



NatureScot
NàdarAlba

Scotland's Nature Agency
Buidheann Nàdair na h-Alba

Edward Mountain MSP
Convener
Net Zero, Energy and Transport Committee
Room T3.40
The Scottish Parliament
Edinburgh
EH99 1SP

14 June 2023

Dear Mr Mountain,

MEMORANDUM OF UNDERSTANDING REGARDING WOODLAND INVESTMENT AND NATURE RESTORATION IN SCOTLAND

Thank you for your letter dated 30th May 2023. I am happy to respond to the questions from the committee below and will be pleased to share further information on the investment partnership as it evolves.

1. Does NatureScot have a current position on the application of carbon finance to land-use activities in Scotland (for example any agreed principles), and on the use of carbon offsetting, that will inform its engagement in this project?

We support the use of the existing UK based carbon codes¹ and the UK land carbon register. Whilst we accept the need for further guidance on how the carbon market should function in Scotland, and are working with the Scottish Government and others on this, we see carbon finance as an essential measure to help deliver the targets in both the Scottish Biodiversity Strategy and Climate Change Plan. Without private carbon finance we are very unlikely to meet current nature restoration and climate change targets.

¹ Currently the Peatland Code (IUCN) and Woodland Carbon Code (Scottish Forestry) and in future further carbon codes under development.

Further guidance is needed specifically on the role of carbon offsetting and this is an evolving policy area globally, not just here in Scotland. In our view, carbon offsetting should only be used where this is part of an entity's credible and evidenced pathway to net zero. Carbon offsetting should not be used to simply offset 'business as usual' activity.

An ethical framework to guide the investment is under development and will build these principles in to the project.

2. Does NatureScot have a current position on which independent standards or methodologies are appropriate for the certification of carbon or other ecosystem services, or will this be agreed as part of the project? The Committee is particularly interested in how risks around double-counting and ensuring additionality will be addressed or mitigated.

As above, the project will use recognised UK carbon codes and the land carbon register. The codes apply strict policies on additionality. The register ensures that carbon credits can only be 'retired' once against a businesses' carbon emissions which will avoid double counting.

The policy framework around carbon credits and other ecosystem services is evolving quickly and we will use this project to learn about the practicalities of stacking multiple ecosystem services in a way that avoids double counting. The investors, and buyers of ecosystem services, are as keen as we are to avoid double counting and deliver high integrity. Indeed, they seek stronger regulation to ensure a high integrity market place in Scotland. We can use this pilot to test how that regulation could work.

3. Has NatureScot carried out any estimates or assessment of the total amount of private funds NatureScot envisages will need to be raised to enable the pipeline of projects required to meet current ambitions for nature restoration in Scotland, including 2030 targets expected to arise from the new Biodiversity Strategy? What external assessments or key assumptions have underpinned any NatureScot views on requirements for private finance?

We will be assessing these costs as part of the Scottish Biodiversity Strategy Delivery Plan which is under development. Meanwhile, we are using the estimates set out by the [Green Finance Institute in 2021](#) as a broad indication of the scale of the challenge.

For peatland, we have estimated the costs of restoring all 1.3m hectares of degraded peatland in Scotland at between £3 and 4 billion. This is crude estimate based on typical current restoration costs. The Scottish Government has committed £250 million to pay for peatland restoration, currently leaving a gap of several £billion to be filled by private finance.

We have never attempted nature restoration on this scale before in Scotland. The restoration techniques, costs and supply chain are evolving rapidly. Any assessment of costs can only be an informed estimate at this stage. Despite that uncertainty – we know that current public funding mechanisms will not get us to where we need to be by 2030 and 2045.

4. What type of activities does NatureScot expect, at this stage, will or may generate a financial return for investment – such as sale of carbon credits or commercial activities such as forestry?

At this stage we are working with our partners to develop a business model that could derive multiple income streams from the investment, including carbon, biodiversity, water quality, natural flood management and the sale of woodland products. However, the mix of ecosystem services that we can sell will depend on the views of individual land owners and their willingness to engage in these markets. Not all, for example, will wish to see timber extraction from their land. Some will continue with food production, some may not. Until we have engaged with land managers and explored their intentions it is difficult to say with confidence which income streams will deliver a return on investment.

At the same time, the markets for biodiversity and water quality are in their infancy. Although we very much intend to explore the potential for these to be part of the investment, until those markets mature, we cannot predict what, if any, contribution they will make to the investment, especially in the early phases. Our early modelling is therefore focussed primarily on the existing carbon market, with a view to building in other ecosystem services as the project evolves.

5. What is the overall role of public money expected to be (including from any public sources other than NatureScot, noting the information already provided by NatureScot about its financial role)?

We anticipate that the projects will continue to make use of existing public funding streams such as the Forest Grant Scheme and Peatland Action. Some aspects of the investment are unlikely to be economically viable without public funding, due to higher restoration costs in some locations (e.g. in remote terrain or on poorer quality soils).

The proportion of public funding is likely to vary from project to project and land owner to land owner. Some land owners, such as a charity or NGO will have a different approach to and appetite for private finance, so the balance of funding is likely to reflect a range of factors in each project.

6. How will NatureScot identify and avoid conflicts of interest in relation to the projects – for example in relation to its funding or advisory roles? We appreciate there may be questions within the list above that you may not be able to answer until practical arrangements underpinning the agreement become clearer. If so, we would appreciate if you could indicate when we can expect a response to them to be provided in detail.

Members of staff involved in the investment project will not be involved in determining any applications for either NatureScot or other public funding streams. Similarly, they will not be involved in advising on any regulatory aspects, such as commenting on the impacts on protected areas, or license applications. These aspects will be led by our Operations and licensing teams as normal.

Additionally, as the information becomes available, we would be grateful if you could write to us with more information, at what seems to be an appropriate time (I suggest no later than the year end) about:

1. What types of funding will be channelled from private investors;

At present we anticipate two key forms of funding:

- Loans to pay for up front capital works, alongside public funds
- The purchase of carbon credits via an offtake agreement – the income from which will pay off loans

However, our investors have an open mind on the form of investment, so models such as bonds and equity are being considered too; as are shared ownership models.

2. The expected returns for other actors (i.e. communities, landowners, land managers, public sector);

We are currently modelling potential returns for all of these parties, but until we have engaged with land managers and designed each project in detail, we cannot estimate these returns with confidence at this stage. We do not anticipate any financial return to public sector partners – our role is to help support the investment and help design it in a way that delivers against the interim principles for responsible investment.

3. How environmental outcomes – both in terms of nature restoration and carbon benefits – will be guaranteed, monitored, and evaluated, and who has responsibility for ensuring that they are delivered;

Carbon benefits will be monitored and verified through the existing carbon codes using the verification processes set out in the codes, and the third party assessors they use. Both the woodland carbon code and peatland code contain guidance on these processes and both have legal guarantees that require the delivery and maintenance of the outcomes.

Other tradeable outcomes, such as biodiversity credits, will be monitored and verified using whatever market mechanism emerges and is endorsed by the Scottish Government and NatureScot.

NatureScot will produce an annual report on the investment project, providing full and transparent reporting of all outcomes from the project.

4. How trade-offs or tensions will be managed with a view to establishing best practice in natural capital investment – for example between nature and carbon benefits, or delivering returns on investment and equitable benefit sharing, or between pursuing large-scale interventions and enabling a diversity of participants;

At the project level, trade offs will be considered through the normal consenting and licensing processes. For example, Scottish Forestry will consider applications to create new woodland and advise on these in the normal way using existing policy and guidance.

At the national level, we are in the process of establishing a project advisory board to help steer the investments. They will consider issues such as benefit sharing; land reform and other matters and offer advice to the project.

5. What is currently expected to be the return on investment for the three private investment firms involved in the agreement?

We cannot estimate this at this stage as it depends how much they invest and what business model is used.

There has been an assumption in some of the media coverage around this project that the investment is about private companies ‘extracting’ wealth from rural communities. This is simply not what we are trying to achieve. Our investors are not driven primarily by return on investment – they share our aim to demonstrate what responsible investment looks like and to deliver nature restoration. They are of course businesses who need to recover their investment – but profit is not the driving force in this project. We are working together to tackle climate change and deliver nature restoration.

6. How outcomes and best practice of the pilot might be relevant to other areas of policy development such as on biodiversity, agriculture, forestry land reform, water resources or climate adaptation;

We will use the pilots to inform as wide a range of other policy agendas as we can. We will work with the Scottish Land Commission, Scottish Government and others to spread the learning as widely as possible. We are engaged in the Private Investment in Natural Capital (PINC) programme and will use this mechanism to disseminate and discuss our findings, along with the Scottish Nature Finance Pioneers and other fora.

7. What assumptions underpin the project in terms of the overall role of land and land use change in achieving Scotland’s net zero targets, bearing in mind the need for alignment with the forthcoming Climate Change Plan, expected later this year;

Land use, land use change and forestry (LULUCF²), along with the marine environment, can contribute to at least 40% of the transition to net zero through measures to reduce greenhouse gas emissions and to sequester and store carbon in soils, habitats and healthy ecosystems.

We know that to deliver net zero we need to significantly scale up the delivery of woodland expansion and peatland restoration. We anticipate that the forthcoming climate change plan will reiterate the urgency of that need and may set more ambitious targets. We also know that current agricultural methods lead to significant carbon emissions and that we need to find lower carbon methods of food production.

² [Committee on Climate Change - Factsheet: Land Use, Land Use Change and Forestry](#)

We are therefore working on a more nuanced approach than some earlier private investments have adopted where we will promote mixed land use, such as silvopasture, which can combine woodland expansion with ongoing livestock production; or sporting activity which can continue on restored peatland or amongst woodland. We envisage more diverse land use in future, which can deliver multiple benefits for climate and nature, as well as sustain more jobs in the rural economy. This should not be an 'either / or' approach to land use change, but a balanced approach that delivers multiple outcomes from a diverse mosaic of land use activities.

Fundamentally, we cannot deliver net zero without significant changes to current land use. The collective challenge we face is striking the right balance on future land use which maintains existing economic activity, skills and cultural traditions alongside nature restoration which helps sequester carbon and support climate change adaptation. Extensive engagement with communities and opportunities for community benefit and ownership will be essential to delivering a just transition to net zero.

8. What market-based assumptions underpin the viability of the project in relation to offtake (i.e. purchase) of carbon credits or other ecosystem service credits, in relation to the sustainability of the financial model;

The model will be based on long term offtake agreements to underpin the investment. We will assume a steady increase in carbon value and the value of other ecosystem services as we anticipate a growing demand for these. For example, the recently introduced requirement to deliver 'positive effects for biodiversity' in NPF4 will lead to growing demand from developers to pay land managers to deliver good outcomes for biodiversity, as we have seen in the biodiversity net gain market south of the border.

Similarly, as the private sector moves towards net zero, more businesses will have to buy carbon credits, year on year, to offset their residual emissions. We therefore see a growing market, but one which will require ongoing public intervention until it is fully mature. Carbon credits can be 'banked' and sold to the market when the price is right, and indeed many projects are currently holding on to their credits in anticipation of higher prices in future.

At the same time, we anticipate a new market in water quality and quantity credits, based on measures to improve water quality, reduce flood risk and tackle water scarcity. Natural flood management measures such as peatland restoration and the re naturalisation of water courses can deliver multiple benefits and we anticipate a new market which will pay for those benefits in future. For example, an infrastructure company with an asset which is vulnerable to flood might pay for land managers to deploy these measures upstream to reduce the risk to their asset. We are working with SEPA and the Hydro Nation Chair to develop a set of metrics to support that market and Forest Research are developing a new Woodland Water Code.

The investors will make the final investment decisions and will have to make their own judgements on prices, risks and assumptions.

9. Where public money is being provided in grant or loan form in association with activities that generate financial returns, how will public value for money be maximised?

By using the same assessment processes that are currently used. Public funding already supports many activities that utilise private investment and generate financial returns, including forestry and farming. All the agencies that make public funding available will use their standard tests and policies to determine the value for money from grants made.

As we move forward, however, we will move in to an increasingly complex market, with multiple streams of public and private finance being blended together. To provide transparency and deliver value for money we urgently need a new data management system that tracks all private and public investment in land in a single data system which is transparent and available to all necessary agencies.

10. Who are the partners expected to be in the south of Scotland pilot?

We are already working with Borders Forest Trust, the Tweed Form and Southern Uplands Partnership. They led the scoping study for that project and have been embedded in the project team from the start. We have already engaged with other agencies including Scottish Forestry, Forest and Land Scotland, Scottish Water, SEPA, Historic Environment Scotland and both local authorities. We will be engaging with communities and land managers later this year once resource has been secured to do so.

As the project develops, we aim to use local contractors and suppliers where possible.

11. What type and scale of landowner do you anticipate will be able to participate in the projects?

We want to work with all scales and types of landowner, be they public, private, community or NGOs. Our vision is for landscape scale nature restoration that connects woodlands, peatlands and other habitats together, creating habitat networks and giving nature the best chance of adapting to climate change. To deliver this, we will work with all willing landowners, large and small. Many of the areas with the most potential for investment are currently farmed for upland hill sheep. Striking the right balance between ongoing food production and nature restoration will be critical to success. We fully anticipate ongoing livestock production alongside peatland restoration and woodland expansion, using regenerative techniques that improve soil quality and require less land to produce the same quantity of food.

12. How will the project aim to identify best practice? E.g. will international advice be sought including experiences from international organisations on use of ecosystem service finance?

We will always adopt best practice where guidance and standards are available.

Yours sincerely,

Francesca Osowska OBE FRSE
Chief Executive