzucato²¹ and Rodrik's framing of conditionalities to strengthen UK industrial strategy that pertain to:

interactions between a public agency ("the government") and a private-sector entity ("the firm") where the government provides a benefit to the firm (a grant, loans or equity investments, procurement contracts, tax incentives, training, infrastructure, technological support, regulatory forbearance, etc.) in return for the firm undertaking behavioural changes towards meeting certain public objectives. Conditionality refers to the framework specifying the responsibilities, commitments, or undertakings of the firm.²²

By encouraging a behavioural change in a firm towards national missions and priorities (such as just transition) conditionalities can empower governments to maximise the value of public investment and retain a level of control over how funds are used in accordance with these priorities.

There are two main forms of conditionalities that support this aim, ex-ante, and ex-post. Ex-ante applies to conditions which need to be fulfilled as a pre-requisite for funding, similar to eligibility criteria, where a firm is expected to make a change in anticipation of receiving financial assistance. Scottish Enterprise – Scotland's national economic development agency – puts ex-ante conditions on grants whereby firms must have a net zero plan in place (or plan to have one in place within twelve months) in order to access funding. Through ex-post conditions, a firm would agree to a set of conditions that they would fulfil after receiving funds, receiving further support once conditions are fulfilled.

Conditions can be fixed or iterative. For instance, profit-sharing and reinvestment might be fixed (this was seen in delivery of the COVID-19 vaccine developed in the UK by Oxford and AstraZeneca, where royalties had to be reinvested back into medical research). Iterative conditions might see contracts updated and renegotiated through programme delivery. Fully fixed conditionality programmes include ring-fenced funding like the Grangemouth Skills Transition Employment Plan. This was aimed initially at all Petroineos workers directly impacted by the refinery closure,²³ extended in August 2025 to include INEOS O&P workers.²⁴ The Scottish Government's Fair Work First criteria consist of seven fixed elements developed over a number of years through public consultations and stakeholder engagement. Since 2023, two criteria (payment of at least real Living Wage and effective worker voice) have become mandatory on all public grants administered by the Scottish Government, with scope for flexibility in cases where employers cannot afford to raise wages.

Monitoring and evaluation, and penalisation for non-compliance, are an important part of good conditionality practice. Mazzucato and Rodrick set this out as one of four pieces of an analytical taxonomy of conditionalities, relating to the presence of "explicit, quantitative, or measurable criteria used to ascertain compliance with

conditionality,” and assessing auditing and evaluation plans, how assessments are made, and by whom.²⁵ Letta highlights in the context of the European Single Market, conditions “must be operational, measurable, verifiable, and enforce consequences in instances of non-compliance.” He stresses that:

Importantly, not only the initially agreed conditionalities matter but also to which extent these are later renegotiated or not followed through, making the definition of clear conditionality criteria, their monitoring, and enforcement a key for successful industrial policy making.²⁶

Strict conditions and penalisation mechanisms can, however, create barriers and burden for small business with less resources and experience. This was seen in the EU Common Agricultural Policy (CAP) legislation. To receive income support, individual farmers are required to align their activities with EU agricultural and environmental standards. Payment was withdrawn or reduced if farmers violated these standards.²⁷ However, the administrative burden that proving strict adherence to regulations placed on farmers was considered disproportionate and unattainable, and following consultation in 2025, conditions were simplified.²⁸ This underlines the need for a proportionate conditionality programme that accounts for the capacity and resources of firms, relevant especially for the Scottish business context which is dominated by SMEs.

The European Alliance for a Just Transition identifies the need for not only monitoring and evaluation on conditionalities but also adherence to uniform, standardised expectations around good practice. It stresses that to integrate just transition into the 2024-2029 EU Cycle, the EU and its member states should:

Apply harmonised environmental and social conditionalities to companies receiving all forms of public finance and rigorously monitor compliance. Social, gender and environmental considerations should be mainstreamed into funding programmes and the principles of ‘do no significant harm’ [DNSH] and ‘polluter pays’ [PPP] should be strictly enforced.²⁹

The existence of clear, uniform objectives and outcomes – like DNSH and PPP – supports effective deployment of conditionalities by helping to foster uniform, standardised expectations of good practice. DNSH is a principle assessing the environmental sustainability of policies, programmes and funding, and aims to minimise negative impact on the EU’s environmental and climate objectives.³⁰ PPP is a principle contending that those responsible should pay the price of preventing and controlling pollution.³¹ PPP is mandated through environmental taxes, charges and fees on polluting activities, policy initiatives like the deposit return schemes, offsetting schemes, and financial incentives to encourage non-polluting activities.

In conclusion, conditionalities on funding must:

- Induce a behavioural change in the firm receiving funding that supports the objectives of the donor.
- Be subject to a monitoring and evaluation framework
- Incorporate penalisation measures in the event of non-compliance dependent on the capacity of firms

- Align with broader national-level principles and objectives.

Section 2: What is just transition conditionality?

Just transition conditionalities are a way of empowering the government to effectively mobilise public investment to shape the economy, whilst leaving no one behind. Just transition conditionalities are the social, environmental and economic terms to which firms undertaking economic activities through public funding are bound. Application of just transition conditionalities is cross-sectoral. The specific context of this report, though, pertains to the energy sector and the fossil fuel workers and communities who depend on jobs in Grangemouth, and whose long-term livelihoods and economic security are at risk from industrial closure. A definition of just transition conditionalities, for the purposes of this report, builds on the definition above provided by Mazzucato and Rodrick but relates to firms undertaking economic activity linked to the ongoing transition to a low-carbon economy, including industrial closure, phase down activities, and growth areas. In the Scottish context, firms are typically SMEs, which dominate 98% of the business landscape.

Just transition conditionalities encourage behavioural changes in firms in alignment with national just transition outcomes and principles.³² Behavioural changes in a just transition context could include:

- Instigating development training and apprenticeship schemes in their communities
- Protecting existing workforces by improving wages and reskilling workers
- Using domestic and green supply chains
- Investing into local adaptation and climate resilience measures such as flood protection
- Committing to community investment through community benefit funds or community wealth funds
- Committing to cooperative/worker ownership or equity stakes.

In return, firms receive benefits in the form of – as outlined by Mazzucato and Rodrick above – grants, loans or equity investments, procurement contracts, tax incentives (such as those granted in Freeports and the Scottish Green Freeports), training, infrastructure, technological support, reduction of exposure to climate risk, etc. Mechanisms for integrating conditions could include adapting eligibility criteria to include just transition conditions for grants and funding, or weighting evaluation criteria in favour of just transition-aligned benefits rather than financial cost. For instance, Spain's just transition tenders weighted renewable energy projects significantly in favour of socio-economic impact (see Section 4, Table 4 for further examples of just transition conditionalities as applied in an international context). Beyond the £25 million Just Transition Fund for Grangemouth, relevant funds in Scotland and the UK where these could have been applied (past and present) include the North East and Moray JTF, contract rounds such as the Contracts for Difference (CfD) scheme, ScotWind Leasing, and the Scottish Zero Emission Bus Challenge Fund (ScotZEB2). These are discussed in further detail in following sections.

Table 2 below identifies the key features of just transition conditionality. This builds on and adapts Mazzucato and Rodrick's taxonomy of conditionalities.³³

Table 2: Taxonomy of just transition conditionalities adapted from Mazzucato and Rodrik (2023)		
Type of conditionality	Example	Alignment with just transition principles
Conditionality which targets a type of firm behaviour	Directionality: directing a firms' activities towards just transition goals	Providing skills, training and apprenticeships Trade union recognition Using green, domestic supply chains Investment into communities
	Profit-sharing: requiring returns to be shared from profitable firms and activities through royalties or equity stakes	Equity stakes taken by community, workers, local authority or government in new projects and assets from natural resource windfalls like offshore wind Community or local authority ownership of resources and assets.
	Reinvestment: requiring firms reinvest profits into productive activities	Reinvestment of profits into worker training, apprenticeships, skills, and local colleges
Fixed versus negotiable/iterative conditions	Fixed requirements	For example, fixed requirement on proportion of government equity stake in renewable energy projects; fixed requirement on proportion of community-ownership of onshore windfarms.
	Iterative requirements determined through consultation and discussion with firm recipients	This could apply to businesses which may not have capacity to adapt their behaviour immediately, such as SMEs. For example, a condition on reinvestment could be on a longer, more flexible timeline and dependent on an SMEs annual revenue.
Measurable performance criteria & monitoring and evaluation	The presence of criteria used to measure compliance with conditionality, including monitoring and evaluation plans, how assessments are made, and by whom.	Development of public agencies to monitor conditionality programmes. For instance, a labour market agency that monitors fair work compliance. ³⁴ Draw on capacity and support from public organisations or trade unions to undertake regular review of workplace practices.

Section 3: What is the current approach to conditionalities in Scotland?

This section details an appraisal of Fair Work First and Net Zero conditionalities, outlines the risks, issues and opportunities to the current approach, and assesses the specific needs of Grangemouth and how these are being met through current approaches.

d. Appraisal of current mechanisms: Fair Work First and Net Zero

This section details the two main conditionality programmes applied in Scotland that have a direct relevance to just transition: Fair Work First as applied on all public grants administered via the Scottish Government since 2023, and Scottish Enterprise's application of Net Zero conditionality. This section does not appraise public health legislation, climate change legislation, or other laws and legislation which firms are subject to pertaining to human rights, working conditions, and mitigating pollution/environmental harm.

Fair Work First

In Scotland there is use of ex-ante conditions in the form of selection or eligibility criteria on public grants and procurement, where private firms must adapt or change their behaviour to receive funding or procurement contracts. The main lever is Fair Work First. FWF was implemented iteratively, beginning as a set of strongly encouraged guiding principles in 2019 (the last two in the below list were added in October 2021 in light of the Covid-19 pandemic):³⁵

- payment of at least the real Living Wage;
- provide appropriate channels for effective workers' voice, such as trade union recognition;
- investment in workforce development;
- no inappropriate use of zero hours contracts;³⁶
- action to tackle the gender pay gap and create a more diverse and inclusive workplace;
- offer flexible and family friendly working practices for all workers from day one of employment; and,
- oppose the use of fire and rehire practice.

In July 2023, under the Bute House Agreement, the Scottish Government applied the first two components, payment of at least the real Living Wage, and providing appropriate channels for effective workers' voice, as the “default position” to all recipients of public sector grants.³⁷ Payment of the real Living Wage has also been mandated to those involved in the delivery of Scottish Government contracts since October 2021.³⁸ FWF was developed as a way to promote fair work practices in Scotland in the absence of employment law powers devolved to the Scottish Government, which meant the administration “had to act a little creatively to try to encourage better pay and conditions for workers in areas where it couldn't legislate directly.”³⁹ The incorporation of Fair Work in the North East and Moray JTF is an example of how this area of work is being developed. Effective worker voice was set

as a mandatory criterion in the 2025-2026 funding round, with any applications which scored zero on worker voice automatically failing. As well as this pre-requisite eligibility criteria, the relative evidence of effective workers' voice was then weighted as part of the assessment criteria.⁴⁰

There are limitations to FWF, however, including the following:

- Trade union recognition is not mandated. Definition of 'effective worker voice' includes staff engagement surveys, staff forums and work councils.⁴¹ The Scottish Government does not have the powers to mandate trade union recognition because industrial relations legislation is reserved.
- Uneven uptake of FWF across sectors. The social care sector, offshore wind, and construction have not seen comparable uptake of FWF compared to the public sector, particularly central government and NHS Scotland.⁴²
- Uneven uptake of FWF within sectors.⁴³ Offshore wind has highly fragmented company structures and multiple levels of contracting tiers which means that commitments to workplace terms and conditions at the top level might not filter down the supply chain.⁴⁴ Given fragmented organisational structures, it is difficult to track uptake of FW through supply chains.
- Fair Work conditions apply only to UK-based production. FWF standards do not apply to suppliers which take their production abroad. The effects of this have been studied in offshore wind⁴⁵ and vehicle manufacturing.⁴⁶

These limitations mean that worker voice is undermined where an employer does not recognise a trade union but agrees to a staff forum, thus meeting requirements of FW – but failing to align with just transition principles, FWF's own objectives around collective bargaining,⁴⁷ and other indicators such as the National Performance Framework 4 that use collective bargaining as a metric for progress.⁴⁸ Moreover, as a recent STUC report has highlighted, sectors with a poor track record of union recognition like offshore wind experience worker exploitation through, for example, below minimum wage salaries, lack of worker training and exploiting migrant labour.⁴⁹ Efforts have however been made to address issues around workforce protections. For example, in August 2025, the UK Government consulted on reforms to the CfD Clean Industry Bonus in Allocation Round 8 to strengthen workforce protections in offshore wind. Proposals would encourage developers and suppliers to commit to discussions on a new offshore wind fair work charter, co-developed with trade unions and the offshore wind industry, which would cover issues on pay, conditions, job security, and trade union access.⁵⁰

Complex supply chains coupled with the dominance of foreign state-owned enterprises in Britain's energy and manufacturing sector further undermines the strength of FW.⁵¹ Offshore wind developers have evidenced trade union hostility and have been seen to "flout the Fair Work principles that are supposed to ensure good jobs and fair treatment".⁵² The majority of the twenty ScotWind developers (see case studies below) are joint ventures headquartered across fifteen different countries.⁵³ Alexander Dennis, a UK-based, Canadian-owned bus manufacturer based in Larbert, six miles from Grangemouth, have expressed frustration at what they perceive as the uneven playing field created by uneven application of FWF.⁵⁴ They argued that this

“not only puts domestic manufacturers at further competitive disadvantage, but also undermines the value of this flagship policy as government-funded work is shipped offshore.”⁵⁵

Net Zero

Since 2011, public bodies in Scotland have been legally obliged to reduce their carbon emissions as set out in the Climate Change Act.⁵⁶ This aligns with the Scottish Government’s legally binding commitment to achieve net zero by 2045. Economic development agencies, as well as public procurement administered via the Scottish Government, have aligned strategies accordingly. Scottish Enterprise, for instance, has adopted net zero and energy transition strategies to support businesses to align with national strategic missions. A report by Scottish Enterprise emphasised that “all industrial and user sectors are considering an eventual strategic pivot away from traditional, carbon-intensive energy sources towards a more sustainable energy mix” in an effort to meet Scottish Government net zero targets.⁵⁷ While net zero conditionalities are attached to public grants in Scotland, though, this is not in the same coordinated and standardised fashion as FWF.

With this view, all Scottish Enterprise grants have stipulations that recipients must demonstrate some commitment to net zero. Scottish Enterprise requires that companies receiving financial support of over £10,000 must have a credible net zero plan in place or commit to having one in place within twelve months, and complete the Net Zero Accelerator (NZA) online tool within six weeks. For companies receiving financial support of under £10,000 they must commit to completing the NZA online tool within six weeks.⁵⁸ The NZA tool includes five questions on adaptation under climate change and market trends. These ask companies to assess and report on how they are adapting their operations to severe weather events and climate change.⁵⁹

There are limitations to the approach to net zero conditionalities. For example, since 2021, INEOS has received a total of £700,000 in Scottish Enterprise grants with a view to net zero industrial production.⁶⁰ While the company has reduced emissions by 37% since 2005,⁶¹ a media investigation found that in the post-COVID-19 “bounce back” in oil demand and production levels, emissions at INEOS’ Grangemouth operations increased in both the refinery and petrochemical complex. Between 2021 and 2022, INEOS’ methane emissions grew by 20% while Petroineos’ emissions at the oil refinery rose by almost a third.⁶² Under the existing approach, this does not breach any grant agreements. Net zero conditionality is not applied with a wider view of firm behaviour, corporate practices or the ownership structures that characterise the energy sector. Though INEOS is the joint owner of Petroineos alongside PetroChina, under the existing approach, Petroineos’ activities cannot be influenced by funding awarded to INEOS as an individual business.

Throughout major redundancies and restructuring processes in Petroineos, INEOS continued to receive the above Scottish Enterprise grants totalling £700,000. This included a grant agreed in October 2022 of £500,000 to INEOS in Grangemouth towards a £1 million project for the company to make an assessment into hydrogen-fuelled petrochemical production. The first instalment of £62,243, was paid in July 2023, and the second instalment of £428,000 made in March 2024.⁶³ Further

(undisclosed) grants were given to the company by Scottish Enterprise between April and August 2024.⁶⁴ These had the same conditions tied to any Scottish Enterprise grant – commitments to Fair Work and net zero targets. But whilst INEOS received this money, plans were made to shed 75% of the Petroineos workforce with thousands of jobs risked across the supply chain as well as employment in INEOS O&P and INEOS FPS (the Forties Pipeline System). Conditionalities as they stand do not appear to have been successful in influencing corporate strategy into a higher level of alignment with the broader just transition framework in the Grangemouth case.

This recent example shows the limitations of net zero conditionalities as they currently stand. Just transition conditionalities would have broader application in terms of company operations related to the transition when distributing grants. They would also have robust and actionable standards in terms of existing workforce protections, job retention, local supply chains, and community benefit to support higher quality anticipatory planning around industrial change.

e. Risks, issues and opportunities

Community benefit

There is currently a lack of standardisation of community payments and investment from renewable energy supply. Community Benefits Payments (CBPs), voluntary contributions from renewable energy developers to local communities, are commonly used in Scotland. These have brought significant benefit to local authorities with communities receiving grants into skills development and STEM learning and resources.⁶⁵ However, the approach as it stands today is voluntary, creating an ad hoc distributional pattern, referred to by the Just Transition Commission as “a postcode lottery” where some communities experience firsthand the goodwill of particular firms, while others like Grangemouth report an experience defined by extraction and closure.

CBPs, even those paid in the hundreds of thousands or millions of pounds over the lifetime of a fund, are minimal compared to the turnover generated by private offshore and onshore wind developers, which reach the billions (see below bullet points with examples of CBPs versus profits generated by community-ownership).⁶⁶ Current Scottish Government community benefit guidance for onshore wind under the Good Practice Principles from Onshore Renewable Energy Developments recommends a value of benefit equivalent to £5,000 per MW per annum.⁶⁷ Though subject to public consultation in 2018, this baseline has not changed since 2010.⁶⁸ Reporting by the Ferret in 2022 showed that communities receive only 0.6% of the total value of electricity produced by onshore wind farms (just over £22 million of electricity valued at over £3.5 billion).⁶⁹

Community-owned energy provides social and economic returns comparable and sometimes higher than that of privately owned ventures through CBPs. Some examples are outlined below:

- Shetland: Garth Community Wind Farm (a five-turbine development of 4.5MW) generates around £2 million per year for the North Yell community fund. The privately-owned Viking wind farm brings a comparable £2.2 million per year for

the Shetland Community Benefit Fund.⁷⁰ Viking is 100 times larger than Garth at 443MW.

- Orkney: Orkney Community Wind Farm is owned by Orkney Islands Council (OIC) developing three six-turbine developments. This is anticipated to bring OIC £5.5 million per year and pay £432,000 CBPs per year.⁷¹
- Western Isles: Beinn Ghrideag Community Wind Farm (a three-turbine development of 9MW) brings £900,000 per year for the Point & Sandwick Trust, and, following repayment of capital, is expected to bring £2 million per year. The privately-owned Druim Leathann Wind Farm, five times bigger than Point & Sandwick's at 50MW, brings £350,000 per year.⁷²

In 2017, the Scottish Government laid out an ambition that by 2020, “at least half of newly consented renewable energy projects will have an element of shared ownership.”⁷³ This ambition has fallen short. Between 2017 and 2024, newly consented onshore wind brought capacity up from 7,435MW to 9,600MW, an increase of approximately 2,200MW.⁷⁴ Of this 9,600MW in 2024, only 23MW was co-owned by communities (constituting approximately 1% of newly consented onshore wind projects, and 0.2% of total capacity).⁷⁵ Feasibility of community and local authority ownership is limited by resource constraints and access to finance to meet the high costs of development, planning and technology. A report by the Royal Society of Edinburgh described community-ownership as a “patchwork landscape with some communities negotiating significant investment, while others lacking opportunity to do so.”⁷⁶

Devolved powers further limit the capabilities of local authority and community ownership, with CBPs a reserved matter to the UK government. In 2023, Gillian Martin, then Minister for Energy & Environment, wrote to the UK government to emphasise a call “to explore mandating community benefits for onshore energy developments.”⁷⁷ In 2024, the Just Transition Commission made a recommendation that until community ownership mechanisms are agreed nationally, the Scottish Government “should develop, alongside industry, practical guidance that enables community ownership of revenues, supported by access to finance for local communities.”⁷⁸

Several local authorities and councils have embraced Community Wealth Building (CWB) to generate sustainable and long-term local investment from renewable energy. CWB is a model of economic development that connects to just transition by circulating wealth in communities – through, for example, forms of shared-ownership – rather than relying on attracting external investment through CBPs.⁷⁹ Moray, Argyll and Bute, Orkney, and Highland Councils, as well as Comhairle nan Eilean Siar (Western Isles Council) have each committed to various forms of CWB strategies, policies and mechanisms as alternatives to CBPs.⁸⁰ Strategies like these are expected to be strengthened over the next few years through the Scottish Government's commitment to CWB. In March 2025, a Community Wealth Building Bill was introduced in Parliament which aims to ensure the consistent implementation of CWB across Scotland to support the generation, circulation and retention of wealth in local and regional economies.⁸¹

Domestic jobs and manufacturing

The development of domestic supply chains in Scotland is limited by an approach that prioritises short-term financial cost, inward investment and, as stated by an STUC report, “leaving [green] transition to the market” rather than public control, long-term domestic economic security and public return.⁸² This can be seen in contracting rounds that have benefitted overseas manufacturers. In 2024, the second phase of the Scottish Zero Emission Bus Challenge Fund (ScotZEB2) was launched, awarding 523 vehicles. 361 contracts were won by overseas manufacturers, while Scottish firms were granted only 162, under a third of the total. UK bus manufacturer Alexander Dennis, based in Larbert, Scotland, criticised the lack of incentives in place to prioritise domestic manufacturing.⁸³ Analysis by Future Economy Scotland connected the failure to award domestic contracts to a scoring criteria system that prioritised financial cost over domestic manufacturing and local economic benefits.⁸⁴ “Wider community and decarbonisation benefit” (including job creation) was scored 10%, outweighed by financial criteria (40% to financial cost, 30% to deliverability, and 20% to market transformation).⁸⁵ The analysis argued that this put cheaper overseas competitors at an advantage, stating that:

The design of the scheme arguably prioritised the cheapest bids, regardless of where the resulting buses were made or the domestic economic benefits they could generate.

Schemes can be designed in ways that give higher weighting to domestic jobs and manufacturing, including within the European Union. In Spain, the Just Transition Institute (ITJ) developed a tender process that maximises the local economic benefit of renewables projects to mitigate the impact of the closure of its coal-fired power capacity. The first tender was issued in 2022 to Endesa, a Spanish utility company, with socioeconomic benefit (the equivalent criterion to ScotZEB2’s 10% community and decarbonisation benefit) scored at 55%.⁸⁶ Endesa has committed €1.5 billion into renewable energy projects in Andorra, creating 380 direct jobs and 6,000 indirect jobs.⁸⁷ The Spanish NGO Apadrina un Olivo credited the Spanish government for the tender design, emphasising “it’s incredibly powerful that the ministry has the capacity to drive change simply by stipulating that 55% of the tender’s evaluation will depend on the social-economic project.”⁸⁸

Policy which aims to grow domestic supply chains is further hampered by limited local infrastructure coupled with the private nature of existing infrastructure. This has been the case since the start of large-scale offshore wind development since 2012. Local content provisions were compromised by lack of domestic vessels, with developers forced to use overseas crew transfer vessels from Europe.⁸⁹ Though domestic supply chains have since expanded, the Offshore Wind Champion highlighted in 2023 that Scotland’s local content remains constrained by a small supply chain, limited government support and public investment, and the largely private nature of Scotland’s ports (a mix of private, Trust and local authority-owned) and manufacturing base.⁹⁰

Since the publication of the Offshore Wind Champion report in 2023, the Scottish Government has committed up to £500 million strategic investment in offshore wind infrastructure and supply chain over five years;⁹¹ the UK government has introduced the Clean Industry Bonus into the Contracts for Difference (CfD) scheme;⁹² and £1

billion private and public investment was announced for the offshore wind supply chain in the UK Industrial Strategy in 2025.⁹³ In 2022, the STUC estimated that Scotland would need public investment of between £2.5 to £4.5 billion by 2035 into ports and manufacturing to support the offshore wind supply chain in a way that generates social and economic returns and domestic jobs.⁹⁴ There is still a long way to go to achieve this level of investment.⁹⁵

Monitoring & Evaluation (M&E) and penalisation

In Scotland and the UK, business cases are assessed following guidance as issued by HM Treasury's Green Book. This sets out guidelines on how to appraise policy and programmes on their public value, and on design and application of monitoring and evaluation before, during and after projects.⁹⁶ Appraisal is guided by cost-benefit analysis. The Green Book has been used to assess projects in the Grangemouth JTF and is used as standard practice by Scottish Enterprise, while business cases for each of the Green Freeports are prepared in alignment with the Green Book. The Treasury's 2025 review of the Green Book acknowledged several issues with the approach, including over-emphasis on cost-benefit analysis, poor transparency and inadequate capacity across the public sector.⁹⁷ Mazzucato and Macfarlane have described the appraisal mechanism as one based on market failure theory and "a simplistic, static form of cost benefit analysis [...] that weighs the pros and cons of a policy by using existing market prices."⁹⁸

In the Scottish context, though there is an evaluation process, conditionality is not hard edged, and there is limited penalisation for non-compliance or under-delivery. This is in part due to consideration for the needs of SMEs which may have neither the resources to comply with strict conditionalities, nor the experience measuring and mitigating, for instance, emissions. Instead, the approach leads with support, helping businesses adopt existing conditionalities into their business approaches. Both Scottish Enterprise and the Fair Work First division in the Scottish Government employ targeted and consistent stakeholder engagement to communicate the benefits of fair work and net zero and nudge businesses to take actions and implement improvements.⁹⁹

This is not simply a question of proportionality however: the Scottish Government has set a minimal penalty on large businesses and multinationals involved in ScotWind Leasing which fail to comply with proposed supply chain agreements (see case study below). Devolved powers further limit the M&E the Scottish Government can apply in the Scottish Green Freeports (see case study below). Moreover, in the oil and gas and offshore wind sectors, dominated by foreign-owned enterprises and private multinationals, it is difficult for the Scottish Government to monitor FW compliance across complex supply chains and contracting tiers.¹⁰⁰ Reporting by the Ferry Foundation observed that despite growth of FW and its impact on working lives, "the fundamentals of low pay, poor working conditions and the absence of effective voice in many workplaces remain a feature of the Scottish labour market."¹⁰¹ The report advised the development of a new labour market agency to monitor fair work compliance to support implementation of FWF.¹⁰²

Trust and transparency

Net zero investments underline the importance of transparency and accountability as key principles for just transition conditionalities. False promises into net zero futures combined with job losses compromise public support. Research on the Grangemouth refinery closure announcement found that prior experience of broken promises around net zero proposals shaped worker disappointment and scepticism in their employer and in government. This was highlighted by workers who emphasised their experience of a restructure which took place in 2020 during the COVID-19 pandemic. 200 redundancies were made as part of a package that included a £1 billion investment into a new biorefinery, an investment which never materialised.¹⁰³ Lack of transparency around investment into net zero undermined processes of procedural justice that should underpin a just transition.

Worker experiences of job losses since the 2000s have further shaped attitudes of distrust, which, in turn, have shaped workers' own sense of their stake in a just transition.¹⁰⁴ Shibe and Gibbs emphasised that:

Trusting relationships are needed to secure the compromises and commitments necessary for investment in sustainable activities which reprise the skills, capacities and infrastructures already concentrated at locations such as Grangemouth.¹⁰⁵

The deals that governments make with companies need to be ones which the public can understand and evaluate, or else public trust – and the legitimacy of just transition mechanisms – risks being undermined. With this view, conditions must be negotiated openly with unions, government and employers.

f. Case studies: how have conditionalities related to the just transition been applied in Scotland so far?

ScotWind Leasing

Conditionality: Developers completed Supply Chain Development Statements (SCDS) which set out their expenditure in the supply chain.

Successes: Four developers committed £900,000 to allow the University of the Highlands and Island to extend STEM outreach beyond the Highland Council area.

Issue: No Fair Work or strict supply chain conditionalities; weak penalisation that incentivises developers to break supply chain commitments.

Summary

In 2022, twenty offshore wind developers successfully bid for leasing portions of seabed in Scotland's offshore wind development auction, ScotWind Leasing, administered by Crown Estate Scotland, a public corporation. This was cited as the world's largest offshore wind leasing round, with the potential generating capacity of the current winning contracts standing at 31GW and delivering over £750 million in revenues in initial option fees.¹⁰⁶ Crown Estate Scotland required all bidders to submit a Supply Chain Development Statement (SCDS). The SCDS set out developers' expenditure in the supply chain in Scotland, the UK, the EU, and elsewhere throughout development, manufacturing, installation and operational phase of projects.¹⁰⁷

These however do not constitute a condition, as successful bids were not determined through commitment to domestic supply chains. Instead, contractual obligations were put in place to incentivise developers to deliver on their SCDS. Upon winning the bid, SCDS commitments became part of the contractual obligation between the project developer and Crown Estate Scotland. There have been some successes from these commitments. In 2023, four ScotWind developers¹⁰⁸ committed to the expansion of the University of Highlands and Islands STEM outreach programme to beyond the Highland Council area to schools in Orkney, the Western Isles, Shetland, Argyll and Bute, and Moray and Perthshire local authorities.¹⁰⁹

Developers can be penalised if they do not meet their supply chain commitments, for example, through removal of their licence if they fail to meet at least 25% of their commitment. If they exceed the 25% threshold but fail to fully meet the commitment in full, they face the penalty fee set by Crown Estate Scotland, capped at £250,000. This fee applies no matter how large the shortfall is beyond 25% – a small amount of money proportional to the capital and profits involved in offshore wind developers' operations. The small penalisation has weakened conditionality-adjacent mechanisms. Analysis by Common Weal demonstrates that given the average committed investment stands at £3.8 billion, as long as developers do not fall below the minimum 25% threshold, the penalty fee of £250,000 financially is not a meaningful barrier to underdelivering, allowing firms to renege on their supply chain commitments and still make a profit.¹¹⁰

Though all employers are encouraged to adopt Fair Work First principles, there have to date been no Fair Work conditionalities for ScotWind developers to adhere to. The lack of consistency in application of FW is highlighted in Crown Estate Scotland's Innovation and Targeted Oil and Gas (INTOG) Leasing, which did incorporate FW conditions for developers. This was a smaller and more targeted round running between August to November 2022, aimed at electrification of oil and gas platforms in the North Sea. As with ScotWind, INTOG developers provided an SCDS and are subject to a penalty fee and removal of licence if they fail to meet commitments. However, developers were also required to "demonstrate commitment to adopting Fair Work First Practices."¹¹¹ In 2025, the STUC published research on Fair Work in offshore wind and recommended that the Scottish Government address the inconsistency of FW conditions by setting "Fair Work and Just Transition conditions across leasing, planning applications, and public investment for offshore and onshore wind projects."¹¹²

Green Freeports

Conditionality: Fair Work and Net Zero charters have been developed by the two Scottish Green Freeports, which tax site landowners and beneficiary businesses are asked to sign up to.

Objective: To meet strategic aims of the Scottish Government's vision of Green Freeports

Issue: Absence of devolved powers constrains the Scottish Government's ability to set strict fair work and net zero conditionalities linked to the reliefs available in tax sites.

Summary: In 2023, two Scottish Green Freeports were announced, Inverness and Cromarty Firth Green Freeport and Forth Green Freeport.¹¹³ The Forth Green Freeport consists of three tax sites, Grangemouth, Mid-Forth and Rosyth, and a single customs site.¹¹⁴ Businesses investing in the tax sites and/or customs sites are insulated from normal customs rules and are given tax and National Insurance (NI) relief.¹¹⁵ Green Freeports are structurally the same as the UK freeports, but are tied to a level of commitment to fair work and net zero. Commitments are measured through a charter approach. Tax site landowners and businesses locating within the Green Freeport tax sites are asked to sign up to a Fair Work Charter, where companies are asked to commit to several dimensions of fair work, including payment of at least the real Living Wage, effective voice, fair working hours, and access to training and development opportunities; and a Net Zero Charter, where companies are asked to commit to decarbonisation. Businesses will also contribute a proportion of the savings they will make from NI relief to a skills fund to partially fund implementation of skills plans – which for those in the Forth Green Freeport tax sites will be 5% of savings.¹¹⁶

Employment law is reserved, however, and so the Scottish Government is unable to guarantee adherence to Fair Work charters and cannot guarantee employers in the zone are paying real Living Wage. Tax Sites are designated by the Treasury, and tax reliefs linked to fair work conditionality would require a change in UK government legislation. Instead, adherence to the charters will feed into the overall picture on performance of the Green Freeport as a whole. Compliance will be monitored through a wider monitoring and evaluation framework, which will, in turn, be considered as part of an Annual Performance Review. If performance issues arise within a Green Freeport, such as non-compliance with the tax site delivery plans, the Scottish and UK governments will utilise a set of performance management measures including withholding or delaying further government support.¹¹⁷

But adherence to Fair Work and Net Zero is not a strict conditionality: tax reliefs are available to all eligible businesses locating in the designated tax sites, and charters are not a condition of access to these benefits. Throughout the development of the Green Freeports model, concerns have been raised by unions and thinktanks about how Fair Work and net zero principles will be embedded robustly. Prior to the announcement of the charters, unions and thinktanks expressed concern that the lack of firm, binding agreements on fair work principles and worker protections will leave them unprotected, as in the offshore wind sector.¹¹⁸ Equally, in 2025, after further information regarding Charters became available, concerns were reiterated that it was difficult to see how fair work and net zero pledges could be enforced.¹¹⁹ It is too early into Green Freeport implementation to assess the full effectiveness of the Charter approach.

Private enterprises voluntarily adopting just transition measures: SSE Renewables

Conditionality-adjacent measure: Payment of at least real Living Wage, trade union recognition, measurement of Scope 3 emissions

Issue: lack of standardised frameworks makes it challenging for companies to understand expectations, and creates an uneven playing field of company practice related to just transition.

Summary: The renewable energy utility SSE has used external frameworks to integrate just transition best practice into its company structures and supply chains. This includes the Science Based Targets Initiative (SBTi) which supports companies to plan measurement and reduction of Scope 1, Scope 2 and Scope 3 emissions;¹²⁰ and the Carbon Trust's Offshore Wind Sustainability Joint Industry Partnership (SusJIP), the first shared methodology on calculating lifecycle carbon emissions in offshore wind farms.¹²¹

Regarding working conditions, SSE has integrated payment of at least real Living Wage – before FW was launched by the Scottish Government in 2015. The company became a Living Wage accredited employer in 2013 and voluntarily extended this to all offshore contracts in 2020.¹²² To ensure effective worker voice, SSE also includes “the right to freedom of association and collective bargaining” as part of its just transition strategy, with recognition agreements established with Prospect, Unison, Unite and GMB.¹²³ Other leading renewable energy companies EDF, RWE and Orsted have also reached recognition agreements for their Scottish offshore wind workers, demonstrating demand and interest from major players in the renewables sector.

The presence of unagreed frameworks, however, was described as “incredibly unhelpful” by SSE, creating a cluttered landscape where slightly different asks are being made in slightly different ways.¹²⁴ Perhaps more fundamentally, it should not be private firms who create the standardised measuring standards for their own carbon emissions and workplace practices. Alignment and standardisation should start with government or public bodies. Trade unions are another important vehicle for standardising workplace practices through, for instance, sectoral collective bargaining agreements. Supplemented by site-specific agreements and trade union access to support trade union density, sectoral bargaining can help align workplace practices across complex project structures and supply chains.¹²⁵ The Fair Work Convention's inquiry into construction observed that even in a sector characterised by project-based working and high levels of self-employment, sectoral bargaining agreements are a way to “maintain standards, promote stable and safe working practices, facilitate training and upskilling and maintain terms and conditions for workers.”¹²⁶

g. How are the specific needs of Grangemouth being met?

For the Grangemouth Fund, firm behaviour should be aligned with the specific needs of Grangemouth. This needs to be overseen by a bespoke, targeted M&E plan aligned with just transition principles. Objectives for Grangemouth are summarised below. These have been identified through the current report, and through several past reports published by the Just Transition Commission.

- **Ensure just and stable working conditions for current and future workforces in Grangemouth.** This would aim to mend past wounds and rebuild trust since the closure of the Grangemouth oil refinery.

- **Ensure workers are protected against sudden workplace closure.** Workers reported that the announcement of the Grangemouth oil refinery closure was sudden and unexpected. The workforce was not consulted, nor were trade union officials and local management given sufficient advance warning.¹²⁷
- **Retrain workers who have lost their jobs and support those at risk across the supply chain.**¹²⁸ The closure of the Grangemouth oil refinery has put over 400 direct workers at risk of redundancy, as well as 2,800 across the supply chain.
- **Protect Grangemouth's status as a historic industrial hub.**¹²⁹ Grangemouth is home to a highly skilled workforce, developed over a century of industrial activity.
- **Target vulnerable and affected groups.** Particular groups are identified as those experiencing fuel poverty, financial difficulty and child poverty.¹³⁰
- **Reinvestment and profit-sharing** to redress imbalances between polluting activities and the community. Ensure revenues and profits from industrial activity from potential polluting activity are reinvested in the community.
- **Strengthen local democracy.** Involving the local community in just transition planning can help strengthen the legitimacy of the just transition, support democratic processes, and balance community needs against the interests of business and government.¹³¹
- **Support use of domestic and green supply chains.** Develop local supply chains and domestic manufacturing to build Grangemouth and Scotland's economy, reasserting the site's status as an important national centre of industrial employment.
- **Develop public amenities and public infrastructure.** This includes developing the railway, reducing reliance on cars, connecting Grangemouth to wider areas, and developing cheaper alternatives to current high cost of public transport.¹³²
- **Long-term community investment.** This is inclusive of skills development, public infrastructure, public services, etc.
- **Ensure community stake in new developments in Grangemouth.** This could include community assets like energy production, community infrastructure like greenspace and local leisure assets, or elements of the Grangemouth Industrial Cluster.¹³³ This would help redress historic imbalance around the absence of a public stake in the town's infrastructure since the 1970s.¹³⁴
- **Targeted emissions reduction.** Grangemouth is the largest carbon emitter in Scotland contributing to 7.2% of Scotland's total GHG emissions, and 27% of Scotland's total industrial emissions.¹³⁵
- **Flood protection.** Grangemouth's Flood Protection Scheme is the largest in Scotland given the huge cost associated with how an extreme flood event would impact the town's industrial cluster. As well as the former refinery, petrochemical complex and wider industry, the Scheme also protects 3,000 homes and businesses in the locality.¹³⁶

- **Protection of biodiversity.** Habitats in the mudflats and Firth of Forth are protected under various national and international directives related to nature conservation.¹³⁷ These protected areas exist adjacent to the Grangemouth Industrial Cluster, consisting of over forty regulated sites under SEPA in regard to land contamination, water quality, air pollution, and odour from effluent treatment.¹³⁸

Table 3 below provides an overview of these needs and how they align with just transition principles.

Table 3: Needs of Grangemouth and how they are being met			
Alignment with just transition principles			
Just Transition principle ¹³⁹	Objectives for Grangemouth	Status	Risk if conditionalities are not applied
Citizens, communities and place: support affected regions by empowering and invigorating communities and strengthening local economies	Develop public amenities and public infrastructure.	In 2024 the Scottish Government Grangemouth just transition team funded Scottish Transport Appraisal Guidance (STAG) to look at development of rail infrastructure in Grangemouth. ¹⁴⁰ This is due to be reviewed at the Grangemouth Futures Industry Board based on discussion with Falkirk Council.	No guaranteed investment into public infrastructure.
	Long-term community investment into community needs – inclusive of skills development, public infrastructure, public services, etc.	Extent is unknown. This will be dependent on voluntary contributions by the firms operating in the Grangemouth Industrial Hub. Celtic Renewables has agreed to take on five apprentices per year, replacing the five apprentices that Petroineos took on per year pre-closure.	Community investment is not guaranteed. Community Benefits Payments are voluntary.
Jobs, skills and education: equip people with the skills, education and retraining required to support retention and creation of access to green, fair and high-value work	Ensure just and stable working conditions for the workforce in the Grangemouth industrial cluster.	FWF principles apply to all firms operating in the Grangemouth industrial cluster	FWF does not mandate TU recognition. There is the possibility that fair work conditions will be flouted as seen in offshore wind, the care sector and private sector. Unions and thinktanks have also flagged the possibility of FW being bypassed in firms operating in the Forth Green Freeport due to lack of enforcement.
	Support workers who have lost their jobs;	The Grangemouth Skills Transition Employment Plan (G-STEP) funded by	G-STEP does not apply to workers across the supply chain and contract workers.

	<p>provide support to those whose jobs are at risk across the supply chain;</p> <p>Protect Grangemouth's status as a historic industrial hub and invest into modern forms of manufacturing and training.</p>	<p>the UK and Scottish Governments, and provided by Forth Valley College ensures that every Petroineos worker directly affected by the refinery closure is given the opportunity to reskill and upskill to support their transition to renewable employment. In August 2025, this was extended to INEOS O&P employees who were part of shared services for the refinery.</p> <p>The Skills Transition Hub is being supported by a £4 million grant over ten years to support current and future skills needs within Falkirk and Grangemouth.</p>	<p>G-STEP is a one-off payment package to be used within a fixed term. There is no similar guarantee for workers affected by the long-term impact of the Petroineos refinery closure.</p> <p>By the time new renewable industry has developed, there is risk of 'skills gap' and loss of industrial employment. Further, funding as it stands does not target job retention.</p>
	<p>Ensure workers are protected against sudden workplace closure.</p>	<p>Unknown.</p>	<p>Employers may close their workplace if market conditions require or crude oil reserves run out. See closure of Petroineos in Grangemouth and other sites in the UK, such as the Lindsey Oil Refinery in North Lincolnshire.</p>
<p>Fair distribution of costs and benefits: address existing economic and social inequality by sharing the benefits of climate action widely, while ensuring that the costs are distributed on the basis of ability to pay</p>	<p>Ensure revenues and profits from industrial activity from potential polluting activity are reinvested in the community.</p>	<p>Unknown.</p> <p>There is no infrastructure or standard practice in place in Scotland for profit-sharing and equity stakes.</p>	<p>Without reinvestment, communities risk receiving little to no benefit from the presence of energy industries in their towns. Unequal distribution of wealth has meant areas in Grangemouth have higher rates of employment and income deprivation than Falkirk and Scotland despite presence of major industrial activity.¹⁴¹</p>
	<p>Strengthen local democracy</p>	<p>Community involvement exists through the Grangemouth Futures Industry Board, the Grangemouth Community Council, and participation in local democracy.</p>	<p>Without community involvement, trust in institutions and decision-making processes risks being undermined.</p>

		There is no infrastructure in place which would allow the community to have a meaningful, material stake in new industrial developments.	
Business and Economy: support a strong, dynamic and productive economy which creates wealth and high quality employment across Scotland, upholds the UN Guiding Principles on Business and Human Rights, and continues to make Scotland a great place to do business.	Support use of domestic and green supply chains	Unknown.	Overseas manufacturers with cheaper costs risk being prioritised through evaluation criteria, as ScotZEB and ScotWind licensing rounds have shown.
Adaptation and resilience: identify key risks from climate change and set out actions to build resilience to these risks, ensuring our economy is flexible, adaptable and responsive to the changing climate	Flood protection	<p>Grangemouth's Flood Protection Scheme funded by the Scottish government.</p> <p>Uptake of adaptation actions in firms is limited due to climate risk being seen as a long-term natural environment issue, and no specific grants schemes specific to delivering adaptation (compared to net zero/emissions reduction).¹⁴²</p> <p>There is no requirement on firms to invest into specific community adaptation needs.</p>	Flooding from the rivers around Grangemouth risk the industrial cluster and the wider community.
Environmental protection and restoration: commit to act within our planetary boundaries while protecting and restoring our natural environment	Protection of biodiversity	<p>Industrial sites in Grangemouth are regulated under the Pollution Prevention and Control (Scotland) Regulations 2012 and the Control of Major Accidents Hazards (COMAH) regulations.¹⁴³</p> <p>Industrial activity relating to discharge into watercourse, waste activities and industrial activities require</p>	Companies may breach existing pollution and environmental protection regulations. In 2019 Petroineos was assessed as "very poor" with "significant non-compliance" and "urgent improvement required" with regard to its environmental performance. ¹⁴⁴

		<p>authorisation through permits granted by SEPA. Firms are required to meet conditions on plant maintenance and meet specific emissions values on water and air discharges.</p> <p>Penalisation for failure to comply with regulations include monetary notices and prosecution.</p>	
Decarbonisation and efficiencies: contribute to resource efficient and sustainable economic approaches that actively encourage decarbonisation, support low-carbon investment and infrastructure, and avoid carbon 'lock-in'.	Reduce carbon emissions	<p>Net zero conditions on all Scottish Enterprise grants.</p> <p>Net zero efforts are supported by national net zero strategy including UK government (2022) £240 million Net Zero Hydrogen Fund (UK government) and Scottish Government's (2020) £180 million Emerging Energy Technology Fund.¹⁴⁵</p> <p>Approach is not applied on a company-wide level leading to net zero funding being granted to firms that are contributing to an unjust transition. There is no penalisation in place where emissions are increasing.</p>	<p>Companies may receive net zero funding and then renege on their commitments, threatening decarbonisation efforts and the just transition.</p> <p>Companies may receive net zero funding whilst, for instance, mistreating the workforce, thus undermining the just transition.</p>
Alignment with procedural justice in just transition			
Monitoring & Evaluation (M&E) – How do we know we're on track? Detail how progress towards the outcome statements will be monitored and reported on.	Ensure M&E meets the needs of Grangemouth.	<p>National monitoring exists through the National Planning Framework. A specific Grangemouth M&E plan has been developed in alignment with specific just transition principles.¹⁴⁶ This has not been integrated into planning, and national-level and project-based M&E planning, as it stands, is not yet in alignment with the specific needs of Grangemouth.</p>	Without a bespoke, targeted M&E plan for Grangemouth, local just transition concerns risk not being represented.

<p>Transparency in the forms of openness, trust and timeliness.¹⁴⁷</p>	<p>Ensure transparency and trust with corporate owners and government to legitimise just transition mechanisms and investment.</p>	<p>Just transition governance frameworks lack clarity. Improvement seen through restructuring of Grangemouth Future Industry Board (GFIB) in 2023. GFIB now has membership consisting of industry, public sector, union and community representatives.</p> <p>The Scottish Government has demonstrated further capacity for open collaboration, working with Unite officials to ensure delivery of job skills programme and that it is made available to both unionised and non-unionised workers impacted by the Grangemouth oil refinery closure.</p>	<p>Public support for just transition is crucial to its success. Conditionalities developed without negotiation with unions and the community risks their legitimacy.</p>
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Section 4: What are some international examples of just transition conditionalities?

Table 4 below details examples of how just transition conditionalities have been applied internationally. Each are state-backed initiatives and cover countries in Western Europe and North America. The examples are divided by just transition themes that also relate to the Grangemouth context: jobs, environment, and community. Several conditionality mechanisms are covered: scoring criteria that weighs just transition criteria over financial cost, types of commitments (contractual, legal and preferential), penalisation for non-compliance, and forms of profit-sharing, reinvestment and equity stakes. The examples also highlight how conditionalities have been applied to meet the needs and resources of large firms, SMEs, and individuals.

Table 4: International examples of just transition conditionalities			
Example	Description	Conditionality	Iterative or fixed
Type of firm behaviour targeted in relation to just transition: directionality on job provision, working conditions and local content			
The Spanish Just Transition Institute's (ITJ) Energy Tenders	<p>Spain's coal-fired power capacity employed approximately 3,000 direct workers, who were at risk from the government's aim to close this capacity before 2030.</p> <p>To mitigate job losses, the ITJ has developed tenders that link grid access for renewable energy to job creation in areas impacted by the coal closure programme.</p> <p>The first tender was approved in 2022 to Endesa which will invest €1.5 billion in renewable projects and €60 million in employment in Andorra. Initial success is evidenced through job creation</p>	<p>Grid access is prioritised for renewable energy projects that bring the greatest socio-economic and environmental benefits to areas dependent on coal-based production.</p> <p>A tender process was used to prioritise projects maximising socio-economic value. Endesa's tender weighted socioeconomic criteria at 55%. The tender for grid access in Córdoba weighted socioeconomic impact at 64% (followed by technology 20%, environmental impacts 11% and project maturity 5%).</p> <p>Socio-economic impacts were divided into total jobs (29%), distributed energy (11%), reskilling (8%), local investments and participants (8%), jobs for women (5%), and jobs for coal workers (3%).¹⁴⁹</p> <p>Endesa's tender was legitimised through extensive consultation and consensus-building with the Andorra</p>	The Spanish government has designed tenders by stipulating that evaluation should be weighted heavily in favour of socio-economic impact.

	<p>and slowdown of demographic decline.¹⁴⁸</p> <p>In early 2025, the ITJ prepared four subsequent tenders. The first was issued in 2024 for 409MW of grid access capacity in Valle del Guadiato, Córdoba.</p>	community via the company's Creating Shared Value model.	
€350 million Portuguese scheme 2024	<p>Funds approved by the European Commission to support investment into production of equipment to foster the energy and ecological transition to net zero.</p> <p>This was funded through the Recovery and Resilience Facility with grants for companies producing batteries, solar panels, wind turbines, heat-pumps, etc.¹⁵⁰</p>	<p>Beneficiaries must commit to maintaining the investments in the proposed area for at least five years after completion of the investment.</p> <p>SMEs must commit to maintaining investments in the proposed area for at least three years after the completion of investment.¹⁵¹</p>	Fixed requirements, with a less stringent requirement placed on SMEs to account for their capacity and resources.
The U.S. Inflation Reduction Act 2022 ¹⁵²	This aimed to promote emissions reductions through subsidies and tax credits for electricity generation projects and production of low emissions fuels.	<p>Firms were required to commit to:</p> <ul style="list-style-type: none"> - local content - working conditions, including payment of the local prevailing wage and employment of apprentices. - developing a Community Benefit Plans (CBP; a non-binding agreement made between developers and community organisations). 	<p>Provisions were preferential. There were no legal enforcement mechanisms.</p> <p>CBPs are evaluated by framework and scoring criteria developed by the Department of Energy. The CBP accounts for around 20 percent of an application's technical merit score. These are flexible but delivery of a CBP is required.¹⁵³</p>

U.S. 2022 CHIPS and Science Act (£280 billion) ¹⁵⁴	Supports domestic research and manufacturing of semi-conductors through grants, concessional loans and tax credits.	<p>Firms were required to commit to:</p> <ul style="list-style-type: none"> - domestic manufacturing - good working conditions - workforce training and upskilling - requirements on utilising energy efficient supply chains. <p>There were also limitations placed on shareholder buybacks.</p>	Before funding is granted, recipients work with the government to refine proposals. Unclear on how fixed contracts are.
Canada's Large Employer Emergency Financing Facility ¹⁵⁵	Provided short-term liquidity through interest bearing loans to large employers affected by the COVID-19 pandemic	<p>Firms were required to:</p> <ul style="list-style-type: none"> - publish annual-climate related financial disclosures - contribute to Canada's net zero by 2050 commitment - commit to minimising loss of employment - sustain domestic business activities 	Eligibility criteria for the facility were fixed.
Type of behaviour targeted in relation to just transition: environmental practice			
EU Common Agricultural Policy (CAP) legislation	Farmers are required to ensure that agricultural activities in line with national agricultural and environmental standards set in accordance with EU guidelines	In exchange for abiding to compulsory practices that ensure climate and environmental benefits, farmers receive additional payments to the Agricultural Funds basic payments.	These were fixed conditions applied to individual behaviour. Where farmers failed to adhere to these conditions, they lose additional payments. Note this was heavily criticised for levels of rigidity. Conditions were loosened following review in 2024 to ease the administrative burden this put on farmers. ¹⁵⁶
Type of firm behaviour targeted in relation to just transition: community investment through equity stakes, profit-sharing and reinvestment			

The Norwegian Government Pension Fund Global (the Oil Fund)	Secures and preserves oil revenue from the North Sea and protect the economy and government from fluctuations in oil prices. The fund amounts to around 20 percent of the Norwegian government's budget.	Oil and gas production revenue is put into the fund. The fund is also formed of investment into equities, real estate and renewable energy infrastructure. High taxation and government equity stakes in oil and gas production from the North Sea. Companies which breach ethical guidelines are excluded from the fund.	Fixed. The fund is owned by the Ministry of Finance and integrated into Norway's annual budget. ¹⁵⁷
The Danish Renewable Energy Act 2011	Promotes public participation in onshore wind farm developments.	Communities living within 4.5km of a wind farm project must take a minimum 20% share in ownership Property owners living in the vicinity of wind turbines have the right to full compensation for any related loss of value to their property. ¹⁵⁸	Conditions are mandated by law.

Section 5: The Just Transition Conditionality Toolkit

The following two tables have been prepared with Grangemouth as the primary case study for developing and applying effective just transition conditionalities. While some elements are specific to Grangemouth, the toolkit is intended to set out an approach and a range of practicable options that can be read across different contexts and for broader application to better align public investment, subsidies, contracts, etc., with the high-level goal of achieving a just transition.

Table 5 below, the just transition conditionality toolkit, presents a conditionality package aligned with the needs of Grangemouth identified in Section 3(d). Conditionality options include both positive and negative incentives, which are mapped against the Scottish Government's just transition principles to support alignment with existing just transition policy work. This approach will also aid the replicability of the Toolkit for other policy work beyond the Grangemouth JTF. Next steps to be reviewed by the relevant teams in the Scottish Government will be to establish:

- the responsible owners of each action (such as the local council, the Scottish Government, or the UK government);
- timelines for each action, establishing what can be completed in the short-term, and what will require work over the longer-term;
- and whether conditions should be implemented fixed or iteratively.

Table 5: Just Transition Conditionality Toolkit

Just Transition Principle <i>Alignment of the conditionality with the Scottish Government just transition principles</i>	Objective <i>The objective that the conditionality is designed to meet</i>	Existing opportunity <i>Existing policies, infrastructure, experience, etc. that can be leveraged to support development of the conditionality</i>	Conditionality <i>The just transition conditionality</i>	Considerations <i>What to consider when drafting the conditionality</i>
Jobs, skills and education: equip people with the skills, education and retraining required to support retention and creation of access to green, fair and high-value work	Ensure just and stable working conditions for current and future workforce in Grangemouth.	FWF is already recognised by government and firms operating in Scotland. This could be elevated to ensure a firm approach to Trade Union recognition to ensure all firms operating in the Grangemouth Industrial Cluster and Forth Green Freeport follow through on fair work principles.	Facilitate access to trade unions Access to trade unions is provided on day one of employment through inductions, and discussions and talks with union representatives	Firms may not have union recognition agreements in place Flexibility is encouraged to give room for firms to develop union channels. Where those channels do exist, access to trade unions should be a fixed criterion.
			Mandate collective bargaining at a sectoral and firm level Firms accessing the fund agree to full trade union recognition	Employment law is reserved Mandating full trade union recognition would require a change in UK government legislation.
	Ensure workers are protected against sudden workplace closure.	Presence of union with experience of negotiations around closure. Explicit protection of the workforce against closure would enhance protection of existing workforce.	Firms commit to permanent contracts for the workforce Contracts stipulate that in the case where closure is unavoidable, they will commit to investment into reskilling and finding alternative employment	Firm closure may be unavoidable Contracts should be developed which encourage open communication with the workforce, rather than penalisation over unavoidable

			When closure is expected, firms commit to giving adequate notice to the workforce Firms commit to giving adequate, advance notice to union officials and local management in cases where closure is expected.	circumstances like sudden closure.
	Retrain workers who have lost their jobs and support those at risk across the supply chain; Protect Grangemouth's status as a historic industrial by retaining local employment.	There is developed skills and training infrastructure through Forth Valley College. This can be harnessed in skills delivery proposals set out by developers.	Developers outline supply chain commitments Contracts require developers to outline supply chain plans that identify skills needs and specify how these needs will be met.	Training needs should be identified with consideration of the capacity of small firms A fixed condition on skills and training may lead to unreasonable pressures on both firms and local college. Training needs should be identified through discussion with local college and trade unions
			Firms outline commitment to apprenticeship schemes Firms commit to setting up an apprentice scheme. This should be in line with skills need of the community, following appraisal with Forth Valley College and Unite the Union.	Commitment to apprentices should depend on capacity of small firms Small firms may not be able to accommodate an absolute number of apprentices; apprentice numbers should be proportional to the size of the firm's workforce.

			Firms commit to supporting local employment To promote local employment, firms should be asked to promote their apprentice schemes to the local community.	Firms may be more familiar with hiring university graduates than developing apprenticeship schemes. In these cases, firms should work with the college to showcase benefits of apprentice schemes and hiring local workers.
Citizens, communities and place: support affected regions by empowering and invigorating communities and strengthening local economies; Fair distribution of costs and benefits: address existing economic and social inequality by sharing the benefits of climate action widely, while ensuring that the costs are distributed on the basis of ability to pay; Business and Economy: support a strong, dynamic and productive economy which creates wealth and high quality employment across Scotland, upholds the UN Guiding Principles on Business and Human Rights, and continues to make	Support use of domestic and green supply chains; Long-term community investment; Develop public amenities and public infrastructure; Ensure community stake in new developments in Grangemouth; Reinvestment and profit-sharing; Strengthen local democracy	Institutions and models exist which support anchoring local, domestic manufacturers and the circulation of wealth in communities. These include: Community Wealth Building Bill, which was introduced in 2025, and the Forth Valley Regional Economic Partnership, which was formalised in 2022. Community Benefits Payments are an established system in the British energy sector. Community and municipal ownership are a tried and	Domestic supply chains are prioritised Project evaluation weighs use of domestic supply chains and domestic job creation proportionally higher than cost. Firms commit to payment into a Community Wealth Fund Develop a Community Wealth Fund (CWF) for Grangemouth, with a condition on taxation and leasing funds from firms operating in the Grangemouth Industrial Cluster paid into the Grangemouth CWF. The community can submit funding applications to the CWF and identify needs such as transportation infrastructure, schools, social housing, etc.	Domestic supply chain infrastructure Given limitations in existing domestic infrastructure, conditions on domestic supply chains should be iterative. Firm knowledge and experience in supply chains should also be considered.
				Community investment should not be compromised The existence of a CWF or and/or local authority ownership provides stability and guarantee of community wealth. Once proportion of equity stake has been negotiated, this should remain fixed so community investment is not compromised.

Scotland a great place to do business.		tested system with proven gains.	<p>Mandate community ownership Mandate percentage of community or local authority ownership of new energy developments in Grangemouth.</p>	<p>Mandating CBPs is a power reserved to the UK government Mandating CBPs would require a change in UK government legislation. Scottish Government should continue lobbying the UK government to explore mandating community benefits; whilst itself supporting the creation and standardisation of relevant structures, guidance and capacity around community ownership drawing on best practice.</p>
<p>Jobs, skills and education: equip people with the skills, education and retraining required to support retention and creation of access to green, fair and high-value work;</p> <p>Decarbonisation and efficiencies: contribute to resource efficient and sustainable economic approaches that actively encourage decarbonisation, support low-carbon investment and infrastructure, and avoid carbon 'lock-in'.</p>	Ensure just and stable working conditions for current and future workforces in Grangemouth; and reduce carbon emissions	Expectations on emissions reduction have been established, and this should be integrated with a wider view of social objectives and just transition strategy developed through Grangemouth just transition plan.	<p>Commitments to net zero conditions are tied to commitments to fair work</p> <p>Taking a holistic view of firm behaviour, fair work and net zero conditions are tied together. Firms with track record of worker exploitation and anti-union tactics but which have committed to net zero conditions must also commit to improving workplace conditions. Firms will not be granted access to further public funding until advanced FWF criteria, including specific criteria on trade union access, are met.</p>	<p>Expectations should be introduced iteratively To consider capacity of small firms, expectations on workplace practice should be introduced as guidance, with the view to becoming a fixed condition.</p>
Adaptation and resilience: identify key risks from climate	Flood protection;	Adaptation Scotland provides support and	Firms commit to completing adaptation checklists	Conditions on adaptation should be iterative

<p>change and set out actions to build resilience to these risks, ensuring our economy is flexible, adaptable and responsive to the changing climate;</p> <p>Environmental protection and restoration: commit to act within our planetary boundaries while protecting and restoring our natural environment</p>	<p>Protection of biodiversity.</p>	<p>capacity building for firms and communities to build climate resilience and has published an Adaptation Checklist for firms to consider climate risk in their business operations. Publication of the Scottish National Adaptation Plan (SNAP 3).</p>	<p>Firms agree to completing Adaptation Scotland's Adaptation Checklist</p> <p>Reinvestment of profits into local climate adaptation schemes Firms agree to reinvesting a portion of profits into the Grangemouth Flood Protection Scheme.</p>	<p>Adaptation is less familiar to firms than net zero, so conditions should be developed iteratively. This should also be through negotiation with the Grangemouth Flood Protection Scheme.</p> <p>Conditions on adaptation and investment into the Flood Protection Scheme must involve Falkirk Council.</p>
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Table 6 below breaks down critical elements regarding the delivery of the just transition toolkit, including considerations to help ensure the toolkit is delivered with maximum integrity, impact, and transparency. It has been developed to align delivery of the toolkit with procedural justice, as outlined in Table 3. It is based on analysis provided in the above sections. Rather than present definitive, prescriptive actions, it presents suggestions on how to provide effective monitoring and evaluation, incentivise changes in firm behaviour in alignment with just transition principles, and ensure collaboration and transparency. The table suggests two phases of delivery: phase one, near-term priority actions that should be completed in the next two years; and phase two, long-term actions to be completed in the next ten years.

Table 6: Delivery of the just transition toolkit			
Outcome	Description	Phase one (near term action to be completed in the next two years)	Phase two (long term action to be completed in the next ten years)
Effective monitoring and evaluation to ensure funds are used with impact and integrity	M&E requires (i) that companies seeking money demonstrate adherence to just transition conditionality criteria and (ii) official verifications and checks on whether criteria have been met. This requires capacity building through collaboration and investment.	Capacity and support for M&E could be drawn on from existing lead actors such as GFIB, the STUC, Scottish Enterprise.	Investment into capacity building to deliver M&E, including development of a public M&E agency that monitors compliance of conditionality programmes.
To incentivise a change in firm behaviour in accordance with JT principles, good behaviour rewarded	Incentivising companies to change their behaviour based on a small funding package requires strategic implementation of the conditionality programme.	The JTF is allocated based on a firm meeting pre-defined conditions. The Scottish Government should support businesses to adopt just transition best practice (through the just transition outcomes, for instance) to help them understand and meet expectations.	Option 1: The JTF is dispersed in phases. A portion of money is granted and upon fulfilment of conditions, such as meeting a certain number of jobs, the final portion of money is granted. Option 2: Access to the £200 million National Wealth Fund is conditional on adherence to conditions set out on the £25 million JTF.
Collaboration and transparency	Conditionalities must be negotiated with transparency to ensure their legitimacy and maintain the public trust	The Scottish Government Grangemouth Just Transition Team should develop conditionalities	Establishment of an independent Just Transition Conditionality verification body.

	crucial to successful policy.	through discussion with key stakeholders in Grangemouth including the Grangemouth Community Council, Unite and other unions represented in the Grangemouth Industrial Cluster, Forth Valley College, and others.	Establishment of firm-level and sectoral bargaining agreements.
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Endnotes

- ¹ Just Transition Commission (2024). A Just Transition for Grangemouth.
<https://www.justtransition.scot/publication/a-just-transition-for-grangemouth/>
- ² Scottish Government (2025). Grangemouth Industrial - just transition plan: supporting a fair transition for Scotland's core manufacturing cluster, p.37.
<https://www.gov.scot/publications/grangemouth-industrial-transition-plan-supporting-fair-transition-scotlands-core-manufacturing-cluster/documents/>.
- ³ Scottish Government (2024). Businesses in Scotland: 2024.
<https://www.gov.scot/publications/businesses-in-scotland-2024/pages/business-size/>; The Productivity Institute (2025). Scotland's Productivity Challenge: Exploring the issues 2025, p.34
<https://www.productivity.ac.uk/wp-content/uploads/2025/01/PIP045-Scotland-Insights-Paper-January-2025.pdf>
- ⁴ Scottish Government (2025). Just Transition Fund for the North East and Moray: final evaluation report. <https://www.gov.scot/publications/final-report-evaluation-impact-transition-fund-north-east-moray/>
- ⁵ Ibid.
- ⁶ UK government (2025). Prime Minister announcement on Grangemouth.
<https://www.gov.uk/government/news/prime-minister-announcement-on-grangemouth>
- ⁷ Mazzucato and Macfarlane (2025). A Green, Fair and Growing Scotland: A mission-oriented approach, a joint report between Future Economy Scotland and the UCL Institute for Innovation and Public Purpose. <https://www.futureeconomy.scot/publications/101-a-green-fair-and-growing-scotland-a-mission-oriented-approach>
- ⁸ Mazzucato and Macfarlane (2024). A Mission-Oriented Industrial Strategy for Scotland: Framing Paper, a joint report between Future Economy Scotland and the UCL Institute for Innovation and Public Purpose, p.55. <https://www.futureeconomy.scot/publications/65-a-mission-oriented-industrial-strategy-for-scotland-framing-paper>
- ⁹ Scottish Government (2025). Grangemouth Industrial - just transition plan: supporting a fair transition for Scotland's core manufacturing cluster, p.37.
<https://www.gov.scot/publications/grangemouth-industrial-transition-plan-supporting-fair-transition-scotlands-core-manufacturing-cluster/documents/>
- ¹⁰ Just Transition Commission (2024). A Just Transition for Grangemouth, p.11.
<https://www.justtransition.scot/publication/a-just-transition-for-grangemouth/>
- ¹¹ Just Transition Commission (2021). Just Transition Commission: A National Mission for a fairer, greener Scotland, p.43. <https://www.gov.scot/publications/transition-commission-national-mission-fairer-greener-scotland/pages/5/>
- ¹² Ibid.
- ¹³ Scottish Government (2021). Just Transition - A Fairer, Greener Scotland: Scottish Government response, p.4 <https://www.gov.scot/publications/transition-fairer-greener-scotland/pages/4/>
- ¹⁴ Scottish Government (2021). Scottish Government and Scottish Green Party: draft shared policy programme – working together to build a greener, fairer, independent Scotland.
<https://www.gov.scot/publications/scottish-government-and-scottish-green-party-shared-policy-programme/pages/economic-recovery-and-infrastructure/#Conditionality%20in%20public%20sector%20grants>
- ¹⁵ Note that Fair Work (FW) applies to Fair Work policy (known as Fair Work First or FWF). This is distinct from broader fair work (uncapitalised) approaches.
- ¹⁶ Scottish Government. Scottish Government and Scottish Green Party: draft shared policy programme, pp.19-21.
- ¹⁷ Scottish Government (2025). Giving workers an effective voice: Effective Voice.
<https://www.mygov.scot/effective-voice>
- ¹⁸ Scottish Government (2025). Just Transition Fund: application form and guidance.
<https://www.gov.scot/publications/just-transition-fund/documents/>
- ¹⁹ Babb and Caruthers (2008). "Conditionality: Forms, Function, and History." *Annual Review of Law and Social Science*. 4:13–29, p.16.
- ²⁰ Ibid., 7-8.
- ²¹ Mariana Mazzucato sits on the Scottish Government Advisory Council for Economic Transformation.

- ²² Mazzucato and Rodrik. (2023). Industrial Policy with Conditionalities: A Taxonomy and Sample Cases, UCL Institute for Innovation and Public Purpose, Working Paper Series (IIPP WP 2023-07), p.5. <https://www.ucl.ac.uk/bartlett/public-purpose/wp2023-07>
- ²³ Scottish Government (2025). Supporting Grangemouth workers. <https://www.gov.scot/news/supporting-grangemouth-workers/>
- ²⁴ UK government (2025). Supporting Grangemouth workers. <https://www.gov.uk/government/news/supporting-grangemouth-workers>
- ²⁵ Mazzucato and Rodrik. (2023). Industrial Policy with Conditionalities: A Taxonomy and Sample Cases, UCL Institute for Innovation and Public Purpose, Working Paper Series (IIPP WP 2023-07), p.9. <https://www.ucl.ac.uk/bartlett/public-purpose/wp2023-07>
- ²⁶ Letta (2024). Much more than a market – Speed, Security, Solidarity Empowering the Single Market to deliver a sustainable future and prosperity for all EU Citizens, p.40. <https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf>
- ²⁷ European Commission (n.d.). Agriculture and rural development: Conditionality. https://agriculture.ec.europa.eu/common-agricultural-policy/income-support/conditionality_en
- ²⁸ European Commission (2025). EU actions to address farmers' concerns. https://agriculture.ec.europa.eu/overview-vision-agriculture-food/eu-actions-address-farmers-concerns_en
- ²⁹ European Alliance for a Just Transition (2025). A European Union that Advances a Fair and Just Transition: The European Alliance for a Just Transition's Vision for the EU Cycle 2024-2029 and Beyond, p6. <https://caneurope.org/content/uploads/2025/02/Vision-Fair-Just-Transition-New-EU-Mandate-2025-V2.pdf>.
- ³⁰ RINA. DNSH Certification. <https://www.rina.org/en/dnsh-certification>
- ³¹ European Commission. Ensuring that the polluters pay. https://environment.ec.europa.eu/economy-and-finance/ensuring-polluters-pay_en
- ³² Scottish Government (2021). Just Transition - A Fairer, Greener Scotland: Scottish Government response. <https://www.gov.scot/publications/transition-fairer-greener-scotland/pages/5/>
- ³³ Mazzucato and Rodrik. (2023). Industrial Policy with Conditionalities: A Taxonomy and Sample Cases, UCL Institute for Innovation and Public Purpose, Working Paper Series (IIPP WP 2023-07), p.8-9. <https://www.ucl.ac.uk/bartlett/public-purpose/wp2023-07>
- ³⁴ Ferry Foundation (2023). Assessing Fair Work in Scotland. Report for the Jimmy Reid Foundation, p.43. <https://ferryfoundation.org.uk/wp-content/uploads/2023/09/Fair-work-evaluation.pdf>
- ³⁵ Scottish Government (2023). Fair Work First guidance. <https://www.gov.scot/publications/fair-work-first-guidance-2/pages/2/>
- ³⁶ Inappropriate use of a zero hours contract is where an employer: offers a worker a regular pattern of work or regular number of hours but offer only a casual/zero-hours contract; a worker has had no say in the zero-hours contract and actually wants a contract of employment guaranteeing a minimum number of hours; it puts pressure on a worker to accept the terms of a zero-hours contract (where challenged) in order to keep their job; there is an expectation that workers will accept all hours offered but no reciprocal expectation that the employer will guarantee hours of work. See p.19 of Scottish Government (2023). Fair Work First Guidance: Supporting Implementation of Fair Work First Workplaces. <https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2023/03/fair-work-first-guidance-2/documents/fair-work-first-guidance-supporting-implementation-fair-work-first-workplaces-scotland/fair-work-first-guidance-supporting-implementation-fair-work-first-workplaces-scotland/govscot%3Adocument/fair-work-first-guidance-supporting-implementation-fair-work-first-workplaces-scotland.pdf>
- ³⁷ Scottish Government (2023). Fair Work First: guidance – March 2023. <https://www.gov.scot/publications/fair-work-first-guidance-2/pages/6/>
- ³⁸ Scottish Government (n.d.). Public sector procurement. <https://www.gov.scot/policies/public-sector-procurement/fair-work-in-procurement/>
- ³⁹ Common Weal (2025). Fair Pay for All. <https://www.commonweal.scot/articles/magazine-x9wzt>
- ⁴⁰ Scottish Government (2025). Just Transition Fund: application form and guidance. <https://www.gov.scot/publications/just-transition-fund/documents/>
- ⁴¹ Scottish Government (2024). Fair Work First: guidance (updated guidance). <https://www.gov.scot/publications/fair-work-first-guidance-3/>
- ⁴² Ferry Foundation (2023). Assessing Fair Work in Scotland. Report for the Jimmy Reid Foundation, p.28, 49. <https://ferryfoundation.org.uk/wp-content/uploads/2023/09/Fair-work-evaluation.pdf>
- ⁴³ Ibid., 29.

⁴⁴ STUC (2025). Employment and Corporate Practice in Scotland's wind sector: Workers perspective and company survey. Report commissioned by the Scottish Trades Union Congress and written by Transition Economics, p.7-8. <https://www.stuc.org.uk/resources/fair-work-in-offshore-windfinal.pdf>

⁴⁵ Ibid.

⁴⁶ Alexander Dennis (2024). Uneven playing field forces Alexander Dennis to begin consultation on Scottish bus manufacturing jobs. <https://www.alexander-dennis.com/uneven-playing-field-forces-alexander-dennis-to-begin-consultation-on-scottish-bus-manufacturing-jobs/>

⁴⁷ Scottish Government (2023). Fair Work First: guidance - March 2023.

<https://www.gov.scot/publications/fair-work-first-guidance-2/pages/9/>; Scottish Government (2021).

Fair Work Action Plan: Annual Report. <https://www.gov.scot/publications/fair-work-action-plan-annual-report/pages/10/>

⁴⁸ Scottish Government. National Performance Framework. <https://www.gov.scot/collections/national-performance-framework/>

⁴⁹ STUC (2025). Employment and Corporate Practice in Scotland's wind sector: Workers perspective and company survey. Report commissioned by the Scottish Trades Union Congress and written by Transition Economics, p.12. <https://www.stuc.org.uk/resources/fair-work-in-offshore-windfinal.pdf>

⁵⁰ UK government (2025). Contracts for Difference Clean Industry Bonus: consultation on regulatory reforms for Allocation Round 8. <https://www.gov.uk/government/consultations/contracts-for-difference-reforms-to-the-clean-industry-bonus-allocation-round-8/contracts-for-difference-clean-industry-bonus-consultation-on-regulatory-reforms-for-allocation-round-8-accessible-webpage#proposed-reforms-to-the-clean-industry-bonus>

⁵¹ The oil and gas and offshore wind sectors are dominated by foreign-owned enterprises and private multinationals. As an example, 33% of North Sea equity is held by BP, Shell Exxon Mobil, Centrica, ConocoPhillips, Repsol and Total Energies (<https://www.common-wealth.org/interactive/who-owns-the-north-sea>). Similarly, of the 28 companies involved in the twenty offshore wind projects comprising ScotWind Leasing, the majority are joint ventures based in fifteen different countries, and five are overseas publicly owned (<https://www.stuc.org.uk/resources/fair-work-in-offshore-windfinal.pdf>).

⁵² STUC (2025). Scottish Government's fair work agenda is a 'big blow out' within offshore wind.

<https://www.stuc.org.uk/news/news/scottish-governments-fair-work-agenda-is-big-blow-out-within-offshore-wind/>

⁵³ STUC (2025). Employment and Corporate Practice in Scotland's wind sector: Workers perspective and company survey. Report commissioned by the Scottish Trades Union Congress and written by Transition Economics, p.8. <https://www.stuc.org.uk/resources/fair-work-in-offshore-windfinal.pdf>

⁵⁴ Alexander Dennis was a domestic-owned company until 2019 when it was acquired by the Canadian multinational NFI Group.

⁵⁵ Alexander Dennis (2024). Uneven playing field forces Alexander Dennis to begin consultation on Scottish bus manufacturing jobs. <https://www.alexander-dennis.com/uneven-playing-field-forces-alexander-dennis-to-begin-consultation-on-scottish-bus-manufacturing-jobs/>

⁵⁶ Scottish Government. Decarbonisation in the public sector. <https://www.gov.scot/policies/climate-change/decarbonisation-in-the-public-sector/>

⁵⁷ Scottish Enterprise (2024). Consultation Towards a Future Grangemouth Hydrogen Hub, p.1

<https://www.scottish-enterprise.com/media/ddsaoymo/grangemouth-hydrogen-hub-2024.pdf>

⁵⁸ The Net Zero Accelerator Tool helps organisations create a roadmap to net zero.

<https://www.scottish-enterprise.com/how-we-can-help/business-processes-and-people/business-sustainability/net-zero-accelerator-tool>

⁵⁹ This includes (with answers from 'fully in place' to 'no plan in place to implement'): We have assessed the potential impacts of severe weather events and climate change on our operations; We have an action plan to mitigate the risk of severe weather on our business, including assessing the impact on our supply chain and raw material supply; We have modified our premises, processes or operations to help adapt to severe weather or climate change risks; We have considered the potential impacts of climate change on the demand for our products and services; and We have developed plans to evolve our products to meet future market demands driven by climate change.

<https://www.scottish-enterprise.com/how-we-can-help/business-processes-and-people/business-sustainability/net-zero-accelerator-tool>

⁶⁰ The Ferret (2024). 'Greedy' Ineos claims Grangemouth grant despite refinery closure.

<https://theferret.scot/ineos-claims-grangemouth-grant-despite-closure/>

⁶¹ Scottish Government (2024). Grangemouth Industrial Cluster - draft Just Transition plan: consultation. <https://www.gov.scot/publications/grangemouth-industrial-transition-plan-supporting-fair-transition-scotlands-core-manufacturing-cluster-draft-consultation/pages/5/>

- ⁶² The Ferret (2023). Repeat climate offenders': CO2 emissions surge at Ineos and SSE sites. <https://theferret.scot/co2-emissions-surge-at-ineos-and-sse-sites/>
- ⁶³ The Ferret (2024). 'Greedy' Ineos claims Grangemouth grant despite refinery closure. <https://theferret.scot/ineos-claims-grangemouth-grant-despite-closure/>
- ⁶⁴ The Daily Record (2024). Outrage as billionaire Grangemouth owner benefits from grants despite closure plans. <https://www.dailyrecord.co.uk/news/scottish-news/outrage-billionaire-grangemouth-owner-benefits-33878594>
- ⁶⁵ Ørsted. Annual Report: 2024. <https://cdn.orsted.com/-/media/annual2024/orsted-annual-report-2024.pdf>; STEM learning (2018). ENTHUSE Partnership to benefit from Ørsted East Coast Community Fund. <https://www.stem.org.uk/news-and-views/news/enthuse-partnership-benefit-orsted-east-coast-community-fund>
- ⁶⁶ For example, offshore wind in the UK generated £2.4 billion in 2020 <https://www.gov.scot/publications/onshore-wind-policy-statement-2022/pages/6/>. See also: The Ferret (2022). Wind farms producing £3bn of energy to pay 'loose change' to Scots while fuel bills soar. <https://theferret.scot/wind-farms-pay-loose-change-scots-fuel-bills-soar/>
- ⁶⁷ Scottish Government (2019). Community benefits from onshore renewable energy developments. <https://www.gov.scot/publications/scottish-government-good-practice-principles-community-benefits-onshore-renewable-energy-developments/>
- ⁶⁸ Platform (2025). Social Value from Renewables in the Highlands and Islands, p.13 <https://platformlondon.org/resource/community-ownership/>
- ⁶⁹ The Ferret (2022). Wind farms producing £3bn of energy to pay 'loose change' to Scots while fuel bills soar. <https://theferret.scot/wind-farms-pay-loose-change-scots-fuel-bills-soar/>
- ⁷⁰ The Just Transition Commission (2024). Shetland, Community Benefit, and the Energy Transition, p.31. <https://www.justtransition.scot/publication/shetland-community-benefit-and-the-energy-transition/>
- ⁷¹ Orkney Wind Farms. Community Benefits. <https://orkneywindfarms.co.uk/community-benefits>
- ⁷² Platform (2025). Social Value from Renewables in the Highlands and Islands, p.30. <https://platformlondon.org/resource/community-ownership/>
- ⁷³ Scottish Government (2017). Onshore wind policy statement. <https://www.gov.scot/binaries/content/documents/govscot/publications/speech-statement/2017/12/onshore-wind-policy-statement-9781788515283/documents/00529536-pdf/00529536-pdf/govscot%3Adocument/00529536.pdf>
- ⁷⁴ University of Strathclyde: Fraser of Allander Institute (2018). Scotland's record year for renewables. <https://fraserofallander.org/scotlands-record-year-for-renewables/>
- ⁷⁵ Community Energy Scotland (2024). A Fair Energy Deal for Scotland: Increasing Uptake of Community Shared Ownership Opportunities. <https://communityenergy.scot/wp-content/uploads/2024/09/Scottish-Community-Coalition-on-Energy-Community-Shared-Ownership-Paper-FINAL-1.pdf>; The Scottish Beacon (2025). Grasping the opportunity of Scotland's renewable revolution. <https://www.scottishbeacon.com/news/community-empowerment/grasping-the-opportunity-of-scotlands-renewable-revolution/>
- ⁷⁶ Royal Society of Edinburgh (2024). A strategic approach to community benefits in the energy system, 2. <https://rse.org.uk/wp-content/uploads/2024/12/RSE-AP-A-strategic-approach-to-community-benefits-in-the-energy-system-2024.pdf>
- ⁷⁷ Scottish Government (2023). Community benefits: letter to UK government. <https://www.gov.scot/publications/community-benefits-letter-uk-government/>
- ⁷⁸ The Just Transition Commission (2024). A Just Transition for Shetland. <https://www.justtransition.scot/publication/a-just-transition-for-shetland/>
- ⁷⁹ Economic Development Association Scotland. Implementing Community Wealth Building: a guide. <https://edas.org.uk/community-wealth-building-guide/>
- ⁸⁰ See Platform (2025) Social Value for Renewables for detail on each local authority's approach to CWB.
- ⁸¹ Scottish Government (2025). Community Wealth Building (Scotland) Bill: equality impact assessment. <https://www.gov.scot/publications/equality-impact-assessment-community-wealth-building-scotland-bill/>
- ⁸² STUC (2023). STUC Analysis of ONS Low Carbon and Renewable Energy Economy data for 2021, p.4. <https://www.stuc.org.uk/resources/ons-lcre-data-stuc-analysis-2021.pdf>
- ⁸³ Alexander Dennis (2024). Uneven playing field forces Alexander Dennis to begin consultation on Scottish bus manufacturing jobs. <https://www.alexander-dennis.com/uneven-playing-field-forces-alexander-dennis-to-begin-consultation-on-scottish-bus-manufacturing-jobs/>

- ⁸⁴ Future Economy Scotland (2025). Missing the bus: Alexander Dennis and Scotland's industrial decline. <https://www.futureeconomy.scot/posts/260-missing-the-bus-alexander-dennis-and-scotland-s-industrial-decline>
- ⁸⁵ Energy Saving Trust and Transport Scotland (2023). Scottish zero emission bus challenge fund (phase II): Guidance Document. <https://energysavingtrust.org.uk/grants-and-loans/scottish-zero-emission-bus-challenge-fund-phase-2/>
- ⁸⁶ The Just Transition Finance Lab (2025). Spain's just transition energy tenders, p.5 https://justtransitionfinance.org/wp-content/uploads/2025/02/Just-Transition-Finance-Lab_Spain-case-study.pdf
- ⁸⁷ Ibid.
- ⁸⁸ Ibid., p.6.
- ⁸⁹ Energy Voice (2022). Putting ScotWind's Supply Chain Development Statement into perspective. <https://www.energyvoice.com/insights/energy-opinion/392687/putting-scotwinds-supply-chain-development-statement-scds-into-perspective/>
- ⁹⁰ Offshore Wind Champion (2023). Independent report of the Offshore Wind Champion: Seizing our Opportunities, p56. <https://assets.publishing.service.gov.uk/media/65a662c1867cd800135ae90b/offshore-wind-champion-independent-report.pdf>
- ⁹¹ Scottish Government (2023). Delivering net zero energy opportunities. <https://www.gov.scot/news/delivering-net-zero-energy-opportunities/>
- ⁹² UK government (2024). Contracts for Difference (CfD) Allocation Round 7: Clean Industry Bonus framework and guidance. <https://www.gov.uk/government/publications/contracts-for-difference-cfd-allocation-round-7-clean-industry-bonus-framework-and-guidance>
- ⁹³ UK Government (2025). Great British Energy lands deal to deliver offshore wind jobs. <https://www.gov.uk/government/news/great-british-energy-lands-deal-to-deliver-offshore-wind-jobs>
- ⁹⁴ STUC (2022). Green Jobs in Scotland, p.8. https://transitioneconomics.net/wp-content/uploads/2021/09/STUC_Green_Jobs.pdf
- ⁹⁵ STUC (2024). ScotWind: the investment needed to secure manufacturing jobs in Scotland. Report commissioned by the Scottish Trades Union Congress and written by Transition Economics, p.7. <https://www.stuc.org.uk/resources/scotwind-report-2024.pdf>
- ⁹⁶ UK government (2022). The Green Book. <https://www.gov.uk/government/publications/the-green-book-appraisal-and-evaluation-in-central-government/the-green-book-2020>
- ⁹⁷ UK government HM Treasury (2025). Green Book Review 2025: Findings and Actions. <https://www.gov.uk/government/publications/green-book-review-2025-findings-and-actions>
- ⁹⁸ Mazzucato and Macfarlane (2024). A Mission-Oriented Industrial Strategy for Scotland: Framing Paper, a joint report between Future Economy Scotland and the UCL Institute for Innovation and Public Purpose, p.55. <https://www.futureeconomy.scot/publications/65-a-mission-oriented-industrial-strategy-for-scotland-framing-paper>; See also Kattel et al. (2018). The economics of change: Policy and appraisal for missions, market shaping and public purpose, Report by the UCL Institute for Innovation and Public Purpose. <https://www.ucl.ac.uk/bartlett/publications/2018/jul/economics-change-policy-and-appraisal-missions-market-shaping-and-public-purpose>
- ⁹⁹ Interviews with Scottish Enterprise and Fair Work First division.
- ¹⁰⁰ Interview with STUC and Just Transition team in Scottish Government.
- ¹⁰¹ Ferry Foundation (2023). Assessing Fair Work in Scotland. Report for the Jimmy Reid Foundation, p.49. <https://ferryfoundation.org.uk/wp-content/uploads/2023/09/Fair-work-evaluation.pdf>
- ¹⁰² Ibid., p43.
- ¹⁰³ Shibe and Gibbs. (2025). "The Grangemouth oil refinery closure: lessons for 'just transition' governance," *The Journal of the British Academy*, 13(1): a11, p.11. (doi.org/10.5871/jba/013.a11.)
- ¹⁰⁴ Shibe and Gibbs. (2025). "Workers' Perspectives on an Unjust Transition: Place, History, and Workplace Closure at Grangemouth Oil Refinery, Scotland," *Antipode*, 57(4), pp.1576-1597. (doi: 10.1111/anti.70025); Significant workplace disputes pre-2020 include in 2001 BP made 700 job cuts to the refinery; following sale to INEOS in 2005, in 2008 Unite struck over a pension dispute; in 2013 Petroineos threatened to close the refinery in response to further industrial action.
- ¹⁰⁵ Shibe and Gibbs. (2025). "The Grangemouth oil refinery closure: lessons for 'just transition' governance," *The Journal of the British Academy*, 13(1): a11, p.2. (doi.org/10.5871/jba/013.a11.)
- ¹⁰⁶ Scottish Government (2025). Offshore wind policy statement 2020 update: consultation. <https://www.gov.scot/publications/update-2020-offshore-wind-policy-statement-scotlands-offshore-wind-ambition/pages/3/>
- ¹⁰⁷ Scottish Government (2025). Offshore wind – potential project capital value: factsheet. <https://www.gov.scot/publications/offshore-wind-potential-project-capital-value-factsheet/>

- ¹⁰⁸ The four ScotWind developers were the West of Orkney Windfarm (a joint venture between Corio Generation, TotalEnergies, and RIDG), Floating Energy Alliance's Buchanan Offshore Wind project, Thistle Wind Partners (a joint venture between DEME, Qair and Aspiravi), and Ossian (a joint venture between SSER, Marubeni, and Copenhagen Infrastructure Partners).
- ¹⁰⁹ UHI. (2023). ScotWind developers commit £900K to expand UHI schools STEM engagement programme. <https://www.uhi.ac.uk/en/media/news-archive/2023/scotwind-developers-commit-900k-to-expand-uhi-schools-stem-engagement-programme.html>
- ¹¹⁰ Common Weal (2024). ScotWind: one year on, p.5. <https://www.commonweal.scot/policies/scotwind-one-year-on>
- ¹¹¹ Crown Estate Scotland (2023). Briefing: Innovation and Targeted Oil & Gas (INTOG) Leasing. <https://www.crownestatescotland.com/sites/default/files/2023-11/INTOG%20briefing%20update%20Nov%202023.pdf>; see also Crown Estate Scotland (2022). Briefing: ScotWind Leasing for offshore wind. <https://www.crownestatescotland.com/sites/default/files/2023-07/scotwind-briefing-november-2022.pdf>
- ¹¹² STUC (2025). Employment and Corporate Practice in Scotland's wind sector: Workers perspective and company survey. Report commissioned by the Scottish Trades Union Congress and written by Transition Economics, p.13. <https://www.stuc.org.uk/resources/fair-work-in-offshore-windfinal.pdf>
- ¹¹³ The Scottish Parliament SPICe Spotlight (2023). Green freeports in Scotland: opportunities and challenges as we transition to a net zero economy. <https://spice-spotlight.scot/2023/03/03/green-freeports-in-scotland-opportunities-and-challenges-as-we-transition-to-a-net-zero-economy/>
- ¹¹⁴ Forth Green Freeport (2023). Forth Green Freeport Update – Issue 1. <https://forthgreenfreeport.com/news/forth-green-freeport-update-issue-1/>
- ¹¹⁵ Eligible businesses in tax sites get tax reliefs, while businesses in customs sites get customs easements; where there is a customs site that overlaps with a tax site businesses receive both. <https://www.edinburgh.gov.uk/forthgreenfreeport>
- ¹¹⁶ Scottish Government (2025). Green Freeports Programme - business and regulatory impact assessment (BRIA). <https://www.gov.scot/publications/green-freeports-programme-business-regulatory-impact-assessment-bria/>
- ¹¹⁷ Ibid., p.32.
- ¹¹⁸ The National (2024). Roz Foyer: Still unclear what 'worrying' freeports mean for workers. <https://www.thenational.scot/news/24229486.roz-foyer-still-unclear-worrying-freeports-mean-workers/>; Common Weal. ScotWind. <https://www.commonweal.scot/policies/scotwind-one-year-on>; Unite the Union (2023). Unite demands workers rights guarantees over freeports. <https://www.uniteunion.org/news-events/news/2023/january/unite-demands-workers-rights-guarantees-over-freeports>
- ¹¹⁹ The Scotsman (2025). Exclusive: Tax haven or economic boost? Scotland's green freeports fuel workers' rights fears. <https://www.scotsman.com/news/politics/scotland-green-freeports-workers-rights-stuc-kate-forbes-4980850>
- ¹²⁰ Science Based Targets Initiative. <https://sciencebasedtargets.org/>
- ¹²¹ Carbon Trust (2024). Industry launches new guidance for measuring the carbon footprint of offshore wind farms. <https://www.carbontrust.com/news-and-insights/news/industry-launches-new-guidance-for-measuring-the-carbon-footprint-of-offshore-wind-farms>; partners of the SusJIP include bp, EnBW, Ørsted, Parkwind, RWE, ScottishPower Renewables, SSE, Statkraft, and Total Energies.
- ¹²² Living Wage Scotland (n.d.). Employer Profiles: SSE plc. https://scottishlivingwage.org/employer_profiles/sse-plc/; see SSE Net Zero Transition Plan p.13 for detail on SBTi: <https://www.sse.com/media/exepd1qw/sse-s-net-zero-transition-plan-final.pdf>; see: SSE Net Zero Transition Plan p.17 for detail on the SusJIP: <https://www.sse.com/media/32bch32o/net-zero-transition-plan-2023-final.pdf>.
- ¹²³ SSE Renewables (2021). Just transition: from principles to action. <https://www.sse.com/media/445hyxgk/just-transition-supporting-workers-transition-final.pdf>
- ¹²⁴ Interviews by author with SSE and Just Transition team in Scottish Government.
- ¹²⁵ Correspondence with STUC; see also STUC (2025). Employment and Corporate Practice in Scotland's wind sector: Workers perspective and company survey. Report commissioned by the Scottish Trades Union Congress and written by Transition Economics, p.13. <https://www.stuc.org.uk/resources/fair-work-in-offshore-windfinal.pdf>
- ¹²⁶ Fair Work Convention (2022). Building Fair Work in the Construction Industry: Fair Work Convention Construction Inquiry Report 2022, p.69 <https://fairworkconvention.scot/wp-content/uploads/2022/04/Fair-Work-Construction-Inquiry-Report-2022.pdf>

- ¹²⁷ Gibbs and Shibe (2024). The Grangemouth Refinery Closure: Workers' Perspectives. Report for the Just Transition Commission. <https://www.justtransition.scot/publication/the-grangemouth-refinery-closure-workers-perspectives/>
- ¹²⁸ Ibid.
- ¹²⁹ Ibid.
- ¹³⁰ Jenkins, Drabble and Copeland (2025). Assessing the low carbon transition at Grangemouth: A case study for measuring fairness, Report for the Just Transition Commission. <https://www.justtransition.scot/publication/assessing-the-low-carbon-transition-at-grangemouth/>
- ¹³¹ Ibid., p38.
- ¹³² Scottish Parliament (2023). Economy and Fair Work Committee. <https://www.parliament.scot/chamber-and-committees/official-report/search-what-was-said-in-parliament/EFW-08-03-2023?meeting=15196&iob=129585>
- ¹³³ Ibid., p40.
- ¹³⁴ Shibe (2025). Petrochemicals, Pollution, and the Moral Economy of Noxious Industry: Grangemouth, Scotland, from 1951 to 1989. *Enterprise & Society*, pp.1-28 (doi:10.1017/eso.2024.41)
- ¹³⁵ Scottish Government (2024). Grangemouth Industrial Cluster; Scottish Government (2023). Just Transition for the Grangemouth industrial cluster: discussion paper. <https://www.gov.scot/publications/discussion-paper-transition-grangemouth-industrial-cluster/pages/3/>; Scottish Enterprise (2024). Consultation Towards a Future Grangemouth Hydrogen Hub. <https://www.scottish-enterprise.com/media/ddsaoymo/grangemouth-hydrogen-hub-2024.pdf>
- ¹³⁶ Grangemouth Flood Protection Scheme. <https://www.grangemouthfloodscheme.com/>
- ¹³⁷ The Firth of Forth Estuary Special Protection Area (under the European Directive on the Conservation of Wild Birds); the Firth of Forth Estuary Ramsar Site (under the Ramsar Convention, an international treaty on the conservation of wetlands); the Firth of Forth Estuary Site of Special Scientific Interest (a statutory designation for national nature conservation interest); and local conservation sites designated as Sites of Importance to Nature Conservation, Wildlife Sites and Local Nature Reserves (see https://marine.gov.scot/sites/default/files/grangemouth_fps_eia_scoping_report_final_for_submission.pdf, pp.71-72 for further detail)
- ¹³⁸ Interview by author with SEPA.
- ¹³⁹ Scottish Government (2021). Just Transition - A Fairer, Greener Scotland: Scottish Government response. <https://www.gov.scot/publications/transition-fairer-greener-scotland/pages/5/>
- ¹⁴⁰ Scottish Enterprise (2025). Grangemouth: Land & Infrastructure Baseline Review, p.24, p.26. https://www.scottish-enterprise.com/media/4ord2pvf/grangemouth-land-infrastructure-baseline_-july-2025-issue-1.pdf
- ¹⁴¹ Scottish Government (2025). Grangemouth Industrial - just transition plan: supporting a fair transition for Scotland's core manufacturing cluster. Annex A – Detailed Baseline. <https://www.gov.scot/publications/grangemouth-industrial-transition-plan-supporting-fair-transition-scotlands-core-manufacturing-cluster/pages/8/>
- ¹⁴² Interview by author with adaptation leads in Scottish Government.
- ¹⁴³ SEPA. <https://beta.sepa.scot/local-environmental-issues/grangemouth/>
- ¹⁴⁴ The Ferret (2021). INEOS damned as “very poor” for pollution at Grangemouth. <https://theferret.scot/ineos-damned-poor-pollution-grangemouth/>
- ¹⁴⁵ See Scottish Enterprise Hydrogen consultation for comprehensive detail on status of net zero policy <https://www.scottish-enterprise.com/media/ddsaoymo/grangemouth-hydrogen-hub-2024.pdf>
- ¹⁴⁶ Jenkins, Drabble and Copeland (2025). Assessing the low carbon transition at Grangemouth: A case study for measuring fairness, Report for the Just Transition Commission. <https://www.justtransition.scot/publication/assessing-the-low-carbon-transition-at-grangemouth/>
- ¹⁴⁷ Shibe and Gibbs. (2025). “The Grangemouth oil refinery closure: lessons for ‘just transition’ governance,” *The Journal of the British Academy*, 13(1): a11, p.12. (doi.org/10.5871/jba/013.a11.)
- ¹⁴⁸ The Just Transition Finance Lab (2025). Spain's just transition energy tenders. https://justtransitionfinance.org/wp-content/uploads/2025/02/Just-Transition-Finance-Lab_Spain-case-study.pdf
- ¹⁴⁹ industriAll European Trade Union (2025). Provisions for social conditionality, employment security and anticipation and management of change in the Clean Industrial Deal, pp.5-6. https://news.industriall-europe.eu/documents/upload/2025/3/638774815163272545_Policy_Brief_social_conditionality_2025_01.pdf
- ¹⁵⁰ European Commission (2024). Press release: Commission approves €350 million Portuguese State aid scheme to support investments in equipment necessary to foster the transition to a net-zero

economy.

https://ec.europa.eu/commission/presscorner/api/files/document/print/es/ip_24_962/IP_24_962_EN.pdf

¹⁵¹ Mazzucato and Macfarlane (2024). A Mission-Oriented Industrial Strategy for Scotland: Framing Paper, a joint report between Future Economy Scotland and the UCL Institute for Innovation and Public Purpose, p.34. <https://www.futureeconomy.scot/publications/65-a-mission-oriented-industrial-strategy-for-scotland-framing-paper>

¹⁵² Euractiv (2023). Bidenomics' ties social conditionalities to industrial policy, but EU hasn't followed suit. <https://www.euractiv.com/section/economy-jobs/news/bidenomics-ties-social-conditionalities-to-industrial-policy-but-eu-hasnt-followed-suit/>; Letta (2024). Much more than a market – Speed, Security, Solidarity Empowering the Single Market to deliver a sustainable future and prosperity for all EU Citizens, p.40. <https://www.consilium.europa.eu/media/ny3j24sm/much-more-than-a-market-report-by-enrico-letta.pdf>

¹⁵³ RMI (2023). Community Benefits Plans: Driving Equitable Clean Energy Development. <https://rmi.org/community-benefits-plans-driving-equitable-clean-energy-development/>

¹⁵⁴ McKinsey (2022). The CHIPS and Science Act: Here's what's in it. <https://www.mckinsey.com/industries/public-sector/our-insights/the-chips-and-science-act-heres-whats-in-it>

¹⁵⁵ Canada Enterprise Emergency Funding Corporation. Large Employer Emergency Financing Facility Factsheet. <https://ceefc-cfuec.ca/leeff-factsheet/>; Borden Ladner Gervais. Government of Canada Financing Programmes: LEEFF. <https://www.blg.com/-/media/insights/documents/blg---government-of-canada-financing-programs---leeff.pdf>

¹⁵⁶ European Commission (2025). EU actions to address farmers' concerns. https://agriculture.ec.europa.eu/overview-vision-agriculture-food/eu-actions-address-farmers-concerns_en

¹⁵⁷ Columbia Center on Sustainable Investment (2013). Norway: Government Pension Fund Global. https://ccsi.columbia.edu/sites/ccsi.columbia.edu/files/content/docs/our%20work/NRF_Norway_July2013.pdf

¹⁵⁸ Olsen (2013). Public Acceptance of Renewable Energy Projects: Tilting at Windmills – the Danish Case. https://pure.au.dk/ws/portalfiles/portal/56976888/Birgitte_Egelund_Olsen_Public_Acceptance_DRAFT.pdf

