

Scotland's climate change plan

Evidence to the Environment, Climate Change and Land Reform Committee
February 2017

Overall recommendations

- the Plan should say how much carbon reduction each proposal and policy is supposed to deliver over time
- at least for the earlier years, the Plan should spell out the level of investment needed to deliver the proposals and policies so that a comparison with annual budgets is possible
- the Plan should include an overall commentary on the potential consequences of Brexit
- a remit for the proposed new governance group should be published and its authority clarified
- the future of the Cabinet Sub-Committee on Climate Change should be clarified
- the Plan should be used as the foundation of an industrial plan which marshals the investment needed for a just transition away from fossil fuels in order to deliver a fairer and more equal Scotland

Sector specific recommendations

- the input of transport figures to the TIMES model should be recalculated with more realistic assumptions about traffic levels instead of on a fantasy 'predict and provide' basis
- the Plan needs to include policies which will help people choose walking and cycling for short journeys, and buses and trains for longer journeys, instead of cars, including increasing active travel funding from 2% to 10% of the overall transport budget
- workplace parking levies and parking charges at large retail car parks should be included and other demand management measures should be modelled and included
- Scotland should aim higher on the transition to electric vehicles, as recommended by UKCCC and in line with other leading European nations
- the original plan to equip the TIMES with its own transport modelling component should be delivered, so that TIMES itself can compare technological and demand management options
- further effort is needed to maximise the community ownership of renewable energy schemes covered by the 'community and locally-owned' target
- plans to replace fossil fuel heating systems with low carbon alternatives should start earlier
- the Plan should commit to upgrading Scotland's homes to an EPC rating of 'C' by 2025
- the industrial sector should not be allowed to rely on the EU ETS, and the Plan needs to spell out actions which will reduce emissions for Scotland's largest industrial plants

Introduction

Friends of the Earth Scotland welcomes the opportunity to make this submission. We are part of the Friends of the Earth International network - the world's largest grassroots environmental network, uniting 74 national member groups, over 2 million members and 5,000 local activist groups around the world. FoE Scotland is an independent Scottish charity with a network of thousands of supporters, and 10 active local groups across Scotland. Our vision is of a world where everyone can enjoy a healthy environment without exceeding their fair share of the planet's resources, now and in the future.

Overall

The Climate Change Plan is the product of a very large amount of work and contains many welcome measures, as well as painting an attractive vision of a future Scotland as a low-carbon country. However, delays caused by the use of the TIMES model and political trade-offs have led to a Plan which sometimes lacks detail, has had limited external input and is, in some sectors, overly reliant on

technological progress rather than more fundamental change. The monitoring framework is still being developed but there is insufficient information to interrogate Scotland's financial budget. This evidence is an expanded version of the evidence submitted for the Committee's session on 31st January.

Development and structure of the Climate Change Plan

Scottish Government civil servants have put in many long hours to produce the Climate Change Plan. FoE Scotland have had regular, useful contact with climate civil servants over many months, including a detailed seminar on how the TIMES model works, as well as discussions with ministers. The use of the TIMES model has been helpful in exploring options and highlighting which sectors need to do more. This is a better approach than that of RRP1 and 2. However the TIMES model took much longer to get up and running than expected and therefore delayed and derailed plans for more extensive stakeholder engagement. The multi-stakeholder event held in December was of limited value since it was at a very late stage in the process, after many policy options had already been eliminated for technical or political reasons.

The Plan is logically structured but in some areas oddly lacking in detail of how a particular policy outcome will be delivered. For instance, there are no policy outcomes listed in the tables for agriculture beyond 2025. While the Plan cannot be expected to have all the answers, there are many areas where how to deliver outcomes is left to a future discussion, e.g. table 8-7.

The complexity of getting the TIMES model up and running meant that the original intention of including a sophisticated transport modelling component was not delivered. This would have been able to choose to substitute car journeys with other more sustainable transport choices. Instead Transport Scotland used their own model, with the starting assumption that there would be 27% more car km driven in 2035 than today, and no increase in the use of buses. TIMES was only able to suggest making these vehicles electric rather than seeking alternatives to the level of traffic envisaged.

The predictions of increased distances driven are justified in the Plan thus: "As historically, so in future we expect economic and population growth to increase the demand for the movement of goods, services and people." Transport Scotland's view of history is clearly rather odd. When the Scottish Executive published its 2006 transport strategy it predicted that traffic levels would grow by 22% between 2005 and 2015, presumably on the same basis and using the previous version of the same model as today.¹ The actual growth in traffic levels was 5% between 2005 and 2014.² A similar prediction of 27% growth between 2001 and 2021 made in 2002 will prove equally wide of the mark.³ The kind of 'predict and provide' approach being used by Transport Scotland was discredited more than 20 years ago in the UK Government's SACTRA report on generated traffic.⁴ The fundamental assumptions used to create the transport numbers fed into the TIMES model are clearly nonsense.

Overall ambition of Climate Change Plan

On the one hand the ambition of the Plan must be exactly what is needed, since it is designed to add up to delivering the climate targets agreed by the Scottish Parliament last October. On the other hand, there is insufficient numerical detail to be sure that it does add up, in some sectors there is a large question over how and whether the proposed policy outcomes will be delivered and in a number of areas, particularly transport, technical fixes are supposed to save us and so more difficult policies, are not discussed.

The 2009 Act required Scotland's emissions to reduce by at least 3% every year from 2020. The table below shows that the highest-emissions sectors - transport, agriculture and industry - have been and are proposed to continue to be the sectors which make the least fair contribution to these percentage reductions. It is no coincidence that these are politically 'difficult' sectors. It is in these high-emission

1 Scottish Executive, 2006, *Scotland's National Transport Strategy*, <http://www.gov.scot/Resource/Doc/157751/0042649.pdf>, p11

2 All vehicles and all roads, latest figures available, Transport Scotland, 2016, *Scottish Transport Statistics 2015* Table 5.1 <http://www.transport.gov.scot/report/j415388-08.htm>

3 Scottish Executive, 2002, *Transport Delivery Report*, <http://www.gov.scot/Resource/Doc/159245/0043337.pdf>

4 Standing Advisory Committee on Trunk Roads, 1994, *Trunk Roads and the Generation of Traffic*. <http://webarchive.nationalarchives.gov.uk/+http://www.dft.gov.uk/pgr/economics/rdg/nataarchivedocs/trunkroads/traffic.pdf>

sectors that the credibility of the plan is most important and it is in these sectors that further reductions should be sought.

Sector	2014 emissions	Annual ave change 1990-2014	Annual ave change 2014-2032
Transport	12.9	-0.1%	-1.3%
Agriculture	10.7	-1.0%	-1.4%
Industry	10.4	-2.0%	-0.8%
Electricity	9.8	-1.3%	-4.5%
Residential	5.9	-1.0%	-3.0%
Services	3.4	0.5%	-3.9%
Waste	2.2	-3.1%	-3.1%

Achieved and predicted annual reductions by sector, highest-emissions sectors first; figures in red are less than the 3% overall target required across all sectors

There were several discussions with civil servants about replicating the RPP2 approach of listing the carbon reductions associated with each individual proposal and policies. Whilst these numbers were often quite approximate in RPP2 the TIMES model will have produced very precise estimates of the impact of each policy in each year - these figures exist; we are just not being told what they are. It is hard to see how anyone can have certainty that the document adds up to meeting the targets when this information is lacking. Similarly, it is hard to see how progress on the plan will be properly measured when it is not clear how much any given policy was supposed to have delivered by a certain date.

Even where technical fix measures are desirable and necessary the proposals look weak in terms of both delivery and international comparisons. The Plan envisages that 40% of all new cars sold will be ultra-low emissions by 2032, yet the UK Committee on Climate Change recommended that Scotland should aim for 65% by 2030.⁵ Meanwhile, Belgium, the Netherlands, Germany and Norway are all discussing or committed to targets of 100% by 2025 or 2030. In another example, a previous SNP transport minister promised that every rail line in Scotland would be electrified; at the rate suggested in the transport chapter this would take until 2140.

Over-reliance on technical change

Technological change in transport is important but the Plan is not credible because it almost entirely relies on changing vehicles and fuels, rather than more fundamental demand management options. Getting more people walking and cycling in our urban centres would have multiple benefits, including improving air quality more quickly, reducing congestion (with 12.5% of all journeys delayed by traffic congestion in 2015 according to Transport Scotland), improving public health and thriving urban centres.

The biggest reductions in emissions in transport are supposed to come from policy outcome 1 which relies on tightening vehicle standards from the European Union. Puzzlingly there is no commentary on the implications of Brexit on the imperative to meet current EU standards or for our participation in the negotiations which will agree EU standards beyond 2020. Even if Scotland is still bound by EU vehicle emission standards in future the *Dieseltgate* scandal has shown that emission standards often fail to deliver what is predicted.

The Element Energy report,⁶ which informed much of the development of proposals and policies for transport is specifically about technological changes in the transport sector. The 70-page report contains one rather trivial page on reducing demand and no mention of trains. No proper research seems to have been commissioned by Transport Scotland into demand management, active travel or

5 UKCCC, 2016 *Reducing emissions in Scotland – 2016 progress report*.

<https://www.theccc.org.uk/publication/reducing-emissions-in-scotland-2016-progress-report/>

6 Element Energy, January 2017, *Greenhouse Gas Emissions Reduction Potential in the Scottish Transport Sector From Recent Advances in Transport Fuels and Fuel Technologies*

<http://www.transport.gov.scot/system/files/documents/reports/j202258.pdf> and technical annex

<http://www.transport.gov.scot/system/files/documents/reports/j202352.pdf>

modal shift. Work commissioned for RPP1 showed that some demand management options, including workplace parking levies, speed limit reductions and increased public parking charges are, for instance, four or five times more cost effective at reducing carbon emissions than investment in electric vehicles, yet no demand measures are given any serious consideration in the Climate Change Plan.⁷

On energy there are a number of welcome commitments on decarbonising electricity and a strong focus on renewables, including community renewables. We are sceptical that carbon capture and storage will become viable, but this only becomes important in the late 2020s so there is time to review this strategy, including when higher ambition is enshrined in a new Climate Change Act. The Plan has a high level of ambition on decarbonising heat - beyond 2025 a rapid transition away from gas heating is proposed for both domestic and non-domestic properties. Many modern properties are already in a position to make this kind of change to, for instance, air source heat pumps, when they next replace their heating system, so there is an element of this policy which could be facilitated before 2025. All new construction should install only low-carbon heating or be connected to district heating.

A very significant part of the proposals to reduce emissions in future for industry is for this sector to continue to participate in the EU emissions trading scheme. It would be very confusing to try to continue to give credit to the industrial sector for trading in the EU ETS when overall Scottish emissions are to be reported as gross emissions (i.e. excluding the EU ETS) in future. It is hard to see any actions proposed making much difference to the biggest industrial high energy users in Scotland.

Climate change governance

The Plan contains a chapter on monitoring and evaluation with sensible principles and aspirations, with a final monitoring framework due in 2018. Because of the lack of specific carbon abatement numbers attached to each proposal and policy, as mentioned above, the framework proposes to measure a range of outcomes, outputs and indicators, and report annually. It is not clear what status this report will have, nor when it will appear in relation to the annual targets figures, the 2009 Act §33 annual report to Parliament or the financial budget cycle. There is no commitment for a statement to Parliament and it may be up to Committees to make the most of this information.

It is not possible to tell from the CCP when and how much expenditure is required to deliver policies. So the predecessor Committee's criticism that it is not possible to work out whether the annual financial budget includes the funding needed to deliver on climate policies has not been addressed.

There is a new governance body proposed but no detail of who will sit on it nor what public scrutiny it will be open to. It is not clear that the Cabinet Sub-Committee on Climate Change will continue to exist.

Economic and social considerations

The transformation to a low carbon economy offers the chance to build a fairer, more equal Scotland. It is our view that involving workers and communities currently dependent on jobs in oil and gas and other high carbon sectors, as well as broader civil society in planning for this transition, is essential to its success and resilience.

We urge the Scottish Government and Parliament to use the Climate Change Plan as the foundation of an industrial plan which marshals the investment needed for a just transition to a modern low-carbon economy, in ways which protect workers' livelihoods and tackle disadvantage in the labour market here in Scotland. A Just Transition Commission that includes union, community and environmental representatives should be set up to oversee and take forwards the transformation to a low-carbon economy.

For further information contact Friends of the Earth

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⁷ Scottish Government, 2009 *Mitigating Transport's Climate Change Impact in Scotland: Assessment of Policy Options*. <http://www.gov.scot/resource/doc/282791/0085548.pdf>