

Response to the Advisory Group on Economic Recovery

Friends of the Earth Scotland

June 2020



Significant macroeconomic and fiscal implications will change the economic context for the foreseeable future

What will be the shape and form of the recovery from the crisis and the what will be the implications for the future growth and structure of the economy?

Friends of the Earth Scotland believes that our response to recovering from the social and economic impacts of Coronavirus must not be to simply rebuild our economy in the shape it was before. Determining the success of the Scottish economy on the basis of GDP has proven an inadequate reflection of how the economy is functioning for people or how prepared it is for future challenges. We must avoid the mistakes of the past and rectify inequalities, injustices, and environmental damage, while seizing the opportunities of the future in the move towards a zero-carbon society, by reprioritising the people and planet over economic gain.

Crucially, the last few years have seen an increased recognition that the world is in the midst of a climate emergency, with the First Minister recognising this in her 2019 Spring Party Conference speech, and the Scottish Parliament setting new emissions targets. As we face the twin crises of Covid-19, including its economic and societal impacts, and climate change, it is important that we acknowledge their interlinked nature - with the same people most vulnerable to both, and a requirement to place health, inequality, and justice solutions at the heart of our response. By taking measures that address both, we will make sure that in tackling one crisis we do not exacerbate the other. Rather, we should acknowledge that actions must be taken that address both simultaneously.

Our recovery must see Government intervention and investment on a scale to ensure delivery of a Just Transition, creating high quality job opportunities in zero-carbon industries. The Scottish Government will be in a strong position to direct how companies, many of whom will only exist because of Government financial support, align with national priorities. Companies will have a moral debt, and support for them must be conditional on delivering a social and environmental return on the economic investments they have and may continue to receive. Any significant funds and support made available to restart the economy must not be spent on simply putting things back to the way they were. The recovery must create a fairer, greener, resilient Scotland.

In addition to this response we support the principles in the letter sent to the First Minister on Friday 29 May, signed by 80 organisations including Friends of the Earth Scotland, setting out steps for a Just and Green Recovery.

A new Economic Strategy

To align the economy with our climate targets, Government's economic interventions must be part of comprehensive plans to deliver a Just Transition. This must include a focus on growth in the zero-carbon economy, like renewable energy and clean heat technologies, while managing a move away from those polluting industries that are dependent on fossil fuels.

While there are steps that must be taken in the short term, the Government should also move quickly to set out a new Economic Strategy which delivers a just, circular, and decarbonised economy. The strategy needs to provide a long-term vision for a Just Transition to a zero-carbon economy, consistent with the Government's climate targets, and providing necessary direction to stimulate growth and investment in fossil fuel free industries. This must come with much greater Government investment than the zero-carbon and circular economy currently receives, if we are to rebuild in a way that delivers on broader national outcomes.

Until completion of the new Economic Strategy, as an interim measure the Scottish Government's economic activity must have an explicit commitment to delivering a Just Transition, and developing the new Economic Strategy as soon as possible. In order to protect workers while strategically building new economic opportunities for them in the short term, especially in those industries most affected by current circumstances like oil and gas and aviation, greater Government intervention will be required in the short term.

Replace GDP as a sole measure

We welcome the First Minister's previous support for a wellbeing economy, but would like to see this reflected in how we measure economic success. As a starting point, these words should be backed up by replacing GDP as the primary measure of economic success, instead focusing on a number of measures of wellbeing and environmental performance. Pursuing GDP growth as an isolated measure presents a significant barrier to transitioning to a zero-carbon economy, where developments can deliver significant social and environmental benefits before they return an obvious economic benefit. Using other measures of economic success would acknowledge that economic growth is not an end in itself and economic development has to be a means to social objectives like full employment, enhanced wellbeing, and environmental sustainability.

A selection of key indicators from the Scottish Government's National Performance Framework should be used instead of GDP, including measures that capture our progress in reducing emissions. This would be supported by a re-alignment of the policy hierarchy and coherence to reflect the Sustainable Development Hierarchy and, more recently, the Doughnut approach - recognising that we are bound by planetary limits and needs must be met through a sustainable economy that works for all. This change in approach should be stated by Ministers at the earliest opportunity, and set out in the new Economic Strategy.

All spending and policy decisions should be screened against their 'wellbeing return', reflecting how they perform against the chosen measures. We support the five tests set out

in Scottish Environment Link's "Building the Future We Need: a green recovery for Scotland" briefing:

1. Every individual policy/action adopted must be based on sound evidence, must not increase carbon emissions, must not damage nature and must not harm social wellbeing.
2. Reduce pollution, especially carbon emissions to net-zero by 2045;
3. Improve adaptation to climate change;
4. Reduce the consumption of natural resources, to reduce Scotland's footprint to neutrality;
5. Improve biodiversity and ecosystem services.

Maintaining environmental protections

We note that the consultation document asks about easing some regulation to stimulate growth. While it's not clear what regulation this refers to, we would strongly advise against easing environmental regulations - such as regulations protecting the public from pollution and dangerous chemicals in food and packaging. Even within existing regulations we see communities dealing with pollution from large industrial and power complexes, and every year numerous streets in Scotland record illegal levels of air pollution. We should be discussing how protections can be further enforced to protect public health, as well as restoring, protecting, and enhancing biodiversity.

The Scottish Government had previously given positive assurances that Brexit would not lead to the weakening of environmental protections, now we need to see this extended to a promise that the recovery will continue the strengthening of these regulations.

We support comments from Scottish Environment LINK highlighting that deregulation is a false economy - creating poor value for taxpayers by passing the burdens of environmental degradation and on to society. Regulation offers protections against threats like climate change, which already have a sizable financial and human cost globally. Weakening protections only provides an incentive to business to grow in a way that comes at huge social and environmental costs. Economic growth should not be pursued at the expense of environmental, social, and economic protections.

Replace Maximising Economic Recovery with a positive vision on a just energy transition

The Scottish Government's existing policy of maximising economic recovery of north sea oil is incompatible with its commitment to tackling climate change and delivering a Green Recovery, and should be replaced with a commitment to a Just Transition and creating quality jobs in the zero-carbon economy. Our Sea Change report found that the UK's 5.7 billion barrels of oil and gas in already operating fields will far exceed the UK's share in relation to Paris climate goals; however, under the policy of maximising economic recovery, the UK and Scottish Governments and industry aim to extract 20 billion barrels. Equally, allowing fossil fuel industries to return to 'business as usual' presents a long-term risk of sudden collapse of domestic industries such as the oil and gas sectors.

To align our economic recovery with the Paris Agreement, MER should be replaced with a commitment to a Just Transition, marking the start of a managed phase out of fossil fuels, including an end to offshore licensing, in a way that protects the workers and communities currently involved in the industry. In turn, this will send a long-term signal to industry and direct future Government strategies so efforts are aligned in ensuring our decarbonisation is managed in the best interest of workers and communities.

New taxation

Friends of the Earth Scotland would be supportive of new taxes which generate revenue on a “polluter pays” basis. There are opportunities to look at how we can reduce the burden of taxation from employing people in green industries by increasing taxes on waste and pollution in polluting industries. New taxes on high polluting activities are an opportunity to generate revenue to fund a Just Transition - but also send a clear public message that the economic recovery will put people and planet before polluters.

In particular, a mechanism such as a frequent flyer levy, which recognises that a small group of the wealthiest people most frequently use air travel and incrementally increases the tax on a given individual’s flights within each calendar year, is an equitable way to reduce air travel and fund sustainable transport - and a measure which has been proven to have public support.

As well as new taxation, there are other mechanisms already within Scotland’s devolved powers which can tackle waste, create new industrial opportunities and demands, and create revenue streams. For example, the Scottish Government’s proposed latte levy, and other similar mechanisms, can create opportunities in creating quality reusable products, replacing the 200million single-use cups currently used each year. While this has been delayed, it should now be implemented as quickly as possible.

As well as raising revenue through taxing environmental harms, the Government’s recovery must also mark an end to tax breaks and financial incentives given to high polluting industries. While some of these powers are beyond the Scottish Government’s control, they should commit to working with the UK Government and using any devolved powers so no public spending in Scotland contradicts our climate ambitions.

Different sectors and businesses will be impacted in different ways. What are the medium- to long-term consequences of the lockdown on businesses, including loss of employees, debt overhang, loss of markets, reduced investment and unemployment?

Making business support conditional on a Just Transition

It would be contradictory and counterproductive to our national climate change ambitions, if public money was used to prop up the continuation of high emitting activities. Instead, public money should be used as a lever to start the decarbonisation of polluting industries through

a Just Transition, bringing them in line with broader Scottish Government objectives. A Just Transition means putting the protection of workers' livelihoods, creating new jobs, and delivering a fairer Scotland at the centre of the move to a zero-carbon economy, with trade unions, communities, and environmentalists at the heart of the process.

Any support for industries, especially those in high emitting sectors like energy, must be conditional on those industries delivering a Just Transition away from fossil fuels. These commitments should be reflected in a national Just Transition Strategy, backed up by sectoral Just Transition Plans, with companies committing to protecting their workforce, transitioning away from fossil fuel activities, and transforming the energy sector to address wider social issues. Bailouts should not be given to deliver short term strategies to return to 'business as usual' or deliver shareholder profit.

These Just Transition Strategies must be bolder than the current inadequate oil industry "net zero plans", which are based only on reducing emissions at the point of extraction of fossil fuels while ignoring the impact of these fossil fuels when burned, and include an overreliance on speculative technologies such as CCS that are not deployable at scale within the timeframes required. The Government has an opportunity to set a direction of travel for the energy industry, moving away from fossil fuels and towards renewables. Missing that opportunity would be unacceptable.

Many countries around the world are already making environmental improvement a precondition of Government support. For example, the French Government has imposed requirements on flight operators to reduce emissions as a condition of support, and the Scottish Parliament set a precedent when it passed legislation banning public subsidies being given to companies registered in tax havens.

Financing the recovery

On the basis of national and sectoral Just Transition Plans, the Scottish Government should make an assessment of the amount of investment which will have to be mobilised to hit its climate change targets. This should be compared with what is already happening and what can be expected under 'business as usual', and a strategy for filling the gaps between these two figures should be put in place. The UKCCC has estimated that the cost of meeting the targets is in the range of 1 - 2% of GDP. However it is not clear whether this refers to entirely additional investments or includes some of the regular, ongoing rate of investments in the public and private sector. This can only be assessed properly on the basis of concrete plans to decarbonise public transport, or retrofit all residential properties, for example.

Scotland's recently established National Investment Bank is well placed to help fill these investment gaps by directing public and private finance in the recovery process. The Bank's structure requires it to deliver targeted public finance in areas directed by the Scottish Government, and the Scottish Government have made commitment to the climate emergency being an early mission.

On top of this mission-led approach, the Bank's commitment to patient lending also suits the approach required to stimulate developments in a zero-carbon economy, such as investment

in national energy efficiency and retrofit programmes. The Bank's role in acting as a catalyst to sectors aligned with Government priorities also makes it a crucial tool in directing private investment in the right sectors as part of the recovery process.

Given the social and economic opportunities that will be unlocked in a Just Transition to a zero-carbon economy, the Bank and its early mission are incredibly relevant to the recovery process - but it must be strengthened if it is to fulfil its potential. The initial financing, of £2billion over 10 years, limits the Bank's potential - and this should be revisited with a view to increasing the Bank's capital.

The Bank's mission orientation must also be strengthened, with a commitment that the Bank will not finance anything that undermines any of its objectives, even in fulfilling another objective - publishing a list of areas the bank will not invest in. It is crucial that the bank does not fund capital intensive CCS and fossil hydrogen projects under the auspices of being low carbon. This would be an unwise investment when money could be spent more effectively on energy efficiency and renewables projects, which have less commercial backing currently, and lock in guaranteed long term carbon reduction.

Improving travel to new opportunities

Investing in sustainable travel must be a part of addressing the economic issues outlined in the question, whilst simultaneously tackling emissions from transport - Scotland's highest source of domestic emissions. Increasing access to affordable, sustainable transport can expand the economic opportunities available to individuals, as well as creating direct job opportunities in manufacturing and construction of transport infrastructure, whilst tackling our climate emissions. The Scottish Government should increase permanent investment in active travel, and expand its concessionary bus fare scheme.

Expanding active travel has direct impact in connecting communities and opportunities, but safe travel infrastructure is woeful across the country. This is evidenced by the increase in walking and cycling we've seen as car numbers declined during lockdown and roads became safer - an increase that we must capitalise on.

The underfunding of active travel investment was laid bare when the Scottish Government's initial £10mill fund for temporary infrastructure to support socially distant active travel was oversubscribed, requiring an increase to £30mill to meet the demand. The Scottish Government's 2020-21 budget committed to spending in the region of £18 per head on active travel. In other countries with higher active travel levels, like the Netherlands and Denmark, the equivalent spend can be up to £30 in some areas, even though their active travel infrastructure is already significantly in advance of Scotland's network. To increase connectivity and access to opportunities through active travel, Scotland should be aiming to match this level of travel in the long run, building on the progress made in increasing active travel during lockdown.

Any increase in spending must be delivered in a way that makes sure that lower-income communities benefit, including funding communities to shape their own areas and decide their own priorities. Active travel is often the most affordable method of travel in our current

system, so ensuring that it can be undertaken safely creates access to many of the benefits of mobility for a larger group of people.

With more people likely to be required to travel further to access education and new economic opportunities, public transport must become a preferable mode of transport for longer journeys, rather than a reliance on cars - which would increase climate emissions. Free public transport has been proven to increase passengership, with those currently eligible for free transport overrepresented in passenger numbers. The Scottish Government must also build on its commitment to expand free bus travel to under-19 year olds, and roll out free bus travel to more groups - including more young people. Ultimately, Friends of the Earth Scotland believes we must be moving towards a system where public transport is universally free, enabling and encouraging more people to travel to access opportunities.

The Scottish Government have made a number of positive commitments to decarbonising public transport, including through creating funds for cleaner buses and setting targets for rail decarbonisation. This should be developed, with clean bus funds used to stimulate growth in domestic bus manufacturing and retrofit, and skilled jobs created in the electrification of Scotland's rail network.

The re-shaping of our biggest cities is an opportunity to make them more equitable. New business and business practices could be created if city centres maintain reduced traffic, and we can ensure these gains are shared. In practical policy terms, this can include measures such as expanding the concessionary fare travel scheme over time, initially prioritising people on low incomes, and free access to bike hire schemes, allowing more people to travel. Free or zero-interest loans on cargo-bikes and e-bikes for small businesses based in areas of deprivation would also encourage more innovative businesses with decreased pollution, and more attractive destinations for customers.

Leading change through public ownership in energy and transport

The pandemic, and the need for Government support for privately run services, has made clear the importance of public services being in public hands, subject to public scrutiny, and run in the interests of people's wellbeing, not profit. Through the climate emergency, and now the coronavirus, the existing structural weaknesses of our economy and of our capacity to address social and environmental challenges have been clearly exposed. By prioritising private profit, too often people and the planet are expected to bear the costs of a callous corporate culture - whether it is the communities living next to flaring at Mossmorran or people cut off from jobs as private bus operators view routes as no longer commercially viable.

The need for a new approach has never been more relevant, the economic and social rebuild has to create an economy that promotes social and environmental goods - but this requires significantly higher levels of state intervention, including direct investment and ownership, to create resilient industries that align with national priorities. Government involvement can promote domestic supply chains, target areas at risk of industrial decline and prioritise those most vulnerable in our society to tackle the significant challenges we face.

Purely private ownership will not deliver solutions to fuel poverty, or meaningful action to move away from the polluting, but profitable, burning of fossil fuels and towards renewable energy projects. The Scottish Government should lead the transition in some of our most polluting sectors by starting and supporting publicly owned companies and services which are run in the interest of people and planet. Particularly, early steps have already been taken in some sectors and should be built on by expanding publicly owned bus companies and creating a publicly owned energy company in Scotland with powers to generate energy.

Publicly owned energy

A publicly owned energy company (POEC) is a significant opportunity for the Government to lead the change and create new decent jobs and domestic supply chains in the energy industry. However the Scottish Government's current plans fall short of reaching this potential - proposing an energy company which acts as nothing more than a retailer, with no powers to generate renewable energy. A publicly owned company which generates and invests in renewable energy would be pivotal in developing clean energy generation projects and infrastructure, as well as facilitating community, council, and regional projects.

The energy generated by the energy company could also be provided to people in Scotland at an affordable price that prioritises those in fuel poverty before a profit line, while democratising the energy network through the facilitation of local projects can create more resilient local economies and raise public participation in transition efforts.

The role of a public company, acting in the best interests of the national economy and the supply chain, is important for domestic jobs too. There have been examples in Scotland where companies, including some foreign publicly owned companies, have sent jobs related to renewable projects abroad. This is not only damaging for the environment, but also takes away decent jobs, skills, and expertise in the domestic renewables supply chain.

Publicly owned transport

Transport is another area with ready made public ownership solutions, with a framework created in the Transport (Scotland) Act 2019 for local authorities to run their own bus service, and Edinburgh's buses already being run successfully through public ownership. Increasing the number of buses run in the public interest can connect areas currently under-served by market-driven public transport, both rural and urban. This would stimulate new opportunities in the transport sector, and open up opportunities in employment and education to people currently effectively locked out through lack of access to transport, while reducing social isolation.

Over the course of lockdown bus operators and rail companies, most of which are run by private companies, have been kept afloat by public subsidy - a recognition of the vital service they provide. With Scottish Government support likely to continue to support buses to run at reduced capacity, to enable distancing, for a long time, the Scottish Government must look at what social return the public are receiving for this support.

To create a more stable transport system, accessible to more people than our current model, a fund should be created for local authorities and regional transport authorities to start-up public bus companies, using powers they gained under the Transport (Scotland) Act 2019.

The crisis will impact differently on different groups in society, and on different parts of the labour market; and, has already revealed some thorny issues about relative wages across key occupations. What will the implications of the recovery be for different groups, unemployment and on the nature of work? How is the recovery likely to impact on socio-economic inequality as a whole?

Support people to move into green jobs

A well managed Just Transition to a zero-carbon economy has potential to tackle a number of inequalities in society, whilst urgently reducing our greenhouse gas emissions. As we move away from fossil-fuel energy intensive industries, something that will be required to achieve our climate change targets, we need to ensure Government support is in place for those currently employed in those industries to transition to green jobs. This is particularly pressing in the current economic circumstances, with jobs already being lost in fossil fuel industries. Any funds aimed at creating jobs must also be targeted at delivering a Just Transition.

Individual support should be made available to people transitioning to green jobs, including funding for skills development relevant to the future zero-carbon economy where necessary. Regionally, funding should be focussed on stimulating the development of new fossil fuel free industries, or helping existing industries embrace fossil free alternatives, to create the job opportunities for those leaving fossil fuel industries. This should include the funding of public or community owned projects.

Tackling structural inequalities in the workforce

It is important that any future schemes include a focus on helping groups who face structural barriers into secure and well-paid work, avoiding entrenching the inequalities that exist currently. This should include addressing a lack of access to low-carbon jobs by women, disabled people and BME people, and any existing labour market inequalities within and across the regions.

Addressing regional challenges

Different regions and communities will face different challenges in the recovery process and a Just Transition to a zero-carbon economy. There are already communities which don't see a decent share of the benefits of the Scottish economy or have suffered the economic impacts of deindustrialisation over the last few decades. The Green Recovery should be delivered in a way that addresses economic equalities in society, being careful not to replicate or reinforce them.

National funds and schemes related to a Just Transition must be designed to ensure that those areas and communities that would benefit the most can access them, with support targeted at areas that have suffered through the changing landscape of the Scottish

economy. Additionally, specific targeted projects should be designed, in collaboration with local authorities and communities, that take account of the varying needs and priorities of Scottish regions and communities.

Funding only quality work

Where projects and schemes are expected to create jobs in a zero-carbon economy, there should be controls in place to ensure that the work is high-quality, well-paid and unionised to raise living standards of workers and increase the wealth available within local economies, while combating the growing precarious nature of employment. Projects that will involve construction or manufacturing for infrastructure or local developments should, where possible, rely on domestic sources to provide this in order to advance social inclusion across different areas through the advancement of any single project. They should also ensure they adhere to collective bargaining arrangements where they exist and promote them where they do not.

What can be done now to ensure the transition to a wellbeing-oriented, inclusive economy on a transition to net zero
How can the wellbeing of the people of Scotland flourish and what are the environmental implications of the crisis?

It is disappointing to see issues related to wellbeing and tackling the climate emergency being condensed into a single question, when these issues should be underpinning every aspect of our economic rebuild. We welcomed the First Minister's commitment to build a "fairer and greener" economy when announcing the Advisory Group's creation, and hope to see this reflected in the final recommendations. Our response to many of the issues raised in this question are addressed throughout our responses to other questions.

At its heart, the economic recovery process must mark the start of a transformative Just Transition to a zero-carbon economy, creating a fairer society whilst tackling our climate emissions. This will only happen, though, with the right Government-led interventions, through Government programmes aimed at reducing emissions in areas like heat, and by sending a strong signal to industry that there is no place in the future economy for damaging polluting industry.

Protecting our climate ambitions

The consultation paper poses an important question, whether there will be an acceleration or retrenchment of trends towards net zero - and the Government must use every lever available to guarantee the former, and avoid the latter. There is a very real risk that without strong action from the Government, we revert to the economy of the past, which struggled to keep up with previous, weaker, emissions targets, and contributed to the climate emergency that is already devastating communities across the globe. The challenge is to decarbonise the economy at the same time as consumption, helped by Government interventions to support incomes and fiscal stimuli, increases. This can only be done through a combination

of investment to decarbonise, regulation of industrial sectors and attaching conditions to all support given to enterprises, whether in the private or public sectors.

While the consultation acknowledges Scotland's target to reach net zero domestic emissions by 2045 at the latest, climate science tells us that action in the next decade is crucial to avoid the most devastating impacts of climate change. The group's recommendations must be aligned with Scotland's legally binding target of achieving a 75% reduction in emissions by 2030.

A commitment to decarbonisation through public investment must be threaded through every part of our response in order to seize the necessary new opportunities in the zero-carbon economy to tackle the multiple crises we face. As set out in other areas of our response, it is crucial that our economic response not only includes proactive Government intervention in driving the decarbonisation of the economy, but includes an explicit commitment to not supporting any activities that contradict our commitment to decarbonisation. This is not only in the best interest of our planet and the people living on it, but also makes the most economic sense - with broad consensus amongst economists that investments reliant on fossil fuels present a false economy given the precarious future of these industries.

Accelerating renewable energy generation

Scotland has significant natural resources and technical expertise that make it well suited for the rapid expansion required in renewable energy generation if we are to meet our climate targets. Currently we have an ambition for a "largely decarbonised" electricity system by 2032, and a target for "the equivalent of 50% of the energy for Scotland's heat, transport, and electricity consumption to be supplied from renewable sources" by 2030

These are unambitious, represent a slow growth in the renewables sector, and don't align with our new climate targets. Instead, to stimulate opportunities in the renewables sector as part of a Just and Green Recovery and a Just Transition, the Scottish Government should set a target for 100% of electricity and 85% of total energy generated, not just consumed, in Scotland to be from renewables by 2030.

As well as reducing emissions associated with energy, this has potential to act as a driver for continued Government intervention in renewable energy, and create jobs in new or expanded renewable energy.

Importantly, to be truly renewable, this should not include new nuclear power. A 100% renewable electricity generation by 2030 target should take into account the closure of Hunterston and Torness power plants at their currently planned end dates, of 2023 and 2030 respectively. Just Transition plans are urgently needed for the workers at these plants.

Creating a resilient, circular economy

Rapid moves to create a more circular economy are necessary in order to reduce our impacts on the environmental/biodiversity crisis as well as to contribute to reducing greenhouse gas emissions, including those of the products we consume, rather than just the emissions we create domestically. The most recent figure from 2016 showed greenhouse

gas emissions embedded in imported goods and services from overseas made up 51.1% of Scotland's carbon footprint.

As the global population continues to grow, it has become clear that our current linear economy model, which is heavily extractive and relies on fossil fuels, is not sustainable in the long term. By moving to a circular model, we can make our economy more resilient making us less dependent on virgin material, much of which can come at high financial, environmental, and social cost.

Moving to a more circular economy can also tackle the growing problem of plastic pollution by reducing the damage caused by litter to our immediate environment. By keeping resources in the system, we reduce the impact of consumption on our planet, an important step as global material consumption recently passed 1 billion tonnes for the first time.

Crucially, a more circular economy can create new domestic industries and employment opportunities in reusing and recycling existing materials, while protecting the economy from any future disruptions to the global supply chain.

The Scottish Government was set to bring forward a Circular Economy Bill, which was understandably delayed by the pandemic. This delay in moving to a more circular economy risks losing opportunities for new start ups or innovation in existing businesses, as well as the job creation, increased resilience, and contribution to our climate targets that a thriving circular economy can create. It's estimated that a circular economy would save Scotland 11 million tonnes of carbon dioxide a year by 2050 - a quarter of the current total.

To avoid moving backwards and missing these opportunities, our economic recovery should include targets for delivering a more circular economy, including targets on our material consumption, our carbon footprint, and a strategy for using biomass sustainably. Any Government investment in infrastructure should be led by investment in repair, repurposing, and recycling facilities - and not to incineration capacity or any other technologies that perpetuate the linear economy.

Improving Scotland's housing

Improving the standard and energy efficiency of Scotland's housing stock will deliver a number of policy objectives. Reducing the amount of energy required to heat homes will result in cheaper bills, addressing fuel poverty and the associated health problems, while reducing climate emissions associated with heat, one of Scotland's leading contributors to climate change. Finally, and importantly for a Just and Green Recovery, there is significant potential to create good quality jobs across Scotland in energy efficiency, and renewable heat installation and maintenance programmes. However, these positive outcomes will only be achieved with meaningful Government intervention.

Over the last decade Scotland has used a number of successful schemes to tackle fuel poverty by improving the energy efficiency of people's homes, most of it targeted on the fuel poor. Examples of best practice in this area, particularly those which cover a whole geographical area in one go, need to be identified and rolled out on a much larger scale.

This is a significant opportunity to develop new jobs in home retrofit, but that will require investment - and should be supported by a massive increase in Government investment in energy efficiency, rather than the current £151million budget. While this may have a big price tag attached, this policy has potential to be a key arm of a Just and Green Recovery - offset by the significant interlinked social and environmental returns that this investment will have, in job creation, reducing emissions, and tackling fuel poverty.

This national programme should be underpinned by a target to have all existing homes achieve an efficiency rating of EPC C, or an appropriate equivalent, by 2030. By balancing incentives and restrictions, like setting an end date for advertising properties for rent or sale that do not meet this target, this should drive an increase in opportunities in home retrofit, while ensuring that fewer people in Scotland are forced into fuel poverty.

CCS and Hydrogen

The advisory group should avoid falling into the trap of recommending a recovery based on speculative technologies such as Carbon Capture and Storage (CCS), hydrogen, especially hydrogen manufactured from gas, and BioEnergy with CCS (BECCS). Instead, focus should be on the 'shovel ready' opportunities for decarbonisation and creating quality new jobs through investment in renewables, decarbonising heat, and the associated supply chains in Scotland. Scotland is well placed to research, develop, and deploy zero-carbon alternatives to fossil fuels which can be exported to the world, rather than relying on the hope of CCS and hydrogen.

If money for recovery is going to be limited, requiring careful targeting to areas which will deliver a guaranteed return for the economy and quality jobs, large amounts of public money should not be gambled on speculative CCS and hydrogen technologies for polluting sectors. This would be a gamble which may not come off, which will in any rate be too late for the urgent action needed to set us on the pathway to reaching net-zero by 2045. Rather, investment must be targeted towards job creation in areas where solutions are tried, tested and ready to deploy with known job creation benefits, like renewables and energy efficiency.

Perversely, fossil fuel companies have been reluctant to invest their own money in developing the CCS technology which they claim will prolong the life, and therefore the profitability, of their industry. Additionally there is no evidence base for job creation claims made by industry, whilst the priority for recovery should be on driving a just transition through renewables with guarantees of decent work.

Hydrogen is also not the fix-all solution it is often claimed to be; there is a very limited supply of genuinely green hydrogen (hydrogen created using renewable electricity), meaning that it must be used selectively, and it is an expensive and inefficient use of energy. Even hydrogen produced using excess renewable electricity is expensive and inefficient to make - wasting a lot of precious renewable electricity. The focus for renewable electricity must be on meeting demand across homes, buildings, transport and heating, not creating hydrogen. The cheapest way to produce hydrogen at scale is from gas, relying on continued fossil fuel use, which is incompatible with our climate objectives.

Gambling on technologies also leaves no long-term security for workers in the affected sectors, and money would be better spent on creating secure, quality, jobs through a Just Transition. It is our view that pursuing these technologies would be a wasted use of public finance, and presents a distraction from delivering the level of systemic change required to tackle climate change.

There will be big changes in the form, nature and interactions between different institutions.

How will the crisis change the role and relationships between the UKG/SG/LAs, business and other institutions?

Using the increased confidence in public service

The health, social, and economic impacts of the pandemic have led to an increased recognition of the vital role of public services and the role of the state in supporting individuals and whole sectors. This positive support for greater government support and direction of industry must be capitalised on, and presents an opportunity for more ambitious leadership and direction from the Scottish Government in its engagement with public and private institutions.

It's important that this public trust isn't taken for granted, though. Public support has been shown to follow when the Government makes significant interventions with an explicit link to a wider public good. This lesson should be reflected in our recovery, with the Government at the heart of building an economy which is resilient to future crises, especially the climate crisis.

Supporting our councils

Partnership working between the Scottish Government and local authorities will be crucial in delivering a Just and Green Recovery, and a number of the measures highlighted in our response to other questions will be best delivered in collaboration with local authorities, who are best placed to understand local priorities and challenges. This is especially true of areas like expanding local active travel and public transport options, developing local energy generation, and making regionally appropriate green jobs schemes.

However, after a lengthy period of continual austerity, councils are under-equipped to tackle this, and their vital role must be reflected financially. Any schemes designed to build a more resilient economy should include money for local authorities, who have a key role to play in the success of such schemes.

The worst long-term economic outcome would be if the recovery marked the start of a period of austerity, where the public sector bore the brunt of further cuts after years of continuous cuts, dispelling the faith that has been restored in the public sector and missing an opportunity to strengthen the sector.

The need for a new social contract

We would support the development of a new social contract for Scotland, particularly one which follows similar principles to those proposed in the World Bank's 2019 report "Toward a New Social Contract" report, that a social contract should:

- 1) Encourage universal provision of social assistance, social insurance, and basic quality services;
- 2) Promote equal protection of all workers, regardless of their type of employment; and
- 3) Improve the fairness of the tax system by supporting progressivity of a broad tax base that complements labor income taxation with the taxation of capital.

This is not an exhaustive suggestion, and instead this should form the basis of work to develop a contract relevant to Scotland's needs - with an additional focus on inter-generational equity, protecting our planet' and nature for future generations.

Tied into this social contract must be an understanding that companies receive license to operate from society. In fact, many businesses will owe their existence to Government support for the economy and in some cases to them directly. This gives an opportunity to insist that they should act in the best interests of our society - no longer just pursuing the maximisation of profits. This must include greater alignment between business and Government objectives, as well as more emphasis on dialogue with trade unions, workers, and communities in the design and delivery of recovery measures for each sector.

The pandemic is a shock which will provide insights and data across a range of areas

How do we ensure that we learn from the impact of the crisis and respond accordingly?

Here are some issues you may wish to consider;

- Effective ways to capture data on changing behaviours and working practices to shape policy.
- The role of technology in Scotland's future economy.
- The rate of technological change and the implications of this on the workforce.
- The opportunities for co-operation and co-ordination that didn't exist before.
- Effective ways to capture and react to changing values and different perspectives on the role of public services and link this different parts of Government.
- Implications of protecting health and vulnerable people on future policy development.

Our response:

We have answered this question in other areas of our response.