

The Scottish Government's Draft Energy Strategy and Just Transition Plan – delivering a fair and secure zero carbon energy system for Scotland

A response to the consultation from Stop Climate Chaos Scotland
May 2023

1. Introduction and summary

[Stop Climate Chaos Scotland](#) (“SCCS”) is a diverse coalition of over 60 civil society organisations in Scotland who campaign together on climate change. Our members include environment, faith and belief groups, international development organisations, trade and student unions and community groups. We believe that the Scottish Government should take bold action to tackle climate change, with Scotland delivering our fair share of action to keep temperature rises below 1.5°C and supporting climate justice around the world.

SCCS welcomes the opportunity to respond to the consultation on this draft Energy Strategy and Just Transition Plan. Our focus is strategic and cross-cutting and complements the more detailed submissions from many of our members on individual policy issues. This submission, therefore, takes the form of a written contribution, rather than seeking to complete the online questionnaire. It is set out in four parts: vision and structure; energy supply policies; energy demand policies; and just transition. In addition, as an annex to this submission, some (relevant to SCCS as a coalition) of the specific questions posed by the consultation are answered more fully in the annex.

In summary, SCCS responses to the issues raised are:

- SCCS welcomes the publication of this draft strategy and plan, and supports many of its aspirations (with some exceptions below). However, it is not, as yet, a strategy - both the energy strategy and just transition plan need clear targets, milestones and metrics. In many important respects, it neither says how the proposed outcomes will be achieved nor addresses the risks and obstacles to achieving them. It is also often a restatement of existing policies rather than a proposal for new actions to achieve the changes needed.
- SCCS welcomes the draft strategy's proposal that there be no development of onshore oil and gas (conventional or unconventional), no further coal extraction and no new nuclear. These positions should be confirmed by the final strategy.
- The Scottish Government should use the final Energy Strategy to state their unequivocal opposition to any new offshore oil and gas licences, for both exploration and extraction of known reserves.
- The Scottish Government should commit to a managed wind-down of the North Sea oil and gas exploitation, based on a just transition.
- SCCS strongly supports the proposed policies for the development and/or expansion of renewable energy supplies, subject to this being delivered in a way that is consistent with the principles of sustainable development, including the protection of biodiversity.
- Bioenergy should not be supported in Scotland, except where it can be shown to deliver real emissions' reductions, be the most effective use of the land necessary for the fuel production and/or be based on the use of genuinely sustainable feedstock.
- The draft strategy places too high a reliance on the use of hydrogen and the targets/uses should be further scaled back, and/or subject to significant conditions
- SCCS does not currently support the reliance on BECCS to deliver any significant part of the future Energy Strategy, and the draft strategy continues the Scottish Government's over reliance on CCUS.
- SCCS does not oppose CCUS, in principle; however, it must be noted that it is, so far, an unproven and undelivered technology. Such a reliance should be reduced, and significant uncertainties and drawbacks recognised – and strict conditions set for any limited application. There is a clear need to develop and implement what the former ECCLR Committee called for “a Plan B” in place of this reliance on unproven and expensive technology.

- SCCS welcomes the inclusion of sections, in this draft strategy, that focus on demand reduction policies; this was an issue that SCCS, and our members, raised in the engagement meetings as this strategy was being developed. However, the finalised version of this draft energy strategy will need to deliver new actions and policies to reduce energy demand.
- SCCS supports the need for a just transition, including within the energy sector, the transition can only be truly just, particularly for those communities impacted by our climate damage, if it is also much faster.
- SCCS considers that parts of the plan are positive, however seems very aspirational with very few specific policies or actions proposed, and little on timeframes or how results will be measured/reported. A more coherent approach is needed. The draft strategy also has a significant emphasis on ensuring a just transition for oil and gas workers, and thus on the NE of Scotland. This is necessary - but the strategy needs to be broader, recognising the (linked) needs for just transition in, for instance, the transport sectors, and across the whole of Scotland, particularly for low-income households. Vital to this is consideration of existing inequalities, including gender and other intersectional inequalities.
- The finalised version of this strategy should include (or be accompanied by) a commitment from the Scottish Government to act promptly and to use all the fiscal measures at its disposal to fund the transition.

2. Vision and structure

The executive summary of the draft strategy states:

“We need to transform the way Scotland generates, transports and uses energy. We must seize the huge opportunity this presents and deliver maximum benefits to Scotland’s people, workers, communities and economy from our vast renewable energy resource.

“This draft Energy Strategy and Just Transition Plan sets out the scale of that opportunity and provides clarity on how Scotland will prepare for a Just Energy Transition.

“Our vision is that by 2045 Scotland will have a flourishing, climate friendly energy system that delivers affordable, resilient and clean energy supplies for Scotland’s households, communities and business.

“In order to deliver that vision, this strategy sets out clear policy positions and a route map of actions with a focus out to 2030 that the Scottish Government will take and the changes that the UK Government must deliver.”

SCCS concurs with the need for the “transformation” described, and (subject to certain caveats) with the vision for 2045. Our concern with the vision includes the use of the vague (and undefined) term “flourishing” – we would favour a clear (re)statement that the principles of sustainable development would be applied to policy development and decision-making. Secondly, the targets expressed in the vision as to the make-up of the energy system in 2030 and 2045 is incomplete, and especially avoids any predictions/targets for oil and gas. This should be rectified.

3. Energy supply policies

In principle, SCCS welcomes and supports the overall strategy of “scaling up renewables” and “reducing reliance on other [fossil fuel and nuclear] energy sources”. This is clearly the correct direction of travel and ambition – both to achieve the necessary emissions’ reductions and to move towards a sustainable wellbeing economy.

However, the above support is subject to some concerns both in relation to details of the proposed policies/actions within individual sectors and to the proposed speed of transition. These issues are discussed in the following sections.

One strategic question the draft does not address however is the answer to “how much energy do we need?” Rather, the draft strategy proposes that energy production continues at a level in excess of current demand and that exports are maintained and/or increased. Clearly, in principle, there is no

environmental reason why energy exports should not be allowed/encouraged and, indeed, the capacity to both import and export aids resilience. However, the scale of exports should be a matter for debate.

First, there must be a level of certainty as to the availability of export markets – otherwise, there is scope for the over-development of energy generation equipment that is not active and still impacts on the environment. In such a scenario, of course, the jobs and social benefits are also short-term and result in further socio-economic challenges. Secondly, a genuinely sustainable, circular, wellbeing economy would be one that utilises and re-uses local resources, minimising imports and exports (given that if such an economy is desirable for Scotland, it is surely also desirable for the export market). Thus, future import/export targets for energy should be based on the respective economies' needs for resilience and energy security – rather than competition to see who can export the most.

These issues do not seem to be considered or discussed in the draft strategy – let alone any conclusions reached. Rather, it appears that policy will be to ensure Scottish needs are met and to export as much as possible. This may be short-termism and unsustainable – and even result in over-development; which could be as damaging (to all interests) as under-development.

Similar short-termism is also evident from the disappointing statement (page 36 of the consultation) that the Scottish Government will not be proceeding with a publicly owned energy company, despite the fact this was once Scottish Government policy, as well as Scottish Green Party policy and supported by a vote at the September 2021 SNP conference¹. It is claimed that a company involved in major energy generation would only be possible in an independent Scotland, but Wales is proceeding with an energy company and the idea was supported by first Scottish Just Transition Commission, who called in March 2021 for the Scottish Government to deliver on their (then) promise “at pace” and with a broad remit. The STUC also strongly supports a public energy company which is involved in generation and trade unions have criticised the Scottish Government plan for only a ‘white label’ supplier role

The think tank Commonweal said that failure to create a state-owned Scottish energy company that could have been involved in developing and deploying new offshore wind farms was “arguably the greatest economic failure of the last decade”. The Herald reported in January 2022² that such a company could have sold the new ScotWind electricity to the grid and retained operating profits, with concerns that the failure would cost Scotland between £3.5 billion and £5.5 billion every year - about a tenth of the Scottish budget. The incoming First Minister has now discussed, in his election campaign, the idea of the Government seeking an equity stake in the ScotWind process: this is a welcome development which should be pursued and expanded.

In *Delivering Climate Justice at COP26*, published in July 2021, SCCS called for the Scottish Government to³:

“Transform our energy systems: Deliver 100% renewable electricity generation for a fully decarbonised system by 2032 and establish the Publicly Owned Energy Company at pace and with a broad remit, as recommended by the Just Transition Commission, to support a just decarbonisation.”

SCCS therefore suggests that a publicly owned energy company, potentially working with local authorities on energy generation⁴, may have a key role to play – both in driving the transition to renewables but also in helping to tackle fuel poverty and the cost of living crisis⁵ (see also box 2 below).

¹ <https://www.thenational.scot/politics/23157509.story-common-weals-fight-scottish-public-energy-company/>

² <https://www.heraldscotland.com/news/homenews/19868171.scotwind-scotland-set-lose-billions-windfarm-profits/>

³ <https://www.stopclimatechaos.scot/wp-content/uploads/2021/07/Delivering-climate-justice-at-COP26.pdf>

⁴ Presentation by Mika Minio-Paluello, of Transition Economics, at Just Transition Partnership Reclaiming Our Energy conference, Feb 2023 on a Scottish public energy generation company

<https://www.youtube.com/watch?v=SjzEABDu-Yg&t=836s>

⁵ STUC submission to Net Zero Energy and Transport Committee Energy Price Rises Inquiry, May 22

https://www.parliament.scot/-/media/files/committees/net-zero-energy-and-transport-committee/correspondence/2022/20220510_stuc_submission_energypricerises.pdf

Renewables

Self-evidently, **SCCS strongly supports the proposed policies for the development and/or expansion of renewable energy supplies**, including offshore wind, onshore wind, marine energy (wave and tidal), hydro and solar energy.

Notwithstanding the above support, in principle, however, **it is important that such developments are delivered in a way that is consistent with the principles of sustainable development**. This should mean a strong focus on community ownership and benefit (see box 1) and a robust planning process to ensure that impacts on nature are minimised and, where necessary, compensated. For instance, strong strategic planning and compensatory measures will be needed to ensure that the expansion of offshore wind is both delivered to the extent necessary, but also delivered in a manner that protects our important marine wildlife⁶.

Such planning should identify, and prioritise, areas where renewable energy developments and agriculture and/or nature conservation can co-exist and be mutually supportive⁷.

Bioenergy

While bioenergy will have some role in energy generation, its development needs to be subject to a full consideration of the land-use implications of any potential scale up of domestic biomass supply chains.

Residues from forestry management can contribute to energy generation via, for example, CHP. However, large scale expansion of feedstocks from energy crops and forestry established explicitly for burning is unlikely to represent the most efficient use of land. Such an approach offers only single output rather than the multiple carbon benefits which can be garnered from well-planned new native woodland.

There are also questions concerning the methodologies which make bioenergy appear zero carbon. These owe more to the complexities of international carbon accounting than to genuine emissions savings⁸. The final strategy should make clear that bioenergy will only be supported in Scotland where it can be shown to deliver real emissions' reductions

It should also be noted that existing biomass capacity in the UK is currently heavily reliant on imported timber as feedstock. Numerous questions have been raised regarding the standards under which this timber is harvested including that some may be taken from old growth forests overseas, raising the risk of serious damage to biodiversity. Over-reliance on bioenergy, especially the feedstock is imported, has resulted in accusation of 'greenwashing' as well as being ineffective in reducing net emissions⁹; such issues should be avoided by application of strict conditions.

The final strategy should make clear that bioenergy will only be supported in Scotland where it can be shown to deliver real emissions' reductions, be the most effective use of the land necessary for the fuel production and/or be based on the use of genuinely sustainable feedstock.

We do not currently support the reliance on BECCS to deliver any significant part of the future Energy Strategy. BECCS remains highly expensive and unproven at scale as this plan also recognises. Relying on BECCS to make a significant contribution to energy policy at the present time is at best speculative and distracts from investment in emissions' reduction and more established low carbon technology. A comprehensive assessment of BECCS carried out by Chatham House concluded that it was wrong to assume BECCS to be carbon neutral¹⁰.

⁶ https://www.rspb.org.uk/globalassets/downloads/pa-documents/powering-healthy-seas-report_rspb_august-2022.pdf

⁷ <https://www.reuters.com/business/sustainable-business/with-agrivoltaics-we-dont-have-choose-between-solar-power-producing-food-2023-03-20/>

⁸ <https://www.newyorker.com/news/annals-of-a-warming-planet/the-millions-of-tons-of-carbon-emissions-that-dont-officially-exist>

⁹ <https://www.clientearth.org/projects/the-greenwashing-files/drax/>

¹⁰ <https://www.chathamhouse.org/2020/01/net-zero-and-beyond-what-role-bioenergy-carbon-capture-and-storage>

Hydrogen

While hydrogen technologies may offer some opportunities to contribute to our energy system in a net-zero future, it also has many potential drawbacks and/or disadvantages. For instance, hydrogen production can be expensive, inefficient and, at scale, is far from low carbon. The UK Committee on Climate Change has indicated that hydrogen "is not a 'silver bullet' solution"¹¹.

The current Hydrogen Action Plan, and this draft strategy, suggests that that the key forms of production likely to be fossil fuel generated hydrogen with Carbon Capture Utilisation and Storage (CCUS), also known as Blue Hydrogen, and hydrogen generated from renewables using the process of electrolysis, also known as Green Hydrogen. Both of these have disadvantages: the blue hydrogen relies (to be emissions free) on CCUS, itself an unproven and, as yet, undelivered technology, while green hydrogen may be an inefficient use of renewable electricity that may be better used directly as an energy source, rather than building in the inefficiency losses inherent in hydrogen production.

In relation to the potential uses of hydrogen, SCCS is concerned that it is not a proven or effective alternative for heating (which can require ongoing fossil gas dependence, either for production or blending) and it is not necessary for the majority of transport decarbonisation.

Thus, considering these risks and potential disadvantages¹², SCCS considers that **the draft strategy places too high a reliance on the use of hydrogen and the targets/uses should be further scaled back, and/or subject to significant conditions.**

Thus, while not opposed to hydrogen development and use, in principle, SCCS considers that the finalised strategy must more clearly spell out the disadvantages – and set clearer, and rigorous, conditions to be met to justify its use. Such conditions should include demonstrating any CCUS reliance is achievable, clarity that it does not create ongoing reliance on (and thus risk the phase out of) fossil gas, and that it represents the most efficient use of renewable energy resources.

Onshore conventional oil and gas

In line with our position on offshore oil and gas (see below), SCCS considers that there can be no case, consistent with our statutory emissions' reduction targets, for the development of any new onshore oil and gas, whether conventional or otherwise.

SCCS therefore welcomes and supports the "preferred policy position of no support for the exploration or development of onshore conventional oil and gas in Scotland." This position should be confirmed in the finalised version of this strategy – along with a commitment to use all powers (consenting, licensing, funding, etc) to prevent such developments.

Onshore unconventional oil and gas

In line with our position on offshore oil and gas (see below), SCCS considers that there can be no case, consistent with our statutory emissions' reduction targets, for the development of any new onshore oil and gas, whether unconventional or otherwise.

SCCS welcomes the conclusion by the Scottish Government that the "development of onshore unconventional oil and gas is incompatible with our policies on climate change, energy transition and the decarbonisation of our economy.

SCCS therefore fully supports the Scottish Ministers' finalised position of no support for unconventional oil and gas. This position should be retained and confirmed in the finalised version of this strategy – along with a commitment to use all powers (consenting, licensing, funding, etc) to prevent such developments.

¹¹

<https://www.theccc.org.uk/2018/11/22/hydrogen-is-a-credible-option-for-the-future-the-uk-must-now-prepare-for-the-key-decisions-on-zero-carbon-energy/> and <https://h2sciencecoalition.com/data-resources/>

¹² <https://eeb.org/library/policy-brief-a-sustainable-hydrogen-strategy-for-the-eu/>

Coal extraction

Coal is one of the worst fossil fuels in relation to the generation of emissions responsible for climate change. A future net-zero economy should not include any extraction or use of coal for energy generation; technologies are also being developed to allow the use of (renewable) electricity to replace other uses of coal (e.g., steel making).

SCCS therefore welcomes and fully supports the proposal by the Scottish Government to “confirm a preferred policy position of no support for coal extraction in Scotland”. This policy on extraction should be complemented by a parallel policy to use any consenting, licensing or funding powers to prevent (or, at least, phase out) the burning of (imported?) coal in Scotland.

Nuclear

Issues related to the resources used for, and emissions generated by, the construction and operation, as well as the uncertainties and risks of waste disposal and decommissioning, mean that nuclear energy is not a “low carbon” or sustainable solution to the climate crisis. Given the wealth of renewable resources available to Scotland, seeking to address energy issues with nuclear power would be both expensive and an unnecessary distraction from a transition to a genuinely clean energy system. Accordingly, SCCS does not support the development of new nuclear power under current circumstances.

SCCS therefore welcomes and fully supports the continuing Scottish Government policy that it does “not support the building of new nuclear power plants under current technologies”.

Notwithstanding the above, we are concerned at the draft “reiterates our firm position on traditional nuclear energy” and the use of the caveat “under current technologies” as well as the mention of Small Modular Reactors. While the draft notes that any form of nuclear development “will require the consent of Scottish Ministers and will be assessed on safety, environmental concerns, cost and the contribution to Scotland’s low carbon energy future”, no detail is given on what such an assessment would need to demonstrate to make such a proposal acceptable.

Thus, SCCS considers that **the final strategy should indicate opposition to any/all form of nuclear power, as currently envisaged, and that, for any new technologies, state clearly the tests of “safety, environmental concerns, cost and the contribution to Scotland’s low carbon energy future” that would need to be met.**

North Sea oil and gas

The consultation questions on North Sea oil and gas ask only about new exploration and production. These questions reflect the statement in the Executive summary that “whilst licensing is reserved to the UK Government, the Scottish Government is consulting on whether, in order to support the fastest possible and most effective just transition, there should be a presumption against new exploration for oil and gas”. SCCS’ response to those questions (Q20-26) is set out more fully in the annex.

Positively, as outlined on page 96, the draft strategy quotes the International Energy Agency’s advice that no new oil and gas fields should be approved for development as of 2021. SCCS firmly believes **the Scottish Government should use this final Energy Strategy to state their unequivocal opposition to any new oil and gas licences.** Anything less than this firm stance would fatally undermine the final strategy, and any hopes for a just transition.

However, those consultation questions do not address the issue of existing production. This is despite the draft strategy setting out forecasts for a declining production (pages 82-86) and the data provided by the Government’s commissioned review (referenced in box on page 85, and subsequently published¹³). The Ministerial Foreword, as well as the Executive summary, refers to “the fastest possible just transition” - this, of course, might be faster than the predicted ‘natural’ decline.

Further, in the Cabinet Secretary’s Ministerial Statement, at the launch of the draft strategy, he said:

¹³ <https://www.gov.scot/publications/energy-system-transition-independent-analysis/>

“Our previous policy position of maximum economic recovery is no longer appropriate.” and “This means that domestic production will effectively end within the next 20 years if we do nothing. The draft Strategy is consulting on whether we should act faster than this”¹⁴.

Yet, in the draft strategy itself, there is reference to the historic/current policy on maximum economic recovery (page 95), but no statement that this is no longer appropriate. SCCS welcomes the statements that:

“The Scottish Government is clear that unlimited extraction of fossil fuels is not consistent with our climate obligations. It is also clear that unlimited extraction, even if the North Sea was not a declining resource as outlined above, is not the right solution to the energy price crisis that people across Scotland are facing or to meeting our energy security needs.”

However, **this must also be accompanied by a clear statement that maximum economic recovery is no longer the policy of the Scottish Government.** Such a statement must also include a clearer policy in relation to existing production and what, if anything, the Scottish (or UK) Governments can, and should, do to reduce this at a rate faster than the predicted ‘natural decline’. It is stated (page 83) that it “is unlikely that all potential reserves will ultimately be exploited” – and this has been confirmed by the subsequent independent analysis. Such ‘unexploited reserves’ will become, in effect, stranded assets, underlining the importance of not adding additional fields to this unexploitable stock. However, it also highlights the importance of addressing how much should remain unused, and how to transition the industry sustainably.

It is disappointing that, despite the Cabinet Secretary’s statement that *“the draft Strategy is consulting on whether we should act faster than this”*, there is no mention of such proposals in the strategy (pages 96-99) or among the 50 consultation questions. **This is a serious omission which should be reversed in the final version of the strategy which should set out that maximum economic recovery is no longer the policy of the Scottish Government, as well as the policies the Scottish Government will take to speed the transition, through a managed and just wind down of North Sea oil and gas production.**

SCCS has set out its proposals and policies in relation to North Sea oil and gas – calling for a managed wind down in line with a just transition¹⁵. The summary of this briefing states:

“SCCS supports a managed and just wind down of North Sea oil and gas production as quickly as possible in line with keeping temperatures to 1.5°C and holds that Scotland and the UK must take an equitable approach to this process. As a wealthy nation with historic responsibility for the climate crisis, and a greater financial capacity to act, an equitable approach would potentially result in the UK ending production as soon as possible thereafter. Some studies have suggested 2031 or 2034 as target dates.

“SCCS therefore calls on the Scottish Government to immediately start planning for a credible managed wind down as part of a Just Transition, with trade unions and communities fully involved in agreeing timescales. SCCS believes the Scottish Government must take a ‘hands-on’ approach to ensure a just transition, utilising all powers at their disposal to prioritise the creation of decent jobs in renewables and energy efficiency and put in place strong safeguards for impacted workers transferring from oil and gas jobs to renewables and other work.

“Concerns about energy security, resilience and affordability, driven by global events and the current cost-of-living crisis, are best addressed by an energy strategy that is based on demand reduction, clean energy and greater efficiency. A managed and just phase out of oil and gas is not incompatible with such a strategy; indeed, it forms an essential part of a sustainable long-term approach.

¹⁴ <https://www.gov.scot/publications/scotlands-energy-strategy-transition-plan-ministerial-statement/>

¹⁵

<https://www.stopclimatechaos.scot/wp-content/uploads/2023/01/SCCS-briefing-a-managed-wind-down-of-North-Sea-oil-and-gas-production-in-line-with-a-Just-Transition.pdf>

“The UK and Scottish Governments must act, in accordance with their respective responsibilities, to implement a phase out and Just Transition as described. This will also need to involve a review of current subsidies/tax allowances for the industry, in line with the Glasgow Climate Pact.

“Scotland should collaborate with other countries that are phasing out fossil fuels in a responsible way and join the Beyond Oil and Gas Alliance as a Core Member.”

Notwithstanding what policies are finally agreed, neither the draft strategy nor the consultation questions address the issue of what the Scottish Government will **do** to contribute to realising the ambitions of those policies. This is especially important given the reserved nature (and thus UK Government role) in many aspects of oil and gas policy.

Thus, in relation to a presumption (against new exploration/production), to any CCC test, to a phased wind down, and to a just transition, **the Scottish Government should commit, in the finalised version of the strategy, to:**

- **Ensure that no devolved functions (onshore planning consents, marine or environmental consents, etc) are available to facilitate oil and gas operations that are inconsistent with the strategy.**
- **Work with like-minded MPs/peers, and civil society stakeholders, at Westminster to seek to shift UK Government policy. In this regard, the recent policy announcements by the UK Labour party (and potential UK Government within two years) should be noted and welcomed¹⁶.**
- **Work with international networks to create a climate for faster and more effective action in moving away from oil and gas. The Scottish Government might use its co-chair role of the Under2 Coalition to promote such action. It should consider endorsing the proposed Fossil Fuel Non-proliferation treaty recently endorsed by the EU parliament ahead of COP27 – as well as advance its potential membership of the Beyond Oil and Gas Alliance.**
- **Urge the UK government to exit the Energy Charter Treaty, joining a coordinated withdrawal currently proposed by the European Commission in order to protect the UK and Scottish government from litigation and from ‘regulatory chill’ and enable a smooth government-led transition from oil and gas extraction in the North Sea**
- **Consider if and how public sector investment (including pensions) and/or procurement can be used to ensure that any recipients of such investment or procurement contracts comply with the policies adopted by the finalised strategy.**

¹⁶<https://www.reuters.com/business/energy/davos-2023-starmer-says-no-new-uk-oil-gas-investment-under-labour-government-2023-01-19/>

Box 1: **Communities: important role in both energy supply and demand**

The draft strategy rightly identifies local communities having important roles in both energy supply and managing demand, as well as being potentially affected parties in any transition. However, there are a number of ways that this might be significantly improved, including:

- The importance of clearly defining community energy (and possibly within that recognising that community energy projects might be renewable energy generation, energy efficiency and/or transport), community benefits and shared ownership. Only the former should be counted towards the Scottish Government targets on community and local energy.
- For community energy, there is a need for much wider support beyond CARES, starting with capacity building for communities who just want to 'do something' and then supporting feasibility and capital costs for a wide range of projects to make them viable.
- For community benefits, separating this out from compensation. In order to achieve justice across the country, there may be a need for offering some percentage of community benefit (or shared ownership options) to wider regions or on a national level. The consideration of community benefits should be an obligation on all generators, onshore or offshore.
- For shared ownership (and also for community benefits), clear definition of who should be eligible for such opportunities - they should be non-profit community organisations that invest in their own communities. Otherwise, there is a risk that the 'local' option is taken up by 'local' wealthy people who become wealthier through their investments.
- Better recognition of the important role that communities can play if they have an active role in achieving Scottish Government targets and objectives, especially on behaviour change - and the opportunity to work together with the new National Public Agency, 'Heat and Energy Efficiency Scotland'. There is also a need to consult appropriately with different communities to understand their needs.

4. Energy demand policies

SCCS welcomes the inclusion of sections, in this draft strategy, that focus on demand reduction policies; this was an issue that SCCS, and our members, raised in the engagement meetings as this strategy was being developed. However, the demand reduction objectives and actual policies proposed are little more than the existing policies of the Scottish Government, especially in relation to heating and transport. The finalised strategy must set out that more is needed: the Climate Change Committee's annual report in December 2022 was clear that "*the Scottish Government urgently needs to provide a quantified plan for how its policies will combine to achieve the emissions reduction required to meet the challenging 2030 target*"¹⁷. Such a plan (and the finalised version of this draft energy strategy must be considered a key component of such a plan) will need to deliver new actions and policies to reduce energy demand.

As examples of the above concern, SCCS will highlight three sectors: aviation, ground travel and heat in buildings.

1. Aviation

The Climate Change Committee have observed, in their 2021 progress report to the Scottish Parliament that, in relation to aviation:

*"A demand management framework will need to be developed (by 2022) and be in place by the mid-2020s to annually assess and, if required, control sector GHG emissions and non-CO2 effects"*¹⁸.

Such a demand management framework has yet to be produced, and the Scottish Government's Aviation Strategy is still in development¹⁹. If the demand policies for transport, in this strategy, are to be meaningful, the finalised strategy will need to signal a policy shift and foreshadow action to implement demand management in aviation (as well as, e.g., alternative fuels).

¹⁷

<https://www.theccc.org.uk/publication/scottish-emission-targets-progress-in-reducing-emissions-in-scotland-2022-report-to-parliament/>

¹⁸ <https://www.theccc.org.uk/publication/progress-reducing-emissions-in-scotland-2021-report-to-parliament/>

¹⁹ <https://consult.gov.scot/transport-scotland/aviation-strategy/>

Disappointingly, while this draft Energy Strategy talks about “working to decarbonise scheduled passenger flights within Scotland by 2040” (page 103); it says nothing about reducing demand.

2. Ground travel

We welcome the restatement, in the draft strategy, of the Scottish Government commitment “to reduce car kilometres by 20% by 2030”, as well as to invest more in active and public transport. However, these are simply reiterations of current policy and are set out in the CCPu. This current approach has been considered inadequate to meet long term emissions’ reduction – for instance the ‘route map’ to achieve this 20% reduction target has been widely criticised for lacking the necessary actions²⁰.

The ‘Route Map’ currently suggests only inadequate and delayed intentions relating to demand management (especially road user charging), for which a ‘policy framework’, let alone implementation, will not appear until 2025. It therefore relies largely on the ‘carrots’ of improved active and public transport. It is telling that, responding to questions on the government’s Climate Change Plan at a Scottish Parliament Committee, Chris Stark, CEO of the Climate Change Committee, said:

“The Scottish Government has notably moved towards the carrot approach as its major way of encouraging people out of cars. However, all the evidence suggests that some sticks are needed too”²¹.

Similarly, Prof Iain Docherty of Stirling University, and renowned expert on Scottish transport policy, has commented “the first stage is for the culture of carrot-ism in the transport debate to end, and for some very straight talking to be done”²².

Thus, while the ambition is welcome, there is a lack of clarity on the nature of the investments in active or public travel, whether it is sufficient and what emissions reductions it will deliver. In relation to public transport, it is estimated that an additional investment, revenue and capital, needed to meet climate goals would create significant employment and would more than pay for itself in benefits²³. The finalised version of this strategy must indicate what new actions and policies will be introduced to drive demand reduction - our response to question 28 (see annex) includes a number of such specific proposals.

3. Heat in buildings

The draft strategy makes little mention of the role that better energy efficiency can play in supporting decarbonisation but also providing wider benefits such as reducing fuel poverty, improving health and wellbeing and the energy system benefits of reduced demand on networks and peak energy generation. These benefits are often missed by sector strategies (such as the heat in buildings strategy) which is very focussed on policy interventions, costs and benefits at the household/building level. Given the economic benefits that energy efficiency can bring (research by Strathclyde University has shown that every £1 of public investment can yield £5 in GDP benefit²⁴), this is a glaring omission in the draft strategy. The Scottish Government target to bring all homes to a good energy efficiency rating (equivalent to an EPC ‘C’) is not mentioned at all.

In terms of fairness, the transition to net zero should be seen as “an opportunity to create a future energy system that is fair by design, and at best a market where low-income consumers are not just protected, but actively benefit from the transition”²⁵. Thus, concluded the report “*Net Zero Transition for Low-income Consumers: A Toynbee Hall report in partnership with Fair by Design and Ofgem*”. The report recommended that government needs to develop more extensive support schemes for low-income households to make green changes, from larger structural adaptations to the purchase of smart appliances. Such actions need to be built into this strategy -

²⁰ <https://transform.scot/2022/04/06/traffic-reduction-route-map-strong-target-poor-plan/>

²¹ <https://archive2021.parliament.scot/parliamentarybusiness/report.aspx?r=13073>

²² “Tell It How It Is” in Transport Times, Oct 2020

²³ <https://foe.scot/wp-content/uploads/2023/04/On-the-Move-Report.pdf>

²⁴

https://strathprints.strath.ac.uk/63819/1/Turner_etal_IPPI_2018_Potential_wider_economic_impacts_of_the_energy_efficient_scotland_programme.pdf

²⁵ https://www.toynbeehall.org.uk/wp-content/uploads/2022/09/Toynbee-Hall_Net_Zero_Report_29_09_2022.pdf

along with actions for the Scottish Government to press Ofgem to deliver on the recommendations made to it by its own research.

The strategy does restate existing Scottish Government targets for the number of homes switched to low carbon heating and heat network output but as with other sectors, makes no attempt to assess whether Government policies are adequate to achieve these ambitions. This is important both in terms of policy delivery but also for quantifying the change in energy demand (e.g., shift from gas/oil to electric) and how this relates to energy production, networks, and supply chains – all issues touched on elsewhere in the strategy.

Recent analysis by WWF Scotland of policies proposed in the Heat in Buildings Strategy found that these would achieve less than half of the emissions reduction required of existing homes by 2030 (as per the Climate Change Plan Update)²⁶. More ambition is needed for Scottish Government policies and funding to achieve targets, and this should be articulated in the final strategy.

The need for this ambition (as well as increasing delivery) was also stressed by the UK CCC, in December 2022, who said there was a “lack of adequate policy measures in place to deliver low-carbon heat and energy efficiency at the required rates” and “the design and implementation of policies need to proceed at pace if the Scottish Government is to meet its targets”²⁷. Yet, this draft Energy Strategy does not provide any additional detail on how this scaling up will be achieved, therefore does not respond to the concerns of the UK CCC.

It is now critical that the Scottish Government puts the policy, financial and regulatory framework in place to deliver the ambition of decarbonising more than 1 million homes by 2030 and the Energy Strategy should outline what these plans should be. The Scottish Government committed to allocate £1.8 billion to support heating decarbonisation over the life of this parliament, however as at January 2023, only £155 million of this had been spent (less than 10%).

Policies that should be considered to deliver greater demand reduction, include fiscal measures that might be introduced to incentivise positive actions. These include, for instance, additional but well-targeted taxation on aviation (especially a frequent flyer levy targeted at journeys where rail alternatives are available), incentives and support for local authorities and social housing providers to work with communities to develop low carbon heating systems, increased subsidies for public transport and/or further charges related to private car use. SCCS recently commissioned research to review such fiscal measures²⁸, and recommended that the Scottish Government should “make an explicit commitment that it will both maximise the use of its existing fiscal levers and identify new and additional sources of finance, using a polluter pays approach, to accelerate emission reduction in Scotland”²⁹.

According, across all the relevant sectors, **the finalised version of this energy strategy should set out the new policies and actions, including the introduction of new fiscal measures, that would drive demand reduction to the extent necessary to meet 2030 and 2045 emissions’ reduction targets.**

5. Just transition

SCCS warmly welcome the emphasis in this draft document on a Just Transition, this is a principle supported and adopted by SCCS. We were pleased to join a roundtable with members of the Just Transition Commission, and is aware of the advice that the Commission has provided in response to this draft strategy³⁰. SCCS particularly notes and commends the JTC’s conclusion that there is a

²⁶ <https://www.wwf.org.uk/sites/default/files/2023-02/WWF-Affordable-Warmth-Scotland.pdf>

²⁷

<https://www.theccc.org.uk/publication/scottish-emission-targets-progress-in-reducing-emissions-in-scotland-2022-report-to-parliament/>

²⁸ https://www.stopclimatechaos.scot/wp-content/uploads/2022/09/FinancingClimateJustice_Report_ONLINE.pdf

²⁹ https://www.stopclimatechaos.scot/wp-content/uploads/2022/09/FinancingClimateJustice_Briefing_ONLINE.pdf

³⁰ <https://www.gov.scot/publications/just-transition-commission-letter-to-cabinet-secretaries-14-april-2023/>

“need for ambitious targets to be backed up by detailed and specific plans.” SCCS is also aware of and commends the response from the Just Transition Partnership³¹.

People and communities that suffer most from the impacts of climate change are not those responsible for its cause. This underlines the need for international climate justice. However, it is also the case within countries, such as Scotland, that people living in areas of high disadvantage, children, older people, disabled people, and people with health conditions are often disproportionately affected by environmental problems and are often least responsible for causing environmental damage³². This environmental injustice needs to be addressed – however, it is also important that it is not exacerbated by the necessary changes as we transition to a net zero economy. In addition, those people and communities who have benefited from, for instance, fossil fuel exploitation should, as appropriate and fairly, be assisted through the transition.

As indicated above, we agree with much in the Just Transition Commission’s key messages in the 14 April letter to Cabinet Secretaries³³, in particular the comments on justice and fair work, the need to deliver on just transition principles “including the equitable sharing of costs and benefits, fair work as a strategic objective, and careful strategic use of public finance and procurement mechanisms to create true and lasting value for workers, citizens and communities.” We welcome the JTC comment, para 11, that it is essential to incorporate just transition thinking in “how we assess the relative value being created by investment and procurement decisions. A purely commercial approach risks undervaluing critical long-term gains on job creation, public infrastructure and fairness that go beyond short-term commercial returns.” And we welcome the actions in the ‘Fairness’ section, summarised by the point in para 23, “Embedding fair work effectively is essential to achieving a well-being economy.”

Of course, providing for climate justice and a fair transition will require investment which, during a cost of living crisis, may be a challenge. However, this is not a reason for inaction; many of the solutions to the climate crisis and the cost of living crisis are mutually supporting (see box 2).

<p>Box 2</p> <p style="text-align: center;"><u>Cost of living crisis</u></p> <p>At a time of surging living costs, it might be argued that this is the wrong time to consider major policy changes affecting a sector supporting many jobs and providing energy. However, measures to address the climate crisis and address the cost of living crisis can, in fact, be aligned and complement one another – in part, because both are caused primarily by the use and cost of fossil fuels. Thus, SCCS strongly supports the recommendation, made in the recent Financing Climate Justice report³⁴, that measures to address the cost of living crisis must also reduce emissions, and that well-designed policies will not only help accelerate emissions reduction, but also help to achieve wider social, health and well-being goals. As the report argues: now is the time for policymakers to think boldly and to transform our use of fiscal measures to support urgent action to deliver climate justice.</p> <p>Thus, an ambition to ensure a just transition from oil and gas to climate-friendly alternatives should be viewed as a contribution to addressing the cost of living crisis. Environmental campaigners and trade unions have highlighted these connections in supporting local just transition campaigning and workers striking over pay³⁵. The current crisis should not be seen as a reason to reduce or delay that ambition.</p>

The draft strategy highlights a number of aspirations and principles, in relation to a Just Transition, that are hugely positive. It also lists a number of actions being taken (or to be taken) by the Scottish Government. However, these aspirations, principles and actions seem disconnected – and, taken together, they do not form a coherent strategy.

³¹ <https://www.itp.scot/wp/wp-content/uploads/2023/05/JTP-ESJTP-consultation-response-guide.pdf>

³² <https://www.ercs.scot/wp/wp-content/uploads/2021/12/Advocacy-Manifesto-Dec-2021.pdf> and European Environment Agency (2019) Healthy environment, healthy lives: how the environment influences health and well-being in Europe: <https://www.eea.europa.eu/publications/healthy-environment-healthy-lives>

³³ <https://www.gov.scot/publications/just-transition-commission-letter-to-cabinet-secretaries-14-april-2023/>

³⁴ https://www.stopclimatechaos.scot/wp-content/uploads/2022/09/FinancingClimateJustice_Report_ONLINE.pdf

³⁵ <https://www.jtp.scot/policy/living-wages-on-a-living-planet/>

There is a lack of detailed analysis throughout the document – and, in particular, despite the warm aspirations, there is no clear statement of outcomes (a statement of what a post-Just Transition Scotland would look like) nor any “route map” explaining how the actions being (or to be) taken will contribute to the delivery of such outcomes. Concern about this lack of coherence was also evident in the Just Transition Commission’s initial advice³⁶. Thus, **SCCS considers that the plan is positive, as far as it goes; however, it seems very aspirational with very few specific policies or actions proposed, and little on timeframes or how results will be measured/reported. A more coherent approach is needed.**

The draft strategy also has a significant emphasis on ensuring a just transition for oil and gas workers, and thus on the NE of Scotland. This is necessary - but the strategy needs to be broader, recognising the (linked) needs for transition in for instance the transport sectors, and across the whole of Scotland.

Thus, while the strategy says that “all Just Transition Plans will demonstrate how we will maximise the economic opportunities for Scotland” (page 28), there is, in fact, very little detail on how these opportunities, and the benefits flowing from them, will be shared across Scotland, and how those on the lowest incomes will disproportionately benefit from them. There is some focus in the strategy on ensuring there is benefit derived for communities from the anticipated surge in renewables, however, it is left very unclear how this will be delivered in practice, and whether those on the lowest income will disproportionately benefit from this transition. Greater analysis is needed, alongside a deliberate approach to ensure redistribution is embedded within the transition, if it is to be just.

One key element of the just transition appears to be missing from the strategy is how it will be paid for. The strategy suggests that £5 billion is currently committed in this Parliament to support “the net zero energy economy in Scotland”, however, there is no analysis of how this is to be financed. For the transition in energy to be just, greater work is required to ensure polluters pay for the damage they are creating. To inform this debate, SCCS has commissioned research into the fiscal measures available to the UK and Scottish Governments – highlighting measures that could be used to accelerate the transition, by disincentivising fossil fuel use and incentivising renewables, as well as ensuring that it is polluters that pay and that the transition is just³⁷. Our briefing on this research concluded:

“If we are serious about tackling the climate emergency and the current cost of living crisis (caused primarily by the use and cost of fossil fuels), we need to act at scale and speed. We have to invest in a more positive future: one that ensures we don’t drive further catastrophic climate change at home or internationally or condemn people to cold and draughty homes or to face increasingly extreme and frequent weather events that sweep away their homes and claim ever more lives.

“These further steps, including greater and more effective use of fiscal measures, need to be taken sooner rather than later. It is therefore vital that money channelled to address immediate priorities, like the cost of living crisis, are used wisely to ensure they also actively support efforts to deliver against Scotland’s legal climate targets. We cannot solve one crisis at the expense of another”³⁸.

This conclusion remains appropriate – and thus **the finalised version of this strategy should include (or be accompanied by) a commitment from the Scottish Government to act promptly and to use all the fiscal measures at its disposal to fund the transition** – as well as calling on the UK Government to play its part.

In relation to funding, the strategy suggests (page 44) that the Scottish Government is going to move from “a funding to a financing policy model” in order to more “effectively leverage private sector investment and action to better amplify the impact of public investment”. Private investment will be necessary and, when appropriate, should be welcomed; however, significant care will be needed to ensure the need for profit does not skew the transition required, nor the fairness of it. Nevertheless,

³⁶

<https://www.gov.scot/publications/just-transition-commission-letter-to-minister-for-just-transition-employment-and-fair-work-15-february-2023/>

³⁷ https://www.stopclimatechaos.scot/wp-content/uploads/2022/09/FinancingClimateJustice_Report_ONLINE.pdf

³⁸ https://www.stopclimatechaos.scot/wp-content/uploads/2022/09/FinancingClimateJustice_Briefing_ONLINE.pdf

emissions reductions and a just transition are in the public interest and public funding will also be necessary and must be committed, as described above, in accordance with the polluters pays principle.

In relation to oil and gas workers, while it is necessary and important to support those workers in the oil and gas sector to re-skill and transfer to alternative roles, consideration when planning this transition needs to be given to two features of this workforce. First, the strategy notes that many existing oil and gas workers will retire rather than make the transition to alternative sectors (see page 91, noting a recent survey finding that 35% of oil and gas workers are over 50). Secondly, greater analysis is also needed of the gendered nature of this workforce to ensure that existing occupational segregation within these highly gendered sectors is not continued within the replacement renewables industries.

It should also be noted (see page 87 of the draft strategy) that the average salary for those working in the extraction industry is £88k per year - nearly three times the average salary in Scotland of £29k. Therefore, while a just transition is required, it also needs to be borne in mind that this transition is going to impact people in the higher parts of Scotland's income distribution.

Thus, in finalising a coherent Just Transition Plan, it is important that it properly considers existing inequalities, including gender inequalities, and sets out a clear road map of how these will be addressed. The strategy must, therefore, do more to ensure a just transition for others, particularly by ensuring the just transition (in the energy sector, and more widely) genuinely delivers for those left behind to date: those on low incomes, women, those with disabilities, and ethnic minority communities. For instance, Just Transitions are opportunities to improve gender equality³⁹. Women and girls across Scotland can be primary beneficiaries by centring care in just transition strategies.

Finally, SCCS supports the need for a just transition, including within the energy sector, the transition can only be truly just - particularly for those communities impacted by our climate damage, if it is also much faster. As highlighted above, there is a need to urgently reduce emissions by 2030 in order to limit the temperature rises to 1.5°C, and while the damage already being caused is huge, it will steadily get even worse for every fraction of a degree of warming. This urgency underlines the need for a clear and well-planned just transition, with properly resourced actions to deliver the outcomes desired.

³⁹ <https://www.iied.org/21116iied>

SCCS response to (some of) the consultation questions set out in draft Energy Strategy and Just Transition Plan (annex B and online form).

Chapter 1 – Introduction and Vision

1. *What are your views on the vision set out for 2030 and 2045? Are there any changes you think should be made?*

SCCS' overall vision for climate action states that “we believe that the Scottish (and UK) Governments should take bold action to tackle climate change, with Scotland delivering our fair share of action to limit global temperature rises to 1.5 degrees, championing international climate justice and inspiring others to take action.”

The vision set out in the draft strategy is that:

“Scotland will have a flourishing, climate friendly energy system that delivers affordable, resilient and clean energy supplies for Scotland's households, communities and business. This will deliver maximum benefit for Scotland, enabling us to achieve our wider climate and environmental ambitions, drive the development of a wellbeing economy and deliver a just transition for our workers, businesses, communities and regions”.

SCCS therefore supports the ambition to be climate-friendly and clean (although we consider these terms to be, at least, synonyms), to move towards a wellbeing economy and to ensure the transition is just.

However, as well as “flourishing, climate-friendly, affordable, resilient and clean,” we believe the energy system/supplies must be genuinely sustainable – that is, developed without negative impacts on the environment, or wider society or economy. The vision, as drafted, does not make this clear. Thus, as drafted, the vision could be fulfilled even if the energy system was developed with a significant adverse impact on biodiversity, or with an ownership model or employment patterns that did not maximise benefits to society as a whole.

To address this, we would suggest that the word “flourishing” (which has no clear definition) is deleted, and a second sentence introduced along the lines of “this will be delivered in a manner consistent with the principles of sustainable development (with a clear reference that “sustainable development” means in accordance with the principles of *One Future - Different Paths The UK's Shared Framework for Sustainable Development* – as agreed by the UK Government and all devolved administrations in 2005, and not overtly superseded⁴⁰).

The vision as presented, also includes a presentation of energy production and consumption in 2019, noting also the amounts exported (i.e., 896TWh⁴¹). The equivalent data for 2030 and 2045 (the strategy's targets?) relate only to electricity generation, consumption and exports. To be comprehensive and to be an effective vision for the strategy that follows (especially given our responses to Q20-26 below), this section must include targets for oil and gas production in 2030 and 2045 – with the latter, obviously, to be zero (or, at least, ‘net-zero’ or the minimum necessary for essential non-energy use).

⁴⁰ See <https://www.sd-commission.org.uk/publications.php?id=215.html> and https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/323193/Guiding_principles_for_SD.pdf; and used in, for instance, Scotland's National Marine Plan, as recently as 2015 (<https://www.gov.scot/publications/scotlands-national-marine-plan/pages/5/>)

⁴¹ Not disaggregated but, presumably dominated by oil and gas.

Chapter 2 – Preparing for a Just Energy Transition

2. *What more can be done to deliver benefits from the transition to net zero for households and businesses across Scotland?*

SCCS' general and strategic response sets out a range of additional (or improved actions) that the finalised strategy should include to deliver a transition, and ensure it is just.

However, in responding to this specific question, we would also highlight that the question itself is unnecessarily narrow. Such benefits need to be delivered not just to households and businesses but also to communities and non-profit groups. It should be recognised that many communities run activities and facilities that are a lifeline for the people living there, but that the costs of running these facilities is rising and community groups must be recognised as users of energy in their own right, as well as being able to engage with households and businesses in their area.

3. *How can we ensure our approach to supporting community energy is inclusive and that the benefits flow to communities across Scotland?*

The draft strategy also has a significant emphasis on ensuring a just transition for oil and gas workers, and thus on the NE of Scotland. This is necessary - but the strategy needs to be broader, recognising the (linked) needs for transition in for instance the transport sectors, and across the whole of Scotland. The finalised plan will, therefore, need to assess and address existing and future skills gaps and supply chain issues across all of Scotland, including islands and rural areas

For community energy, there is a need for much wider support beyond CARES, starting with capacity building for communities who just want to 'do something' and then supporting feasibility and capital costs for a wide range of projects to make them viable.

The strategy also needs to better delineate between community energy, shared ownership and community benefit – with appropriate policies and actions set out for each of these different issues.

See also box 1, within our general response on community issues.

7. *What more can be done to support the development of sustainable, high quality and local jobs opportunities across the breadth of Scotland as part of the energy transition?*

There is a need to apply all the policy levers, including public procurement, public sector investment, etc to ensure that contracts/purchasing favour businesses supporting jobs that meet these tests. While this aspiration is set out in the strategy, there is little detail on the policies and actions that will be employed to achieve this aim.

One action that might be employed is to develop a system of conditions and/or regulations that require energy producers and large scale energy purchasers to adopt practices that favour such an approach.

There should also be a focus on where the opportunities are and what skills/jobs are required to make it happen, the current strategy has too much focus on retaining jobs from oil and gas industry and NE and Moray rather than looking at where the need/opportunities are (see also general response and response to question 3)

Chapter 3 – Energy supply

Scaling up renewable energy

9. *Should the Scottish Government set an increased ambition for offshore wind deployment in Scotland by 2030? If so, what level should the ambition be set at? Please explain your views.*
10. *Should the Scottish Government set an ambition for offshore wind deployment in Scotland by 2045? If so, what level should the ambition be set at? Please explain your views.*
11. *Should the Scottish Government set an ambition for marine energy and, if so, what would be an appropriate ambition? Please explain your views.*

We will address questions 9-11 collectively.

SCCS supports the current ambition to achieve up to 8-11 GW of offshore wind in Scottish waters by 2030. We also acknowledge the potential capacities set out in the draft strategy of over 43 GW in the longer term.

How much of this potential (or more) that can be delivered and made operational, as well as when that is the case, depends on a range of factors. First, there is the consenting and development pipeline, and all projects take time to progress. Second, there are policy issues to address; these include:

- Determining how much is desirable (rather than simply possible) and this depends on decisions related to security of energy supply at home and import/export plans. These issues appear unclear in the strategy – with little consideration of the sustainability of the energy but rather a desire to produce “as much as possible” and export the ‘excess’ (and import when/if necessary). A genuinely sustainable and circular economy would produce for its needs rather than predicted demand. The “predict and provide” approach has both failed and contributed to the climate crisis in other sectors and it would be inappropriate to apply approach this to a potential solution.
- Determining how much is compatible with other users of the marine environment, including ensuring the protection of that marine environment including its wildlife. In particular, offshore wind developments need to be planned and delivered strategically (and not piecemeal) so that a system of strategic compensation can be delivered, as necessary, to protect marine wildlife⁴².

12. *What should be the priority actions for the Scottish Government and its agencies to build on the achievements to date of Scotland’s wave and tidal energy sector?*

Three actions have been suggested that could and should be employed; these are:

- Invest (or encourage investment) in R&D;
- Strategic planning (and Strategic Environmental Assessment) to identify potential scale of, and locations for, such developments; and
- Appropriately speedy planning and consenting of such developments, subject to environmental suitability.

14. *In line with the growth ambitions set out in this Strategy, how can all the renewable energy sectors above maximise the economic and social benefits flowing to local communities?*

In addition to community benefit, it's important to recognise the impact that can be had through procurement processes, recruitment, etc in order to channel more income and job opportunities into local communities.

17. *Do you think there are any actions required from the Scottish Government to support or steer the appropriate development of bioenergy?*

The Scottish Government should exercise caution in any plans to scale up bioenergy beyond current rates and learn lessons from the course followed in England where electricity generated through biomass is heavily reliant on imports. More detail on bioenergy is set out in our general response.

18. *What are the key areas for consideration that the Scottish Government should take into account in the development of a Bioenergy Action Plan?*

The Scottish Government should consider the land use implications of scaling up bioenergy. Large scale expansion of feedstocks from energy crops and forestry established explicitly for burning is unlikely to represent the most efficient use of land. Such an approach offers only single output rather than the multiple carbon benefits which can be garnered from well-planned woodland expansion. Another area for considerations should be the implications of biomass burning for human health.

⁴² https://www.rspb.org.uk/globalassets/downloads/pa-documents/powering-healthy-seas-report_rspb_august-2022.pdf

North Sea Oil and Gas

20. *Should a rigorous Climate Compatibility Checkpoint (CCC) test be used as part of the process to determine whether or not to allow new oil and gas production?*

As made clear in the [SCCS briefing: A managed wind down of North Sea oil & gas production in line with a Just Transition](#), there should be such a presumption and the UK Government must ensure that no new licences or approvals are granted, while the Scottish Government should oppose such licences as a matter of policy. There is, therefore, no need for a Climate Compatibility Checkpoint (CCC) test in determining whether or not to allow new oil and gas production.

However, in the event that such a presumption is not applied, the use of a CCC test may be an alternative approach – but the test must be rigorous in its examination of the impact of the proposed exploration/production, and the use to which any oil and gas thus recovered would be put. Any new consents for exploration/production cannot be permitted to add to the emissions generated by existing production (which is already at a level/likely duration that need to be curtailed in order to meet our climate ambitions).

21. *If you do think a CCC test should be applied to new production, should that test be applied both to exploration and to fields already consented but not yet in production, as proposed in the strategy?*

As made clear in the answer to question 20, such a test is unnecessary if an effective presumption against new exploration and new production is applied.

However, if such a presumption is not applied and/or it is ineffective, and a CCC test is used, it should be rigorous, as described above, and apply to both exploration and to fields already consented but not yet in production.

22. *If you do not think a CCC test should be applied to new production, is this because your view is that:*

- *Further production should be allowed without any restrictions from a CCC test;*
- *No further production should be allowed [please set out why];*
- *Other reasons [please provide views].*

As is clear from our answers to questions 20 and 21, there is no need to apply a CCC test to new production as such further production should not be permitted. A full explanation of why is set out in the [SCCS briefing: A managed wind down of North Sea oil & gas production in line with a Just Transition](#).

23. *If there is to be a rigorous CCC test, what criteria would you use within such a test? In particular [but please also write in any further proposed criteria or wider considerations]*

- *In the context of understanding the impact of oil and gas production in the Scottish North Sea specifically on the global goals of the Paris Agreement, should a CCC test reflect –*
 - A. *the emissions impact from the production side of oil and gas activity only;*
 - B. *the emissions impact associated with both the production and consumption aspects of oil and gas activity (i.e. also cover the global emissions associated with the use of oil and gas, even if the fossil fuel is produced in the Scottish North Sea but exported so that use occurs in another country) – as proposed in the Strategy;*
 - C. *some other position [please describe].*
- *Should a CCC test take account of energy security of the rest of the UK or European partners as well as Scotland? If so, what factors would you include in the assessment, for example should this include the cost of alternative energy supplies?*
- *Should a CCC test assess the proposed project's innovation and decarbonisation plans to encourage a reduction in emissions from the extraction and production of oil and gas?*
- *In carrying out a CCC test, should oil be assessed separately to gas?*

Notwithstanding our view that such a CCC test is unnecessary (see above), if one is applied, it must be both extensive and rigorous. At a minimum, it would need to address the emissions impact associated with both the production and consumption aspects of oil and gas activity. However, it

would also need to demonstrate how the emissions thus generated were compatible with emissions targets, bearing in mind the emissions generated by existing production.

To meet the above standard, any test would need to include both oil and gas, and issues of energy security and innovation are likely to be irrelevant – if other policies in those areas were developed and applied such that new oil and gas was unnecessary.

24. As part of decisions on any new production, do you think that an assessment should be made on whether a project demonstrates clear economic and social benefit to Scotland? If so, how should economic and social benefit be determined?

Social and economic impacts (that is, benefits and disbenefits) of such decisions should, of course, be considered. However, it is important that this does include the disbenefits – including the considerable and damaging social and economic impacts of a rising mean temperature as a result of emissions.

Secondly, any assessments of social and economic impacts should consider the social and economic impacts of alternatives, including greater investment in demand reduction, energy efficiency and/or renewables.

25. Should there be a presumption against new exploration for oil and gas?

Yes.

As made clear in the [SCCS briefing: A managed wind down of North Sea oil & gas production in line with a Just Transition](#), there should be such a presumption and the UK Government must ensure that no new licences or approvals are granted, while the Scottish Government should oppose such licences as a matter of policy

26. If you do think there should be a presumption against new exploration, are there any exceptional circumstances under which you consider that exploration could be permitted?

Given the scale of the ‘consented but not developed/extracted reserves’, it seems unlikely that there could ever be such exceptional circumstances that would permit further exploration without leading to extraction that would cause emissions to rise above targets. In principle, therefore, SCCS does not consider that such circumstances should arise.

That said, SCCS is aware that provision may need to be made for ‘residual production’ for non-energy use of fossil fuels (e.g., pharmaceuticals, some chemicals, some plastics, etc⁴³). This residual production, however, must be minimised and there is likely to be sufficient reserves for many centuries worth of such non-energy use, if properly managed. A clear and well-defined policy for the reduction of production to this residual level is required – but this should be based on ensuring the longevity of ‘consented but not developed/extracted reserves’, not exploration for new reserves.

Chapter 4 Energy demand

Heat in Buildings

27. What further government action is needed to drive energy efficiency and zero emissions heat deployment across Scotland?

The draft strategy makes little mention of the role that better energy efficiency can play in supporting decarbonisation but also providing wider benefits such as reducing fuel poverty, improving health and wellbeing and the energy system benefits of reduced demand on networks and peak energy generation. These benefits are often missed by sector strategies (such as the heat in buildings strategy) which is very focussed on policy interventions, costs and benefits at the household/building level. Given the economic benefits that energy efficiency can bring (research by Strathclyde University

⁴³ However, parallel policies and actions to move towards a genuinely circular economy should reduce the demand/need for many of these products and thus use of fossil fuels for these purposes should be kept to an absolute minimum.

has shown that every £1 of public investment can yield £5 in GDP benefit⁴⁴), this is a glaring omission in the draft strategy. The Scottish Government target to bring all homes to a good energy efficiency rating (equivalent to an EPC 'C') is not mentioned at all.

The strategy does restate existing Scottish Government targets for the number of homes switched to low carbon heating and heat network output but as with other sectors, makes no attempt to assess whether Government policies are adequate to achieve these ambitions. This is important both in terms of policy delivery but also for quantifying the change in energy demand (e.g., shift from gas/oil to electric) and how this relates to energy production, networks, and supply chains – all issues touched on elsewhere in the strategy.

Recent analysis by WWF Scotland of policies proposed in the Heat in Buildings Strategy found that these would achieve less than half of the emissions reduction required of existing homes by 2030 (as per the Climate Change Plan Update)⁴⁵. More ambition is needed for Scottish Government policies and funding to achieve targets, including through massive retrofitting programmes, potentially carried out by local authorities. This should be articulated in the final strategy.

In addition to the above, SCCS supports the Scottish Government's proposal⁴⁶ to regulate (following the proposed Member's Bill by Alex Rowley⁴⁷) to require new-build homes to meet *Passivhaus* standards. In relation to existing homes, we support and commend the work of the Existing Homes Alliance, and their policy proposals⁴⁸.

The Scottish Government must greatly increase funding provided for public sector energy efficiency and decarbonisation. A report for UNISON, published at COP26 in Glasgow, looked at the costs of decarbonising the UK public sector, estimating the UK government should be investing over £140 billion up to 2035 to fund urgent actions needed to decarbonise UK public services⁴⁹. Ensuring schools, hospitals, leisure centres and other public buildings meet suitable energy efficiency standards and move to clean energy is vital, with early investment crucial.

Energy for transport

28. What changes to the energy system, if any, will be required to decarbonise transport?

First, "decarbonising transport" must be about more than electrification of cars, vans and lorries. A significant modal shift to active and public transport is needed – and, as these forms of travel can be considerably low cost, such a shift can support the less well off. However, while walking and wheeling are low cost for all who are able to use these methods, and the Scottish Government concessionary schemes for young and older people's bus travel are welcome, more such policies are needed. These should include:

- extending concessionary fare schemes further and lowering costs of bus travel for all⁵⁰;
- free public transport pilots/funding for municipal bus companies
- employers' provision of public transport 'passes' options where workers prefer instead of company cars
- lowering the costs of trains;
- improving bus/train availabilities; and
- investing in cycling/walking infrastructure to make the option safer and more attractive.

⁴⁴

https://strathprints.strath.ac.uk/63819/1/Turner_etal_IPPI_2018_Potential_wider_economic_impacts_of_the_energy_efficient_scotland_programme.pdf

⁴⁵ <https://www.wwf.org.uk/sites/default/files/2023-02/WWF-Affordable-Warmth-Scotland.pdf>

⁴⁶ <https://www.passivhaustrust.org.uk/news/detail/?nid=1176> and statement to Parliament by Patrick Harvie MSP, Minister for Zero Carbon Buildings, Active Travel and Tenants' Rights, 10 January 2023.

⁴⁷

<https://www.stopclimatechaos.scot/wp-content/uploads/2022/07/SCCS-response-to-Proposed-Domestic-Building-Environmental-Standards-Scotland-Bill.pdf>

⁴⁸

<https://existinghomesalliancescotland.co.uk/wp-content/uploads/2023/02/Heating-our-Homes-Knowing-the-Destination.pdf>

⁴⁹ <https://unison-scotland.org/wp-content/uploads/Getting-to-net-zero-in-UK-public-services.pdf>

⁵⁰ See, for instance, <https://www.povertyalliance.org/campaigns-projects/everyone-aboard/>

32. *What action can the Scottish Government take to ensure that the transition to a net zero transport system supports those least able to pay?*

First, this needs a recognition that the “transition to net zero transport” is more than about electrification of cars, vans and lorries. A significant modal shift to active and public transport is needed – and, as these forms of travel can be considerably low cost, such a shift can support the less well off. However, while walking is low cost for all and the Scottish Government schemes for young and older people’s bus travel are welcome, more such policies are needed. This should include the policies set out in answer to question 28.

Secondly, there is a need (where electric vehicles are appropriate) to ensure that costs are fair. At present, there appears to be a lower cost for charging from a private home than at public charging costs. As the latter will, more often, be used by the less well off (living in tenements etc), this represents unfairness. The Scottish Government should therefore work with the UK Government, local authorities and others to equalise these costs.

33. *What role, if any, is there for communities and community energy in contributing to the delivery of the transport transition to net zero and, what action can the Scottish Government take to support this activity?*

All behaviour or modal change must be tackled on a local and community level in order to effect national or global change. Community groups know their own communities and Community Energy organisations are experts in community engagement and delivering community projects. This trust and engagement creates community buy-in and local inspiration for low carbon and net zero transport options such as electric transport and active travel and successful community projects inspire other communities to create similar (and sometimes more ambitious projects).

Community Energy Scotland has a project to bring together 6 communities in the south of Scotland to share ideas, share lessons learned and collaborate on projects. One community in this group has successfully funded and began construction on an ambitious path project and shared learnings with the other communities. This inspired 3 other communities to begin work on creating their own path projects to improve walking and cycling between neighbouring towns and improve walking access to school for local children and families. Another community launched a successful e-bike project and this inspired a neighbouring community to raise funds for an E-Cargo bike - this funding was successful and the bike will be used by local groups and businesses to carry out local deliveries and lower delivery emissions. A remote island community we work with raised funds for an electric minibus and an EV charger which will directly benefit local vulnerable residents via community transport and will have the ancillary benefit of overcoming barriers to personal EV ownership on the island and will attract more tourists in EVs. The EV charger is powered by a wind turbine erected by the community group and funded from revenue from the turbine.

The Scottish Government should make access to funds for promotion of active transport easier and allow those funds to be used for engagement, capital and revenue projects that help identify the things that communities want and make it possible to realise these visions and share these with other communities. People and communities perform better when they are given the option to build projects that they believe in and positively impact their local community.

Energy for agriculture

35. *What are the key actions you would like to see the Scottish Government take in the next 5 years to support the agricultural sector to decarbonise energy use?*

Agriculture and wider land use (notwithstanding that it is also responsible for significant removals) is now the sector responsible for the greatest contribution to Scotland’s emissions. It is a sector which is responsible for nearly a fifth of Scottish emissions. If agriculture and land-use fail to reach their respective targets, Scotland will fail to reach its national targets too.

Action to support decarbonisation in both agriculture and wider land management is vital. This must involve both addressing emissions from their operations (fuel use, buildings, etc) but also from the

way in which the land is managed (cropping patterns and methods, livestock management, woodland expansion, etc).

Agriculture (and some other land uses such as forestry) is significantly 'controlled', through both regulations and subsidy, by the Scottish Government and is a fully devolved issue. These regulatory and subsidy regimes are currently subject to review, following the UK's departure from the EU, and the new framework will be established by the forthcoming Agriculture Bill. This Bill represents the perfect opportunity to realign policy for this sector.

To ensure that emissions' reductions are at the heart of such policy realignment, the Agriculture Bill should include a purpose clause that requires Scottish Ministers to ensure that its implementation must contribute to the achievement of the climate change targets set under the 2009 Act.

Energy for Industry

36. *What are the key actions you would like to see the Scottish Government take in the next 5 years to support the development of CCUS in Scotland?*
37. *How can the Scottish Government and industry best work together to remove emissions from industry in Scotland?*
38. *What are the opportunities and challenges to CCUS deployment in Scotland?*
39. *Given Scotland's key CCUS resources, Scotland has the potential to work towards being at the centre of a European hub for the importation and storage of CO2 from Europe. What are your views on this?*

We will address questions 36-39 collectively.

SCCS does not oppose CCUS, in principle; however, it must be noted that it is, so far, an unproven and undelivered technology. The strategy, therefore, places an over-reliance on this technology becoming available and then being reliable and effective. Such a reliance should be reduced, and significant uncertainties and drawbacks recognised – and strict conditions set for any limited application.

Such conditions should include demonstrating any CCUS reliance is achievable, that is in being applied only in the "hard to abate" sectors (and not for areas where renewable energy and/or demand management would be more effective and efficient), and that it does not create ongoing reliance on (and thus risk the phase out of) fossil gas.

As such, the strategy should adopt a considerably more sceptical approach to CCUS, reduce the reliance on this technology as means to achieve net zero, and develop what the Scottish Parliament's (former) ECCLR Committee called a "plan B"⁵¹. This was supported by the Climate Change Committee who have called for "Clear contingencies will have to be developed for meeting the 2030 target if it should turn out that [engineered greenhouse gas removals] cannot be delivered at scale on the necessary timetable"⁵².

⁵¹ https://archive2021.parliament.scot/S5_Environment/Reports/ECCLR_2021.03.04_OUT_CS_CCPu_Report.pdf

⁵² <https://www.theccc.org.uk/publication/progress-reducing-emissions-in-scotland-2021-report-to-parliament/>