LINK Consultation Response
Scotland Climate Change Plan
29 January 2026

Scottish Environment LINK

Introduction to Scottish Environment LINK

Scottish Environment LINK is the forum for Scotland's voluntary environment community, with over 50 member bodies representing a broad spectrum of environmental interests with the common goal of contributing to a more environmentally sustainable society.

Its member bodies represent a wide community of environmental interest, sharing the common goal of contributing to a more sustainable society. LINK provides a forum for these organisations, enabling informed debate, assisting co-operation within the voluntary sector, and acting as a strong voice for the environment. Acting at local, national and international levels, LINK aims to ensure that the environmental community participates in the development of policy and legislation affecting Scotland.

LINK works mainly through groups of members working together on topics of mutual interest, exploring the issues and developing advocacy to promote sustainable development, respecting environmental limits. Individual LINK members from across all of LINK Working Groups have contributed to this consultation response.

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General notes:

The sectoral approach adopted in the Climate Change Plan consultation means that not all sectors are of relevance to LINK members and we have answered relevant questions only. Our key focus has therefore been around land use, agriculture and forestry and some on planning and infrastructure.

Delivery of the Climate Change Plan is fundamental to the Scottish Government's action addressing the climate and nature crises. Recent global and national risk assessments now all include biodiversity loss as well as climate change as a major and growing risk. The CCP must reflect this and provide appropriate levels of action to address the identified risks minimising trade offs and maximising mutual benefits involved.

The lack of sufficient focus on adaptation and resilience is very concerning. Both mitigation and adaptation actions are necessary if Scotland is to meet its own climate targets and nature targets. The Scottish Government has a number of ambitious, welcome and necessary strategies and visions to help meet these. This includes Scotland's Environment Strategy and Scottish Biodiversity Strategy. However, these must be underpinned by relevant action in the Climate Change Plan. Those actions are not yet identified in this draft: this will require more detail than the proposals in the consultation so far. We have suggested where the gaps lie in our response.

A further key issue is the lack of a shared or consistent Scottish Government scenario framework for both CCP and SNAP3. While UKCP18 is widely used, alongside UKCP09 in many agencies, these data are a long way out of date, with advances in understanding about climate extremes and impacts in the last 10 years since the UKCP18 was produced. Without a common scenario framework, different organisations are planning to mitigate and adapt to very different futures.

Overarching themes:

The inadequacy of a purely economic approach to transition: a healthy environment is fundamental to provide economic, social and cultural rights and it underpins a healthy and resilient economy. Our environment is the envelope in which all other systems exist: if our environment is not resilient to ongoing change then by default our economy, society and culture cannot be either.

This is one of the key risks of the Scottish Government's Green Industry Strategy and therefore also of the CCP, given its high level of reliance. The Green Industrial Strategy is inadequate in protecting and restoring Scotland's environment and this means it is inadequate, on its own, in building a future for Scotland.
A strategy fit for the future must build in action to protect and build environmental, economic, social and cultural resilience today and ensure that future generations will have a resilient future too. This is why meeting climate and nature targets is fundamental. Yet meeting those targets will only be achieved if both are mainstreamed across all of Government.
In the Climate Change Plan we are therefore looking for:
1. Recognition of a healthy environment as the context of the economy – we are concerned by a drive purely towards growth, which we see as a reversal from previous approaches and too shortsighted. We need to see much more focus and action on resilience. Budget tagging may be helpful in this context. Replicating tagging currently done for child poverty and gender should be adopted for climate adaptation and nature resilience.
2. Actions for future generations are required: creating and restoring a healthy environment has long term outcomes that need action now. While these include peatland restoration and woodland planting, it must not be limited to these. We need a wider range of interventions across ecosystems. For example, recognition of the importance of native woodland creation and restoration is crucial, alongside requiring non-native, commercial forestry to do more for nature in exchange for public funding.
3. Link into delivery on nature targets: these must be mainstreamed across all sectors with specific recognition of action in LULUCF and agriculture sectors. There is too little detail on actions, the scale of action required and suggested actions are too narrowly defined.

For example, the agriculture section is very poor on biodiversity, which is only considered as part of necessary action in reducing emissions and not, as we would expect, as part of action on adaptation and resilience. There must be a link through to Scottish Biodiversity Strategy and nature targets to capture biodiversity restoration actions and build momentum for adaptation and future resilience to ongoing change. Currently, the Plan is led by food production while there are other wider actions to include. For example, the Woodland Trust Scotland and Soil Association Scotland work on "trees on farms" provides concrete proposals which could be adopted tomorrow, and which could address both. This becomes even more pressing when ScotGov has decided it will not require a reduction in livestock numbers. Report available here:
https://www.woodlandtrust.org.uk/publications/2025/06/unlocking-the-potential-for-trees-and-crofts-in-scotland/
On forestry, public funding should be invested as a priority into woodland that deliver both carbon sequestration and biodiversity, delivering the two fundamental foundations of adaptation. For example, silviculture that works with biodiversity delivers both economic and biological returns, providing value for money for public funding and higher resilience for Scotland's forestry sector to ongoing and future environmental change.

The Sectoral annex describes current policy in Scotland but there is too little detail on what will be done. Signposting to this detail to tie it into the CCP would be helpful on natural habitat restoration for carbon and biodiversity and management of wild deer for example.

Response

Section 1: Delivering a Just Transition:

Q1 – Q4: Outwith LINK group current work priorities

Section 2: Sectoral contributions, Policies and Proposals

Q5 – Q8: Outwith LINK group current work priorities

Q9: *What action by the Scottish Government would be most helpful in supporting you to live a more climate-friendly lifestyle?*

This is largely outwith LINK's remit although LINK's Freshwater Group's 2024 briefing recommends action in relation to domestic water supply:
Scotland has the highest per capita water usage in the UK, and is second only to Italy in Europe. As a water-rich country, many consumers consider drinking water as a limitless resource. Reducing our water consumption should be a priority for all sectors. Water conservation efforts should be promoted through public education campaigns, incentives for water-efficient appliances and fixtures, and the adoption of water-saving technologies in both residential and commercial sectors. Reducing overall water demand can alleviate stress on the distribution system and minimise the potential for leaks.
Around a third of water supplied to households is used to flush toilets. Not only is this a waste of resources, it places an unnecessary burden on the supply system. Despite first being identified as a potentially useful approach to reducing water usage some 20 years ago, grey water recycling has not been widely adopted in the UK. To accelerate the adoption of this technology a grant scheme should be developed to encourage and enable householders to retro-fit grey water systems. In addition, the installation of grey water systems should be encouraged through the planning system.

Q10: *Are there any additional proposals to support waste sector emission reduction that should be considered across the following 5 areas:*

Strengthen the circular economy:
Scotland's Circular economy strategy must introduce binding obligations on business to reduce material consumption and social and environmental impacts in supply chains, incorporating UN guiding principles on business and human rights.
Sector accountability and stress testing: projected carbon emissions by sector should be stress-tested against the risks of physical climate change e.g. energy demands in a shifting climate, changing infrastructure risk profiles with increased climate extremes etc.
Consumption based targets: about half of the materials we consume in Scotland are imported. The carbon impact of imports is not measured in the climate change plan. This means that the Scottish Government policies around the way materials are used do not directly relate to the climate change plan and so are often overlooked, despite making up a significant proportion of the emissions related to Scotland. This has led to policies which resulted in carbon and jobs leakage from the Scottish economy.
The Climate Change Plan must address this gap in carbon accounting by adding consumption-based targets to the climate change plan or circular economy strategy. Without a consumption-based target, key circular economy opportunities, such as the need to develop policies to cut plastic consumption, will continue to be overlooked and the carbon impact of Scotland's use of materials will be unsustainably high.

Reduce and reuse:

Incineration: A moratorium is needed on new incinerators and action required to address incinerator overcapacity 'lock-in' effect, where long-term investment in incineration infrastructure undermines preferable waste management options (waste prevention, reuse and recycling).
Incineration should be measured under the waste sector of the CCP. The Scottish Government has agreed to set a cap to reduce incineration. This cap should be in line with CCP emission reduction plans.
The Scottish Government should remove plans to fit CCS to incinerators in Scotland. Instead, it should be investing resources and funds higher up the waste hierarchy, especially reuse and repair.
Plastic: 99% of plastics are made from fossil fuels and plastics production is expected to triple by 2060. Neither the CCP nor the CE Strategy mentions plastic. It is essential that Scotland has a plan for reducing plastic production, consumption and safe management of disposal. Specific actions around plastics must include:
- Measuring and reducing how much plastic is produced in Scotland, how much is consumed and what happens to waste plastic.
- Enforcing and expanding the single use plastics bans.
- Conducting research on the impacts of chemicals in plastic on people and nature, including health costs, and recommendations on how to reduce these impacts.
- Banning the burning of plastic in incinerators.
- Enforce bans on exporting plastic waste.
- Improve recycling data reporting to understand how much plastic is sent to recycling, how much is actually recycled (and where and how) and what happens to the rest.
- Invest in affordable, reusable alternatives to plastic-based systems such as packaging.

<u>Modernise recycling:</u>
Extended Producer Responsibility (EPR): the Scottish Government should create an ambitious and comprehensive EPR programme for Scotland. In the first five years, the Scottish Government should aim to create EPRs for at least five product categories. Product categories linked to significant environmental harm should be prioritised.

<u>Avoid harmful persistent chemicals that undermine circular activities and increase the need for waste incineration:</u>
Addressing contamination caused by plastic and chemical industries is fundamental to reducing emissions (e.g. need to incinerate POPs contaminated waste) and resource use and minimising waste generation and resource loss.

<u>Energy Supply</u>
Q11: *What are your views on Scotland generating more electricity from renewable sources?*

LINK members support renewable energy as essential in decarbonising the economy, but energy developments must be developed in a manner consistent with the protection of biodiversity.

There are growing concerns of the potential impact of data centres in Scotland and their demand for energy, water and land. Data centres are not mentioned in this consultation. This is a whole new sector of extremely high energy demand infrastructure , and it should be covered in this plan. The Scottish Government's data centre action plan in 2021 must be reviewed and updated in line with the CCP and the impact of the significant increase in planned capacity for data centres and the environmental impact.

This impact includes land, often on green belt or agricultural land, alongside energy and water requirements, leaving a large climate and nature footprint with impacts on local communities too. The impact of this future demand for energy and water must be included in the Climate Change Plan, with a measured, evidence-based, and ecologically- centred approach in place to manage it.

Business and Industrial Processes
Q12*:* Outwith LINK group current work priorities

Agriculture and Land Use, Land Use Change and Forestry (LULUCF):

Q13: *How can the Scottish Government encourage sustainable land use, that is also productive for local communities?*

Agricultural funding is a key tool in influencing land use outcomes - it is in fact one of the strongest tools available to the Scottish Government to meaningfully influence emissions. Despite this, the pace of change in agricultural reform has been entirely inadequate and current government policy will not enable the agricultural sector to meet its necessary contributions to climate mitigation. Farmers and crofters need more support to ensure that food production is both economically and environmentally sustainable in the long-term. Agriculture is extremely exposed to the impacts of climate change and there are a range of interventions that would bring mitigation and adaptation benefits, as well as supporting biodiversity.

Many farmers in Scotland are already managing their land sustainably and sharing their lessons learned with other farmers. This must be acknowledged and farms given financial support that allows all to learn and develop best practices on their land. This may also include support for farms who want to promote the messages about how they produce food from their farms and the environmental benefits and provide help for them to supply local communities where this is a feasible option.

Q14: *What do you think about our proposals for planting trees and restoring natural habitats like peatlands?*

Scotland, and the world, is facing a twinned climate and nature crisis. Building resilience to the climate crisis and nature restoration must go hand in hand through effective nature based solutions which deliver multiple benefits, such as sequestering carbon emissions, creating habitats for wildlife, and mitigating the impacts of the climate crisis. However, this is not just about trees and peatlands. It also includes action on other open habitat including grasslands, and freshwater habitats for example, which act as carbon sinks and also biodiversity hotpots. Climate and nature resilience, tree management and natural habitat restoration is all about building resilience. Resilience is the fundamental concept underpinning our contributions below and must be embedded into the CCP. Nature-based solutions, including natural colonisation and continuous cover forestry for example, allow for a long-term strategy of climate resilience and should therefore be looked on as the first-choice option.

Trees:
There is an urgent need to look at policy across forestry, deer management and farming to secure better value from the public funding going into these areas, which currently has little cohesion. A holistic approach to herbivore management by enabling woodland expansion via natural colonisation at scale would be a more ecologically effective and more cost-effective contribution to meeting climate goals than conventional tree planting behind deer and stock fences. For instance, LINK supports a proposal for a National Deer Management Plan bringing the average national deer density to a figure of 5/km2, which would enable a model-estimated

320,000 hectares of new native woodland over ten years, far above the current planting target, at a cost of £15-20M per year, which significantly less than half of the current Forest Grant Scheme budget. Reducing deer numbers could help greatly with natural regeneration as a sustainable means of expanding woodland cover.

Proposals should focus on tree cover expansion rather than tree planting: 50% of these targets should be native woodland creation for nature's recovery and long-term carbon storage, and half of that (i.e. a quarter of all total tree cover expansion) should be achieved through natural colonisation (i.e. adjacent to existing native woodland seed sources, especially Ancient Woodlands, which includes core areas of Caledonian pinewoods and temperate rainforests). This is a nature-based solutions approach that will deliver a nature positive, net zero future. By minimising soil losses at establishment, it will contribute to achieving net zero by 2045 on mineral soils, whereas planting methods that disturb soil on organo-mineral and organic soils (peats), particularly those running downhill and not contour, are running out of time (<20 years now) to return to a net carbon balance through carbon gains in growing tree biomass, never mind actually deliver carbon sequestration benefits.

Natural colonisation: If managed correctly this ecosystem restoration approach can lead to more natural woodland development which benefits early successional species in the short-term and specialist woodland species in the longer-term. This is a more resilient approach as trees succeed where they are best suited, rather than sites being selected by planters, and is best suited in areas where seed source is plentiful and varied and grazing pressures are managed at 2 deer per km2 or thereabouts. Natural colonisation does require effective deer management and other measures for a longer-period of time, for example supplementary planting with low occurring or absent but expected tree species may be required. We acknowledge the role of planting the right tree in the right place where there is no remaining seed source. After centuries of heavy grazing, too many areas (in particular in the uplands) simply can't be recolonised naturally.

Numbers provided: It is difficult to comment on the proposals in detail because the numbers do not appear to add up. Annex 2 states that '*Scotland's total forest and woodland cover is estimated to be approximately 1,518,470 hectares*' and that '*Scotland is the most wooded of the UK countries with 19% woodland cover.*' We agree with these figures, but using them as the basis for calculations, means that to achieve a 1% uplift in woodland cover requires the planting (and/or natural colonisation) of (1,518,470 / 19 =) 79,919 hectares. The lead policy driver for tree planting is:
'1. Increase in the annual woodland creation target every year till the end of the decade, hitting 18,000 hectares per year in 2029/30, and with an aim of achieving 21% woodland cover in Scotland by 2032.'
Increasing woodland cover by 3% from the current 19% to 21% in 2032 would require (79,919 x 3 =) 239,757 hectares, but even if 18,000 hectares were established in every year from 2026 to 2032 inclusive (rather than increasing by 2,000 hectares per year until 18,000 hectares per year is achieved in 2030 and thereafter), this would only create (18,000 x 7 =) 126,000 hectares. This is a shortfall of (239,757 – 126,000=) 113,757 hectares, representing an uplift of only 1.58%.
Annex 2 provides another target '*The new Climate Change Plan will build on this through annual woodland creation targets that rise steadily to 18,000 hectares and which would increase woodland cover to 24% by 2040.*'
And we are similarly unable to follow the calculations to achieve this.
Consequently, we would urge the Scottish Government to clarify exactly how the numbers are reached, or revise them, in which case any carbon budgets based on them should also be revised.

We have a number of other concerns, but for brevity are just presenting these as bullet point questions. We would welcome the opportunity to discuss the above calculations and these further questions in a meeting with you:

1. Why has the previous 18,000 hectares target, which was supposed to have been reached by 2024/25, been set back to 2029/30 in this draft? This requires investment but as a priority then that investment must be made.
2. How has the increasing risk of climate change impacts on native woodland and commercial forest plantation growth, such as flood, drought, wildfire and associated increases in pest and disease outbreaks been factored into the calculations?
3. How are measures to increase the resilience of forests, such as greater diversity of species, structure and silviculture factored in? These lead to short term reductions in carbon sequestration but hopefully greater long-term carbon storage and more certainty that native woodland habitat and domestic timber supply will be produced. There are also valuable benefits at community level in opportunities for starting smaller forestry-related businesses requiring achievable initial investments to grow and process lower volumes and higher value timber products.
4. How has the Climate Change Committee 7th Carbon Budget advice *'Trees are only planted on mineral soils, with organo-mineral and organic soils excluded to protect biodiverse habitats and minimise soil carbon loss from planting disturbance'* been used in this draft Climate Change Plan?

Trees on farms:

Sheep and cattle can play a role in biodiversity through their grazing patterns and dung deposits for insects. Low stocking on hills in particular, in conjunction with low deer numbers, can result in the regeneration of pioneer species and open woodland without destroying the swards, resulting in an even higher benefit for biodiversity than planted schemes where stock are excluded.

The activity of whole farm purchase and planting needs to be looked at as this has huge implications for local communities and landscape diversity, particularly. Whole farm or whole moorland planting can lead to a loss in biodiversity and landscape value with an impact on local communities, public transport provision and schools.

Livestock and woodland: Low density planting with sheep grazing permitted is a winner as a habitat and for a farm business. The current sheep and tree scheme has too much focus on the tree element and spacing is too close and should move to a full silvo pastural system. When trees are tall enough cattle can also benefit woodlands. This is where an integrated scheme of woodland, agriculture and biodiversity would be ideal.

Peatlands and grasslands:

A greater emphasis on a site habitat assessment as part of public funding application process would help mitigate precious open habitats being lost to tree planting. These include unimproved species diverse swards which once planted with conifers in particular, lose that plant diversity and the associated insect and bird species once the canopy closes. A loss of soil carbon where ploughing or mounding for ground preparation occurs should also be taken into account. The loss of good acid grassland to forestry is rapidly increasing at present.

The Peatland Action Scheme is vital in helping meet Climate Change Plan targets and must be continued.

There should be an explicit mention for the value of grassland habitats (carbon storage, alleviating flood and fire risks etc.) and a commitment to restoring them as part of the plan. A narrow focus on trees at the potential expense of other important and diverse habitats is concerning. A strategic focus of right habitat, right place is required. For more information: https://www.bumblebeeconservation.org/what-we-do/our-position-statements/tree-planting-and-woodland-creation-position-statement/

Build resilience of freshwater environments to climate change

Restoring our freshwater habitats, in particular, can make an important contribution to building resilience to flooding and mitigating for increasing water temperatures. Interim targets for 2030 to invest in blue-green infrastructure to reduce sewage spills and improve resilience/protection against flooding would be helpful. Networks of water and green areas can reduce pressure on sewers by absorbing rainfall. More information here: https://www.interregeurope.eu/sites/default/files/2024-09/Policy%20brief%20on%20Green%20and%20blue%20infrastructure.pdf

Giving more space for rivers and coasts to move and adjust naturally will regenerate habitat, improve wildlife, and help us adapt to climate change. Measures such as avoiding development on floodplains (including where mitigation is proposed), arable reversion and implementing measures such as crop rotations will support our adaptation to the effects of climate change, helping to restore the functionality of some floodplains. High proportions of rivers are disconnected from their floodplain by embankments and flow control structures, limiting the scope of those floodplains to hold water during high flows and contributing to downstream flooding issues. The restoration and recreation of wetlands, such as reedbeds, ponds, wet meadows and wet woodlands, will make a significant contribution to securing biodiversity (such as amphibians and a wide range of aquatic invertebrates), healthy functional ecosystems and the provision of ecosystem services, as well as being crucial to the protection and enhancement of rivers, lakes and other freshwater habitats. Beavers can provide important ecosystem services for both flooding resilience and biodiversity improvements. Other measures such as natural regeneration and targeting tree planting to riparian areas will help to shade watercourses and prevent water temperatures rising. The Riverwoods initiative has highlighted the transformative potential of native woodland restoration along riparian corridors. Beyond providing shade that moderates water temperatures, these woodlands create intricate root systems that stabilise banks, filter agricultural runoff, and slowly release groundwater during dry periods. The fallen woody material they contribute to waterways creates flow diversity and habitat complexity that helps aquatic communities withstand climate extremes.

After the 2025 drought in Scotland affecting not only agriculture and wildlife but drinking water supplies, slowing down the water in our catchments is now highlighted as an urgent issue that can be helped with the reconnection of the rivers and floodplain. Water storage areas are urgently needed for agriculture to lessen the pressure on waterway extraction from rivers already low and of course beavers create wetlands and dams with great efficiency and low cost. If riparian woodland returned to our uplands, beavers would also return to suitable areas. Beavers build small dams which slow the water down through the upper catchment and provide deep pools which allow fish cooler areas to shelter from high temperatures. Instead of having a landscape designed to get rid of the water as fast as possible, we need a landscape which slows and stores the water down coupled with temporary floodplain storage areas for times of heavy rain and storms.

In addition, in order for riparian zones to be allowed to function naturally, the current subsidy system wording needs to be amended to remove the obligation on farmers to keep the riparian zones in good "agricultural" condition by removing the natural successional vegetation which are considered "injurious weeds" (GAEC) - a current barrier to environmentally friendly farmers. The removal of this barrier would allow these farmers to regenerate their riparian zones without losing support and is a relatively simple change to the current support system that could have wide positive benefits. By widening the riparian zones this will also help with agricultural run-off and erosion of the finite topsoil (which is a serious long term issue). Removal of the word "agricultural" would leave the sentence to say "...in good environmental condition."

Connectivity is a key attribute required for healthy, functioning ecosystems. The prioritisation of projects or proposals mapped through Nature Networks could be used to enhance connectivity, both directly (e.g. fish

passage projects which improve physical connectivity, and enhancements to lateral connectivity by reconnecting rivers with their floodplains) as well as by considering the quality of connected habitats. For example, a river restoration project may be more valuable if it links upstream and downstream areas which have already been restored, as it increases the area of connected high quality habitat. Mapping of priority wetland habitats would also identify existing areas of good-quality habitat as well as opportunities for restoration, and allow the identification of areas where habitat restoration or re-creation will be valuable to support biodiversity delivery as well as creating functional floodplains / coastal habitats that can play a role in flood and coastal erosion risk management.

What action is required?

- Restoration of riparian habitats: Restoring, enhancing and protecting riparian habitats, the land adjacent to a freshwater body, is a valuable line of defence against flooding. These habitats play a key role in mitigating the effects of flooding through dissipating the speed and volume of flood water, reducing impacts downstream. Riparian areas can absorb and store water during high flows and slowly release it, reducing the likelihood of surrounding land becoming overwhelmed with flood water.
- A catchment-based approach: Natural flood management (NFM) techniques play a crucial role in mitigating flood risks. This involves planting trees and restoring wetlands to slow water flow, creating flood plains to allow rivers to expand safely, and restoring meandering river courses. These measures work with nature to reduce the speed and volume of floodwater. These techniques work best when they are employed on a catchment wide basis so that the flow of water is managed from source to sea.
- Promoting sustainable farming practices: This can play a significant role in flood management. Encouraging soil management techniques that reduce runoff and promoting crop rotation and cover crops to improve soil structure can help mitigate flooding at its source. By combining these various approaches, Scotland can work towards reducing the impact of river flooding and creating more resilient riverside communities.
- Enhance funding and financial incentives: Establish dedicated, long-term funding streams for NFM projects. This could include creating a specific NFM grant programme or integrating NFM more prominently into existing flood management budgets. Additionally, develop financial incentives for landowners and farmers to implement NFM measures, such as payments for ecosystem services or for land used in NFM schemes.
- Improve the evidence base and monitoring: Invest in long-term monitoring programmes to build a robust evidence base for NFM effectiveness, focussed on existing and new demonstration sites. Use this data to develop more accurate models for predicting NFM outcomes, helping to reduce uncertainty and build confidence in these approaches.
- Integrate NFM with other environmental objectives: Align NFM initiatives with other environmental goals such as biodiversity enhancement, water quality improvement, and carbon sequestration. This could help attract additional funding and support from various sectors.

Further information: Building nature-based resilience to flooding

Restore natural processes to rivers and lochs

Scotland's industrial heritage has left over 2,200 barriers in rivers that block natural flow and fish migration. Few Scottish rivers remain free-flowing, where water and sediments move unimpeded, fish migrate freely, and rivers naturally adjust on their floodplains. Despite plans to address 262 barriers by 2027, complete restoration would take over 50 years at current rates.

Rivers need space to move naturally, helping regenerate habitats and adapt to climate change. While fish passes allow migratory movement, only complete barrier removal restores natural flow processes and sediment movement. Rivers have been disconnected from floodplains by embankments and flow control structures, limiting their ability to hold water during high flows and provide habitat for reptiles, amphibians, invertebrates, and wetland plants.

The underground water flow amongst stones and gravels below rivers forms crucial habitat for invertebrates and influences river chemistry. These invertebrate populations support fish, and are vital to Scotland's food, drink, and tourism sectors. Climate resilience depends on this underground flow, which can be damaged by abstraction, development, and sedimentation.

Scotland's lochs have been extensively modified through water level manipulation, shoreline hardening, and nutrient enrichment. These interventions have caused biodiversity loss and habitat deterioration. Restoration requires recognising that lochs evolved within specific hydrological regimes, where natural water level fluctuations create essential habitat diversity.

Pumped storage hydropower in the Scottish Highlands presents additional concerns. While providing grid storage and balancing capabilities, these projects can damage ecologically sensitive landscapes. Beyond immediate habitat destruction, the rapid and frequent water level fluctuations required for scheme operation significantly alter watershed hydrology and loch shoreline dynamics. These changes can profoundly disrupt aquatic food webs and damage sensitive spawning grounds crucial for migratory fish species, particularly Atlantic salmon.

What action is required?

Government policy and strategies must support:

- Projects that will restore freshwater habitats as critical nature-based solutions to climate change.
- Existing work to identify and remove unnecessary/defunct structures in our rivers, and enforcement to deal with unconsented works.
- Knowledge-sharing about techniques that work with natural processes with key stakeholders, particularly Local Authorities, and those involved in Flood Risk Management.
- Aligning nature-based solutions to flood management with the Scottish Planning Policy, particularly National Planning Framework 4 (NPF4).
- Comprehensive assessments of the impact of new structures upon freshwater, beyond just considering the impacts on migratory fish.
- The restoration and recreation of wetlands, such as reedbeds, ponds, wet meadows and wet woodlands to make a significant contribution to securing biodiversity.
- Measures avoiding development on floodplains, arable reversion and implementing measures such as crop rotations to adapt to the effects of climate change.
- Habitat restoration and creation, planned and prioritised through a spatially mapped national Nature Network informed by local knowledge to enhance ecosystem connectivity.
- Establishing a range of funding sources for habitat restoration.
- Including a target on free-flowing rivers in the monitoring framework for the River Basin Management Plan. For example, the EU's Biodiversity Strategy for 2030 includes a target to restore at least 25,000km of free-flowing rivers.

- Bespoke schemes within tier 3 of the reformed agricultural support package to encourage cooperative "at scale" applications with a focus on riparian health. These schemes also need to be sufficiently resourced.
- Full and proper implementation of the Scottish Beaver strategy

Q15: *How can the Scottish Government support farming to become more climate-friendly while continuing to support food production and improve biodiversity?*

We welcome the recognition in the draft CCP that there is "abundant evidence" that the twin crises of climate change and biodiversity loss are "linked and mutually reinforcing" and that they must be tackled together. However, the biggest issue with the draft CCP chapter on agriculture is the reliance on progress through the Agricultural Reform Programme (ARP).

We are concerned about the pace and scale of change of current policy development. So far, in the seven years since the UK officially left the EU, we have seen only minor tweaks to legacy CAP schemes, and it is difficult to see how emissions reductions will be delivered unless the forthcoming Rural Support Plan signals a significant change in direction for future policies and schemes.

The current budget for agricultural support is around £600m annually. We think the scale of need to deliver on food production, climate and nature objectives is much higher than that. However, if that budget is not going to substantially increase, then the existing funding will have to work much harder.

In our view, that will require a phased shift in the current budgetary allocation, so that money is moved out of Tier 1 and into Tiers 2-4 of the new support framework, so that more of the funding is directly linked to activities that deliver for climate and nature. We were very supportive of the government's 'List of measures' published in February 2023 for consideration for Tier 2 and we think this should be the first step in better linking farm payments to activity that evidence shows can deliver emissions reduction and benefits to nature. Some farmers are already doing these types of activities, such as rotational grazing, integrating trees or using legumes in grass mixes, but they are not being specifically rewarded through direct payments for doing so. This shift in terms of farm payments will need to be underpinned by a scaling up of farm advisory services and knowledge exchange (Tier 4) to share best practice and enable the cultural change or 'mindset shift' required. If this does not happen, then it is hard to see how Scottish Government will make sufficient progress on its climate and nature targets. The 13% reduction in emissions (8.6MtCO2e to 7.5MtCO2e) from 1990-2023 was mostly due to long-term decline in livestock numbers (cattle and sheep numbers have decreased by 20% and 33%, respectively, during that period).

The draft CCP pathway has agricultural emissions reducing to 5.8 MtCO2e by 2040 – a 23% cut in a 17-year period – so there is a need to go further and faster than has happened to date.

The SPICe briefing on the draft plan points out that Since the Climate Change Plan Update (CCPu) in 2020, headline emissions from agriculture have not changed significantly. The CCPu projected that agricultural emissions would be 7.0 $MtCO_2e$ in 2020 and that agricultural emissions would fall to 6.3 $MtCO_2e$ by 2023. The actual figure in 2020, published in the 2022 emissions inventory, was 7.4 $MtCO_2e$, and emissions in 2023 (our most recent figures) are estimated to be 7.5 $MtCO_2e$, 1.2 $MtCO_2e$ higher than the CCPu anticipated.
SPICe notes that the Scottish Government has not provided a breakdown of estimated emissions reductions for any of the policies or proposals in the agriculture chapter; however they estimate that the combined emissions

impact of CCP policies and proposals in the next carbon budget (2026-30) will be 0.1 $MtCO_2e$ with larger impacts expected in later budgets (1.3 $MtCO_2e$ in 2031-35 and 3.5 $MtCO_2e$ in 2036-41).

We are concerned that those larger impacts in the later carbon budgets are, at present, overly reliant on technological fixes which risk driving further intensification of agriculture. For example, in order to ensure the consumption of feed additives or to capture emissions from 'green sheds', cattle and sheep have to be housed. This is problematic as much of Scottish livestock production is from extensive, outdoor grazing systems. Intensification in this area would in our view risk the delivery of other objectives in the Agriculture and Rural Communities (Scotland) Act specifically around on-farm nature restoration and animal health and welfare.
In addition, some of the projections of uptake, for example around tractors powered by alternative fuels, appear optimistic. We are concerned that while these technologies might be available within the timeframe suggested, they will remain unaffordable for many farm businesses. It is also unclear that the development of the supporting infrastructure that will be required for electric vehicles or vehicles powered by methane or hydrogen will happen on farm at the scale and within the timeframe required.

There are several reports that have been published since the Scottish Government declared a climate emergency in 2019 that outline clearly how the agricultural sector can meet its emissions targets - in particular the Farming for 1.5C inquiry report and the WWF Scotland 'Delivering on Net Zero' report from 2020. The WWF report highlighted the emissions reduction potential of: reductions in nitrogen fertiliser use; encouraging the use of legumes in grassland, rotational grazing of livestock, improved animal health and breeding, the use of feed additives and greater uptake of organic farming and agroforestry.

Specifically on organic farming, the Scottish Government has an existing commitment to double the area of land under organic management. Conversion to organic farming can lead to reduced nitrous oxide emissions (from the elimination of synthetic fertilisers) and reduced methane emissions (due to lower livestock densities). We would like to see an assessment carried out by Scottish Government, and included in the CCP, of the emissions reduction potential of a future 10% land share for organic (e.g. by 2030), as well as a 25% land share (by 2045) to reflect the ambition at a European level.

Elsewhere, the achievement of the targets in the CCP rely on achieving 45% uptake among farmers and crofters across a number of specific measures. Emissions reductions in this sector rely heavily on the actions taken by a large number of mostly small businesses. Focused action is needed to increase the uptake of relevant measures, and two factors are particularly relevant here. First, engaging with the supply chain - as an example, the uptake of sexed semen has now risen to around 80% in less than a decade as a result of supply chain requirements. Other measures - such as improved beef and sheep genetics - could be accelerated through supply chain requirements.

Second, upscaling the provision of 1:1 advice through an expanded Tier 4 budget. Building on the work to date to require audits and tests as part of the whole farm plan, each farmer and crofter could be offered free assistance to develop and implement their own greenhouse gas reduction plan. This process would also yield valuable aggregate data, and help in designing new schemes for grants and loans where the costs of implementing change are greater than the financial benefits to the farm.

The CCP should be more proactive in accelerating microbiome-driven breeding as a national strategy to reduce ruminant methane emissions while improving health and productivity.

The CCP should also include a commitment to end headage subsidies and (with the UK Government) to phase out red diesel subsidies, both of which have the effect of encouraging greenhouse gas emissions. The savings should be recycled into support for sustainable food production.

There are, in addition, a whole host of activities that farmers could deliver for future resilience and biodiversity. LINK members are including these in their own submissions - see FWAG Scotland for example. This includes future proofing publicly supported activities by, for example, ensuring that public support should require nature networks, including terrestrial corridors for example, to be retained and not removed.

Section 3: Impact Assessments

Q16- 21: Outwith LINK group current work priorities

Section 4: Strategic Environmental Assessment (SEA)

Q22 – Q25: Outwith LINK group current work priorities

Section 5: Monitoring emissions reductions

Q26 – Q28: Outwith LINK group current work priorities

Section 6: Monitoring Just Transition

Q29 – Q30: Outwith LINK group current work priorities

Q31: *What indicator would provide the best measure of the impact of net zero development in local communities across Scotland? For example, the impact of the installation of renewable energy infrastructure or other land use changes (e.g. through peatland restoration or tree planting).*

Net zero and nature positive development must be embedded in ecologically resilient environments. One key element of this is the extent to which nature networks are able to function. Measuring the extent and functioning of Nature Networks is currently at a fairly early stage and indicators will become more sophisticated. But at present, there are two indicators that may be helpful: Nature Restoration Fund support for projects delivering Nature Networks interactive map and evaluation report and use of the Naturescot interactive habitat network tool: https://www.nature.scot/doc/naturescot-interactive-habitat-network-user-tool .

Q32: Outwith LINK group current work priorities

Q33: *What specific data or indicators could we use to meaningfully monitor the impact of the transition to net zero on the environment and biodiversity across Scotland on an annual basis?*

NatureScot farm biodiversity Scotland initiative (Whole Farm Plan) and wider biodiversity monitoring platform is helpful. Other NatureScot work that is key for Scotland includes: https://www.nature.scot/professional-advice/social-and-economic-benefits-nature/natural-capital/farming-nature/farm-biodiversity-project

https://www.informed.com/news/naturescot-deploys-biodiversity-monitoring-platform/

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