

Paper 2: Background briefing

Background

This paper has been prepared by the secretariat to support the Commission in developing its understanding of just transition issues related to Grangemouth in advance of its visit March 14-15. It includes material across the following areas:

- Scottish Government policy development
- Findings of the Scottish Parliament's Economy and Fair Work Committee's work on Grangemouth, including its report, submissions from key stakeholders and hearing with INEOS/Petroineos leadership
- Local community consultation and flood prevention issues
- Selected articles published since the refinery closure announcement
- Other press cuttings

Approach

This briefing collates recent reports, publications, submissions and other documents to support the Commission's engagement. As this material is very extensive, we have provided a high level summary of some of the key items to support members in determining which they wish to review in detail (please click on the links where applicable). Secretariat invited all relevant stakeholder organisations to provide advance briefing on key challenges for the Commission to consider as well as a note of data/indicators they hold or access which could potentially play a role in JT M&E, however no responses were received.

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1. Scottish Government Policy Development

Context

A [paper](#) summarising the Scottish Government's proposed approach to developing a Just Transition Plan for the industrial cluster of Grangemouth was published in September 2023.

This was prepared to support engagement, in aid of a co-design process, to shape the final Just Transition Plan. A draft plan is scheduled for publication in May 2024 for consultation, with a finalised plan by the end of the year.

Key Points

- The Grangemouth industrial cluster is home to a concentration of strategic infrastructure assets and high-value employment. There are estimated to be over 2,000 full-time equivalent (FTE) jobs present in the immediate industrial cluster, with thousands more individuals employed in operators' supply chains.
- However, the area was responsible for around 6% of Scotland's net greenhouse gas emissions in 2021.
- The Scottish Government and public sector partners ambition is to see the site remain as a key manufacturing base, but significantly decarbonised.
- Grangemouth is a town of around 16,000 people. It has communities that are in both the top and bottom segments of the Scottish Index of Multiple Deprivation, suggesting a high degree of inequality in the local economy.
- Changes in scope of operations at the industrial cluster could affect households of different deprivation levels in different ways.
- The Grangemouth Future Industry Board (GFIB) will be the main delivery vehicle for the Grangemouth Industrial Just Transition Plan, working in partnership with other vested interest groups, including industry, workforce, trade unions and the community of Grangemouth.
- The plan will outline a shared view of what the industrial cluster could look like by 2045, and the ways in which this transition can maximise socio-economic benefit for the surrounding area. The plan will focus on just transition of the Falkirk/Grangemouth area as it relates to the decarbonisation of the industrial cluster.
- There are parallel initiatives, including the delivery of the [Falkirk Growth Deal](#), the emerging [Forth Valley Regional Economic Partnership](#) and the [Forth Green Freeport](#).
- GFIB will ensure that efforts to deliver a Just Transition Plan do not complicate the landscape of development initiatives for the area.
- GFIB is under-going changes at present. To date GFIB has been a partnership between public sector organisations, but going forward it will have private and community representation.

2. Economy and Fair Work Committee

Context

The Economy and Fair Work Committee held an [inquiry](#) in to Grangemouth last year looking at how we can support, incentivise and de-risk this transition in a way that benefits both companies and individuals.

A selection of some of the most pertinent recommendations have been pulled out below.

Recommendations

- The just transition plan should make clear what a just transition will look like in Grangemouth, in tangible terms, to enable local stakeholders to understand what it will mean for them and the part they can play.
- The Scottish Government should engage with the community to determine their priorities and to inform the Just Transition Plan for Grangemouth.
- The Scottish Government should undertake and publish an assessment of the proportion of new jobs that will be local and the proportion that may increase commuters.
- The Scottish Government should set out how the Grangemouth Flood Protection Scheme will be funded, given the scale of the project (£600 million), and doubt expressed by the council about its ability to contribute the usual 20%.
- The use of local supply chains in public procurement should be emphasised in the next iteration of the draft Energy Strategy and Just Transition Plan, and that conditionality around this be built into procurement contracts relating to the transition of the area.
- Public and private sectors should work collaboratively to identify, develop, and clearly articulate the business and community opportunities, and risks, around hydrogen technology; ensure funding is in place at the right time to take advantage of opportunities to maximise the economic and community benefit; and to develop contingency plans should the expected benefits from this technology not be as hoped.

3. Economy and Fair Work Committee consultation – evidence submissions

Context

As part of the inquiry, the Committee undertook a call for views which closed on 14th February 2023 and received [26 responses](#) in total. A number of these submissions have been flagged for your awareness.

3.1. Just Transition Partnership

The Just Transition Partnership* includes leading organisations in the trade union and environmental sectors and has played a significant role in creating the commitment in Scotland to policies for Just Transition. It welcomes this Inquiry and wishes to draw the attention of the Committee to the points set out below.

3.1.1. The role of government is to make the Just Transition happen, not just to support, incentivise and de-risk

The Committee should not start from the assumption that a just transition is going to happen in Grangemouth, one way or another. The overall and essential question is how we can ensure that a just transition does actually happen in Grangemouth and every area of Scotland, because there are not many signs for confidence about this. It is the role of the Scottish Government and the Scottish Parliament to do this, a role which is not properly captured by the phrase ‘support, incentivise and de-risk’ which seems to imply that this is a process with its own momentum where the role of government is to help it on its way.

3.1.2. A just transition must be worker-led

Workers themselves are best placed to shape and determine what a just transition means for their workplace, their industry and their community. Government must therefore engage workers and trade unions directly in just transition planning. However, equally importantly, they must require businesses to talk to trade unions by making Government support for business conditional on trade union access and collective bargaining at company and sectoral level.

3.1.3. The importance of Just Transition Plans for regions with significant dependency on fossil fuels

The Scottish Government has said that there will be a Just Transition Plan for every sector and region of Scotland. The Inquiry into a Just Transition to net zero for the Grangemouth area is a welcome stimulus to the process of thinking through how Just Transition principles, plans and projects are developed and implemented in a specific geographical area. It is very useful to start with areas, like Grangemouth, in which industries based on fossil fuels are located because these exemplify in clear ways the application of just transition principles to industrial change and the benefits and challenges associated with them. These plans are therefore important steps in demonstrating that the climate crisis can and will be met in a just way delivering better jobs, a better society and a better world for all.

3.1.4. Regional Just Transition Plans should cover the whole economy, not just fossil-fuel sectors

However it is not the case that the need for decarbonisation in the Grangemouth area applies only to the fossil fuel-based enterprises at the Ineos refinery and petrochemical plant. The port is another enterprise of Scottish significance and there are other employers in the area which, depending on how wide its boundaries are drawn, might include the bus manufacture Alexander Dennis. In addition, the communities of the Grangemouth area face the same challenges and opportunities regarding decarbonising demand for energy in a just way as any other Scottish community so logically the Just Transition Plan for the area must also cover transport, public services, the heating of buildings and the food and farming sectors. This approach, also involving community engagement, is necessary if the full benefits of a just transition are to be planned and anticipated – because they may be dependent on whole-economy plans.

3.1.5. Regional and sectoral Just Transition Plans must consider supply chains

Research for the STUC suggests that, with the right policies, meeting climate targets could create 367,000 jobs. However, without the right policies, job creation will be less than 131,000. Crucial to this is ensuring that we retain and create manufacturing supply chain jobs in Scotland as part of the transition. The Scottish Government must ensure local manufacturing jobs are created by requiring local content in all green energy leases and planning consents, building supply chains in Scotland. Investment should be targeted to sectors and enterprises in the supply chain to complement requirements for a minimum proportion of local content. Lessons must be learned from the recent Scot Wind leasing round, which has been shown to have failed to maximise opportunities for supply chain benefits and local ownership.

3.1.6. The National Just Transition Planning Framework needs elaboration for regional use

The process of Just Transition Planning is central to this Inquiry. The National Just Transition Planning Framework produced by the Scottish Government is a good starting point but it remains a high-level guide and has yet to be properly implemented in any sector. Furthermore it appears to be designed for application to industrial sectors at Scottish level and does not include any consideration of the integration of area-based just transition plans with existing geographic planning like development plans prepared under the land use planning system. It is therefore very useful for the Inquiry to investigate how sectoral, geographical and enterprise-level just transition plans can be created rapidly, consistently and consensually; and in what order.

3.1.7. A Just Transition Plan for Grangemouth should draw on the relevant sectoral Just Transition Plans ...

It might be sensible to base a geographical just transition plan on the sectoral plans for the industries which are of greatest relevance. However to say this would be a recipe for indefinite delay in starting regional just transition plans. The

first draft just transition plan is the Energy Strategy which is currently out for consultation, although we have serious concerns that this does not fulfil the minimum requirements for consistency with the Framework. It does not include reliable projections of the demand and supply for fossil fuels nationally, let alone as they might apply to the refinery at Grangemouth. It does not contain a workforce plan and contains very few new policies. The Scottish Government has said that it will produce draft JT Plans for Construction, Food and Farming and Transport (which will be of considerable relevance to Grangemouth) in 2023 but it would be rash to predict when these will be finally agreed with the respective industries. There is no known timetable for a sectoral just transition plan for the petrochemical and plastics sector within which the Ineos plant would fall.

3.1.8. ... but starting the process in Grangemouth and other key areas should not be delayed until sectoral plans are completed

Pragmatically, just transition planning should start for all regions and sectors as soon as possible and run in parallel - they should influence each other. As the Framework says, these will be adaptable and iterative documents. This process should involve the engagement from the very start of representative organisations of the workforces and communities most affected including trades union councils. Furthermore, each should draw on just transition planning done at the business level. Every important enterprise, in private and public sectors, should already be making plans for decarbonisation and working with trade unions and its workforce to manage the process of change equitably – and with environmental experts to limit and mitigate any harm to the environment from transition plans; that is the essence of just transition planning.

3.1.9. It's the responsibility of Government to start the process, within the framework of the Climate Change Act 2019

The process should be initiated by either the Scottish Government or the local authority, Falkirk Council, but should proceed in partnership with local trade unions and business organisations and engage with community bodies. The framing should be provided by the targets set in the Climate Change Act 2019 and the contribution to that which must be made within the Grangemouth area. It should consider how the required changes will be made to happen and their implications for workers and communities, in particular changes in the types and numbers of jobs. On that foundation it should make plans for the investments needed, planning for the relevant skills, the offer of jobs and support for the workers affected and the protections and improvements needed by local communities.

3.1.10. The key Just Transition Outcomes should guide both forward planning and monitoring of the benefits for the Grangemouth community

Both the forward planning and the monitoring of the local Just Transition Plan should be based on a clear and measurable set of targets. The outcomes for these should be derived from the Scottish Governments' Just Transition Outcomes but these are not, in our opinion, specific enough – furthermore there

are now two versions, one in the Framework and the other in the Energy Strategy. In our view the key indicators are:

1. Job creation - numbers in new industries or processes
2. Emissions reductions achieved
3. Numbers of people making job transitions
4. Skills necessary for transition – delivery and utilisation
5. Pay , conditions and collective bargaining
6. Distribution of costs and benefits to communities and citizens – reductions of inequalities

These indicators give a clear view of what we believe should be the benefits of the just transition for the Grangemouth community

3.1.11. The Just Transition Plan has to attend carefully to delivery so should include financial projections as well as jobs.

Once the overall trajectory of the plan is established, commitments regarding the investments needed to make it happen will have to be sought, from both businesses and the public sector. The case for a government fund comparable to the Just Transition Fund for Northeast Scotland should be considered. Wherever public money and assets are involved, appropriate requirements should be stipulated which can ensure both the commitment of private companies to achieving their share of the plan's targets and ways of tying down the public benefits – where possible this should include options for extension of public ownership to give a direct stake to the community.

3.1.12. Proper skills planning should respond to the actual and anticipated labour demand in the area

The skills required to deliver the transition are not being invested in at the necessary pace or scale. There is too little work being done on upskilling workers to enable them to move to new industries when they come on-line. Plans for investment in skills training should respond to assessments of labour demand developed within the plan. Funding for training of the existing workforce should be expected from employers while colleges should commit sufficient budget to training of new recruits into the relevant local sectors.

* The Just Transition Partnership The Just Transition Partnership was formed by Friends of the Earth Scotland and the Scottish Trade Union Congress. It advocates for action to meet climate change targets in ways which protect workers livelihoods and make Scotland more equal and inclusive. Membership includes Unite Scotland, UNISON Scotland, UCU Scotland, CWU Scotland, PCS Scotland, New Economics Foundation, Common Weal and WWF Scotland. When it was set up in 2016 one of its first proposals was the establishment of the Just Transition Commission. See <https://www.jtp.scot/>

3.2. Grangemouth Community Council

As a community Grangemouth has been a long time host to a range of industries that encompassed Ship Building, Timber importing and processing, Oil Refining and Processing, Chemicals Processing, Port Operations. All of these activities provided work for local residents in the main. The town prospered by provision of services to those locally employed people and in support of the larger businesses.

The local authority benefited from its status as a small Burgh and the revenue raised from both business and domestic rates arising from the expanding industry and community. That all changed in the 19 seventies with the implementation of the Local government Scotland Act 1973 and the creation of Central Region headquartered in Stirling and Falkirk District Council (now referred to as Falkirk Council) headquartered in the town of Falkirk. The revenue streams that had benefited Grangemouth exclusively were now diverted to the wider Central Region. Not surprisingly this resulted in a diminished return to Grangemouth as the host community from these now nationally important industries. The Scotland Act of 1998 and Devolution saw further distribution of the benefits accruing from hosting major industry within the community of Grangemouth as the revenue was now returned to the Scottish Government for redistribution across the country.

So now to the present day and we see how those historic changes have manifested themselves in Grangemouth. We now have a community in near terminal decline with numerous areas of deprivation and poverty, high levels of unemployment, poor health profiles and low skilled population. For specific figures we refer you to Scottish Index of Multiple Deprivation report.

We also have a local authority with a £67M blackhole to fill who are withdrawing basic services needed to support those most in need within our community. How can this be when we are located up close and personal to the largest wealth creating industrial complex in the county?

The Grangemouth Cluster is a significant contributor to the Scottish Economy and sharing the accruing benefits is fair but what cannot be shared are the negative environmental impacts arising from the various operations surrounding the community. The nature of the operations also inhibits local development due to the constraints of the Hazard Consultation Zones associated with the industry. History has not treated Grangemouth well,

So what needs to be done to achieve a Fairer, Greener, Safer, Healthier Grangemouth?

What local economic and employment benefits should the community expect from a transition to net zero?

First of all there needs to be an acceptance by decision makers that the community of Grangemouth ie those resident within the FK3 postcode need to be seen as a priority group. Currently many of those employed within the current local industry commute into and out of Grangemouth on a daily basis, referred to locally as DIDOs (Drive In Drive Out).

We have no wish to deprive the DIDOs of a living but there has to be measures taken to mitigate their impact. Green public transport offer including a rail station, use to be incentivised by implementing workplace parking levy.

Skills training for unemployed FK3 residents and appraisal of local schools curriculum to focus on future anticipated skillsets.

What engagement has there been between the public sector, industry and local communities in planning for the transition to net zero?

Consultations in various forms have been ongoing for some time: Grangemouth Flood Prevention Scheme Community Links Report (Your Place Your Views) Community Action Plan Falkirk/Grangemouth Growth Deal including Greener Grangemouth Project Grangemouth Future Industry Board

The Grangemouth Flood Prevention Scheme has probably been the one that has engaged the population most. Regular online and hard copy news letters, meet the team events, website, information boards located in proximity to development locations, public events displaying proposed options.

Community Links Report was a good example of a get out and meet the community engagement that drilled down to all levels within the community. It also formed a basis for the creation of the Community Action Plan. Community Action Plan was more of a collaboration between Falkirk Council and Grangemouth including Skinflats Community Council as a result of Covid constraints but driven by the outcomes from the Community Links Report. There was also an online launch event backed up by attendance at an open air Community Event to raise awareness of Community Groups.

The Falkirk/Grangemouth Growth Deal has received publicity but we suspect not a great deal of understanding as yet within the wider community. The Community Council has been involved but for many it is seen as not something they can influence and the perceived benefits are not yet manifest.

Grangemouth Future Industry Board again the Community Council is aware and had early engagement to press the case that the community needed be given due consideration.

What is the level of understanding of what skills will be in demand in the Grangemouth cluster to support the transition to net zero?

From a community perspective in the absence of any specific industries/businesses identified as likely to take up residence in Grangemouth the answer to the question is “None”.

Is industry confident that it has access to the skills and the labour needed to meet the demands of the next two decades, and if not, what are the concerns?

From the Community Council perspective we would suspect not. As stated earlier there is an identified lack of skills within the FK3 community to meet current industrial demand far less any future industry requirements and that needs to be urgently addressed.

We are aware as part of our discussions with Falkirk Council officers in relation to the Falkirk/Grangemouth Growth Deal that work is underway with Forth Valley College to establish courses that will be relevant to the future needs of the local industry.

What support has there been for innovation such as demonstrator projects. What are the other opportunities that Grangemouth could take advantage of?

Celtic Renewables have established a demonstrator plant to produce biofuel from the by-products of the Scotch Whisky industry however it is our understanding that if proven viable the potential growth will be adjacent to existing Distillery sites out-with Grangemouth.

We are not currently aware of any other innovation projects within the Grangemouth Cluster but clearly there is scope given the clearing of redundant processing plant within the Ineos Site. It was our understanding based on Ineos's 20/20 Vision statement that they proposed to encourage external organisations to establish operations on utility serviced plots within their site.

Recent publicity relating to the creation of a Forth based Green-port will clearly open the door to further development within the Grangemouth environs.

How can we measure whether the transition in the Grangemouth area is achieved in a 'just' way – what data should be collected to measure this?

In the long term reference to the Scottish Index of Multiple Deprivation should provide empirical evidence of improvement. Sustained environmental emissions reduction across all sectors (industrial, transport, business) Town Centre Regeneration Radical approach to the existing imbalance in available housing stock to reduce the high levels of transience within the community. Improved community cohesion

How can innovation in the Grangemouth area support the transition to net zero across Scottish industry?

The principle innovation has to be around the relationship between the wealth generators and the residents of the communities in which they operate.

Providing job opportunities has in the past been seen as the route to addressing social ills and issues of wellbeing. Its a good place to start but is it enough?

There needs to be a realisation that the community hosting operations has to be at the forefront of benefits accruing. One need only look to communities that host wind turbines and the community funds created to compensate them for the imposition of a perceived environmental impact. An impact significantly less than that experienced by Grangemouth residents for decades.

Consideration also needs to be given to a review of the currently defined Hazard Consultation Zones. Safely shrinking these zones can open the door to more socially acceptable development and maybe even scope for more home building. Homes that could encourage people to move into and stay in the community to take up the

envisaged job opportunities, reduce transience, reduce traffic emissions, improve community cohesion.

How can policy makers ensure that local supply chains benefit from the transition to net zero in the Grangemouth area, and across Scotland?

It is difficult to see how policy makers can develop a policy that would effectively and reasonably require major organisations to source materials and services from purely local sources.

The question would be better put to industry along the lines of: “How are you going to materially contribute to the wellbeing of the community for the duration of your operations within the community”? Their response could manifest itself as a guarantee to employ an agreed percentage of FK3 postcode residents either directly or indirectly via local suppliers.

3.3. Forth Valley College

Forth Valley College (FVC) is one of Scotland's leading providers of education and training for the oil and gas, chemical, energy and engineering sectors with significant experience in delivering innovative solutions for employers. Our new £78 million Falkirk Campus which opened in January 2020 includes world class laboratories, a process training rig, transmission training centre, distillation plant, virtual control room, mini-rig and a biotechnology centre.

FVC are at the heart of industry with a prime location next to Grangemouth Petrochemical Strip. Grangemouth, which is 1 of 6 industrial clusters in the UK and the only cluster in Scotland, benefits of this location include deploying and utilising shared decarbonisation infrastructure, enabling industry to reduce the unit cost for each tonne of carbon abated as well as opportunities for resource and energy efficiency and learning and innovation sharing. Naturally, for these reasons, Grangemouth has been listed as the centre of Scotland's Net Zero Infrastructure. Forth Valley College's strategic plan includes aims to be agile, nimble and responsive to the changes in both local and national industry.

Our dynamic provision ranges from access to degree level, vocational qualifications such as Foundation Apprenticeships, Pre-Apprenticeships and Modern Apprenticeships (MA) and Graduate Apprenticeships. We also develop and deliver specialist industry courses, professional qualifications, transition/re-skilling courses and tailored programmes.

FVC hold the largest contract for Modern Apprenticeship training in Engineering with Skills Development Scotland within the College Sector. We have a superb reputation in developing work-ready, competent apprentices who move seamlessly into their working environment because we embed industry standards and behaviours throughout their time in college. Our vision drives us to continually seek new ways to reinvigorate learning and develop our students in yet more engaging ways to meet both the current and future needs of employers and the economy. We respond swiftly and effectively to industry needs, but also do our best to ensure that this responsiveness leaves us with a lasting legacy that will benefit our future learners.

What local economic and employment benefits should the community expect from a transition to net zero?

- **Creation of new jobs:** The transition to net zero is very likely to create new job opportunities in a range of sectors, such as renewables, hydrogen technologies and uses, and clean technology including carbon capture. These jobs will range from manufacturing and installation to research and development, as well as technical support, project management, and others. The jobs created are likely to be well paid and require appropriate skills training.
- **Increased economic activity:** The transition to net zero can lead to increased economic activity in the Grangemouth area as part of the just transition, as businesses invest in clean energy projects, reduced energy usage, and hydrogen

and carbon capture technology. This can lead to increased demand for goods and services and can help to stimulate local economic growth.

- Improved energy security: By increasing the use of locally produced renewable energy along with hydrogen and carbon capture schemes the Grangemouth area can improve energy security by reducing dependence on fossil fuels, which are subject to price fluctuations and more recently there has been an international concern with the security and supply of these fuels
- Increased competitiveness: Transitioning to net zero can improve the competitiveness of local businesses by reducing energy costs and increasing access to new markets for clean energy products and services.
- Community engagement: Transitioning to net zero is likely to create opportunities for community participation in the planning, decision-making, and implementation of clean energy projects, which can help to build a sense of ownership and pride in the community.

What engagement has there been between the public sector, industry and local communities in planning for the transition to net zero?

Community engagement has taken place in relation to outreach activities with schools. For example projects run by Forth Valley College such as the STEM Summer School, STEM Loanbox and Famous Four have all focused on the issues around climate change, transition to net zero and also linking this to future skills. These activities target the younger generation and are designed to help them understand the changes and how they can contribute/prepare for this.

Strategic initiatives such as the Falkirk Growth Deal and the Forth Port Green Port will also increase engagement between organisations and local communities as projects will have a positive impact on their local area. Inclusion and community well being are key drivers for these projects – therefore engagement is critical to their success. For example, skills programmes, improved green spaces, wellbeing, improved transport, arts and culture.

What is the level of understanding of what skills will be in demand in the Grangemouth cluster to support the transition to net zero?

It is likely that the level of understanding of what skills will be in demand in the Grangemouth cluster to support the transition to net zero varies among different stakeholders, such as businesses, government, and educational institutions. However, some of the key skills that may be in demand include expertise in renewable energy technologies, energy efficiency, and carbon capture and storage. Additionally, there may be a need for workers with skills in data analysis, digitalization, and automation to support the transition to a more efficient, low-carbon energy system. The Cluster can also focus on skills such as project management, engineering, and research and development to support the deployment of new technologies and the integration of renewable energy into the existing energy system. Employers believe that the skills required will be a blend of current skills adapted to new technologies and new skills that will need developed as technologies and direction of travel to net zero becomes clearer.

Is industry confident that it has access to the skills and the labour needed to meet the demands of the next two decades, and if not, what are the concerns?

It is difficult to make a general statement about the confidence of the entire industry regarding access to the necessary skills and labour to meet the demands of the next two decades, as it likely varies by industry and region. However, there are concerns in some industries about a potential skills gap and shortage of workers with the necessary skills to meet the demands of the future economy. Additionally, there may be concerns about labour shortages in certain regions, particularly in industries that have been hit hard by the COVID-19 pandemic and may have difficulty attracting new workers. There is a sense of a lack of STEM qualified young people who will be the employees of the future in a range of industries, along with a reduced pool of future employees across a range of sectors.

What support has there been for innovation such as demonstrator projects. What are the other opportunities that Grangemouth could take advantage of?

Funding for demonstrator and innovation projects is available through for example programmes such as Innovate but it is unknown how many businesses have knowledge about accessing these programmes and also the success rate. Support for demonstrator projects needs to be enhanced and also information about these programmes needs to be highlighted regularly.

The Growth Deal may be also act as a catalyst for demonstrator projects but its funds are limited therefore, this area needs further investment to make a difference/lead the way.

How can we measure whether the transition in the Grangemouth area is achieved in a 'just' way – what data should be collected to measure this?

Measuring whether the transition to net zero in the Grangemouth area is achieved in a "just" way can be challenging, as it would likely involve assessing a range of social, economic, and environmental factors. One way to measure this would be to collect data on the impact of the transition on different groups of people and communities, such as low-income households, communities of colour, and workers in the fossil fuel industry.

Some specific data that could be collected to measure the "justness" of the transition include:

- Employment and unemployment rates, particularly for those in the fossil fuel industry and those in low-income communities.
- Income and poverty levels, both before and after the transition.
- Access to education and training opportunities for workers in the fossil fuel industry, including retraining programs and opportunities to acquire new skills.
- Changes in energy costs for low-income households and communities.
- The number and nature of air and water pollution incidents, particularly in low-income communities and communities of colour.
- The number of new jobs created in the renewable energy sector and the demographics of those employed in the sector.
- Overall changes in the quality of life for the community, such as health outcomes

and community engagement.

It's also important to consider involving the community in the process of data collection and analysis, and to have a transparent communication of the results and actions that will be taken to address any inequalities that may be revealed.

How can innovation in the Grangemouth area support the transition to net zero across Scottish industry?

It has an opportunity to lead the way, show case innovation through demonstrator projects and sharing this with other industries. Innovation should also come from the community engagement aspect and the approach Grangemouth takes. Ideas started as part of the just transition in Grangemouth could be replicated across other sectors – saving resources and time.

How can policy makers ensure that local supply chains benefit from the transition to net zero in the Grangemouth area, and across Scotland?

There are several ways that policy makers can ensure that local supply chains benefit from the transition to net zero in the Grangemouth area and across Scotland. Some strategies include:

1. Encouraging the use of local suppliers and manufacturers: Policy makers can establish procurement policies that prioritize the use of local suppliers and manufacturers for the production and installation of renewable energy technologies, and other related infrastructure, in order to maximize the economic benefits for the local community.
2. Investing in local workforce training and development: By investing in training and development programs for the local workforce, policy makers can ensure that local residents have the skills and knowledge needed to take advantage of new job opportunities in the renewable energy sector.
3. Offering incentives for local businesses: Policy makers can provide financial incentives to local businesses that invest in renewable energy technologies, such as grants, low-interest loans, or tax breaks, to help them compete with larger, established companies.
4. Building strong partnerships: Policy makers can work with local businesses, educational institutions, and community organizations to identify opportunities for local supply chain development and to support the growth of local renewable energy businesses.
5. Promoting green procurement: Policy makers can establish green procurement policies that encourage public sector organizations to purchase goods and services that are environmentally friendly, in order to support the development of local supply chains for clean energy products and services.
6. Addressing the specific needs of the area: Policy makers should take into account the specific needs of the Grangemouth area in order to develop tailored policies that can effectively support the transition to net zero, as well as ensuring that the transition is inclusive and fair for all the stakeholders.

3.4. Economy and Fair Work Committee – evidence session with INEOS/Petroineos

Context

In December 2023 the EFW Committee held an [evidence session with INEOS/Petroineos](#) management, Colin Pritchard (Sustainability Director, INEOS Grangemouth) and Iain Hardie, (Head of Legal and External Affairs, Petroineos) both of whom will also meet the Commission during Friday's visit and roundtable. Some pertinent points have been pulled out below.

Key Points

- INEOS/Petroineos noted that it is well understood by workers that, as Grangemouth is an older and energy inefficient asset, it would inevitably transition from a refinery business to an operating business at some point, as we move forward through the energy transition.
- They said workers at the refinery would be incentivised to remain in post as long as required through an attractive financial package
- They said that Grangemouth refinery business has, in the past decade-plus, incurred losses of more than \$1 billion, so physical mitigations are being put in place to avoid that loss-making environment.
- They also noted that in order to get beyond May 2025, the refinery will have to spend a very significant amount of money—£40 million—in order to have a licence to operate beyond then.
- The inland demand of 150,000 barrels is designed to meet the domestic supply; this domestic supply will fall away, due to penetration of EVs and hybrids.
- The future venture will be an import hub to serve commercial markets in Scotland.
- When the Grangemouth refinery stops operating, its scope 1 and scope 2 emissions will fall to 800,000 tonnes a year. However, there will still be demand, so scope 3 emissions for the country will remain largely unchanged.

4. Unite the Union worker engagement survey

Unite the Union recently undertook a worker engagement survey, which included workers at the Grangemouth refinery including non-union members and those employed by different businesses.

The survey found:

- **93 per cent** agreed that the potential impact of any potential closure on the local Grangemouth economy and that of surrounding communities would be 'severe';
- **88 per cent** responded saying that politicians were not doing enough to support and protect jobs at Grangemouth;
- Only **11 per cent** expressed 'confidence' in finding a "like for like" job in the event of refinery operations ceasing at the Grangemouth site;
- Only **3 per cent** expressed confidence in the ongoing "just transition" plans for oil and gas workers.

5. Other local issues

5.1. Grangemouth “Your Place Your Views” Consultation

Background

In January 2019 an independent consultation commissioned by Falkirk Council within the communities of Grangemouth was undertaken.

The purpose of the consultation required was to assist in the development of a Community Action Plan for Grangemouth by exploring jointly with local communities and groups, ideas and opportunities that could be developed and designed to make a difference to the place, including the Town Centre and Charlotte Dundas Shopping Centre.

Key Points

The consultants noted: “The present status of Grangemouth community causes consultants concern as they feel strongly that the community is reaching its “tipping point” and that if appropriate significant interventions are not implemented in the near future, it will have significant consequences for their positive sustained future”

The [report included recommendations](#) around local identity, employment, housing, regeneration and transport. Some of the key findings include:

- Encourage increased connectivity between local industry and communities as well as local investment through training and other engagement opportunities
- Increase communication between the Council and other significant partners and the local community about local developments, plans, activities and how they can get more involved in different activities or pieces of work.
- Conduct or revisit any previous skills gap analysis in conjunction with local businesses to identify any current skills gaps that exist and take steps to address this by educating about employment pathways and opportunities.
- Support young people to be involved in developing plans for a dedicated safe youth space/community space further and ensure that plans are appropriate for their aspirations and ambitions.
- Investigation should be conducted surrounding available public transport in the Grangemouth area and whether it meets the needs of the community in relation to health, employment and associated transport links.
- Investigate the issue of heavy goods vehicles (lorries) and the impact that they have on the local area specifically in terms of traffic, pollution, road safety and civic pride/community spirit.

5.2. Enabling a Place-based, Just Transition to Net Zero, Guidance for stakeholders in Grangemouth, Huei-Ling Lai, Jo Hamilton, Patrick Devine-Wright, and Abigail Martin, University of Exeter and University of Sussex

Background

This guidance was created independently following community consultation last year by Exeter University on behalf of Industrial Decarbonisation Research and Innovation Centre.

Key Points

It presents recommendations for government, industry and associated organisations to help enable a place-based, fair industrial transition in Grangemouth, a key industrial site in Scotland.

Informed by the Place-Based Just Transition framework, the recommendations include:

- Develop a place-sensitive approach to industrial decarbonisation that is grounded in the lived experiences of communities in Grangemouth, and treats residents and workers as stakeholders.
- Undertake sustained, genuine engagement with host communities and workers with a partnership approach. This could include allocating more government, cluster, and project budgets to community engagement; setting up a physical place for engagement in the centre of Grangemouth; providing learning and discussion opportunities on unfamiliar or contested technologies; reaching residents in different communities and valuing their time contributions with incentives and follow-up actions; and drawing lessons for community engagement from experiences in Grangemouth and elsewhere.
- Ground benefits of industrial decarbonisation to meet local needs, including: long-term planning for employment and skills; availability of affordable housing; better public transport and less lorry traffic; more green spaces and less air pollution; reducing poverty and inequality.
- Devise and improve government mechanisms for maintaining an evidence base of community concerns and needs; for channelling benefits to address these needs and deliver positive outcomes beyond immediate projects; and for overseeing the impacts of industrial activities.
- Encourage a bottom-up process for industrial decarbonisation and address the investment shortage facing national and local government.
- Recognise and work through tensions in stakeholders' priorities through engagement opportunities, and address potential conflicts over industrial activities and climate deniers in the area.

5.3. Grangemouth flood prevention

The Commission will be visiting Skinflats¹ to discuss the impact that climate change may have on the Firth of Forth. Skinflats provides an example of the possible solutions.

Dynamic Coast² research anticipates coastal erosion to increase under all emissions scenarios. So, both adaptation and mitigation are essential and urgent activities.

Grangemouth, in particular, is at risk of fluvial and tidal flooding which could have potential impacts on local homes and businesses.

The Grangemouth Flood Protection Scheme³ is the largest flood defence project in Scotland and one of the biggest in the United Kingdom, protecting communities in Grangemouth, Wholeflats, Glensburgh, Langlees, Carron, Carronshore and Camelon (Stirling Road).

The scheme was identified as the highest priority given the potentially huge costs if an extreme flood event were to occur. Whilst other parts of Scotland have been significantly affected by flooding over the last 5 years, Grangemouth has fortunately avoided significant flooding.

Flood defences are proposed various locations, with a total length of flood defences being approximately 28km

The scheme will benefit:

- 2,760 residential properties
- 6,025 people
- 1,200 non-residential properties
- 23km roads

The current cost of the scheme is estimated to be between £450 million and £672 million⁴.

¹ [Skinflats Managed Realignment | Inner Forth Futures \(innerforthlandscape.co.uk\)](http://innerforthlandscape.co.uk)

² [Dynamic Coast](#)

³ [HOME | Grangemouth Flood Protection Scheme \(grangemouthfloodscheme.com\)](http://grangemouthfloodscheme.com)

⁴ [News - Councillors given update on Grangemouth Flood Protection Scheme | Falkirk Council](#)