# DRAFT ENERGY STRATEGY AND JUST TRANSITION PLAN CONSULTATION

## A COMMON WEAL RESPONSE

## INTRODUCTION

Now four years on from the Scottish Government's declaration of a "climate emergency" and with as little as two Parliamentary Elections away from the absolute deadlines set by the IPCC for Scotland to have made substantial and permanent progress towards climate targets. The proposed draft energy strategy from the Scottish Government may therefore represent the last chance to get Scotland on track towards its climate targets.

It is disappointing therefore that the current draft energy strategy does little to achieve this and is not much more than a collection of previously announced or initiated policies with little in the way of new, more intensive work or, indeed, much sense of strategic development of the policies to understand how the policies interact with each other (e.g. how heat insulation programmes will impact energy demand and thus the need for more energy supply or other infrastructure).

We are particularly disappointed that the scope of the Scottish Government's "Just Transition" strategy has been reduced to an annex at the end of this consultation with

even less in the way of new policy material included or thought as to how the success or failure to achieve a Just Transition for workers will impact delivery of the other objectives within the energy strategy.

The Scottish Government should begin to take its obligations and responsibilities towards the climate emergency as seriously as the science demands. We expect that when the Government comes back with its final energy strategy that it will have performed a complete evaluation of all proposed policies to ensure that the sum total of them actually meets climate objective or, when it is found that they do not, the strategy is revised to include additional strategies to correct that shortfall.

# 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?

### Please give us your views:

The 2030 and 2045 visions are insufficient to meeting the challenge posed by the climate emergency. The 2045 vision in particular merely promises a "Net Zero" future that – assuming currently unproven carbon sequestration strategies are possible – will merely promise that by 2045 Scotland will do no further harm to the planet in terms of carbon emissions. The vision takes no account of the harm done by Scotland historically or will cause up until it reaches the "Net Zero" point nor does it factor Scotland's disproportionate share of that harm on a global scale. The vision also largely does not account for harms caused beyond carbon such as resource use, soil degradation, non-carbon waste, the stresses and harms caused by consumerist economies and others. In short, Scotland needs a Green New Deal, not merely a Net Zero strategy.

It is particularly notable that despite the Scottish Government announcing a shift away from its previous policy of maximum extraction of fossil fuels from Scottish waters, no end date has been proposed for extraction and, indeed, extraction is projected to continue well beyond the 2045 Net Zero horizon.

# 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?

### Please give us your views:

The Scottish Government must recognise the scale of the problem facing especially households in terms of energy transition. Done badly, a "net zero" transition will remove carbon from heating but will do so by increasing costs to households both in insulation costs and higher energy bills.

Available assistance is not sufficient to meet even the current too-low targets and it is largely being left to individuals to finance their own transitions. This will lead to households delaying retrofits or ignoring doing them even at the cost of not being able to move house (if legal mandates to retrofit before sale are introduced), this will lead to retrofits being done cheaply and to minimum standard (or below minimum standard given no strategy to ensure compliance in installation) and will result in delays in reaching targets and exacerbated fuel poverty.

In short, the Scottish Government must stop treating building retrofits as something akin to redecorating where it is the individual's responsibility to comply (and their fault if they don't) when the true fault lies in decades of failing to ensure that building regulations met known climate risks. The national retrofitting

strategy should instead be considered a collective public effort akin to a major national infrastructure project – one that includes street-by-street retrofits, compliance and inspection and free-at-the-point-of-install upgrades for all houses regardless of ability to pay. It will be for Government to decide how to pay for these retrofits but Common Weal would remind them of their commitment to the Polluter Pays and Producer Responsibility principles that they have adopted which would suggest demanding substantial commitments both from fossil fuel companies who have caused the climate emergency and housing developers who have profited from enabling fuel poverty by building sub-standard homes and other buildings.

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

### Please give us your views:

Community energy has had an extremely positive impact in Scotland – much more so than so-called "community benefit schemes" run by private energy companies which even at their best transfer only a pittance of the profits extracted from communities back into them - but it is currently being hampered by lack of access to finance, lack of access to land and lack of access to infrastructure like Grid connections. The Scottish Government urgently needs to drop its objections to a publicly-owned National Energy Company and start to work on building it in a manner that supports community energy via strategies such as building assets and transferring them to community ownership, via joint public-public investment schemes or simply by being a local, public-owned energy generator/ provider for communities.

### 4. What barriers, if any, do you/your organisation experience in accessing finance to deliver net zero compatible investments?

### Please give us your views:

In many cases, such finance simply does not exist in any meaningful or sustainable way. Funded pots of grant money are too small and too fragmented and almost always exist in a shifting landscape that means that even if one project is funded, a subsequent project must apply to different funds to compensate for those that have since closed.

The Scottish National Investment Bank – an idea designed and championed by Common Weal – was supposed to consolidate and flatten this funding landscape and to make it possible for diverse groups with diverse needs to apply to a single point of contact to meet their investment needs. This has so far not materialised in part because the SNIB itself is underfunded (the Scottish Government must push harder to pressure the UK Government into giving SNIB the dispensation from Treasury rules preventing it from attracting external investment) and its mandate has been eroded and captured by private sector interests to the point that it will struggle to fulfil its missions unless pulled back on track by the Ministers who were supposed to oversee it.

### 5. What barriers, if any, can you foresee that would prevent you/your business/ organisation from making the changes set out in this Strategy?

### Please give us your views:

Quite simply, this proposed draft strategy places the burden of change onto individuals in an unsustainable manner. Many people cannot afford even interest free loans for home retrofits (or cannot do the retrofits even if they could afford them because they do not own their home). If the Scottish Government was serious about meeting its targets, it would take on the responsibility for meeting them, and deal with the climate emergency as a matter of collective public infrastructure, not as individual effort no matter how well supported.

### 6. Where do you see the greatest market and supply chain opportunities

**from the energy transition, both domestically and on an international scale, and how can the Scottish Government best support these?**

**Please give us your views:**

In Common Weal's policy paper ScotWind: One Year On we demonstrated that the Scottish Government has failed to secure the offshore energy supply chain to Scotland by almost incentivising the exporting of that supply chain. Further, the reliance on "Foreign Direct Investment" in almost all areas of the transition rather than in growing a domestic supply chain foundation means that profits will, by definition, be extracted from Scotland and workers involved will be abandoned as soon as it is profitable to do so. The opportunities are indeed great, but the Scottish Government seems intent on actively pushing against them.

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

**Please give us your views:**

The best, most powerful way of doing this would be the creation of a National Energy Company and a Scottish Energy Development Agency – the blueprints for which have been published in Common Weal's policy paper Powering Our Ambitions. Both of these policies were accepted by overwhelming majorities of party members at multiple SNP and Green conferences and both were adopted as Government policy but have either been abandoned or stalled.

The worst way of doing this would be to rely on profit-driven companies, largely either heavily invested in the fossil fuel industry or themselves being foreign-owned public companies, which will extract profits from Scotland, ensure the minimum possible investment in Scottish supply chains (especially if doing more would compete with their own domestic supply chain investments) and ultimately leave Scotland and Scottish workers with little control over the transition.

The Scottish Government is currently pursuing the latter option.

**8. What further advice or support is required to help individuals of all ages and, in particular, individuals who are currently under-represented in the industry enter into or progress in green energy jobs?**

**Please give us your views:**

This question highlights a core but unanswered question in the climate transition. The people who will be charged with meeting the 2030 targets – especially the entry-level construction workers, tradesfolk and plumbers who will be building and retrofitting the homes and businesses that will make up the majority of the actual work of the transition – are currently in education. Some of those who will be retrofitting the final buildings ahead of the 2045 target have not yet been born.

Beyond under-representation, the work to populate green energy jobs should be an emergency-level strategy within the remit of the Education Ministers – but their role is scarcely mentioned at all within the draft strategy. Scotland will require but cannot rely on immigration to fulfil our impending skills shortage in this sector if for no other reason than other countries will be building their own transition strategies on a similar scope and timescale to ours.

# 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.

Please give us your views:

The first ScotWind auction has already promised more offshore energy capacity than Scotland's currently foreseeable energy needs even in a maximally electrified energy strategy. However, our overall capacity to generate energy for export could and should go further.

This said, rather than aiming for sheer capacity, the Scottish Government should acknowledge the failures of ScotWind as highlighted by Common Weal and should instead work towards a targeted ambition of publicly-owned energy both on- and offshore with an eventual view towards bringing a majority or all of Scotland's energy generation into Scottish public ownership by 2045.

To fail in that goal will result in the benefits of Scotland's renewable energy being extracted and exported just as the financial benefits of oil were and coal were before that.

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:

To reiterate our answer to Question 9, the Scottish Government should set an ambition to own most or all of Scotland's offshore wind deployment by 2045.

This can be done by limiting the length of existing leases to as short a time as possible (necessarily less than 25 years at this point – certainly less than the 60 years that Crown Estate Scotland considers the default lease term) and by applying strict break clauses to leases such that they can be transferred to a National Energy Company in the event that contracts and promises are broken.

11. Should the Scottish Government set an ambition for marine energy and, if so, what would be an appropriate ambition?

Please explain your views:

As above, we are less concerned with the ambition for energy generation capacity as we are with who owns that energy. All forms of energy generation in Scotland should be publicly owned at the point of construction unless there is no alternative to the contrary and leases should be designed to return that energy to public ownership in the shortest feasible timescales.

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?

Please give us your views:

The principle priority action should be the creation of a National Energy Company to substantially or completely own the wave and tidal energy sector.

13. Do you agree the Scottish Government should set an ambition for solar deployment in Scotland? If so, what form should the ambition take, and what level should it be set at?

Please explain your views:

Solar is a massive missing factor in Scotland's energy strategy. Solar PV should not be restricted to rooftop deployment but should be deployed en-masse at community and Grid scales. Co-location with wind turbines should be considered as the combined generation greatly increases the utility factor of a given space of land (even in Scotland it is rarely both dark and not windy for extended periods of time). Co-location of solar with agriculture (as currently being pioneered in Germany) can also greatly

increase the effective utility of land.

Solar PV is not enough however, in Common Weal's Common Home Plan we envisaged around 50% of Scotland's heat demand being delivered by solar thermal panels using summer heat to charge interseasonal thermal storage (such as covered water reservoirs or gravel pits) and feeding distributed heat networks. This scheme is modelled directly from Denmark's thermal strategy and should be adopted and deployed by the Scottish Government as a matter of urgency.

We wish to take this moment to remind the Government that its strategy of electrifying Scotland's heating sector – even via a strategy based on Air Source Heat Pumps – will place bottlenecks in the form of electricity Grid reinforcements which largely fall into reserved power remits and will thus force Scotland to transition at a pace no faster than that allowed by the UK Government. Heat networks are a) entirely devolved, b) require just as much infrastructure deployment as electrification will and c) will deliver better overall heat outcomes and a more future-proof system than will be gained by locking Scottish consumers into the future price of electricity for their heating.

### 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?

### Please provide further details:

The most ambitious "community benefit schemes" run by private energy companies in Scotland deliver benefits on the order of only a few hours worth of annual profits to these companies. The maximum economic and social benefit to local communities from the energy sector will come if those communities own their own means of energy generation. The second level of benefit will come if the energy generation is owned nationally by a Scottish energy company. Private ownership of energy by non-Scottish domiciled companies or ownership via foreign public energy companies will almost inevitably result in profit extraction from Scotland.

### 15. Our ambition for at least 5GW of hydrogen production by 2030 and 25GW by 2045 in Scotland demonstrates the potential for this market. Given the rapid evolution of this sector, what steps should be taken to maximise delivery of this ambition?

### Please give us your views:

Scotland should immediately ban the generation and import of all forms of hydrogen that are not derived from entirely renewable sources (including a ban on hydrogen created using Carbon Capture to achieve "Net Zero"). It has been shown that hydrogen derived from fossil fuels can have a higher carbon footprint than simply burning the fossil fuels (due to methane leakage during generation, transport or carbon capture and storage) and these non-Green methods of generation are largely being pushed by fossil fuels companies trying to slow or avert their energy transition, not accelerate it.

Rather than setting an ambition on production, Scotland should consider its demand for hydrogen. Such demand will largely NOT lie in home heating (district heating is more efficient and effective while requiring almost the same level of new infrastructure commitment) or transport (current technology indicates that hydrogen ground vehicles will only be or remain more efficient than battery vehicles when deployed in trucks on extremely long-haul journeys that make up a negligible fraction of transport within Scotland) but in areas such as steel and chemical production. Scotland's Circular Economy should be attempting to limit the demand of such production to an absolute minimum so Scotland's supply target should not be based on maximising delivery, but in meeting the minimum possible level of demand.

In short, Scotland should not seek to generate 5GW of Blue Hydrogen if we can instead create an economy that only requires 3GW of Green Hydrogen.

## 16. What further government action is needed to drive the pace of renewable hydrogen development in Scotland?

### Please give us your views:

With the caveats above in mind, the Scottish Government should consider where community and local generation of hydrogen may be appropriate and should fund its development there. Local production may be more appropriate than centralised production and transport given the difficulties involved in storing and transporting hydrogen.

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

### Please give us your views:

Common Weal's paper Carbon-Free, Poverty-Free found that for some Scottish homes and communities – particularly those in extremely remote rural areas – the most effective form of heating may be bio-kerosene or hydrogenated vegetable oil as a direct, "drop in" replacement for heating oil. Many new oil boilers are already "HVO-ready" but supply in Scotland of compatible biofuel is currently essentially non-existent. A local production supply chain (or supply chain based on recycling oil from other sources such as the restaurant industry) would greatly benefit these houses where insulation may not be as practical or affordable as elsewhere, where the infrastructure costs of delivering electricity (or distributed heat networks) may be prohibitive and where other bio-fuels such as wood pellets would significantly degrade air quality both indoors and outdoors.

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

### Please give us your views:

A key area of the Bioenergy Action Plan is the degree to which bioenergy production may crowd out or compete with other land uses as well as the extent to which it may compete with other uses of biofeedstock (such as chemical or bio-plastic production).

In an ideal case, the source material for biofuels or biofeedstocks should be what is currently considered waste (such as food scraps or excess stalks and chaff from food production) subject to the caveat that these "waste" products may also be useful resources for composting and soil production/regeneration.

A suboptimal result in biofuel production would be one that is the true, albeit disguised, purpose of "rewilding" projects where the biofuel is harvested for commercial purposes that reduce the utility of the rewilding efforts.

Finally, an outright counter-productive source of biofuel would be land use that crowds out other uses such as true rewilding or primary food production.

It should be noted that, on a global scale, the world already produces enough mass of biofuel (albeit largely ethanol derived from corn, soy or palm oil and not always in a sustainable manner) to satisfy the global demand for all hydrocarbons excluding fuel. The Bioenergy Action Plan, like the hydrogen plan discussed above, should therefore be based from first principles not on maximising supply but on minimising demand and then satisfying that demand in a sustainable manner.

## 19. How can we identify and sustainably secure the materials required to build the necessary infrastructure to deliver the energy strategy?

### Please explain your views:

The materials involved in the infrastructure are probably less important than the skills required to turn those materials into the results demanded by the strategy but in either case,

if Scotland continues to rely on "foreign direct investment" rather than domestic upgrowth then we shall become dependent on imports of both materials and skills and shall see the benefits of the infrastructure investments exported as profits elsewhere – often to subsidise the public services of those countries who saw fit to maintain their own energy and other national infrastructure in their public hands.

# CHAPTER 3 - 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?

### Please give us your views:

We are registering an answer of Yes to this question on the basis that we believe that any other answer would be registered as an encouragement towards more oil and gas extraction, however we would challenge the Scottish Government to present a scenario that they envisage would result in proposed new oil and gas production passing a CCC test while remaining compliant with the scientific view that no new oil and gas production is compatible with valid climate emergency targets and that, in fact, even extant and producing fields must be shut down long before maximum economic extraction if the world is to meet binding Paris targets.

True compliance with that view would render the concept of a CCC redundant on the basis that it would be a test that is impossible to pass and thus no different from an outright ban on extraction.

We worry that the policy choice of a checkpoint rather than a ban as the Scottish Government's chosen mechanism is a sign that they either do not believe in the scientific consensus on climate change or they seek to subvert it by creating a scenario whereby they can greenwash oil and gas production despite the science.

### 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?

### Please explain your views:

Subject to the caveats in the answer to Q20, we believe that the CCC should also be extended both to consented but not yet producing fields AND to fields that are in active production or which have at one time been actively producing but currently are not. The science of climate change does not care if a burning barrel of oil came from an existing field or a new one, only that the burning of that oil contributes to the climate emergency.

### 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].

### Please explain your answer:

If the Scottish Government decides against applying a CCC test on new and existing oil production it should be because it has instead decided to support rapidly and entirely phasing out oil and gas production in line with (or more rapidly than) climate emergency demands and supports a ban on all extraction from that point onwards.

### 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 specifically on the 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:

The test should also apply to fossil fuels produced elsewhere in the world and burned in or for Scottish use as the result of a CCC should not be to start importing fossil fuels to replace domestic production.

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?

Given that the climate emergency threatens the security of all nations on the planet, including Scotland, the UK and EU, on energy and other grounds it is difficult to imagine a scenario where encouraging more oil and gas production does not trade a short term problem for a much larger long term one.

If the CCC test is passed in this regard it will almost certainly be because the Scottish Government has failed in other aspects of the climate transition such as by insulating homes or securing adequate supplies of renewable electricity.

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?

No. A CCC test should be based on the worst case failure scenarios of any proposed carbon capture or decarbonisation scheme given that no carbon capture scheme has been developed at scale, no scheme can adequately account for the decentralised nature of much of the emissions associated with oil and gas production and because the consequences of failure have a long enough lead time that by the time the failure is detected, it will be too late to correct and avert the damage caused.

In carrying out a CCC test , should oil be assessed separately to gas?

The CCC test should be applied equally to all fossil fuels based on their ability to pollute both in terms of carbon emissions but in other environmental impacts such as oil spills. If this results in slightly different criteria then so be it, but we again challenge the Scottish Government to present a scenario where they envisage either an oil, a gas, or a combined oil and gas production project can pass any reasonable CCC test.

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?

Please explain your views:

Such an assessment should only take place if it factors in all known "externality" costs of production, use and clean up of the project. For example, it is currently estimated that the environmental cost of burning a barrel of oil and releasing the carbon into the atmosphere is above $100. Unless the producer is willing to pay at least that amount in a carbon tax on top of all other costs, and the consumer is willing to pay the final price of the oil including that carbon tax, then the economic and social benefit of the oil will – in the long term – be negative. Anything less is extracting benefit from someone, somewhere or sometime else rather than deriving it ex nihilio from the oil.

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

Please give us your views:

Yes.

The Scottish Government should go further than a presumption against and pass a moratorium on all new exploration for oil and gas as it has done with onshore shale gas (fracking). While this is largely a reserved issue, the moratorium should make it clear that the Scottish Government will not support, assist, aid or abet any exploration and will actively work against exploration by any means possible including use of devolved taxes, environmental fines/levies and the blocking of planning permission for onshore infrastructure necessary to support the offshore sector.

Consideration should be given to the Scottish Government endorsing and supporting the coalition around the Fossil Fuel Non-Proliferation Treaty campaign and prepare for Scotland to either sign it at the earliest opportunity or to align ourselves with it to the greatest extent possible and to act "as if" Scotland can and has signed the Treaty.

### 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?

Please explain your views:

It is difficult to imagine any exceptional circumstance that would permit oil and gas exploration – especially as the long lead times involved preclude actions that may mitigate a short term crisis such as the energy price crisis of 2022/23.

If an exceptional circumstance does arise, it should be given due consideration but Common Weal is clear that circumstances such as promises to "mitigate" emissions via carbon capture or similar technologies DO NOT constitute such grounds.

## 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?

Please give us your views

The Scottish Government should stop considering building retrofits as akin to a redecorating project to be carried out by occupiers (many of whom lack the power to redecorate their homes) and instead should consider it a matter of urgent national infrastructure demanded by the climate emergency.

This means that retrofits and upgrades should be carried out on a community- and street-by-street level rather than on an individual one and should be financed as a matter of public good rather than by individuals (bearing in mind that many individuals in fuel poverty cannot afford even an interest free loan to do work themselves).

Consideration should be made towards financing retrofit projects by applying windfall taxes to energy companies and housing developers who have profited over decades from building sub-standard homes and thus enabling needless fuel poverty in Scotland.

See Common Weal's Common Home Plan for more details.

# CHAPTER 4 ENERGY DEMAND - ENERGY FOR TRANSPORT

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

### Please give us your views:

Transport within Scotland will be dominated by electric vehicles – hydrogen will only become competitive against EV in long-haul road transit and in medium/long haul sea and air transit.

This means that the major challenge to Scottish energy system will be the demands placed on the Grid to charge electric vehicles. Without efficiency upgrades and ignoring heat, a straight conversion from internal combustion to electric in all vehicles will double current electricity demand in Scotland. (Similarly electrifying heat as well will quadruple current electricity demand)

As Grid infrastructure (and much of transport regulation) is substantially a reserved issue, the Scottish Government will face significant bottlenecks in this area and will therefore only be able to transition transport as fast as the UK Government allows.

To move faster, transport strategy must be based on demand reduction as much as possible. This means the public ownership of and massive expansion of public transport, changes to urban design to discriminate against private car ownership and use where other options are more efficient and the rollout of community-owned schemes that allow vehicle-sharing with centralised charging points (which can more easily be load-balanced than individual cars charging at homes).

### 29. If further investment in the energy system is required to make the changes needed to support decarbonising the transport system in Scotland, how should this be paid for?

### Please give us your views:

Transport transitions happen when transport is a) more convenient AND b) cheaper than the alternative so merely taxing drivers will only work so far. (i.e. taxing people to sit in a traffic jam won't encourage people to take the bus instead of driving if the bus is stuck in the same traffic jam for lack of bus lanes and the bus tickets are still more expensive than the car journey). This said a Polluter Pays principle does demand more environmental taxes especially on energy and vehicle production companies who have enabled the climate emergency.

The Scottish National Investment Bank should also play a role – though the Scottish Government must, with urgency, increase demands for SNIB to be able to borrow in its own right rather than be reliant on ScotGov funding – and should, amongst other things, fund the development of community-level vehicles sharing schemes aimed at reducing energy demand in the transport sector. SNIB's "patient funding" model was designed by Common Weal specifically for projects of this nature.

### 30. What can the Scottish Government do to increase the sustainable domestic production and use of low carbon fuels across all modes of transport?

### Please give us your views:

Scotland has some capacity to build domestic production of, for example, bio-kerosene for home heating (as outlined above) but should be wary of land use demands and competition for other uses of biofeedstocks. Within vehicles,

there will be limited scope for any “low carbon” fuel in Scotland. Almost all land transport can be more efficiently electrified.

We are clear that remaining fuel uses should be zero carbon, not low carbon. This would therefore preclude and presume against any energy strategy based on “blue hydrogen” derived from methane or any fossil hydrocarbon source “mitigated” by carbon capture.

### 31. What changes, if any, do you think should be made to the current regulations and processes to help make it easier for organisations to install charging infrastructure and hydrogen/low carbon fuel refuelling infrastructure?

### Please explain your views:

Regulations around hydrogen for fuel use should include a ban on the generation, transportation, importation or consumption of any hydrogen not created by zero-carbon means (i.e. any H2 derived from fossil fuels whether or not “mitigated” by carbon capture).

### 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?

### Please give us your views:

Costs will be maximised on those least able to pay if we insist on individual solutions (such as demanding folk dispose of combustion cars with the only option being to buy EV cars instead).

Community vehicle sharing schemes will be cheaper overall and cheaper for individuals and transport strategies including public ownership of mass-transit will help to reduce fares.

### 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?

### Please give us your views:

Vehicle sharing schemes are best run at a community level and can be made more sustainable by coupling with community energy schemes to charge EVs. While a nationally owned public energy company and nationally run energy development agency will be required for much of the transition, our Powering Our Ambitions plan foresees a key role played by community-level schemes. As stated above, the SNIB was specifically designed to aid schemes like this through its “patient finance” model and mission-driven mandate.

Currently, the funding landscape for community schemes of all kinds is being actively opposed by Scottish Government policies including policies such as only funding capital spending (not ongoing revenue) and pulling funding before schemes are self-supporting in order to generate new (also underfunded) schemes.

### 34. What, if anything, could be done to increase the reuse of electric vehicle batteries in the energy system?

### Please give us your views:

Proper Circular Economy design in vehicles would foresee this eventuality and demand regulation on vehicle design to ensure that the batteries can be easily removed/replaced/refurbished (so as to avoid the chassis going to waste once the battery is removed).

Transport strategy around community vehicle-sharing would also accommodate reductions in battery life and mitigate against range anxiety by assigning older vehicles to shorter haul duties as their battery capacity reduces.

# CHAPTER 4 ENERGY DEMAND - 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?

### Please give us your views:

No action is more important than comprehensive land reform (see Common Weal's policy paper Our Land as well as our response to the Land Reform for a Net Zero Nation consultation).

Scotland should also change its strategy on land which is currently favouring a "green rush" towards carbon capture and other "Green Laird" activities. Activities on Scottish Land that generate carbon credits should NEVER result in those credits being used to "offset" current emissions.

Beyond this, Scotland should follow the lead of countries like France and mandate a transition to an agroecological model of food production - providing support and retraining for farmers where required.

See Common Weal's Common Home Plan for more details.

# CHAPTER 4 ENERGY DEMAND - 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 carbon capture, utilisation and storage (CCUS) in Scotland?

### Please give us your views:

Carbon Capture has no place in the solutions to the climate emergency except as a long-term negative-carbon repair. It should not be relied upon to "mitigate" or reduce current carbon emissions which should, instead, be directly reduced or eliminated.

Instead, emissions and environmental taxes should be set at level that fully pays for the damage caused by the emissions plus a premium to further encourage transition to sustainable business models.

For the avoidance of doubt, the key action the Scottish Government could make on CCUS is to end support for it for the purposes of mitigating current emissions.

### 37. How can the Scottish Government and industry best work together to remove emissions from industry in Scotland?

### Please give us your views:

Scotland should explore and implement the full scope of environmental and emissions regulations and taxes within devolved powers (and campaign and plan for the implementation of those outwith devolution) so that ALL Externalities are taxed commensurate to the damage they cause to the planet.

As this will necessarily risk cheaper, polluting imports into Scotland, import tariffs or devolved equivalents (such as minimum unit pricing) should be explored and implemented.

### 38. What are the opportunities and challenges to CCUS deployment in Scotland?

### Please give us your views:

The primary challenge of CCUS is that it has not been proven to work at any scale sufficient for

the climate emergency, is entirely contingent on climate strategies being fully politically captured by those who have caused the emergency and by the time it has been demonstrated to have failed, it will be too late to fix.

The "opportunity" of CCUS is massive profiteering by polluters while allowing them to make minimal possible changes to their own sector while demanding that everyone else changes everything AND pays for their lack of change.

### 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?

### Please explain:

CCUS has no place in climate strategy as a tool to mitigate against current emissions and should only be used as part of a long term negative carbon repair strategy.

Using Scotland as a storage facility for Europe's carbon emissions should be treated with as much political disdain as using Scotland's land resources as a storage facility for Europe's landfill waste.

# CHAPTER 5 CREATING THE CONDITIONS FOR A NET ZERO ENERGY SYSTEM

### 40. What additional action could the Scottish Government or UK Government take to support security of supply in a net zero energy system?

### Please give us your views:

The first, most important action to support security of supply is to minimise energy demand through massive, infrastructure-driven insulation and retrofitting programmes, substantial increase in regulations to ensure that buildings constructed now meet climate requirements across their expected lifespan and will not need future retrofits.

Substantial upscaling of renewable heat infrastructure will also increase security of supply by reducing Scotland's reliance on the UK Government reinforcing the electrical grid at the scope, scale and speed required of Scotland's transition.

### 41. What other actions should the Scottish Government (or others) undertake to ensure our energy system is resilient to the impacts of climate change?

### Please give us your views:

One area so far completely understated by the Scottish Government is the impact of sea level rise on Scotland – including its energy system. On current projections, Grangemouth is scheduled to go below sea level even if all climate goals are met.

Similarly, coastal facilities like energy importing ports and pipelines along with large scale energy facilities like nuclear energy (current and future) will be threatened (even inshore nuclear, if built, will be threatened by changes to water demands).

As many of these scenarios have already been baked in by past climate inaction (and mitigations like sea barriers would be expensive, impractical or both) then future energy strategy must take this into account and begin reducing reliance on land in risk zones, rather than trying to reform or increase it.

# CHAPTER 6 ROUTE MAP TO 2045

### 42. Are there any changes you would make to the approach set out in this route map?

Please give us your views:

The route map to 2045 is entirely insufficient to meet climate demands and the stated policies in this draft are insufficient to meet the targets laid out in the route map. The map has also been rendered largely obsolete by developments since its writing (the document makes no mention of Freeports, for instance)

The Scottish Government should take stock, consult actual climate experts and develop a Green New Deal strategy that is commensurate to the climate emergency that the Government has accepted is happening.

### 43. What, if any, additional action could be taken to deliver the vision and ensure Scotland captures maximum social, economic and environmental benefits from the transition?

### Please give us your views:

The Scottish Government is utterly wedded to the idea that "foreign direct investment" will save everything and deliver "supply chain" jobs to Scotland when what it will actually do is result in massive profit extraction and a severe lack of "anchoring" in the companies involved (companies mobile enough to move to Scotland are mobile enough to move away the moment it is profitable to do so – as evidenced by decades of FDI in Scotland).

The maximum social, economic and environmental benefit from the transition will be gained by ensuring that as much of the transition as possible is secured within the public sector and as much of the rest as possible is preferentially delivered by Scottish companies.

# IMPACT ASSESSMENT QUESTIONS

### 44. Could any of the proposals set out in this strategy unfairly discriminate against any person in Scotland who shares a protected characteristic?

### Please explain your views:

There are significant discriminatory aspects to many of the jobs that will be created by the transition (engineering and construction are currently very male-dominated) so strategies may have to be put in place to mitigate this.

However, failure to enact policies such as retrofitting or other fuel poverty mitigations may discriminate against older people or others who are vulnerable and less able to pay for mitigations themselves.

### 45. Could any of the proposals set out in this strategy have an adverse impact on children's rights and wellbeing?

### Please explain your views:

The failure to address the climate emergency will be a direct and life-limiting threat to children and their wellbeing and thus may be a direct threat to their rights to life.

As this route map is insufficient to meet the demands of the climate emergency it follows that carrying it out instead of a sufficient Green New Deal will result in a breach of childrens' rights almost as severe as would be failing to enact any climate policies.

### 46. Is there any further action that we, or other organisations (please specify), can take to protect those on lower incomes or at risk of fuel poverty from any negative cost impact as a result of the net zero transition?

### Please give us your views:

The primary lesson from many of the mitigation plans in the transition is that long term costs of transition will be lower than inaction but the barrier is upfront capital costs (e.g. a solar panel – once bought – produces electricity at very low cost for its lifetime whereas a diesel generator requires fuel purchases). Funding should be borne by the public purse where possible (and taxed back from those who can afford it – not just individuals but also companies responsible for the climate emergency). Where funding must be applied by loans, it should be SNIB-back, long term and patient. Consideration should be given to schemes that link loans to buildings and their owner, not their current occupant. It currently makes no sense for a homeowner to take on a 10 year personal loan for retrofits and solar panels if they intend to sell the house within that time – doing so would leave them potentially liable for the loan without receiving the benefit of the retrofits or solar panels.

### 47. Is there further action we can take to ensure the strategy best supports the development of more opportunities for young people?

### Please give us your views:

When this routemap reaches its 2030 goals it will be reliant on workers who are, at present, in primary and secondary education.

When the routemap reaches its 2045 goals, it will be reliant on workers who are not yet born.

For the routemap (or its more adequate replacement) to be secure it will require the restructuring of the Scottish education system to create those workers. The routemap at present does not mention this at all.

This said, please see the below article on Common Weal's website that points out that current "Just Transition" efforts are neglecting the skills and experience build up by older workers already in the sector.

https://commonweal.scot/without-workers-the-transition-wont-be-just/

## JUST TRANSITION ENERGY OUTCOMES

### 48. What are your views on the approach we have set out to monitor and evaluate the Energy Strategy and Just Transition Plan?

### Please give us your views:

The monitoring and evaluation of the Plan is insufficient. Two immediate improvements would be

a) a "climate footprint" estimate applied to every new Scottish Government policy which, if positive, should contain justifications for why it cannot be Net Zero or true-negative.

b) A "Just Transition Register" similar to the one adopted by the 2021 SNP conference and accepted for investigation by now-First Minister Humza Yousaf. This Register would ideally count annually the number of jobs in sectors that must be transitioned and how many workers were successfully and justly transitioned in the previous 12 months.

### 49. What are your views on the draft Just Transition outcomes for the Energy Strategy and Just Transition Plan?

### Please give us your views:

It is extremely disappointing that something as vital as the Just Transition has been reduced to an afterthought in this consultation. We refer to the response to this consultation submitted by the Just Transition Partnership which says:

It is extremely disappointing that something as vital as the Just Transition has been reduced to an afterthought in this consultation. We refer to the response to this consultation submitted by the Just Transition Partnership which says:

1) This is not a strategy – it does not say how the proposed outcomes will be achieved nor address the risks and obstacles to achieving them. 2) This is not a Just Transition Plan.

3) There are important omissions from the document.

4) Relying on markets for achieving change is flawed – without priority to public action and ownership, the objectives can't be met. 5) Engagement with drafting the strategy has been poor.

## 50. Do you have any views on appropriate indicators and relevant data sources to measure progress towards, and success of, these outcomes?

### Please explain your views:

The UK Climate Change Committee has a clear scorecard measuring Scottish Government's implemented policies against projected impact on climate change. A measure similar to this should be implemented by the Scottish Government to encourage the announcement of policies actually sufficient to meet the demands of the climate emergency.

### - Dr Craig Dalzell, Head of Policy and Research, Common Weal

Response on behalf of Common Weal.