**Friends of the Earth Scotland’s Response to the Economy and Fair Work Committee Inquiry into Net Zero in the Grangemouth Area**

**February 2023**

**I have read and understood how the personal data I provide will be used.**  
  
**I would like my response to be published in its entirety.**  
  
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**About us**

Friends of the Earth Scotland exists to campaign, with partners here and across the globe, for a just transition to a sustainable society. We are Scotland’s leading environmental campaigning organisation; an independent Scottish charity with a network of thousands of supporters and active local groups across Scotland. We are also part of the largest grassroots environmental network in the world, uniting over 2 million supporters, 75 national member groups, and some 5,000 local activist groups – covering six continents.

**Introductory comments**

Friends of the Earth Scotland welcomes to the opportunity to feed into the Economy and Fair Work Committee’s [Inquiry into a Just Transition to net zero for the Grangemouth area](https://yourviews.parliament.scot/efw/net-zero-grangemouth/). The need to transition away from fossil fuels has never been more urgent and the Scottish Government must begin taking radical action now, to address the climate emergency and ensure those most affected by the transition are supported.

The following remarks are intended to help frame our answers to the questions set by the Committee.

* **Prioritising meeting climate targets by way of a Just Transition**

The world is in an existential climate and nature crisis, and we are rapidly running out of time to stop ecological and social collapse.

The Scottish Parliament passed legislation in 2019 updating domestic climate targets in light of the increased emphasis on limiting temperature increases to 1.5oC under the Paris Agreement. Under the Climate Change (Scotland) Act 2019 the Scottish Government is legally obliged to deliver emissions reductions of 75% on 1990 baseline levels by 2030 and reach net zero by 2045. The updated climate legislation also enshrines Just Transition principles in law and obliges the Scottish Government to assess the impact of decarbonisation policies on sectors and regions and to come up with policies to alleviate the impact on workforces and communities. Ministers regularly reaffirm their commitment to the 1.5oC goal, including at COP26 in Glasgow.

Climate science is clear that use of fossil fuels must be urgently phased out if we are to meet the critical 1.5oC threshold; the principles of equity under the UN Framework Convention on Climate Change require that rich, historical polluters like Scotland act fastest to curb emissions.

Experts at the Tyndall Centre for Climate Research have calculated that for only a 67% chance of keeping to 1.5°C, the UK must end oil and gas production by 2031.[[1]](#footnote-27498) This date takes into account the capacity of different producer nations to phase out extraction from an equity perspective such as providing basic needs of citizens and a just transition. For the UK, a wealthy country with oil and gas as a relatively small part of the overall economy, this date should enable sufficient time to ensure the transition is fair to workers and communities who currently rely on the industry for their livelihoods, avoiding a chaotic deferred collapse

With industry at Grangemouth heavily reliant on fossil fuels and accounting for 9% of all of Scotland’s climate emissions,[[2]](#footnote-15575) there is an urgent need to for both regional and sectoral just transition planning to ensure the workforce and community are supported through the changes which must come to meet our climate objectives.

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 in our view is not adequately 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.

Furthermore, the objective of meeting climate targets by way of a just transition – as established under the 2019 Act – must take precedence. This means that where there are conflicts between meeting emissions reductions targets and generating economic benefits, particularly short-term benefits to private businesses, meeting our climate targets must take priority. Further these conflicts cannot be identified and resolved without a global climate justice framing.

In addition to climate considerations, before the possible economic and employment benefits of meeting climate targets are considered, first, the unequal, deeply flawed and unjust economic systems which have allowed industry at Grangemouth to operate at the expense of people and climate must be addressed. Unless there are fundamental changes to the nature of business and the way Grangemouth operates, business-as-usual profit seeking strategies will continue to compromise any real climate or environmental progress. The true benefit of a successful and just transition for Grangemouth is that it can contribute to an alternative, safe, fair and sustainable future for all.

* **Just Transition Planning and Process**

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 at this time 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.

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.

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.

It may seem logical 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 produced by the Scottish Government is the Energy Strategy and Just Transition Plan (ESJTP) which is currently out for consultation. 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. 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.

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. 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.

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.

* **‘Net zero’ and the risks of overreliance on NETS**

The NZET Committee will be aware of the issues with the concept of ‘net zero’, as enshrined in the 2019 Climate Act, and increasingly present in both government and corporate climate targets. Net zero targets leave the door open to continue emitting greenhouse gases (GHG) in the short term on the basis that one day they will be sequestered or captured and stored. This can have the effect of delaying real action to reduce emissions, by which time devastating climate impacts will be locked in if it turns out the technologies do not come on stream on time, capture emissions at projected rates, or more fundamentally work. Many of the speculative negative emission technologies, such as Carbon Capture and Storage (CCS) and Nature Based Solutions being promoted in particular by fossil fuel industry interests are politically, economically and practically unfeasible, and in some cases likely in themselves to cause wider environmental damage and human rights abuses.

Global net-zero pathways that rely on negative emissions technologies see emissions (in some cases very significantly) overshooting the carbon budget for 1.5oC and being theoretically brought down later, pushing the burden of action onto the shoulders of future generations, by which time the damage of warming over 1.5oC will be done and irreversible. Scotland’s current net zero target is based on a highly inequitable interpretation of how the remaining global carbon budget should be distributed.

In 2019 four Holyrood committees criticised the Scottish Government’s Climate Change Plan update for its overreliance on Negative Emissions Technologies to meet short term targets, with 3.8MtC02 meant to be captured (or one fifth of emissions reductions) in 2030 rising to 5.7(one quarter of emissions reductions) in 2032, and urged Ministers to come up with a plan B. Likewise, the Climate Change Committee warned in its December 2021 report on Progress in Reducing Emissions in Scotland that the Scottish Government should come up with a plan B "if it should turn out that GGR [greenhouse gas removals] cannot be delivered at scale on the necessary timetable, accompanied by a clear date - no later than 2023 - to implement these contingency plans if developments on CCS do not provide confidence that they can deliver by 2030.’

The Climate Change Plan Monitoring Report last year reveals that the Scottish Government now accepts that NETs cannot deliver “at the pace assumed in the CCPu,” acknowledging that CCS was unlikely to come onstream in time to contribute to 2030 targets. However, the Scottish Government has not come up with a plan B nor in any way responded sufficiently to these fundamental concerns with the feasibility of relying on NETs to meet emissions reduction targets.

The point for this Inquiry to bear in mind is that any Just Transition plan for the Grangemouth industrial area is bound to fail if it is overly reliant on speculative Negative Emissions Technologies to bring down emissions, in particular, in the critical period to 2030.

* **The risks of offshoring**

Net-zero production targets additionally enable the offshoring of GHG emissions, where emissions produced in a particular country are reduced by closing, for example, heavy industry, while imports and global emissions connected to consumption rise. The Scottish Government’s Climate Change Plan update estimates that reductions in Scottish industrial emissions were “driven by the closure of heavy emitting sites, particularly the steel and paper sectors”. Offshoring emissions is of course also associated with job losses.

In its report to the Scottish Parliament in 2022, which was highly critical of the Scottish Government’s lack of progress towards Net Zero targets, the Climate Change Committee notes that: “Scotland’s consumption emissions grew by 3% between 2017 and 2018, driven by increases in the manufacturing and fuel supply sectors”.[[3]](#footnote-18939)

There can be no just transition if emissions in the Grangemouth area, or Scotland, are reduced by offshoring. This risk can be mitigated through the introduction of carbon-based consumption targets under the forthcoming Circular Economy Bill.

* **Just Transition and Circular Economy**

For the Grangemouth industrial area to decarbonise in line with global climate goals and by way of a just transition, it must embrace the principles of a circular economy.

In August 2022, Friends of the Earth Scotland and the Scottish Trade Union Congress hosted a roundtable with unions through the Just Transition Partnership with a particular interest in the circular economy and this section of our submission is informed by the outcomes of that discussion.

Where a more circular economy requires changes in employment patterns, the affected workers should have a clear offer of support, skills training and, where necessary, alternative employment. Government should guarantee this while requiring employers in each sector to negotiate the relevant agreements with trade union representatives. Strong social partnership mechanisms and sectoral bargaining arrangements are therefore crucial to a Just Transition.

Where public policy is driving employment change, through for example legislation, regulation, licensing, grant support, investment or procurement, it should ensure that jobs created are secure and well-paid. Training programmes should be put in place so that the right workers have the right skills and they should incorporate programmes which extend opportunities to groups which are under-represented in well-paid occupations or sectors.

To drive forward these important social objectives, the public sector will have to be more directly involved. The implementation of circular economy policies must enhance the powers and roles of public bodies, especially local authorities and, in Grangemouth, SEPA. If it does not do so it risks undermining the financial sustainability of local authorities and extracting wealth out of local economies, at a time the Scottish Government is meant to be supporting community wealth building.

The transition to a circular economy should be a participatory process in which workers and people in communities affected can co-create the changes needed. It will have big implications for workers, changing what they do and how they do it across whole industries. While some may see threats, there are enormous opportunities for job creation, upskilling and enhancement of work roles. At the moment it appears to be a top-down process which will be done to the workers and communities affected. Instead it should engage them and learn from their knowledge and experiences.

* **Firth of Forth Green Port**

The Grangemouth industrial area is covered by the Firth of Forth Green Port winning bid. We share trade unions’ concerns that an approach that exempts ports from existing protections will weaken workers’ rights and jobs quality, undermine environmental protections and reduce community benefits. We note that the ‘free’ element of this programme is forecast to suck in economic activity that already exists or would have been created elsewhere, instead of boosting investment or creating new jobs. A just transition for the Grangemouth area is not a just transition if it happens at the expense of other areas.

The Scottish Government’s Green Port proposal adds additional priorities including:

* adopting a fair work approach, which includes payment of the real Living Wage
* adopting the Scottish Business Pledge
* committing to supporting sustainable and inclusive growth in local communities
* contributing to Scotland’s just transition to net zero

However it is unclear as to whether these priorities will be legally binding in Scotland, nor what is meant in any substantive way by the latter two.

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

The Grangemouth industrial area has a huge role to play in the just transition to meet climate change emissions because many of Scotland’s largest polluters are situated there. Emissions from industry make up 30% of Scotland’s overall emissions and Grangemouth accounts for 30% of Scotland’s industrial emissions[[4]](#footnote-25208), meaning Grangemouth accounts for 9% of Scotland's entire emissions.

* **Carbon Capture and Storage**

However, as noted above, there will be no just transition, and few new jobs, for the Grangemouth area if plans remain overly reliant on Carbon Capture and Storage (CCS).

There is a clear historic failure of delivering CCS at the capture, transportation and storage stages of the process. CCS is cumbersome and slow to develop. According to the Global CCS Institute, less than fifth of CCS capacity under development in 2010 was operational by 2019. Further, deployment has also been far slower than predicted, with sites in development in 2010 with a potential capacity of 150Mt a year ultimately resulting in just 39Mt by 2020.[[5]](#footnote-2)

The Tyndall Centre for Climate Change Research[[6]](#footnote-3) state that during the initial deployment of CCS in the power sector, capture rates are often around 65% and that fossil fuel-based CCS is not capable of operating with zero emissions “due to “increased energy use and cost penalties” meaning that “current projects usually target 90% capture rate at peak capacity”. Carbon Capture and Storage (CCS) is therefore highly unlikely to be operational at 90% capture rates from the beginning of this project and may never be operational at this level or even operational at all.

Even in the unlikely event that a 90% capture rate was to be achieved there is still a significant release of CO2 into the atmosphere.[[7]](#footnote-4) Climate science is clear that all greenhouse gas emissions must be globally eliminated (with some emissions remaining in agriculture). This means that the high lifecycle emissions[[8]](#footnote-5) that are attached to CCS (approx. 100-300gCO2e/kWh) make CCS, especially in the power sector where other options are already readily available, incompatible with meeting climate targets under the 2019 Climate Change Act.

Any of the highly unlikely potential benefits of CCS are outweighed by the risk that CCS poses to Scotland exceeding its incredibly constrained carbon budgets, and the impact of doing so on the regional and national economy.

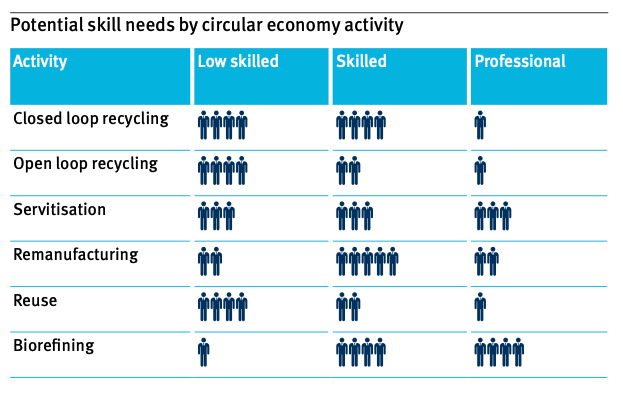
​Blue hydrogen projects that rely not only on CCS but also on fossil fuels have the worrying potential to lock us into high carbon emission pathways from continued fossil fuel production, increase demand for natural gas in Scotland[[9]](#footnote-6) and keep us tied to volatile gas prices which this past year has shown to have huge societal impacts and significantly contribute to the cost-of-living crisis.

Furthermore, a recent report from the Energy Research Centre looked at evidence from across 15 studies and estimated the number of jobs created per £million invested in different energy technologies. The report found that renewables and energy efficiency can create significantly more jobs than fossil fuel generation per £ invested: fossil fuel generation was found to create an average of three jobs per £million invested, compared to an average of 10 jobs per £million for renewable energy technologies, with energy efficiency creating an average of 16 jobs per £million invested.[[10]](#footnote-7)

CCS and Blue Hydrogen are not reliable or viable options for the just transition as they serve to lock Scotland into continuing dependence on fossil fuels and as industries are unreliable at best and unproven at scale. We must ensure that jobs and reskilling of workers is in truly green sectors, in Grangemouth and across the country.

* **Circular Economy and Just Transition**

By embracing a pathway that prioritises actions to reduce emissions at source (e.g. limiting carbon intensive activities) rather than NETs, Grangemouth would be more likely to create local economic and employment benefits as businesses begin operating more circular economy business models and are supported to do so. The[[11]](#footnote-20895)￼[[12]](#footnote-26254)￼[[13]](#footnote-733)￼ that the circular economy offers many job opportunities. For example, a[[14]](#footnote-15234)￼ consulted circular economy industry experts who expected that remanufacturing, closed loop recycling and other circular economy activity would require mid-level skilled employment and some higher end professional and technical skills. These types of roles could be encouraged at Grangemouth as the natural evolution towards a more circular economy for the area.



To reduce Scotland’s consumption emissions and avoid (and remedy historical) offshoring of jobs as well as emissions, policy makers must plan how to bring low carbon versions of industrial and manufacturing practices back to Scotland. Steel decarbonisation will need “infrastructure, just transition policy, investment subsidies, all coordinated in a policy mix”[[15]](#footnote-9972). To guide the scale and pace of change needed, carbon and material consumption-based reduction targets should be set in law, as we have argued in our response to the Circular Economy bill consultation.[[16]](#footnote-19232)

At the same time, decarbonising existing industrial activity at Grangemouth will require many companies to completely revise their current operations and sustainability plans, which do not reduce emissions in line with Scotland’s climate goals. For example, the petrochemical company Ineos, situated at Grangemouth, is the largest producer of plastic in the UK, shipping ethane from fracked shale gas in the USA as feedstock – arguably the very definition of an unsustainable and environmentally harmful business model. The combined emissions from Ineos’ Grangemouth operations meant that it was, by far, the biggest single polluter in Scotland in 2020, with over 3 million tonnes of greenhouse gases emitted.[[17]](#footnote-23642) Meeting domestic and global climate goals of limiting warming to 1.5oC cannot be achieved without ending the extraction and use of oil and gas, therefore Ineos must end fossil-based plastics production at Grangemouth for Scotland to meet its climate goals. So far, Ineos has focused its sustainability efforts around plastic on recycling trials, which lock-in demand for fossil-based plastic, rather than reduce it. Reducing demand will require a rapid phaseout plan, investment in low-carbon alternatives to fossil-based plastics.

By focusing on a transition that takes into account the urgent climate issues addressed above and recognises that we need to rapidly change the very nature of the work and industry at sites like Grangemouth the Scottish Government would be able to provide clean, green, high quality jobs. Transition support mechanisms are required to ensure workers in Scotland’s waste management sector are supported as their industry shifts to a more circular economy model. As called for by the Just transition Partnership in response to the Circular Economy consultation[[18]](#footnote-8943) workers and their Unions should be involved in shaping how to transition the industry.

* **Incinerators limit jobs and the circular economy**

The Scottish Government’s Incineration Review[[19]](#footnote-22334) confirmed that “lock-in”[[20]](#footnote-14831) is a genuine concern for incineration in Scotland. It is vital that Scotland’s waste management system is unlocked from incineration in order to allow a circular economy to develop: it is not possible to use resources again if they have been burnt. In this way, incinerators represent a threat to Scotland achieving its climate goals, which cannot be achieved without reducing consumption created by a linear system of resource use.

A [recent report by ReLondon](https://relondon.gov.uk/wp-content/uploads/2022/06/The-circular-economy-at-work_jobs-and-skills-for-Londons-low-carbon-future.pdf)[[21]](#footnote-13) found that “preventing 10,000 tonnes of waste bound for incineration would lead to the loss of one incineration job and the creation of 386 jobs in circular business”. The report also found that there was a skills gap in core and enabling circular economy jobs at skill level two and above were needed to support the development of London’s circular economy.

The Earls Gate incinerator is expected to start operating at Grangemouth in 2023. It has a capacity of 215,000t/yr. If the ReLondon report scales are applied to an incineration facility the size of Earls Gate, that suggests that removing a 215,000t/yr capacity incinerator would lead to the loss of 21.5 jobs and instead create 8,299 circular economy jobs; a net gain of 8,277 jobs.

In our response[[22]](#footnote-14) to the Scottish Government’s second review on incineration, which focuses on how to decarbonise Scotland’s existing and planned incinerators, we recommend that a rapid phase out of Scotland’s incinerators, in line with Scotland’s climate targets, is required. This should include reversing plans to open facilities like Earls Gate, which have not yet started operating.   
  
A just transition plan that stops and removes incineration would be able to provide significant economy and community benefits to communities around incinerators.

* **Beyond economic benefits**

Finally, it is important that we do not simply consider the economic benefits of Just Transition. Clean, green jobs that serve to tackle climate change will make for happier, healthier, individuals with cleaner, greener, robust communities. The Scottish Government and the Committee should consider how the Just Transition contributes to a ‘well-being’ economy, and not just traditional fiscal understandings of economic benefits.

There are obvious wider social and environmental benefits of reducing Grangemouth’s climate impacts: less plastic and chemical pollution will have beneficial impacts on human and ecological health locally and nationally. The INEOS Kinneil Terminal site at Grangemouth has consistently received poor compliance ratings with environmental regulations, according to the Scottish Environment Protection Agency (SEPA)[[23]](#footnote-22639). For every reported year, the Kinneil Terminal has received a compliance rating of poor or very poor. A holistic and properly executed just transition as part of a move to a circular economy would, for example, ensure that companies which are causing contamination are made to take responsibility for the use of chemicals in their products.

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

There can be no just transition without putting the primary impacted stakeholders at the heart of just transition planning processes. This question implies that the key stakeholders in just transition are public sector, industry and local communities. We would argue that while the involvement of public sector is of course vital, and industry has a certain role to play, the primary stakeholders are local communities, workers and their trade unions, and the environment (or those who can represent it).

Workers and communities dependent on the current energy system for their livelihoods will be significantly affected by the transition to a renewable energy system. They also have the skills and knowledge crucial to helping shape the future. Furthermore, it is vital that limiting wider environmental impacts of plans to transition (including the pace of decarbonisation and impacts beyond emissions reduction) are centred in decision making.

Through our local members, we are aware that very little if any substantive engagement with communities has occurred in the Grangemouth area. Engagement is not a PR opportunity for business - it is a chance to listen, reflect and act on how businesses can reduce their impacts and benefit local communities.

Recommendation 9 of the Scottish Government’s Independent Review on Incineration found that “communities deserve more authentic and committed engagement from local authorities and industry than is currently sometimes the case”[[24]](#footnote-20).

The quote below is from local Grangemouth resident, Norman Phillips, who stated in February 2023:

“In my opinion, the community of Grangemouth has already transitioned, unjustly away from the benefits of the oil and gas industry. For generations the town was asked to balance the economics benefits with the environmental impact of living so close to industry.

“There is no real economic benefit for the majority of residents in the town. The town of Grangemouth developed around the oil and gas industry. There was community support and appreciation of the opportunities the industry contributed to the town. Today, with four areas of social deprivation within the community, that social licence no longer exists, and Ineos don’t appear to be looking to develop one.

“Grangemouth is a community of 17,000 people, not just an industrial complex, and the community needs to be considered in any Just Transition plan being considered.”

We note that the Grangemouth Futures Industry Board has committed to undertaking a Just Transition plan for the industrial area.[[25]](#footnote-15565) It is unclear the extent to which the development of this plan is underway, or will engage with workers and their trade unions, local communities and those who can represent the environment.

* **Delays to SEPA’s Compliance Assessment Scheme are a risk for communities**

Communities are being failed by a lack of basic information from the public sector and industry. This creates a risk of environmental harm both locally and further afield in the case of some pollutants, such as greenhouse gas emissions.

For example, in December 2020, SEPA was subject to a cyber-attack which resulted in the temporary loss of much of its services. One of the affected areas was the Compliance Assessment Scheme (CAS) which rates an operator’s environmental performance against its licence conditions. This service is still unavailable, meaning that the most up to date information published on the SEPA website is now four years old. SEPA is legally required to monitor and inspect the highest risk industrial operations meet lawful environmental compliance standards under the Pollution Prevention and Control (Scotland) Regulations 2012.

The latest available information on the SEPA website indicates that in 2019 there were three sites in Grangemouth where there are specific concerns about compliance with environmental regulations (Table 1).

**Table 1. Sites with low compliance ratings in the 2019 SEPA Compliance Assessment Scheme[[26]](#footnote-21)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Site** | **Authorisation Number** | **Regulatory category** | **Compliance band** |
| Calachem Ltd, Grangemouth | PPC/A/1008834 | Chemicals | Poor |
| INEOS FPS Ltd, Kinneil Terminal, Grangemouth | PPC/A/1013107 | Non-renewable energy | Very poor |
| INEOS Infrastructure (Grangemouth) Ltd | PPC/A/1090147 | Non-renewable energy | At risk |

The SEPA websites states: ‘the agency will publish a report of its regulatory work covering 20/21 in 2022’ and ‘SEPA remains committed to a publicly accessible compliance assessment approach and later in 2022 will consult widely and gather high level views from a range of stakeholders on a new, publicly accessible compliance assessment approach.’[[27]](#footnote-22) However, there appears to be no information relating to compliance assessment later than 2019 and no further information on when more information will be available. This suggests that SEPA is falling short of its own plans to return to the lawful standards of its regulatory duties.

The CAS reports operator’s environmental performance against their licence conditions and highlights the poorest performing operators. Without publicly available annual updates, it is much more difficult to know which operators are performing badly and whether performance is changing. There have now been four years without public scrutiny of compliance. The under-regulation of major polluting industries represents a serious risk to local communities.

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

There is a distinct lack of any skills demand management or understanding in the Scottish Government’s recent draft Energy Strategy and Just Transition Plan (ESJTP), currently out for consultation. The draft ESJTP lack adequate detail as to how just transition objectives will be delivered, and includes highly speculative jobs figures, particularly in relation to hydrogen. If the Scottish Government wishes to ensure the benefits of a just transition flow fairly to communities across Scotland it must quantify the scale and timing of investment needed in the public and private sectors and the expected impacts on employment by sector and geography and the consequent demands for skills; it must show how good quality jobs in the supply chains will be secured for Scotland and how private corporations will be required to contribute to and comply with the implementation of the plan. By conducting a thorough audit on the scale and timing of investment needed the Scottish Government will be able to plan appropriately and communities across Scotland will be able to see the benefits ahead of time.   
  
As set out earlier, Grangemouth should be prioritised as an area where a just transition to circular economy jobs will be required urgently due to the need to change much of the existing industrial activity in the area. In its consultation for the Circular Economy Bill and Route Map, the Scottish Government identified specific opportunities around supporting a just transition to a circular economy. However, the examples given did not go far enough and were inadequate to meet the challenges ahead. For example, a Green Internship Scheme may be useful for those joining the workforce but there needs to be a much larger programme to support those already in the workforce to adapt to the circular economy. Sectors including Energy, Manufacturing, Retail, Construction, the Bioeconomy and Waste must be prioritised for this transition. This should be done in a fair and just manner, in consultation with trade unions, workers and communities.

Just Transition Plans should link with circular economy Sector Resource Plans with set targets for decarbonisation, investment and job creation alongside policies to demonstrate how they will be reached[[28]](#footnote-23). Trade unions, workers and communities must be involved in shaping these plans to provide assurances and ensure they reflect the priorities of those whose livelihoods may be affected.

1. **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?**

n/a

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

n/a

1. **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?**

The starting point for measuring whether the transition in the Grangemouth area is achieved in a just way should be reference to the just transition principles and requirements under the Climate Change (Scotland) Act 2019, which sets out that “taking action to reduce net Scottish emissions of greenhouse gases [must happen] in a way which—

(a) supports environmentally and socially sustainable jobs,

(b) supports low-carbon investment and infrastructure,

(c) develops and maintains social consensus through engagement with workers, trade unions, communities, non-governmental organisations, representatives of the interests of business and industry and such other persons as the Scottish Ministers consider appropriate,

(d) creates decent, fair and high-value work in a way which does not negatively affect the current workforce and overall economy,

(e) contributes to resource efficient and sustainable economic approaches which help to address inequality and poverty”.

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 draft ESJTP. In our view the key indicators are:

* Emissions reductions achieved
* Job creation - numbers in new industries or processes
* Numbers of people making job transitions
* Skills necessary for transition – delivery and utilisation
* New jobs are good jobs - pay and conditions, collective bargaining
* 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

* **Global just transition considerations**

As the Just Transition Commission notes in its recent report:

“Scotland's current position as an advanced economy was gained through the historic exploitation of fossil fuels, and indeed the natural resources of formerly colonised regions. In line with the UNFCCC principle of Common but Differentiated Responsibilities and Respective Capabilities, there is a duty for Scotland to move faster in cutting emissions and to use our voice and resources to create an enabling environment for every region and nation to achieve a just transition.” [[29]](#footnote-24)

The Commission calls for a principle of ‘do no harm’ as a strategic priority for Scotland’s Just Transition:

“Commitment to an international just transition means that Scotland's just transition should not be a trigger for negative economic, climate or social outcomes in other parts of the world, particularly in the Global South where people are already bearing the disproportionate burden of a crisis they did not create. Scotland's national just transition strategy must ensure that objectives are not met by transferring carbon emissions, exploitation, human rights abuses or economic precarity to other jurisdictions.”

Measuring success in this respect is challenging but could in part be done through:

* Global emissions reductions
* Scope 3 emissions reductions
* Climate finance for mitigation, adaptation and Loss and Damage reparations
* Speed of transition - i.e. faster than global south countries

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

As noted above, the Grangemouth industrial area is one of Scotland's largest polluters accounting for 9% of Scotland's emissions. Therefore, 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. By monitoring and evaluating the process the Scottish Government can learn from the transition and the lessons can be applied elsewhere across the country.

Done correctly, a circular economy could be job rich and contribute to conserving critical minerals required for Scotland’s transition to a low carbon economy and producing recycled materials. At the core of a Just Transition must be attention to Fair Work practices. The transition to a circular economy will require both job creation – including increased demand for repair, reprocessing and recycling jobs; and job transformation – including retraining, upskilling and potentially relocating as jobs shift from linear to circular models, technologies and processes. The Scottish Government’s approach should aim to ensure that workers are protected in these changes and that overall the employment conditions of the workforce improve.

In the ReLondon report “*The circular economy at work: Jobs and skills for London’s low carbon future”* interviewed businesses suggested that to transition to circular business models, there was need for employees to have a baseline understanding of the circular economy and knowledge of how to build a business case for circular business models was emphasised. Businesses also talked about a lack of repair skills available in the UK, resulting in the need to outsource. In contrast to the linear economy, a key theme from conversations (particularly in the transition phase) was the need for a collaborative approach, with systems thinking as a cornerstone.

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

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.

Conditions must be attached to public funding, with clear obligations placed on all businesses, enterprises and projects which receive support from or are regulated by government agencies regarding emissions reductions, local job creation, job quality and participation in sectoral transition training initiatives.

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.[[30]](#footnote-28103)

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