



## Public consultation by Transport Scotland to inform the development of an Aviation Strategy

Response from Stop Climate Chaos Scotland  
January 2022

### **Introduction**

[Stop Climate Chaos Scotland](#) (“SCCS”) is a diverse coalition of over 60 civil society organisations in Scotland who campaign together on climate change. Our members include environment, faith and belief groups, international development organisations, trade and student unions and community groups. We believe that the Scottish Government should take bold action to tackle climate change, with Scotland delivering our fair share of action in response to the Paris Agreement and supporting climate justice around the world.

SCCS was pleased to be invited to, and to participate in, the Transport Scotland event entitled “*Developing an aviation strategy: Low and Zero Emission Aviation Workshop*” held on 3<sup>rd</sup> December 2021. The notes of that event, circulated subsequently, included the comments made by SCCS’ representative. We welcome the opportunity to add to those comments by means of this written submission to the public consultation. This submission seeks to reiterate those comments and provide greater detail – as the comments are strategic, it takes the form of a written contribution, rather than seeking to answer the specific questions in the online consultation.

### **Climate context**

Global warming of more than 1°C has already taken place since the pre-industrial period. The impacts are already being felt and further emissions will make these increasingly worse. The Paris Agreement aims for countries to work to limit warming to well below 2°C and to aim for 1.5°C above pre-industrial levels. The UN’s Intergovernmental Panel on Climate Change (IPCC)<sup>1</sup> states that restricting global warming to the 1.5°C level would require a 45% reduction in net human-caused emissions of CO<sub>2</sub> by 2030, global carbon net neutrality by mid-century, and then the removal of billions of tonnes of atmospheric carbon dioxide for the rest of the century. The IPCC also stated in 2018 that there are fewer than 12 years to make the necessary changes; we must therefore act now.

In August 2021, the IPCC issued the starkest warning yet about human impact on the planet, including more intense heatwaves and more extreme weather events, with some changes now inevitable and irreversible<sup>2</sup>. The UN Secretary General branded the findings a “code red for humanity”<sup>3</sup>. The science is now overwhelming: without concerted action we’re headed towards climate catastrophe; with the poorest communities and future generations suffering the most.

“As First Minister of Scotland, I am declaring that there is a climate emergency.  
And Scotland will live up to our responsibility to tackle it.”

Rt. Hon. Nicola Sturgeon MSP, 28 April 2019<sup>4</sup>.

In April 2019, the First Minister ‘formally’ declared a climate emergency<sup>5</sup>. This language was subsequently central to Scottish Government policy and statements – for instance, the (then) Cabinet

<sup>1</sup> ‘IPCC Special Report: Global Warming of 1.5°C’, October 2018. <https://www.ipcc.ch/sr15/>

<sup>2</sup> <https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/>

<sup>3</sup> <https://www.bbc.co.uk/news/science-environment-58130705>

<sup>4</sup> <https://www.ukpol.co.uk/nicola-sturgeon-2019-speech-at-snp-conference/>

<sup>5</sup> <https://www.bbc.co.uk/news/uk-scotland-scotland-politics-48077802>



Secretary's statement in May 2019<sup>6</sup> and the 2019-20 Programme for Government<sup>7</sup>. It remains a key element of policy with one of the six chapters within the Scottish Government – Scottish Green Party Shared Policy Programme entitled “Responding to the climate emergency”<sup>8</sup>. The co-operation agreement also creates a Cabinet Sub-Committee on the Climate Emergency “to provide cross-Government leadership and coordination of efforts to tackle climate change”<sup>9</sup>.

In May 2019, the UK Climate Change Committee (CCC) recommended that Scotland could reach a net zero target for greenhouse gases by 2045 (ahead of the UK, which could meet the same target by 2050)<sup>10</sup>. The Scottish Government swiftly accepted these recommendations<sup>11</sup> and have now legislated to secure net zero emissions by 2045, with an interim target of a 75% reduction by 2030<sup>12</sup>.

**Any strategy for aviation, within and to/from Scotland, that does not set out the scientific and policy context of climate change – including the respective 75% and net zero targets – is not a coherent strategy.** To be effective, the strategy will also need to set out current data on emissions from aviation and what reduction each policy intervention will make to reduce these emissions.

### **Lack of a strategic vision**

At the 3<sup>rd</sup> December workshop, “*Environmental NGOs commented that the discussion document is lacking a strategic consideration of how much aviation there should be in future and the role that demand management needs to play in reducing aviation emissions*”<sup>13</sup>. **This remains the single most important, strategic concern with the consultation and proposed strategy.**

As the most effective way to reduce emissions from aviation is to not travel or use alternative means of travel, the aviation strategy should begin by asking “how much aviation is necessary” (as opposed to desired/demanded)? Policy mechanisms to reduce demand to this level (as well as to support the alternative, less carbon intensive means of travel) should be adopted as the highest level of a policy hierarchy. With regard to demand management, we note that the Climate Change Committee (the Scottish Government’s formal advisors) have observed, in their most recent progress report to the Scottish Parliament that, in relation to aviation:

*“A demand management framework will need to be developed (by 2022) and be in place by the mid-2020s to annually assess and, if required, control sector GHG emissions and non-CO2 effects”<sup>14</sup>.*

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<https://www.gov.scot/publications/global-climate-emergency-scotlands-response-climate-change-secretary-roseanna-cunninghams-statement/>

7 <https://www.gov.scot/news/protecting-scotlands-future/>

8

<https://www.gov.scot/publications/scottish-government-and-scottish-green-party-shared-policy-programme/>

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<https://www.gov.scot/publications/scottish-government-and-scottish-green-party-cooperation-agreement/>

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<https://www.theccc.org.uk/wp-content/uploads/2019/05/Net-Zero-The-UKs-contribution-to-stopping-global-warming.pdf>

11 <https://www.gov.scot/news/climate-change-action-1/>

12 <https://www.legislation.gov.uk/asp/2019/15/enacted>

13 From the Transport Scotland notes reporting the “Developing an aviation strategy: Low and Zero Emission Aviation Workshop” held on 3<sup>rd</sup> December 2021.

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<https://www.theccc.org.uk/publication/progress-reducing-emissions-in-scotland-2021-report-to-parliament/> (page 112).



We also note that demand management (and specifically reduction), including for aviation, is central to the policy recommendations in the *Decarbonising the Scottish transport sector* report commissioned by Transport Scotland<sup>15</sup> which states:

*“Emissions from domestic and international aviation need to fall by 33% between 2019 and 2030, driven by a mix of SAF and a **reduction in total flight kilometres travelled**”* (emphasis added).

As indicated above, this demand management will need to include greater support for alternative, less carbon intensive means of travel (where the journey is necessary and such alternatives are available). As part of this, the Climate Change Committee have further recommended that the Scottish Government should:

*“Take steps to address price imbalances between aviation and surface transport, once aviation taxation is devolved to Scotland, encouraging the low-carbon alternative (e.g., rail) for journeys where one exists”<sup>16</sup>.*

This top level of demand reduction should, of course, be accompanied by other measures to reduce emissions from those necessary flights (low or zero emissions aircraft, sustainable aviation fuel, etc). However, while these measures are necessary, they must be seen as essential *components* of an overall strategy and will never enable a strategy for net zero unless set within the context of a strategic vision and demand management. In addition, it should be noted that the Climate Change Committee describe (in relation to the UK Government’s aviation policy) such assumptions on such technological improvements as “ambitious”<sup>17</sup>. While there is nothing inherently wrong with ambition, it does underline the need to plan for lower success as well as the importance of demand management as the context within which such improvements should be made.

The Scottish Government’s 2020 National Transport Strategy states, as one of its strategic priorities that “our transport system:

*Will enable greener, cleaner choices: over the next 20 years, Scotland will see a continued transformation in transport where **sustainable travel options are people’s first choice** if they need to travel. We will design our transport system so that walking, cycling and public and shared transport take precedence ahead of private car use”<sup>18</sup> (emphasis added).*

While primarily concerned with land-based travel, that general climate policy inspired approach should also apply to the aviation strategy. It should also be noted that “not travelling” (where possible) is, in fact, the most sustainable travel option available. Such an approach to travel policy is also similar to the “reduce-reuse-recycle” approach used in waste policy.

**Any strategy for aviation, within and to/from Scotland, that does not set out a strategic vision of how much aviation there should be in the future – and demand management policies to achieve such a (reduced) level – is not a coherent strategy. It would also not be consistent with the Scottish Government’s climate change targets and policies.**

### **Response to specific questions/policies**

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<https://www.transport.gov.scot/media/50354/decarbonising-the-scottish-transport-sector-summary-report-september-2021.pdf>

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<https://www.theccc.org.uk/publication/progress-reducing-emissions-in-scotland-2021-report-to-parliament/> (page 112).

<sup>17</sup>

<https://www.theccc.org.uk/publication/progress-reducing-emissions-in-scotland-2021-report-to-parliament/> (page 111).

<sup>18</sup>

<https://www.transport.gov.scot/media/47052/national-transport-strategy.pdf>



In addition to the above, strategic issues, SCCS would comment, as follows, on a few of the specific questions/issues raised by the consultation paper.

### **1. What more, if anything, should the Scottish Government and industry do to accelerate the transition to low/zero emission aviation?**

Based on the consultation paper and the workshop discussion, we understand “low/zero emission aviation” to mean the use of wholly or partly electrically powered aircraft (with, of course, the assumption that the electricity sources used would be renewably generated). We also understand that, at least for the period of this strategy, that such aircraft would be focused on domestic (especially highland and island) and/or short haul flights.

As outlined above, transforming any necessary flights (within the context of the strategic approach discussed above) to this form of low/zero emission aviation is a commendable *part of* any strategy. However, it is important that, as with any other policy, all the implications/consequences of such an approach are assessed, taken account of and, where necessary this or other policies modified. In this case, the issues that must also be considered would include: -

- Increased electricity demand – do Scotland’s plans for renewable electricity generation incorporate the likely increased demand, and can it be delivered to the right locations? Can such increased demand be delivered in an environmentally sustainable manner?
- Batteries – as with electric land vehicles, the manufacture, transport, and disposal of batteries necessary for such wholly or partly electrically powered aircraft will need to be considered. This is an area where environmental (and social) impact can be considerable, and a policy that relies on considerably greater use of this technology will, to be coherent, also need to address these impacts.

### **2. What can the Scottish Government do to help increase the use of sustainable aviation fuels (SAF)?**

Based on the consultation paper and the workshop discussion, we understand “sustainable aviation fuel” to be fuel that can be burnt in conventional/adapted aircraft engines (particularly for medium and long-haul flights where electrification is less feasible) but is dubbed ‘sustainable’ by virtue of being manufactured from ‘renewable sources’ such as plants and/or food waste.

As outlined above, transforming any necessary flights (within the context of the strategic approach discussed above) to this form of fuel is potentially a commendable *part of* any strategy. However, it is only potentially commendable because, as with any other policy, all the implications/consequences of such an approach must be assessed, taken account of and, where necessary, this or other policies modified. In this case, these issues are especially important given the ‘mixed’ track record of biofuels for land vehicles.

The issues that must also be considered and addressed, in relation to sustainable aviation fuel, would include: -

- Is the ‘feedstock’ used for the manufacture of such fuel genuinely sustainable/renewable?
- What impact does encouraging the growth of demand for such feedstock have for other policies/objectives of the government (e.g., land use, food supply, waste reduction).

In relation to these issues, we welcome the discussion (at the workshop) of a ‘feedstock hierarchy’ and of accreditation schemes. However, these need to be appropriately scrutinised and vigorously enforced – and a government strategy needs to set out how this scrutiny/enforcement will take place. In particular, we note that the ‘feedstock hierarchy’ sets food waste as the ‘most sustainable’ source. Such an approach needs to be considered in the context of the Government’s other, commendable policy of aiming for zero waste – is developing an industry based on demand for waste consistent with a zero-waste policy?

### **3. What do you think the Scottish Government can do to help ensure a just transition to net-zero for the Scottish aviation sector?**



SCCS supports the principles of a just transition, and our membership overlaps considerably with the Just Transition Partnership<sup>19</sup>. We commend any submission made by the partnership and/or its members but would especially note that the voices of trade unions, environmental bodies and the communities affected must be involved in the implementation of policies to ensure a genuinely just transition.

### **Conclusion**

SCCS welcomes the opportunity to make this written submission to the public consultation to inform the development of an Aviation Strategy.

Our primary concerns are that **the strategy must:**

- **set out the scientific and policy context of climate change – including the respective 75% and net zero targets; and**
- **set out a strategic vision of how much aviation there should be in the future – and demand management policies to achieve such a (reduced) level.**

In addition, the policies to be set out in relation to low or zero emissions aircraft and sustainable aviation fuel must also set out any likely consequences for the environment and/or the successful delivery of other government policies (including the decarbonisation of electricity and a zero-waste economy). Finally, the voices of trade unions, environmental bodies and the communities affected must be involved in the implementation of policies to ensure a genuinely just transition.

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<sup>19</sup> <https://foe.scot/resource/joint-statement-just-transition/>