



**OFFICIAL REPORT**  
AITHISG OIFIGEIL

# Finance and Public Administration Committee

**Tuesday 15 March 2022**

**Session 6**



The Scottish Parliament  
Pàrlamaid na h-Alba

© Parliamentary copyright. Scottish Parliamentary Corporate Body

Information on the Scottish Parliament's copyright policy can be found on the website - [www.parliament.scot](http://www.parliament.scot) or by contacting Public Information on 0131 348 5000

---

**Tuesday 15 March 2022**

**CONTENTS**

<b>ENVIRONMENTAL FISCAL MEASURES.....</b>	<b>Col. 1</b>
-------------------------------------------	---------------

---

**FINANCE AND PUBLIC ADMINISTRATION COMMITTEE  
10<sup>th</sup> Meeting 2022, Session 6**

**CONVENER**

\*Kenneth Gibson (Cunninghame North) (SNP)

**DEPUTY CONVENER**

Daniel Johnson (Edinburgh Southern) (Lab)

**COMMITTEE MEMBERS**

\*Ross Greer (West Scotland) (Green)

\*Douglas Lumsden (North East Scotland) (Con)

\*John Mason (Glasgow Shettleston) (SNP)

\*Liz Smith (Mid Scotland and Fife) (Con)

\*Michelle Thomson (Falkirk East) (SNP)

\*attended

**THE FOLLOWING ALSO PARTICIPATED:**

Callum Blackburn

**CLERK TO THE COMMITTEE**

Joanne McNaughton

**LOCATION**

The Robert Burns Room (CR1)



# Scottish Parliament

## Finance and Public Administration Committee

Tuesday 15 March 2022

*[The Convener opened the meeting at 09:45]*

### Environmental Fiscal Measures

**The Convener (Kenneth Gibson):** Good morning and welcome to the 10th meeting of the Finance and Public Administration Committee in 2022.

Agenda item 1 is an evidence session on environmental fiscal measures for Scotland. The committee will hear from Callum Blackburn, an independent consultant, on the findings of research that was commissioned during session 5 of the Parliament by the Environment, Climate Change and Land Reform Committee and which has recently been completed.

I welcome Mr Blackburn. He will present his findings for approximately 20 minutes and then we will open up the meeting to questions from members.

**Callum Blackburn:** Thank you for inviting me. I will read out one part of my evidence; the rest will be more free flowing.

During the previous parliamentary session, the Environment, Climate Change and Land Reform Committee was interested in the role of environmental fiscal measures, including taxes, levies and other charges, as part of its financial scrutiny. The committee undertook some initial work to discuss existing devolved measures and the potential and priorities for further devolved fiscal measures in various areas of environmental policy. The committee agreed to explore the opportunities and risks of making use of new tax powers to change behaviour. This research was commissioned to support that work. That gives you the background and an introduction to the research.

I understand that you have been given a short pack of the slides that will keep me on track as I talk for the next 20 minutes.

The first slide gives an overview. In the next 20 minutes, I will cover the scope of the research and some overarching or strategic issues. I will then talk about some learning from six case studies. I will pick a couple rather than diving into all six, although, as a result of geopolitical events that are happening at the moment, there might be questions about some of the other case studies,

which have become more interesting. Then I will cover a potential strategic approach. I will look at what we can learn from the research and how it can help to shape our future thinking. Finally, I will consider some questions.

**The Convener:** I am sorry, but I must interrupt you. I neglected to give apologies from our deputy convener, Daniel Johnson, who is unable to be with us because he has Covid and is quite unwell. I apologise for forgetting to say that and for interrupting you, Mr Blackburn, but I wanted to put that on the record.

**Callum Blackburn:** That is not a problem.

The next slide is about the scope of the research. I will set out some of the thinking about the issues behind the research report and how it is framed.

If you have the slides in front of you, you will see that the first bullet point is

“Ecological Restoration and Net Zero Aim”

When we look at environmental fiscal measures, the first question is to ask what we are trying to do. The strategic aim has been to look at the two major crises that we face: ecological restoration and our net zero aim. In other words, we have a biodiversity crisis and a climate change crisis. The aim is to find measures that will address those.

The second bullet point is

“Fiscal measures considered (carrot and stick)”.

In the previous session, the Environment, Climate Change and Land Reform Committee looked primarily at the stick: charges and taxes. I started with a broader funnel. I looked at the broadest definition of “fiscal measure”, which is that it is an instrument that makes a flow of money happen. We looked at both carrots and sticks: grants and subsidies, as well as taxes and charges. Both types of measure influence the outcomes that will lead towards addressing both emergencies.

It could be argued that there is ample evidence that people respond to even small charges, and to fiscal measures in general. It could also be said that the fact that we have the two crises reflects the fact that the real costs and charges in the markets are not correct. Things are not priced properly, so we end up with environmental damage. Fiscal measures can be a way of correcting that and balancing it out.

The next bullet point is “Filtered for relevance”. I point out that this has not been a scientific process. I tried to pick out, particularly in the six case studies in the report, relevant issues that parliamentary committees and the Parliament as a whole will look at in this parliamentary session. There was a little bit of focus on the programme for government, the climate change plan update

and key and pressing challenges in relation to the environment. There was also consideration of what the European Union is doing and policy alignment with that.

The report draws on evidence of market failure and anything that is particularly relevant in a Scottish context. That is quite subjective but, given the devolved nature of the Parliament, areas in which Scotland has oversight are probably of more interest than areas in which the United Kingdom has oversight.

The final bullet point is

“Measures in development or under consideration”.

I am aware that there are a lot of things in the pipeline, so I have tried to bring those into the report, because they are likely to crop up in the committee or in the wider Parliament.

The next slide is on overarching issues. It is about the strategic points that came out of the work.

The first bullet point is

“Complexity of current fiscal measures”.

In Scotland, we have powers over air passenger duty—although they have not yet been applied—and landfill tax. We have single-use carrier bag charges, and the aggregates tax is in the pipeline. We have energy efficiency grants, sustainable fisheries payments, forestry grants, agricultural subsidies and business innovation grants in relation to, for example, the circular economy. The landscape is complex.

On top of that, we can add UK measures, including those relating to fuel duty, renewable heat incentives, the climate change levy, emissions trading schemes and contracts for difference for renewable energy. There are even variable VAT charges, which is an interesting example, because a mainstream tax such as VAT can suddenly become an environmental fiscal measure if there is differentiation between products.

All those measures are probably doing some very good stuff, but I assume that different things are priced at different rates in relation to biodiversity loss or climate change. It is key that there be a bit more consistency among the measures, so that people have clear signals about the real costs of things. We have a complex arrangement that probably mimics what is often referenced by others as the very complex UK tax code, which is one of the most complicated in the world. There is a lot of complexity.

The next bullet point is

“Carbon Tax v Emission Trading Schemes”.

To make a “Lord of the Rings” reference, I note that, if we were looking for one tax to rule them all, it would be the carbon tax. A lot of external commentators would like such a tax to be introduced, and there is a clear reason for that. If a carbon tax was applied consistently across all the measures, businesses and individuals would have the transparency to be able to make really good decisions. For example, they would know the cost of a flight, a train journey or a car journey, and the carbon impact and other impacts would be reflected in any taxation that was charged. That is a decision for the UK Parliament, and there does not seem to be any movement towards that. I do not think that Scotland has the powers to introduce a carbon tax.

The UK Government and the EU are moving towards a proxy for a carbon tax: the emissions trading scheme. There is great doubt about whether such schemes will succeed. They are very complicated, there are lots of loopholes and there are lots of areas of debate in relation to choosing things that might not be right. From the point of view of providing clarity, there is not the transparency or the desirability that is associated with a carbon tax. There are risks that such a scheme will not deliver in the long run.

Scotland had a trading scheme in the past. We had a landfill allowance trading scheme, which was in place for a few years and was then removed, so we have a little bit of history in that regard. Given that we are unlikely to get a carbon tax, it is key that Scotland works with the UK emissions trading scheme and makes it work as well as possible. We need to have some consistency in the measures over which Scotland has some control, so that we give clear messages.

The next bullet point is “Whole Government approach”. I admit that, with that, I am referring to something that is outside the scope of the study but I feel that I have to mention it.

The whole-Government approach has come from the Coalition of Finance Ministers for Climate Action, which includes the UK and 64 other countries. The approach suggests that, if we are trying consistently to apply the aims of achieving net zero and ecological restoration, we should consider all Government expenditure. That includes the £12 billion of public procurement in Scotland, our other revenue expenditure and grants. The agreement between the Government parties already contains plans to look at that for large grants, but going further than that could be extremely beneficial and go beyond even the changes that could be made with fiscal measures because of the sheer amount of Government spend. However, it is a huge task because it would require enormous capacity building within Government on finance and understanding climate

change and biodiversity issues. It is not easy to do, but the benefits could be huge.

Having mentioned something that is outside the scope of the study but which I felt I had to talk about, I will go back to the rest of the study.

The next bullet point is “Repurposing existing measures”. I highlight the urgency of the situation. I am not sure what targets will be produced regarding biodiversity in the next year or two, but we have ambitious carbon targets to meet by 2030. We need to do two things: use all the existing technologies to achieve those targets; and, possibly, use fiscal measures to help to support approaches that are currently niche but which need to be mainstream. That is where some of the grants and subsidies come in.

The urgency of the situation suggests that we really need to focus on repurposing existing measures. Later, I will talk about agriculture. At the moment, we are reviewing agricultural subsidies. The timescales that are involved in introducing new measures and the engagement with stakeholders that is required make that quite challenging, so it might be easier to revisit existing measures and ensure that they are aligned with where we want to get to.

The next bullet point is

“Increasing percentage of overall tax take”.

The report highlights the point that, if we want to succeed on environmental fiscal measures, they need to be a bigger part of the overall tax take. If the same amount of tax is collected in the economy, there needs to be a shift from labour and employment taxes to taxes on resources and resource use. That is challenging.

At the moment, resource taxes are a relatively small percentage—I think that it is 6 or 7 per cent—in many countries. If fiscal measures are to have a real impact, we need to make resource taxes a bigger chunk of the overall tax that is taken out of the economy while keeping the overall figure neutral. However, if we do that, there will be other challenges, as the tax base will be much less stable. Employment taxes are stable. From the point of view of encouraging employment, it is beneficial to reduce employment taxes and switch them to resource-use taxes, but the tax base then becomes less stable because people can take measures to avoid those taxes.

The last bullet point on the slide is “Local taxes/charges”. When you look through the case studies, you will see that local taxes and charges are a major area of opportunity. It is politically challenging to give more powers to local authorities—I understand that—but, given that the Parliament is constrained by legislation such as the United Kingdom Internal Market Act 2020 and

the Subsidy Control Bill, local taxes and charges could offer a real opportunity to support the aims that will help us towards the targets. If you have time to look through the case studies, you will see that quite a few points on local taxes and charges come out.

That is enough of the strategic points. I will move on to the case studies slide. I have listed all six case studies but I really want to highlight two: waste management and land management. I realise that, given the current situation, there might be more questions on energy, and I am quite happy to take them, but I feel that, in view of what is coming up this parliamentary session, those two issues are worth diving into.

10:00

On waste management, the case study looks at two aspects, with reference to the fact that an energy from waste review, a likely consultation on a route map to meet waste targets and a circular economy bill are all in the pipeline. The first issue is our having to deal with the consequences of the success of the landfill tax. The tax has been really successful at pushing material out of landfill and into recycling, but we now have a situation in which, with landfill becoming so expensive and energy from waste seen as a more attractive option, we are finding from a technical perspective that energy from waste might create more emissions than landfill. We have become very good at extracting food, paper and card waste from the residual waste stream, but because that stream is now mainly made up of plastics and fossil fuels, its energy emissions are equivalent to the quite strong emissions that we get from more fossil fuel-based sources such as gas stations.

We need to address that issue, and I am sure that it will come up in the review. A few other countries and regions such as the Netherlands and Flanders have already introduced an energy from waste tax, and I think that we will have to do the same to prevent all of this material moving from landfill to energy from waste facilities. If the Scottish Parliament does not want to go down that route, there are, as I have highlighted in the report, other ways of changing the situation.

The second issue that I want to highlight under waste management is recycling systems. The issue is that all such systems that we have rolled out to households over the years are based on good will, and in practical terms, local authorities have very few powers to make people comply with the system. The end product of that is that 50 to 60 per cent of the material in landfill bins is actually recyclable or compostable. At the moment, it really comes down to awareness and good will, but now that local authorities are struggling financially and given that, as a result of

previous legislation, the only thing that they can charge for in the waste system is green waste collection, they are either removing such collections or charging householders for them. That is leading to almost a negative distortion in the market, because we are charging for something that is beneficial and not charging for something—the landfill bin—that is not beneficial.

In the case study, therefore, I have looked at countries such as Germany and Belgium that have introduced direct and variable charging, in which a proportion of what is currently collected as council tax becomes a charge for recycling and waste collection. That allows councils to incentivise people to put things in recycling bins rather than in the landfill bin. That seems a very sensible way of helping councils to invest, but the change from this being covered by council tax to a charging system has not come without political challenge. Those are the two waste management issues that I want to highlight.

Finally, on land management, there is, again, a very strong pipeline of work coming up in the Parliament with regard to changes to the current subsidy regime and the planned biodiversity strategy and natural environment bill. However, the main challenge is the need to make agriculture far more environmentally friendly from a wildlife perspective and the fact that a lot of agricultural land will have to be used to meet our forestry targets.

In that respect, I have highlighted a couple of examples from Sweden and Costa Rica, both of which have been very successful in making positive changes to how land management subsidies work. In Sweden, for example, there are payments for wolverine and lynx on land managed by people, in recognition of the fact that those predators cause damage. Instead of being made for the damage caused, the payments are for the number of predators on the land, which changes the relationship in a positive way.

Similarly, many countries are moving to camera trap technology. If a farmer or landowner has a predator or beaver or something else that, from their perspective, is potentially not good for their land, they get a payment every time that it is witnessed on the camera trap. That positively encourages landowners, because we are saying, “You’ve got this thing on your land that’s really beneficial to us all, and we want to make sure you’re paid for it.” That moves us away from a compensation culture, and that will be important if we are to increase biodiversity across the huge amount of agricultural land in Scotland.

The second point is on the ecosystem service payments in Costa Rica. Costa Rica has been fantastically successful at restoring lost forest; it recently won the Earthshot Prize for that. The

country has moved to payments that are based on ecosystem services and that recognise the carbon impact, wildlife benefit and flood management benefit of forestry and other land management techniques. That sort of thing must be incorporated in the new subsidy regime if we are to get more forestry on the land and see the benefits of some of the wildlife that we have.

My final point is on an interesting local tax option, which is a proposal from the John Muir Trust on a natural carbon land tax. I mention that because it could be done at local level, perhaps through incorporation into business rates or something similar. It is meant to be a neutral tax. Basically, the idea is that people who have land that produces a lot of carbon would compensate those whose land does not produce much carbon. It would be kind of like the energy efficiency label system for appliances—when you buy an appliance, there is a rating from A to G. In this case, the money would flow from the G raters to the A raters, so there would be no overall increase in the tax take.

That is an interesting proposal that is worth considering in the subsidy review. Historically, people always respond to a charge much more strongly than to a subsidy. The subsidies are significant in the agriculture sector, and they can change behaviour, but a charge can do the same.

I will move on to the last slide. Am I okay for time, convener, or have I taken up too much time?

**The Convener:** No, you are fine.

**Callum Blackburn:** Okay.

For my last slide, I have taken from the research work all the data for a potential strategic approach and put it into a simplistic model with fiscal measures that I think are the most relevant. There are also some principles that we would apply, some of which come from general taxation principles and principles on grants, as well as some that are tailored to the environmental aspect. There are also some constraints that we have to consider.

This is really a starter for 10, to use “University Challenge” language. Work in the area is in its infancy around the world, and I am sure that lots of things will develop in countries across the world, including in the European Union, over time. It is about getting us to think about how we can apply measures in future. I will quickly touch on three aspects.

One of the fiscal measures listed is “Carbon Pricing Mechanisms”, which I have not mentioned. The Government puts a carbon price on projects, which is then used in decision making. That is a key thing that the Scottish Government could change, and doing so might influence which



project options are selected. There is a strong argument that the carbon prices that are used at the moment are too low.

My second point is on the principles. One bullet point says “Route Mapped”. With anything that is done now, it is important that there is a clear plan for the future. Given that we have such a short timeframe, people need to be able to invest. The landfill tax is a good example of that. We had an escalator and everyone could see where the tax was going in the next five to 10 years, so they knew what they had to do. That approach will be important for any environmental fiscal measures.

My final point is on constraints. Under that heading, I have a bullet point that says “UK Solution”. There are lots of things in the pipeline on which Scotland will have to work with the rest of the countries in the UK. The key lesson is to get in early and shape the approach as much as possible for Scotland. The evidence from some of our producer responsibility schemes is that they are often tailored to population centres in the south of England, so it will be important to get in early when we are working on a UK solution in order to get something that is right for Scotland.

I am happy to answer questions now. I hope that that made sense—it was a bit of a fly-through of a very complex subject.

**The Convener:** That was excellent—it was fascinating stuff, so thank you very much. It has stimulated our thinking on the subject and has probably generated quite a lot of questions from committee members.

I will open with some questions and then we will go around the table. In your last slide, under the “Fiscal Measures” heading, you talk about carbon pricing mechanisms matching a UK solution. You also mention devolved taxes and subsidies under that heading. It is really important that we take people with us on this journey, and I think that one of the most difficult things, as you list under your second heading, “Principles”, will be ensuring that what is done is proportionate.

You spoke about behaviour change and about good will from the public, which is what we need to be able to change behaviour. It is about how we marry those together. You said that, for landfill taxes, everything was set out over a number of years so that people could see the road to be travelled. Should the Scottish Government try to do that, so that we have a 10-year programme involving all the issues that you have mentioned, including how we reach various milestones along the way, where we think changes should be made, at what time they should be made, and by whom?

**Callum Blackburn:** Yes, I believe that it should. I know that it will be really challenging for the Government and the Parliament to achieve that,

because there are always changes—we have seen from recent events in the past month or so that things can change rapidly.

I will give one example. In relation to the case study on waste management, local authorities and waste management companies are sitting there, but it is quite difficult for them to invest at the moment because there are so many things that decisions are waiting on. We have the introduction of the deposit return scheme, but we also have a number of reviews of producer responsibility schemes, which are basically a regulation with a fiscal measure attached. Those have been under review for a while and, if you talk to a local authority waste manager, they say, “I don’t know where to put the money—I don’t know where to invest, because I am not quite sure what this is going to do.” That is an example of the need to create some certainty. We have very short timescales for meeting the targets, so it is really important to have as much of a route map as possible.

**The Convener:** Yes—waiting for decisions to be made can be quite frustrating. However, if we are looking at something that is about cost cutting and that involves a host of Government departments, umpteen ministers, consultation and so on, we need to try to make sure that we do not end up with unintended consequences. For example, we do not want some people being so heavily penalised that they could go out of business, whereas other people make a killing out of it. We need to try to get the balance right. We need to get the 10-year programme, or whatever it might be, right. There would have to be checks and balances, because there is no doubt that decisions would be made that would prove to be wrong when it came to delivery, because nothing ever works as one would hope.

On constraints, you talked about a UK solution. You mentioned the importance of working with the UK, and I think that everyone would agree that that is essential on this huge issue. However, we cannot always move at the pace of the slowest caravan, so should the Scottish Government look at things on two levels—what the Scottish Parliament and the Scottish Government can deliver in one sphere, and what we can deliver with the co-operation of the UK in another? Is that possible? Can that be done on a parallel track?

**Callum Blackburn:** I think that it can. The Scottish Government and the Scottish Parliament could be subject to things that they might not be aware of and that the UK Government could suddenly bring up, but I think that the work could be done on a parallel track. From a Scottish perspective, repurposing existing measures will be easier than bringing in something new, which will be more of a challenge.

10:15

On the timing of the report, there are a lot of things that are unknown. The United Kingdom Internal Market Act 2020 and the common frameworks have not really been tested, and there is the Subsidy Control Bill. Some things are not very clear, but it looks like it will be quite challenging to introduce new individual measures in a Scottish context, because there are so many things to be tested at the UK level. It is a matter of looking at the whole thing and considering where it makes sense to work on a UK basis and where Scotland needs to do something itself.

There is a trade-off between ambition, and practicality and pragmatism. Scotland's ambition on something in the environment might often be stronger than that of the UK, with Scotland wanting to push ahead with something. It might be that the UK planned to do that, too, but not as ambitiously. We would then have to consider all the resources that were required to make it happen. I am thinking of Government internally—the civil service, agencies and so on. Would it make sense to say that we have to be slightly less ambitious on something and more ambitious somewhere else, and to accept that that would be a more pragmatic solution? Obviously, that is a decision that the Scottish Government and the Scottish Parliament will have to make. That is the trade-off.

To go back to the original point, in the round, it is good to look at the two parallel areas.

**The Convener:** You have talked about overarching issues and the complexity of current fiscal measures. It is important that we ensure that the winners do not win by too much and that the losers do not lose by too much if we are to take people with us, but that can sometimes slow down the pace of change.

I know that John Mason is keen to talk about carbon tax, so I will not ask about that. Do you think that, while resources are being shifted towards net zero solutions, increasing the percentage of the overall tax take can happen only by increasing the amount of tax revenue that is available, or can that be done within the current envelope, broadly speaking?

If we look at the largest area of expenditure, which is on the national health service, we might ask how we can move the service towards net zero without shifting money from patient care to insulating buildings, or whatever. There could be long-term savings, but we would still have to invest in the short term. How can that be done in a practical, pragmatic way, or is it inevitable that the Government will have to increase its overall spend?

**Callum Blackburn:** In the report, I made the assumption that the approach is revenue neutral so, overall, the tax take would not increase. It could be assumed that the tax take would increase but, given what we have been through with the pandemic and so on, that seems to be unlikely if we are to support businesses and people.

We have got some examples in the report. The climate change levy has a compensatory mechanism that relates to national insurance to offset it. We could consider a situation in which a resource tax is put on something, but the tax is reduced somewhere else to match that in compensatory terms. That would be the way in which I would see the approach working.

I would hope that there is no need to increase the tax take. I would prefer us to stimulate investment, rather than have the Government fund all the investment.

In land management, there is a lot of discussion about forestry and the importance of the Scottish Government putting money into forestry to meet targets, but there is also a lot of private investment. In the short term, investors are looking for carbon offsets for things that cannot be addressed by renewable energy just yet.

One can see where a lot of investment could be pulled in that is not public money. I would hope that there would not be a need to raise the overall tax envelope.

**The Convener:** Even if there were an overall increase in tax take, there is still a potential for the imposition of significant costs on the public through laws or regulations. For example, we were told that the installation of renewable heat in people's homes could cost up to £33 billion over the next eight years. The cost per house is colossal. There is about £1.8 billion available for that. If we assume that we have heating engineers to deliver the programme within eight years—I am dubious about that—how do we deliver those admirable ideas in practical terms, both financially and ensuring that we have the people to deliver them on the ground?

**Callum Blackburn:** Renewable heat is a challenging issue because it relates to so many things; it is not just a fiscal measure. For people to replace oil or gas boilers and introduce, for example, air source heat pumps into their house would be a major intervention in their property. People often have to put in retrofit insulation measures, but introducing heat pumps would be a change in how the heating system operates. The question is, as you pointed out, whether we have the skills and the heating engineers for that work. The issue goes beyond fiscal measures.

In relation to renewable heat, the key thing is that it needs to be made to stack up from a

revenue perspective for people to take that up. Air source heat pumps produce 3kWh of energy for 1kW of electricity. Taking that into account, we really need that energy source to be cheaper than oil and mainstream gas. In Europe, the cost ratio is 1:3—electricity might be three times as expensive as gas. However, people get three times the amount of energy out of a heat pump, and that magnifying effect means that it might make sense for householders to move over to that energy source.

Here, the gap between the gas and electricity prices is just too high, and the geopolitical situation has obviously made that worse in recent months. Many of the powers are at the UK Parliament level, but we need to do everything that we can to ensure that the gap between electricity price, which is the low-carbon option, and the fossil fuel price that is used for heating is reduced to a level at which heat pumps technologies make sense. Then, a householder or a business will say, “If I put this technology in, there will be an initial cost and disturbance, but I know that over the next 10 years it’s going to be cheaper.” Making that happen will be key, because the number of people who have put those systems in their houses is way below what we need it be.

Lastly, we should not underestimate the expert advice and technical support that householders and businesses need. Organisations that help people with those services, such as the Energy Saving Trust, become really important in that regard. It is a complicated area. The fiscal measure is one part of it, but there are many other bits around it.

**The Convener:** You have mentioned in your presentation some of the excellent work that countries such as Belgium, Sweden, Germany and Costa Rica have done. Should the Scottish Government and the UK Government look in detail at what is happening in those countries and try to implement some of those measures here, rather than reinvent the wheel and come up with something new that might or might not work? Adapting successful measures from elsewhere could save a lot of time and effort, if that can be done.

**Callum Blackburn:** I agree that doing that is really important. It comes back to my point about urgency. It would be challenging to invent something new, given the timescale that we have for meeting our targets—those are due in less than 10 years.

When the deposit return scheme was being designed, for example, a lot of work was done to look at all the countries that had already been running such a scheme for decades. You can take that principle of learning from others and apply it to a lot of things. I agree with your point.

**The Convener:** Human scientific ingenuity should not be ruled out. In my constituency, DSM, which employs around 350 people, has developed a feed additive called Bovaer, which will reduce the amount of methane emissions from cattle by between 30 and 90 per cent, depending on what type of cattle they are—dairy or beef—and on what their feed is. That would cost much less than retrofitting huge numbers of houses, for example, and it could have a significant impact on the environment. That example shows that there are a number of other areas that we could consider.

An investment of £100 million-plus will be made in that factory. The food additive will be marketed worldwide, and it has already had regulatory approval in the European Union. You spoke about changing some of the subsidies for agriculture. We could perhaps incentivise farmers to use that safe food additive to reduce methane, rather than progress some of the more complex methods that are currently being considered.

That advert for DSM is now over. I will open up to questions from around the table.

**Liz Smith (Mid Scotland and Fife) (Con):** Thank you for your presentation, which, as the convener said, was thought provoking. You mentioned that we are dealing with two crises: the biodiversity one and the climate change one. We now have a third crisis: Ukraine.

Notwithstanding the absolutely horrific scenes that we see on our television screens hour by hour, the crisis in Ukraine will have the effect of making us look long and hard at our longer-term energy mix. How significant is that for Governments in terms of their having to apply a more practical approach to achieving net zero? We would all like to drive towards net zero, but, as Germany has found out very quickly, that will not be quite so easily done to the original timescale, because of the practicalities of the situation. Do you think that that is very significant?

**Callum Blackburn:** I do. There are two aspects to the situation in Ukraine. First, it gives us a really strong incentive to create energy security for ourselves. There is no doubt that much of that will come from renewables, which is simply because Scotland has such a huge supply of that.

Secondly, the impacts that we are feeling now will potentially get worse over the next year or two. You will then have a challenging situation around fuel poverty, and you might have to take measures to address that. Some of those might be pragmatic. We recognise that we cannot change all the systems overnight. I would love it if everybody had a renewable heating system in and solar panels on their property, but we cannot achieve that overnight.

Interestingly, we probably could accelerate some things. In relation to solar panels, the feed-in tariff scheme, which is mentioned in the report, was withdrawn a few years ago. We then had a massive drop-off in solar panel installations, which only really make sense when building a new house or getting a new roof, rather than when undertaking a retrofit. There may be emergency measures that you can take to accelerate things and get higher take-up. That would require doing two things. First, you would have to really push renewable energy, while realising that it could take years before you make a real difference. Secondly, you will also have to take some difficult measures in the short term to address the sheer cost of heating and electricity. There is a real challenge there.

**Liz Smith:** I very much agree with that. There are issues for consumers. There is no question that changing systems in houses will be extremely expensive for the families involved—that will cost thousands of pounds. That is a huge issue for an awful lot of families.

However, there is also an issue for the producers. At the moment, because of the situation in Ukraine, which is likely to be quite long term, there is an incentive for them to continue to use some of the energy systems that are less effective in tackling climate change. That is unfortunate, but that is the easiest way to ensure that we have an energy mix. Do you foresee that that will lead to a problem with driving incentives on the renewables side?

10:30

**Callum Blackburn:** It is difficult to answer that, because we do not know what the measures would be. However, you can parallel track in a way, to use that phrase again. You might have measures that are about providing stability to help people get through the current situation. In reference to heat systems, getting through the current situation means retaining current heat systems in an affordable way that does not damage health. However, at the same time, you could really up the ante on renewables and investment for the long term. You can do both those things as best you can at the same time.

As somebody who is very invested in the green agenda, it is disheartening to think that we might have to take measures that will not fully push renewable energy and instead stabilise what is there already. However, at the end of the day, I think that that will have to happen. The price of energy affects everything, and we have not yet made the transition to a completely renewable energy system, so we are subject to all the things that are happening, and we have to react.

Does that answer your question?

**Liz Smith:** Yes. It is a serious issue, and there is certainly not an answer just now. I think that it will be a long-term problem and that there will be an emphasis on using existing supplies of energy that are not particularly environmentally friendly for quite some time. European countries have already found that it is a bit of an issue because of the Ukraine crisis.

I want to ask about another aspect of your research. You talked about landfill tax being a relatively good tax, in that it has done what it was asked to do, is seen to be effective and has the public on board. Is it the case that what economists call marginal cost pricing—in other words, that is where you can see the extra cost of one more person using a service—is more effective in getting the public to change behaviour in the way that we want than something such as average cost pricing?

In your report, you cited a proposal by the John Muir Trust—I should declare an interest as a member of the trust. That is an important example of cross-subsidisation. That has its merit in totality, but it does not necessarily work for the people who have to pay the subsidy across to others. Is marginal cost pricing a better aspect of the fiscal levers that we need to apply?

**Callum Blackburn:** It could be. I always find it hard to grasp marginal cost pricing without a clear example of where it is applied, because it can look very different in different areas. I do not have a clear answer on that, but I think that marginal cost pricing could be a useful tool, particularly in areas where there is a trigger point and where a slight change might tip something the way that we want so that we do not have to put in much effort and there is not a big negative impact. From that perspective, it could work. However, I will cover myself by saying that it really depends on the example, where you are applying it and what the impacts would be.

**Liz Smith:** The point relates to the dilemma that you mentioned earlier about getting people to respond well to paying taxes—well, nobody likes paying taxes, but it is about getting them to respond as well as they can. It is about behaviour change.

People are more likely to come with you if they understand, first, why a tax is necessary and, secondly, how much extra they will have to pay on the margin. Is that a better way of bringing people with you? After all, we need cultural change. I was a member of the Environment, Climate Change and Land Reform Committee when that issue was discussed a couple of years ago, and it was very much our view that not much progress would be made unless there was buy-in from the public.

**Callum Blackburn:** It is essential that we have understanding, fair transparency and discussion of those issues. That is challenging and, again, takes time, which brings me back to my point about repurposing existing measures. If a lot of stakeholders are already involved in a taxation measure and you say to them, “We’re going to tweak this, because it is a lot easier than starting afresh or bringing in something new”, you will have engaged with those people already and will probably have technical and civil service resources working on the matter.

What you have said is therefore true, and you have also made a very good point about engagement. I think that people readily accepted and understood the reason for the single-use carrier bag charge, for example, and they also readily accepted the price increase. I should say that the other marginal issue with behaviour change is that when you make such a change, people get used to it, so you need the flexibility to be able to, for example, increase it. Nevertheless, you have made an important point. All the things that have been mentioned will require quite a lot of engagement. It will be a massive exercise, but it has to be done if you want to bring people with you.

**Liz Smith:** Thank you.

**Ross Greer (West Scotland) (Green):** Thank you for that really interesting presentation, Callum. I was particularly interested in some of your comments about the potential of procurement and in your reference to the Bute house agreement, which underpins what the Government is currently doing.

With regard to conditionality in procurement for net zero purposes, the agreement commits to consulting with regard to

“businesses receiving grant or loan/equity funding of over £500k and for major contracts”

on a condition

“to reduce scope 1 and 2 greenhouse gas emissions at a level consistent with Scotland’s 2045”

targets, including a requirement to publish a carbon management plan and to submit a copy of it to whichever Government body is providing the funding.

As one of the folk who wrote that particular section of the agreement, I hope that, given your earlier comments, you can tell us whether there are certain areas that we have missed or on which we can build. If you were one of the people that we consulted on that condition that we might put on public procurement, what would you tell us could be done to make that more effective? At the moment, the commitment on those businesses is just to say that they will reduce emissions and to

provide a plan in that respect. Could we ask for more?

**Callum Blackburn:** The challenge is to look at how the whole system works. The approach is a good one, but the fact is that, if you ask organisations to produce a carbon plan, they will all produce something completely different on the basis of advice from different consultants with different views. I would suggest, therefore, that you do anything that you can to make the process as easy as possible.

This is just my personal view—although it is based on pragmatism—but I think that, when you start that measure, it will have to be something quite simple. You might want to keep it that way, given that the staff who assess the plans and the businesses involved will be starting a journey. Things will get more and more mainstreamed as time goes on but, in the initial phase, you will need to think of the people who are assessing the carbon plans and deciding whether applicants for grants are telling the truth about the targets and how realistic they are.

The resource in that respect should not be underestimated, but another important aspect is the hand holding that will be needed for businesses and those applying for grants. Indeed, that will be important for the Government, too, because the more that you spend on hand holding and helping a business or organisation get itself into the right place, the more time that you will save in assessing the plans and ensuring that they are good.

In general, therefore, I would say that you need to think about getting in place the right resources and support, and making things as simple as possible in the first stages, although I know how challenging that is. In five years’ time, the system might be much more developed, but you might have to keep things relatively simple at this point. That might be challenging for green people who want to see progress, but it will also be challenging to ask businesses those questions and ensure that they have the answers.

I do not know whether that answers your question.

**Ross Greer:** That was really useful. When the formal consultation on that starts, I might come back to you in a separate capacity to ask you to put that in writing.

I was quite taken by your comment in the report, particularly given the urgency of the climate emergency, that reform of existing levers of taxation is perhaps more attractive than the creation of new ones. I am interested in your thoughts on the potential for reform in a couple of areas.

You may not have seen it, but last week the Fraser of Allander Institute published a report, which was commissioned by the Government, on the small business bonus scheme and its relative effectiveness. I am interested in any views that you have on how mechanisms such as the small business bonus scheme could be reformed. There are other areas where we have more latitude for reform, such as council tax. There is potential for significant reform or even replacement of the council tax in the current parliamentary session, or at least for starting that, because the council tax is complex and reform would take a while to implement.

Do you have any thoughts on the direction of travel in relation to the reform of either economic incentives such as the small business bonus scheme or local taxation such as the council tax?

**Callum Blackburn:** I have to hold up my hand and say that, in this work, I did not really look at the council tax. I am aware of research into tweaking it for houses that perform better in terms of renewable energy, but I do not know whether that is a strong enough incentive. It might look good to say to people, “You’ll pay less tax,” but I question whether that would really change behaviour.

I am not familiar with the small business bonus scheme, so I cannot comment on that. I have not read the Fraser of Allander report, but I would say that, from a general perspective, what you mentioned would apply. We have discussed larger funding. Eventually, we would want that half a million to become smaller and smaller to a point where it is shown that all the money that goes out the door—I hate to use the term “ticks a box”—is aligned with the 2045 target and any biodiversity targets that are set. The same applies to the small business bonus scheme. In considering priorities, we should consider where the biggest expenditure is and where the biggest benefits are likely to be. That takes me back to the point about marginal costs. We should choose which schemes to intervene in first in order to bring in that tick-box exercise.

Business rates are a different thing. There are already quite a few incentives in business rates relating to, for example, renewable energy and the reduction that people get if they have a deposit return machine. Bearing in mind what I said about the John Muir Trust initial proposal, you might get more responsiveness from the business rates side. I hate to say this, because it is a negative phrase, but one of the people that I spoke to when I started to get information said that business rates are a dying tax because of all the changes that are happening in society as a whole. However, I still think that business rates offer an opportunity to provide a clearer incentive. This is my personal

opinion, but such an incentive is more likely to be taken up than something that focuses on householders and the council tax. I have not really answered the question properly, but I hope that that helps.

**Ross Greer:** That is useful. To be fair, the small business bonus scheme report came out only last week and it came out quite quietly, so I did not necessarily expect you to have noticed it.

I have a final question. You are relatively critical—in a way that I would agree with—of the forestry grant scheme, in that it focuses on the economic benefits of commercial forestry. That essentially means a monoculture—Sitka spruce et cetera—that certainly does not contribute to the restoration of biodiversity or tackle the nature emergency. What reform are you looking for in forestry grants? What would a successful version of the scheme look like if the overarching objective is to tackle the climate and nature emergencies?

10:45

**Callum Blackburn:** From a simple perspective, it would involve ensuring that a significant proportion of the forestry that is funded by the public is native species planting. There is a lot more complexity within that in terms of things such as the riparian woodlands—planting around rivers and so on—that we have lost, and there is a lot of complexity to the issue. That is where the Costa Rica ecosystem service payments come in. If someone has planted, say, Sitka spruce as a commercial crop, there are some things that they can do around that to get more benefit out of it. That is where some of the subtleties of the subsidies lie.

It is quite challenging to put a lot of those complexities into a scheme—you have to keep it simple. However, the simplest key indicator would be the number of native trees that are planted. If an area of, say, 18,000 hectares is planted every year, increasing the amount of native planting to half of that will let you know that you are doing the right thing. However, you might want to include some other indicator that concerns the measures that someone has put in place to mitigate some of the damage that is done by the commercial forestry that they have planted.

Those are the indicators that I would look for, in order to keep it simple.

**Douglas Lumsden (North East Scotland) (Con):** Thank you for your presentation this morning, Callum. I really enjoyed it. One of my concerns about the environmental fiscal measures is about the possibility of there being a disproportionate effect on some of our rural communities. I am thinking about the possibility of people in those areas having a greater reliance on

private transport, but the issue is also relevant to public transport. It probably has a larger carbon footprint in rural areas than it does in the central belt because ferries are mainly diesel powered, because of the diesel high-speed trains that people depend on, and because air travel is important to some of our island communities. How can we ensure that anything that we introduce does not hit rural areas disproportionately?

**Callum Blackburn:** It comes back to one of the principles that I included in my starter for 10 strategic approach. A measure has to be proportionate and, within that, we need to look at the winners and losers and try to mitigate the impact on any losers. Going back to the engagement piece, I note that, with anything that is designed, we have to consider not only people who live in the central belt but those who live in rural communities, who are more likely to use oil heating and to have properties that are in need of insulation or, more importantly, bespoke solutions.

We are good at rolling out programmes that are quite basic in design, such as loft and cavity wall insulation, but the situation is completely difficult in hard-to-treat houses, and the approach probably requires more technical skills. Governments are not used to dealing with that sort of challenging situation and they tend to prefer programmes that are quite simple to roll out. It is important to think about those things, and also about how issues such as those around transport will translate into rural communities, and whether there can be some compensating mechanisms.

I mentioned that you might want to consider how you can help rural communities with the electrification of transport. That might involve the installation of fast chargers on rural roads, which Norway has done. We want people to move to using electric cars, partly because of rising fuel prices. One of the barriers to that is range, and that measure would help with that.

There might need to be a mixture of engagement in the design of the fiscal measures that you put in place and thinking about mitigations and proportionality, as well as other measures that are not fiscal at all but which will help. That is the way that I look at the matter based on the research that I have done.

**Douglas Lumsden:** Thanks for that. As you say, we have to ensure that people in those areas are not disproportionately impacted.

With regard to energy from waste, you mentioned that we are not in quite as good a place as we thought that we were. Is a review being done of where we are with energy from waste? Should a moratorium be put in place until we have evaluated it?

**Callum Blackburn:** My understanding is that there is a commitment to a review by the Scottish Government. I cannot remember whether that is part of the partnership agreement between the Scottish National Party and the Greens or whether it is in the climate change plan. I am sorry—I cannot remember where it is stated, but there is a commitment to a review.

In the EU and the UK, we had a policy that said that landfill was the worst thing for climate change emissions because of the methane release from things rotting in it, and that energy from waste was the better solution—although, obviously, when we create energy from waste, we are not recycling or reusing. However, that has changed because of the composition of the waste. I suppose that it could be said that we should have anticipated this 10 years ago but, as we have got better at pulling out certain waste material—particularly food, paper and card, which are materials that rot in landfill—the methane emissions from landfill have dropped, whereas with energy from waste, we are ending up with a lot of fossil fuel-based energy from all the plastics that are being burned.

That is where the change is happening. A report from Zero Waste Scotland has highlighted that energy-from-waste technology is now quite high carbon and that one of the higher-carbon technologies is involved in putting that energy on the electricity grid. That is an issue.

On what can be done about that, we have to take a measured approach and plan, because a lot of investment is required. We need to highlight the issue, as is happening in the European Union, so that people are aware of it and they realise that they will have to take action. The industry is starting to see that energy from waste might have a limited time horizon, given the situation.

**Douglas Lumsden:** I suppose that it would be better if we managed to get all the plastics out of that waste and met our recycling targets. That would make energy from waste better for the environment.

**Callum Blackburn:** I agree with that. Obviously, the more we get out, the less feedstock there will be for the energy-from-waste industry, which is an issue. The best performance by energy from waste tends to be where there are heat-only plants rather than plants that generate electricity. Conversion to electricity reduces the efficiency, so the overall carbon impact rises. We therefore need to look at not only the feedstock that goes into energy-from-waste plants, but the technology and what the plant does. If it distributes to a district heating network, it will generally have a far better carbon emissions profile than if it only generates electricity.

**Douglas Lumsden:** My other question is about the transient visitor levy. In your report, you refer to an “environmental tourism tax”. I have been a councillor for the past five years, and the TVL has been a difficult sell to many in the hospitality industry. One way round the issue is to say that all money that is raised will be reinvested in tourism to try to grow the industry. There seems to be a change, and the carrot has changed into a stick. Is that fair?

**Callum Blackburn:** I do not think so. I think that it is still a carrot. I would call that a hypothecated tax, and I am suggesting that, if we want it to be accepted by visitors and locals, the money has to be reinvested locally. I have given two examples of where the environmental aspect has really been focused on. Local reinvestment might help tourist attractions to reduce their emissions, it might help to restore some of the damage to the countryside, or it might enhance biodiversity for tourists, for example. Focusing on the environmental benefits seems to work really well in the Balearic islands and Barcelona, where the main focus is on them.

Definitions are important. What is meant by improving an environment? That can mean anything from improving the road infrastructure to planting trees. If money is going to be reinvested, it needs to be clear what will happen. When the schemes that I referred to were started, there was quite a broad definition of that, but we could now probably be very specific about where money will be invested, and that could potentially get buy-in.

We have very high VAT charges here, which could make that approach not viable. That really needs to be considered. It could severely impact the tourism industry, as well, so there are negative impacts. Does that answer your question?

**Douglas Lumsden:** Yes. Thank you.

**The Convener:** Douglas Lumsden touched on the issue of ferries. Ferries are now being designed to be hybrid but, given that they can last upwards of 25 years, smaller ones are now being designed so that they can be retrofitted. They might be fitted with hybrid power systems now, but in five years’ time they might have to switch to electric, and in 10 years’ time they might change to hydrogen or whatever. That is now being built into the design of ferries. After all, it is not just buses, cars and trains that we have to make more environmentally friendly.

John Mason is next.

**John Mason (Glasgow Shettleston) (SNP):** Thank you for your really interesting input so far, Mr Blackburn. One of your conclusions seems to be that we could do with an overarching, simplified carbon tax. I hope that that is the correct phrase. Will you explain that to me? You said that it would have to be introduced at the UK level, but I

suppose that we have an interest in that, too, and we can encourage the UK Government to do certain things. Would it be like putting VAT on everything, with a 5 per cent rate on some things, 10 per cent on others and 20 per cent on the rest? Is that the idea behind a carbon tax?

**Callum Blackburn:** Yes. The idea is to create transparency. However it is administered, the carbon tax might be X per cent on diesel and petrol and Y per cent on heating oil, depending on the carbon impact.

That said, it is not as simple as that. Everyone thinks that a carbon tax is a silver bullet because it provides not only businesses but you and me with transparency that allows us to see how much we are being charged. It could be similar to VAT in that, when you looked at a receipt, you would see the carbon tax charge along with the VAT and any other charges. However, it is likely to be quite detrimental to those on low incomes, and you will have to be really careful in that respect.

According to the literature out there, the general view is that mitigations would have to be put in place for a carbon tax. For example, those who use heating oil might suddenly find themselves paying a much higher charge for their heating, which would affect rural communities and properties where people do not have a lot of income.

As I said, you have to be careful with such a tax. It is in some ways the one tax to rule them all, but it is not a silver bullet and some mitigations would be needed. However, it could be applied at different rates—indeed, that is probably the whole point of it. If you were looking for a flight, you would see the charge and probably think, “Gosh—that’s quite high”, but that is because taking that flight will have more impact than, say, taking the train.

**John Mason:** I note that, on page 37 of your report, you say that

“lower-income households”

will spend

“a higher percentage of their income on high-emission activities”.

That is a challenge.

Are you suggesting that we should just rename landfill tax, the charge on single-use bags and so on a carbon tax? Is that the idea?

**Callum Blackburn:** You could change the names to make things more consistent, but you will find that there are other factors to take into account. You could try to get consistency in the carbon tax, even with the single-use carrier bag charge, but that does not mean that everything would end up being priced in carbon. We could



call the landfill tax a carbon tax, but we would also have to consider the impacts on local communities and some other factors, which might lead to the overall charge being much higher than the carbon charge alone.

Similarly, with the single-use carrier bag charge—or, say, a charge on coffee cups, if that was introduced—you might say, “The carbon charge should be 5p, but that’s not going to make anyone change their behaviour, so it’ll need to be 20p.” The approach that you suggested could create more consistency, but it would not mean that everything would be priced in exactly the same way, as there would be other factors to take into account. That is my personal view.

**John Mason:** Your comment about changing people’s behaviour leads me on to my next question. Page 23 of your report highlights the single-use carrier bag charge and the Scottish landfill tax, and you suggest that, because an individual is paying 5p or 10p for a bag, that directly changes their behaviour. However, the Scottish landfill tax does not quite work that way. I do not pay for the damage that I do; the council has to pay a bit more in some vague way; and it might change my council tax, but it will not really have an impact on me at all.

11:00

**Callum Blackburn:** Yes. That is a challenge. In the report, I have suggested some minor things that we can do.

Again, I come back to the point about a carbon tax versus emissions trading schemes. Emissions trading schemes are firmly in the background. People would not know what a business’s allowances were; they would see only the price. That would not be transparent.

When it comes to waste, I have suggested in the report that we have producer responsibility schemes, in which, generally, businesses are made responsible for the waste at the end of a product’s life. To take the example of waste electronic equipment, if a business makes a computer, it has to help at the end of its life with the recycling or the capture of the material.

The way to engage the public, who are not aware of that scheme in the background, is by having more deposits on things. The obvious example is small waste electronic equipment, such as electric toothbrushes, which often end up in landfill because people do not know what to do with them. They are not going to drive to a recycling centre to place one in a container, as they would with a washing machine. That could be an area in which to use deposits, so that people are incentivised to say, “Oh, I will take this back and get back my £5.” It is a deposit rather than an

extra charge. That would certainly work on batteries, which are being discussed at European level, because we are not collecting all the batteries that we should.

Such a deposit creates a value for consumers, as it does with drinks containers. Suddenly, that changes their whole behaviour. It is a way of bringing into the foreground the things that will engage businesses and people. There are probably other ways, but that is a simple one that we could do.

**John Mason:** You are right. There is a lack of information. I do not know where to put my old electric razor, or whatever it may be. Frankly, some of the recycling sites in Glasgow have deteriorated. There used to be somewhere for electrical items; now, I cannot find it.

You also seem to be quite keen on hypothecation—that the money goes towards something. I get it for the tourist tax, as Douglas Lumsden was asking about. However, in a sense, it does not matter where the money from the single-use carrier bag goes. The point is that I do not want to spend 5p. Some businesses—most, I think—give the money to charity, but I do not know to which charities. Is that important? If we could make money from carrier bags or from returning cups or whatever, and put into the national health service, would that not be equally good?

**Callum Blackburn:** You could do that, and there was a lot of discussion about it when the single-use carrier bag charge came in. If there is a similar charge on coffee cups, it might be the same. However, there is a simplicity in doing it without getting involved. For the single-use carrier bags, the money goes back to the retailer and, as you said, they are encouraged to give the money to charity. That is nice and simple. Apart from policing the scheme, the Government does not really have to get involved.

The first time that we looked at single-use carrier bag charges, I was working for a local authority. The Government was trying to find a way of getting the money back into the public exchequer, if you like, and it was so complex that, eventually, it gave up. There is a place for such things, but there is also a place for just saying, “Let the retailer keep the money; we will encourage them to do the right thing. The key thing is the behaviour change, so does it matter?”

It might take five years longer to bring in a charge that would give you a bit of revenue, whereas you could do it really quickly. There is an offset. In some ways, minimum pricing is an easy thing to do, and businesses will complain less if they do not have to give the Scottish Government money and can just keep it for themselves.

Sometimes, there are costs for them. It makes sense.

Does that answer your question?

**John Mason:** That is fine. There is so much in this that we could all be asking questions for an hour, which, presumably, the convener does not want.

There is another biggie that we have not really looked at too much this morning. You have talked about tax being neutral, and your idea is that we could take a bit off income tax or council tax, and put it on to something else, such as waste. A big issue that you mention in your report is fuel duty, and the fact that, when we fill up our cars, so much of the cost goes to the Government. Where do you think we can go with that? If we are giving all those incentives for electric cars, which do not pay so much road tax—they do not pay this and they do not pay that; I think that you even suggest that they should get cheaper parking—how do we compensate for that? What will happen?

**Callum Blackburn:** That is a big issue for the UK Government. I have forgotten the numbers, but billions of pounds of revenue would be lost. The question is what happens then. I suppose that the obvious thing would be to start taxing electric cars once everybody has one. The annual duty that you pay on your car could be increased; at the moment, it is very cheap for electric cars.

The consensus has been that the lost fuel revenue would be replaced with road pricing. If you had asked me about that a few years ago, I would have said that I could not see that happening, because it is so complex. However, technology has moved on, and we can see what is happening in London, which is pioneering some of the changes to charging with its congestion zone. If London manages to do those things, and it becomes more electronic, you could see road pricing coming forward.

If I was the UK Government and I was gradually going to lose billions of pounds, I would need to do something. Road pricing looks like the most obvious answer to me, from the research work that I have done. I know that it is not popular and that there are lots of issues around it, but just looking at it pragmatically, it looks like the most likely option.

**John Mason:** I could ask more questions, but I will leave it at that.

**The Convener:** Australia has had road pricing for 20 years. You have an electric chip in your car, you drive along a motorway and you do not have to stop at any tollbooths or anything. You drive along, and you pass these things every 5km or whatever it happens to be. It is almost like being in a taxi—the meter keeps ticking over. If Australia

has been doing that for 20 years, there is no reason why it cannot be done here, although, as you said, it will not be very popular. It would probably have to be met with reductions in other motor-related tax. One of the things about road tax is that it is not all spent on the roads—it just goes into general taxation.

**Michelle Thomson (Falkirk East) (SNP):** You have done a great job with your report, Callum Blackburn, particularly in restricting it to only 90 pages, such is the complexity of the issue. There is a backdrop to it, of course. The UK Parliament Public Accounts Committee's report makes it clear that the UK Government has a plan, without answering the key question of how it will fund the transition to net zero, including how it will deliver policy on replacing income from taxes such as fuel duty. It does not even provide a general direction of travel on levies and taxation, which would kind of nail it.

Few could disagree with the principles that you set out in your report, but it immediately struck me that there must be areas in which, if you adhere to one principle, you will be moving against another. Are there any particular areas that you would want to bring out that have not been brought out thus far? You have given some examples already, but it would be useful to have more examples, because I would not in any way want to underestimate the complexity of what we have to do.

**Callum Blackburn:** It is a challenge. Coming to a strategic approach on this is really a starter for 10, to use "University Challenge" language. The principles there are meant to be balanced. There is not a scientific answer, and some of the committee's questions have drawn that out. What about rural properties? What about ferries? You could take a kind of scientific approach to the principles, but at the end of the day, it is about finding the right balance.

The overall whole-Government approach is so important. If that goes forward, and the whole Government applies the same principles for biodiversity and climate change and all the money it spends, you are less likely to get conflicts in some of those principles, because everything will be going in the right direction.

The other thing that I would probably pull out, apart from the route map that I mentioned, is the holistic policy package. As has been mentioned in relation to heating, fiscal measures, especially in areas where the Scottish Government does not have full control, are really just one piece of the jigsaw. We need to look at the wider picture. For example, you might look at a fiscal measure and think, "Actually, would it not be better just to ban that?" Of course, Governments do not like to ban things, because it is not popular, but you might say, "A fiscal measure might not work here, so

we'll need to look at a whole package of other support or have the fiscal measure alongside such a package."

I have to say that the question is a starter for 10, because I have not worked through this to look for obvious conflicts. I hope that there will not be any, but I am sure that they will come up. For example, there might be niche interests or things that have not been considered in a particular area of the Scottish Parliament's competence.

**Michelle Thomson:** You have looked at other countries and set out that evidence in your report, but, as you have highlighted, part of the complexity relates to the fiscal transfer process, which is particularly complex for the Scottish Parliament. Did you consider other states where similar fiscal transfer models exist?

**Callum Blackburn:** No, I did not get the opportunity to do that in this research. I have seen some of the individual measures that have been put in place in certain areas, but I did not look at which country was doing this sort of fiscal transfer better than others. It is definitely worth looking at.

A general issue that came up was that, for the EU27, only 6 to 7 per cent of resource tax was environmental taxation—in other words, it fell within the taxation bracket rather than the grants and subsidies bracket. When you look at that graph in the report, you will see that it is perhaps not going in the right direction. As a result, you could say that no one is, as yet, showing any sign of a good transition.

However, I did not look at the specific issue that you have mentioned, so I might have missed some things. It might be something that the Parliament could consider in future.

**Michelle Thomson:** Like everyone else, I could ask a multitude of questions, but we would be here all day.

**The Convener:** You can ask another, if you like.

**Michelle Thomson:** Okay. As I have been invited to do so, I will.

You allude to some of the potential limitations introduced by the United Kingdom Internal Market Act 2020 and the Subsidy Control Bill. The Scottish Parliament has refused to pass a legislative consent motion on that bill, and the Economy and Fair Work Committee, of which I am also a member, has written about it in quite stringent terms. Are there any other areas that you want to highlight in that respect? I suppose that there is a timing element to consider, given that, as you have pointed out, initiatives that the Scottish Government might attempt to introduce—and which might be trying to do the right things for the right reasons within a very restricted framework—could fall foul of that bill. You have

provided some commentary in your report, but you have not chosen to give any specific examples. Are there any such examples that you would like to highlight now?

**Callum Blackburn:** Yes, I probably have a couple of examples in mind. I am not saying that they are the largest or most significant, but I was thinking about the common frameworks that are being developed. Perhaps I am being hopeful, but going back to the waste-related issues that we have discussed today, the Scottish Parliament and the Scottish Government have always had quite a strong framework of competence with regard to waste and the circular economy, and there is potential for some leeway in those common agreements. That is why I have suggested that an energy from waste tax of some kind might be a mechanism in that respect, if the other countries of the UK have not already done the same thing.

I have two other comments to make. First, I am concerned about what all of this means for minimum prices. After all, we have shown with the single-user carrier bag charge that such an approach can be a really useful little tool for changing behaviour in particular areas.

I would like the Scottish Parliament to have minimum prices in its toolbox for a number of things. That probably extends to deposits on particular waste streams that we want to address in a different way. At this early stage, it looks like that would be a problem, so we might lose that ability, which would be a shame.

11:15

When I looked at the Subsidy Control Bill, my concern was about agricultural subsidies, which are very significant to the Scottish economy. I am not a lawyer but, when I read the bill, it did not seem to be very focused on them; it seemed to be more focused on funding businesses such as manufacturing through state aid rather than agriculture. I might be completely wrong about that, and it might change. I hope that, with the fact that England is moving in the same direction on some of the things that I have mentioned in relation to where I think agricultural subsidies need to go, there will be no barriers to the changes in the agricultural subsidies for the Scottish Parliament.

The three things that spring to mind are minimum prices, agricultural subsidies and—I am sorry; I have forgotten what I mentioned first.

**Michelle Thomson:** That will be in the *Official Report*.

**Callum Blackburn:** Those things do not have particular significance, but they are the points that came into my head.

**Michelle Thomson:** For the record, I point out that the Scottish Government is recommending refusal of the LCM.

**The Convener:** That concludes questions from other members of the committee, but I have one or two wee issues to raise.

Biodiversity is one of my great concerns. In the past couple of weeks, I have read in *The Economist* that, excluding our seas, 96 per cent of the biomass of all vertebrate creatures on earth is either human or the livestock that we raise to feed us. For example, 70 per cent of all bird life on the planet is poultry.

Some of the measures in Sweden with regard to lynx have been touched on. I know that a lot of work is being done to try to restore the Iberian lynx, which was on the verge of extinction.

What more can we do on biodiversity? For example, you have spoken about perhaps up to half of tree plantations being native woodland. We have done a lot in Scotland since the first world war, when our tree cover was down to 2 per cent. That is now up to around 17 or 18 per cent. It is not quite like that of Japan, which is 73 per cent. It has been like that in Japan for centuries because Japan has never denuded its forests. What more can we do to try to restore biodiversity, which has halved worldwide since the 1970s?

**Callum Blackburn:** Agricultural subsidies are important in getting things right. Obviously, we are a very forest-degraded country compared with what was originally there. When a native forest is planted, it does not magically create an ecosystem: that comes through time. Having more of a mosaic of a landscape in which there is more native forestry will be really important. There can be incentives to do that, whether that is through the agricultural forestry payments system or even through encouraging investment in offsets. The woodland carbon code is a good mechanism that provides some certainty about what climate change benefit there will be for businesses that want to invest in offsets. That is a good way of getting more forestry with some safeguards. More native forestry will be key.

I have touched on the persecution of animals. If we can use fiscal measures to change the perception of many people—particularly in agriculture—that animals are pests, and turn that around so that some wildlife is seen as positive because a payment is involved, that will be important. That is why I included that issue. Obviously, it is fantastic to see the reintroduction of sea eagles, red kites and beavers, but there are huge challenges with persecution because of some of the damage that they do. It would be good to find a way of turning that round in our own

behaviour, and for people to think, “It’s a positive thing that I get paid for them being here.”

Those are two things that come to mind.

One of the things that did not come out too strongly was peatland. We have a huge peatland resource and a peatland code. Encouraging investment in that area might not involve a fiscal measure—it might just involve providing a framework for investment—but it will be important to the aim of maintaining biodiversity in the area.

All those issues involve terrestrial life. I did not go into the marine area in detail; I only mentioned things such as the fishery payments.

**The Convener:** Scotland’s only no-take zone is in my constituency, so we can do a lot more in the marine area. However, I will stick to land at the moment.

You have said that it would be great to increase the number of squirrels, pine martens, birds and so on, but what about increasing the number of apex predators? Wolves died out in Scotland in the 17th or 18th century, and bears died out perhaps 1,000 years earlier. Minnesota has reintroduced wolves, but the move was viciously opposed for understandable reasons by farmers and people who were brought up on “Little Red Riding Hood” and so on and thought that wolves would have a severe impact on human populations, which they do not. I do not think that Scotland is quite ready for such a reintroduction, but might it be palatable in the decades to come? The red deer population in Scotland is high because there is a lack of predation. Is that an argument for introducing a predator that could reduce their numbers, so that we could protect the trees—an issue that we have just been talking about—without introducing culling?

**Callum Blackburn:** Obviously, that is not really a fiscal measure, but, from my experience, I can say that it would be beneficial to introduce those predators, and I think that it will happen. Members might know that the lynx is likely to be the first to be reintroduced, but there is a lot of controversy around wolves.

Some of the payment systems that I have mentioned in my paper could be beneficial. Although lynx are apex predators, they are not a main predator of red deer—they predate more on roe deer. However, a lot of groundwork has been done around their reintroduction. From my personal perspective, and speaking as a rewilding enthusiast, I would say that lynx are the apex predators that are the most likely to be reintroduced first. Wolves are incredibly challenging, for the reasons that you have set out.

We have some good news from some of the innovative work that is being done in America.

There are camera traps in buffer zones in areas around places where there are puma and lynx, and a farmer who has lynx coming on to their land gets a payment. There are also measures to support farmers to think differently about how they manage sheep and livestock and bring back more traditional ways of dealing with apex predators. For example, apex predators are scared of dogs, and an industry is developing in America to breed those large dogs that have traditionally guarded flocks, with support being provided to farmers to obtain them, as well as the camera traps. Such a range of measures can be used around apex predators.

There is an appetite for the reintroduction of apex predators, and I believe that more people are talking about it. As awareness of biodiversity and ecological restoration grows, there will be more interest in and support for things like that.

That is my personal view on some things that are not quite related to fiscal measures.

**The Convener:** Well, they will not happen without significant fiscal measures, so I think that it is an important fiscal issue for us. If farmers are not incentivised, they will just not do it; it is as simple as that.

Thank you for your evidence. We appreciate your giving us your time this morning, and thank you for your excellent report and for answering our questions. Your report will inform the committee's approach to examining the finances of our net zero ambitions and areas beyond that, and we will consider the issues again at a future meeting.

We will now move into private session.

11:24

*Meeting continued in private until 11:47.*



This is the final edition of the *Official Report* of this meeting. It is part of the Scottish Parliament *Official Report* archive and has been sent for legal deposit.

---

Published in Edinburgh by the Scottish Parliamentary Corporate Body, the Scottish Parliament, Edinburgh, EH99 1SP

---

All documents are available on  
the Scottish Parliament website at:

[www.parliament.scot](http://www.parliament.scot)

Information on non-endorsed print suppliers  
is available here:

[www.parliament.scot/documents](http://www.parliament.scot/documents)

For information on the Scottish Parliament contact  
Public Information on:

Telephone: 0131 348 5000

Textphone: 0800 092 7100

Email: [sp.info@parliament.scot](mailto:sp.info@parliament.scot)

---

