Consultation Response
Draft Infrastructure Investment Plan – 2021-22 to 2025-26
November 2020

Scottish Environment LINK

Introduction

Scottish Environment LINK is the forum for Scotland's voluntary environment community, with 40 member bodies representing a broad spectrum of environmental interests with the common goal of contributing to a more environmentally sustainable society. This consultation response has been prepared by members of LINK's Planning and Economics Groups.

General comments

Scottish Environment LINK welcomes the framing of the Infrastructure Investment Plan around a vision which refers to inclusion, net-zero and sustainability. It further welcomes the inclusion of natural infrastructure in the definition of infrastructure. However it thinks that it is a mistake to prioritise growth as an objective in itself in its draft vision. Further it believes that the detail of the draft plan falls short of charting a path in the direction of the vision and in implementing the recommendations of the Infrastructure Commission Scotland.

In finalising the plan and developing it in the coming years, we hope that the Scottish Government will address the points made below.

All of the investment plan should contribute to decarbonisation and protecting the natural environment, not just one of its three separate strands

The draft IIP splits the programme into three core strategic themes which appear to be consistent with the vision. However it seems that in fact they are three separate strands which will be constructed using different criteria. It appears that the investments under 'Driving inclusive economic growth' and 'Building resilient and sustainable places' do not have to help to deliver decarbonisation or sustainability, only 'Enabling the transition to net zero emissions and environmental sustainability' will do that. Without clear stipulations, they will likely result in substantial carbon emissions and so counteract any of the reductions measures supported by the first strand. The final version of the IIP should contain a unified vision, and ensure that any strands underneath this vision do not contradict each other.

Assessment of the carbon emissions from the proposed investments are misleading

From the sections on each of the themes at the end of the plan, it is clear that in fact most of the investment in this programme will not contribute to the transition to net zero and environmental sustainability. Strands two and three do not have the transition to zero carbon as an objective and there are serious problems with the assumption that all projects in strand one will. Reading the associated Capital Spending Review further shows that the categorisation of whole investment programmes into low carbon, neutral or high carbon is deeply unreliable. Much better methods need to be put in place before the next year's capital programme is put in place.

The scale of investment in tackling the climate change and biodiversity crises needs to be increased

The foreword by the Cabinet Secretary, stating that the Scottish Government accepts these recommendations, and references in the introduction to the role which infrastructure investment has in the transition to a net zero emissions economy and to delivering a wellbeing economy ("ensuring

society thrives economically, socially and environmentally"), is encouraging. However, the substance of the document fails to propose anywhere near the change in infrastructure policy needed to tackle the climate crisis and meet the Infrastructure Commission's recommendations.

Under Enabling the Transition to Net Zero Emissions and Environmental Sustainability there are some welcome investment proposals but the current £1.8 billion a year augmented by £2 billion over five years is not sufficient to achieve net zero emissions by 2045. The development of the Infrastructure Investment Programme and the Capital Programme should be rooted in an overall assessment of the investments needed to meet emissions reductions targets through a just transition. This should identify investment gaps which will have to be filled by the private sector or increased public spending (whether in the government's capital investments or other agencies and local authorities.)

Answers to questions in the consultation

1. **Natural Infrastructure**

   a. **Do you support the inclusion of natural infrastructure in our definition of infrastructure?**

   Answer: Yes. Investing in the protection and restoration of our natural environment is fundamental to achieving positive outcomes for society and our economy. Including natural infrastructure in the Scottish Government's definition of infrastructure will enable natural infrastructure investments to be assessed for a share of the capital programme alongside other categories. Scottish Environment LINK members support the inclusion of natural infrastructure in the definition.

   However we urge caution about viewing the importance of nature only in terms of 'ecosystems services' because the value of nature cannot be fully encompassed in such economic terms. In particular we would be concerned if financial quantifications of the 'value' of nature start to be used in infrastructure investment assessments, in the place of actual measures of environmental health or impact**.**

   b. **Do you agree with the wording proposed for the revised definition?**

   Answer: The wording in the definition is generally sufficient, although could be bettered. Furthermore, there remain two outstanding issues that require resolution:

   1) The justification for including natural infrastructure requires a much fuller explanation to reflect the critically important role it can, and must, play in tackling the climate and biodiversity crises. For instance, restoration of Scotland's vast peatlands is recognised as a key component in helping the country achieve net-zero by 2045, as is expanding our natural woodlands to increase carbon sequestration. To not increase investment and accelerate efforts to restore these habitats now, will undermine our ability to reach these targets. Whilst some reference is given in the document to the carbon sequestration role and other multiple and fundamental benefits provided by our natural infrastructure, these are not provided the same degree of importance as other built infrastructure.

This lack of prioritisation or valuing of natural infrastructure is subsequently reflected in the definition, which LINK suggests is amended to include more reference to the crucial role of natural infrastructure (amendments in **bold**):

"The physical and technical facilities, natural and other fundamental systems necessary for the economy to function; ***to enable healthy ecosystem services****; and to enable, sustain or enhance societal living conditions. These include the networks, connections and storage relating to the enabling infrastructure of transport, energy, water, telecoms, digital and internet, to permit the ready movement of people, goods and services."*

The lack of prioritisation is also reflected in the scope and content of proposed spending on certain types of schemes, primarily woodland planting and peatland restoration, which are a re-statement of existing government commitments. Whilst there is allocation for flood risk and coastal change adaptation, there are no substantial new budgets specifically allocated for other natural infrastructure or, indeed, an increase to existing woodland and peatland schemes over the 5-year term. Futhermore, there is also no consideration given to the role of coastal and nearshore habitats, such as kelp forests, seagrass beds and saltmarshes, for both carbon sequestration and, crucially, coastal protection. The wrong type of "investment in flood risk mitigation and schemes to help us adapt to coastal change", that for example focused instead on hard infrastructure rather than habitat restoration, could lead to the net loss of carbon storing and coastal protecting habitat and create a "lose-lose" outcome. Investment in flood risk and coastal change adaptation should therefore focus on "soft" solutions, such as saltmarsh, seagrass bed and native oyster reef restoration, reed-beds and other natural soakaways and managed retreat and realignment.

Allocating additional funds to natural infrastructure is important and considered wholly justifiable in the context of a government that has declared a climate emergency and which considers that action on climate and biodiversity are two sides of the same coin.

2) What constitutes natural infrastructure and therefore what can be funded by the investment plan is a key outstanding issue. Given the expected inclusion of the term in Scottish Government's definition, clarity is sought on what types of projects or programmes could be supported by the investment outlined in the Plan. Expanding on and outlining the multiple and fundamental benefits of healthy and robust natural infrastructure to society and the economy will help determine the scope of projects or schemes that could be funded within existing financial parameters. As an example, the Scottish Nature Network is considered by LINK members to be an ideal candidate as a natural infrastructure project eligible for investment given the long-term environmental, societal and economic benefits that it could help realise. Another example that could be considered a natural infrastructure project is the Dornoch

Environmental Enhancement Project (DEEP), and unlocking the native oyster spat supply chain, which in time could support restoration of carbon-storing, water quality improving and coastal protecting native oyster reef, not just in the Dornoch Firth, but throughout Scotland.

Included in these considerations is the extent to which spending on natural infrastructure fits within the 'maintenance' of existing natural habitats versus the 'create or build' category. Much peatland work is restoration of existing natural infrastructure or habitats and this spend could be considered maintenance. Whereas, creation of new woodland, new natural flood management schemes or natural coastal realignment schemes could be classed as new infrastructure. For natural infrastructure the balance of spend may, by necessity, be weighted toward maintenance as opposed to new infrastructure. Such contrasts with more traditional 'grey' infrastructure spend need to be accommodated to ensure that sufficient spend is being allocated to the maintenance of our existing natural infrastructure versus new schemes. Related to this issue, we seek clarity on the European Union's 'long-lived assets rules' and to what extent they can or cannot fund activities related to delivering nature based solutions, in addition to any other potential constraints on funding natural infrastructure.

In addition, there is reference to the decision-making approach supporting efforts to protect the environment. This is welcome however it must also be recognised that there is also a need to restore our natural environment (and natural infrastructure) in order to meet our biodiversity targets and obligations and the decision-making approach must reflect this.

c. If you do not agree, please provide your suggested changes and additional material to support your answers [200 word limit]:

Answer: See above.

2. Common Investment Hierarchy

a. Do you agree that the steps proposed in the common investment hierarchy are the right ones?

Answer: Whilst we support the intended approach of the investment hierarchy, as drafted it is a framework tool developed for considering built infrastructure. The hierarchy needs amending in order to accommodate the delivery of natural infrastructure and the inherent differences in approach that should be taken in determining investment needs for natural compared to built infrastructure.

Furthermore, while these are useful as general principles, in practice, the determination of future need to which they are applied must have at its core the need to meet greenhouse gas emissions targets. A plan to do this will require the

replacement of existing high-carbon-use infrastructure with low, zero or negative carbon infrastructure. To the extent that past and present investment decisions have locked in fossil fuel dependence, some of these will have to be decommissioned earlier than would be decided on regular financial or resource-use assessments. The purpose of maximising use of existing assets might be used to avoid taking such necessary decisions. Therefore the application of this hierarchy has to be conditional on the overriding purpose of decarbonising our economy in time to meet our targets being applied to the Infrastructure Investment Plan.

Natural infrastructure is so fundamental to addressing the twin crises of climate change and biodiversity loss that sufficient weight, or arguably even priority, should be applied to such projects over traditional 'grey' infrastructure to accelerate the delivery of much needed nature-based solutions. Spend on natural infrastructure has a multiplier effect in terms of the benefits and outcomes it can deliver, which need to be accounted for. For example, spend on natural infrastructure can encourage reductions in emissions, increase biodiversity through creating nature networks, create community greenspace and enhance resilience to climate change through schemes such as those that protect the coast and reduce flood risk. These benefits are not yet accounted for and an example of this is the reference to Annex B, which considers the economic and distribution benefits of maintenance and enhancement programmes of built infrastructure only.

b. If you think any adjustments are needed to the proposed investment hierarchy, please provide suggested changes (and evidence, where appropriate) to support your answers.

Answer: proposed changes suggested in **bold.**

Determine Future Need:

Consider appropriate infrastructure provision ***(including the adaptation of existing infrastructure)*** *in light of changes in* ***land use and available natural resources/ assets,*** *service design, availability of digital platforms and technological innovation, and resilience in light of population, biodiversity and climate change forecasts.*

There should be more prioritisation throughout the plan, specifically in Tier 1, on reducing demand for types of infrastructure that contribute to climate change. The development of the Infrastructure Investment Programme and the Capital Programme should be rooted in an overall assessment of the investments needed to meet emissions reductions targets through a just transition – a Just Transition Plan.

Addressing the pressure of existing high carbon infrastructure assets is also required to limit the negative legacy of these proposals into the future. Such an approach will deliver public benefits such as reducing harmful emissions and demands on our ecosystems. Carbon and biodiversity assessments could assist with determining climate and nature positive projects.

For example, encouraging reduced car usage through investment in public transport and active transport networks would deliver a range of environmental, social and health benefits including: reduced emissions; opportunities for active travel; reduced ecosystems pressure; and community cohesion. Plans to reduce demand should be aligned with planning policies, such as NPF4, as this will ensure demand reduction is worked into planning e.g. by ensuring residential, business and recreation provision could be reached by sustainable transport.

Maximise use of existing assets:

*Title - Maximise the use, **protection and restoration** of existing **grey and natural** assets.*

*Maximise use, **protection, restoration** and the safe operation of existing **grey and natural** assets to meet future need*

Maximising the use of existing natural assets should mean, for example, steps to link and enhance existing ancient woodland habitats or landscape-scale restoration projects such as the Flow Country or Cairngorms Connect or steps to invest in natural assets that help store blue carbon and/or protect the coast such as seagrass beds, saltmarsh, kelp forests and native oyster reefs.

Repurpose & Co-locate:

*Reconfigure**, ~~or~~** repurpose **or restore** existing assets, giving preference to co-location or shared facilities where appropriate.*

There's a clear need to re-purpose built assets to reduce demand for land take. Similarly, this includes a need to explore how to restore or repurpose derelict land to meet demands of urban environments, such as green-space provision/ nature networks, which should be emphasised in this tier.

Replace or New Build

Title - *Replace or* ***Create and~~New~~ Build***

Consider suitability and sustainability of new build ***and new natural*** *assets to meet future need.*

Emphasis is needed on using recycled materials/ circular economy elements of delivering replacement or new builds. Furthermore, it may be more efficient and productive to invest in building new natural assets over maintaining/repurposing/maximising existing grey assets. For example, building natural assets to combat flood risk instead of enlarging overflow sewer systems could potentially be more effective and more economical as it would have a longer lifespan. It would also deliver other benefits including community greenspace; mental and physical health benefits; and increased biodiversity and wildlife.

3. Assessing Impact

a. Do you agree that a dashboard of indicators is the best approach to enable informed decisions to be taken about the long-term trade-offs and choices in our infrastructure investments?

Answer: No. We are concerned that a dashboard of indicators has no hierarchy and allows projects to 'score well' that satisfy some, but not all the indicators. LINK feels that there are some criteria which are essential and others that are desirable and this needs to be reflected in the framework used to inform decisions. For example, the achievement of net-zero and addressing the biodiversity crisis must be core to all investment decisions and thus projects must demonstrate a contribution to both. The framework should reflect these priorities and apply measurable criteria to inform decision-making, including a specific carbon budget that infrastructure investment must deliver.

Furthermore, as currently drafted the indicative dashboard risks undercounting the value or importance of natural infrastructure. The extent to which natural infrastructure can contribute toward the achievement of all 15 indicators will likely differ widely between projects or programmes given the variety of schemes that could be described as natural infrastructure. This issue relates to the need to more fully describe what constitutes natural infrastructure and what can be invested in (within existing fiscal rules).

b. What outcomes (and/or indicators) do you think should be included in developing a common assessment framework for prioritising infrastructure investment?

LINK proposes 5 tests[1] to ensure that all projects are in line with overarching aims of net-zero, a wellbeing economy and restoration of biodiversity. Against each of the 5 tests, we propose a number of indicators.

5 tests:

1. Every individual infrastructure project must be based on sound evidence, must not increase carbon emissions, must not damage nature and must not harm social wellbeing.

Infrastructure projects, when taken together as a programme, must ensure four additional tests are met, while each individual infrastructure project must contribute to at least one of:

2. Reducing pollution;

3. Improving adaptation to climate change and reach net zero by 2045;

4. Securing sustainable consumption of natural resources;

5. Improving biodiversity and ecosystem services.

The contributions must be quantifiable and reportable.

Main indicators, grouped under each of the 5 tests:

Carbon emissions (test 1):

- Carbon footprint of infrastructure lifecycle plus impact its use has on emissions from other sources.
- Contribution to net-zero target.

Damage to nature (test 1):

- Condition and trends of natural habitats and species, on land, coast and at sea.
- Extent of loss or gain of natural assets per annum from infrastructure projects.

Social wellbeing (test 1):

- The impact of infrastructure investment on reducing inequality by making built, cultural and natural heritage more accessible, visited and used by everyone in Scotland.

[1] https://www.scotlink.org/publication/5-key-tests-for-a-green-recovery/

- Links to National Performance Indicators for 'Access to green and blue space', 'Perceptions of local area' and 'State of historic sites'.

Reduce pollution (test 2):

- Indicated by level of air pollution, water pollution and soil pollution.

Improve adaptation to climate change and reach net zero (test 3):

- Carbon footprint of infrastructure lifecycle plus impact its use has on emissions from other sources.
- Significant delivery of one or more of the outcome actions in the Scottish Climate Change Adaptation Plan.

Sustainable consumption of natural resources (test 4):

- Material footprint.
- Residual waste per capita.

Improve biodiversity and ecosystem services (test 5):

- Condition and trends of natural habitats and species.
- Geographic extent of land and sea under management that contributes toward Scottish Nature Network.
- Trends in levels of improvement of biodiversity potential of existing infrastructure assets.

c. Are there existing tools or methodologies you are aware of which you think the Scottish Government could draw on or adopt in developing its framework?

Answer: Cost benefits analysis for nature spend?

The Mersey Forest has developed a green infrastructure valuation toolkit to assess the benefits of proposed green investments and existing green assets. The toolkit provides a means to value natural infrastructure projects in monetary, quantitative and qualitative terms. It applies equal weight to each of these in recognition that other toolkits often require projects to provide robust evidence that they will deliver economic benefits, and as natural infrastructure projects (like nature networks) are often unable to provide this in the same way grey projects (like housing) are, they may be less likely to be approved.

Both Denmark and the Netherlands have developed a national nature network approach, improving connectivity for species and habitats, and supporting the delivery of ecosystem services. We suggest Scottish Government draw on these.

4. Assessing Greenhouse Gas Emissions Impact

a. **Do you support the planned approach to developing a new approach to assessing the contribution made by infrastructure investment to Scotland's emissions targets?**

Answer: A new approach to assessing the emissions of infrastructure investments is undoubtedly required. The existing taxonomies approach used in the Capital Programme and the Strategic Environmental Impact Assessment is clearly inadequate for the purposes of ensuring investment is complementing rather than conflicting with the achievement of our net-zero targets.

The capacity of the baseline-and-interventions approach to assess the change in emissions caused by an investment decision is important but so is the role of gap analysis in identifying the additional investment required to meet the emissions reductions targets. Some combination of these is likely to be required.

Notwithstanding the inadequacy of the existing approach, steps must be taken now to increase and accelerate investment in low-carbon infrastructure whilst also taking the opportunity to remove investment in infrastructure projects that are in the 'high carbon' category, and which if delivered will lead to a locked-in legacy of high emissions activity. This is a fundamental element of the recommendations made by the Infrastructure Commission for Scotland and wholly supported in the recently published inquiry report by the Environment Climate Change Land Reform on a Green Recovery. Without such a review, such new infrastructure could effectively cancel out the promised increase in investment in 'low-carbon' infrastructure over the next parliamentary period. A consideration of possible mechanisms that could be implemented now, as part of the Plan, should be made. For instance, investing in high-carbon projects only after the scheme has been reviewed and prepared measures that could be implemented to further reduce its contribution to greenhouse gas emissions.

5. Strategic Environment Assessment

a. **What are your views on the accuracy and scope of the environmental baseline set out in the Environmental Report? Please give details of additional relevant sources alongside your response.**

This report seriously fails to identify the environmental impacts of the Infrastructure Investment Programme. The methodology of allocating entire budgets or strands of the programme to Low, Neutral or High categories is patently inadequate. It is not capable of showing how much the programme will contribute to the achievement of greenhouse gas emissions targets. In particular it fails to take account of the emissions caused by the infrastructure projects in the programme, let alone the degree to which they will lock in reliance on fossil fuels.

In relation to biodiversity, we consider that the report could make reference to the Global Assessment Report on Biodiversity and Ecosystem Services from the UN's Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services

(IPBES)[2] which highlighted that global nature was declining at "rates unprecedented in human history" and that "transformative changes" were needed. Furthermore, in August 2020, the Edinburgh Declaration[3] set out the aspirations and commitments of the Scottish Government, and others, in delivering for nature over the coming decade. The declaration set out deep concerns about the significant implications that the loss of biodiversity and climate change has on our livelihood and communities. Most recently, in September 2020, the final "stocktaking" report on the world's progress against the Aichi targets was published. This report (Global Biodiversity Outlook 5)[4] shows that we have failed to take enough action to turn the tide of biodiversity loss.

b. What are your views on the predicted environmental effects of the IIP as set out in the Environmental Report?

They are profoundly inaccurate. In essence the report seems to say that each category of infrastructure project may contribute to emission reductions or other environmental objectives in some ways; but may have adverse effects on these objectives in other ways. As a way of assessing whether and how much the programme will contribute to reaching overall targets, it appears to be of little or no use.

Due to the fact that the Capital Spending Review is separate to the Plan, impacts of the projects actually being funded over the next plan period are not adequately captured. The Environmental Report relies heavily on the changes, and positive effects, which will be made to future investment programmes (many of which are welcome) but does not adequately assess the current programme.

The Environmental Report makes reference to 'adverse localised impacts' from new and upgraded infrastructure and the fact that EIA and HRA can be used to mitigate impacts. This does not appear to reflect the fact that impacts such as climate change have far wider consequences. In addition, whilst many projects will also be covered by the SEA of their parent plan (for example the National Transport Review), and will be subject to project-level EIA and HRA, potential effects can still be reported and high-level mitigation identified at this point. Requiring projects to follow the 'mitigation hierarchy', avoiding adverse impacts on biodiversity in the first instance before mitigation and compensation are considered, should be included. The assessment should reflect the fact that low-carbon projects are not necessarily positive for biodiversity and also that forest planting can have negative effects on biodiversity, depending on type and location.

c. What are your views on the proposals for mitigating, enhancing and monitoring the environmental effects set out in the Environmental Report?

[2] https://ipbes.net/global-assessment

[3] https://www.gov.scot/publications/edinburgh-declaration-on-post-2020-biodiversity-framework/

[4] https://www.cbd.int/gbo5

Infrastructure development may negatively affect Scotland's cultural heritage as groundwork can cause irreversible damage to archaeological remains and paleoenvironmental information. The Environmental Report should acknowledge this.

There is currently a lack of skills for appropriately identifying and installing energy efficiency methods in traditional buildings which may inhibit efforts to maintain and adapt existing buildings. To efficiently adapt existing properties, we must invest in an adequate supply of appropriate skills and materials.

This response represents the view of LINK's Planning and Economics Groups. Members may also respond individually in order to raise more detailed issues that are important to their particular organisation.

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