

STOP CLIMATE CHAOS SCOTLAND RESPONSE TO SCOTTISH GOVERNMENT CONSULTATION: ESTABLISHING A SCOTTISH NITROGEN BALANCE SHEET

1. The scope of the Scottish Nitrogen Balance Sheet

The Scottish Government proposes that the Scottish Nitrogen Balance Sheet (SNBS) should, wherever possible, cover all major flows of nitrogen within all parts of the Scottish economy and environment. Flows across relevant national boundaries should also be quantified wherever possible. Such an approach would mean that the SNBS will cover flows of nitrogen within and between the following sectors of the economy: aquaculture, energy production, fisheries, food and drink production, forestry, human nutrition, industry, transport, waste management. It will also cover the following aspects of the environment: atmosphere, terrestrial, freshwater and coastal systems.

Do you:

fully support the proposal

support the proposal to some extent

not support the proposal

don't know/don't have an opinion

Do you have any changes you would like to suggest and/or any other comments? In particular, are there any important sectors that may be missing from the lists above?

Really key that this integrates with other legislation and measures such as the Cleaner Air for Scotland 2 as that could help drive nitrogen use efficiency too. The agriculture sector is not directly mentioned but it is understood that much of it would be covered under food and drink production. However, there are other products from agriculture such as fibre eg wool, medicinal components, non-edible horticulture, and so on. All agricultural products and on-farm waste need to be included within the scope of the SNBS.

2. The spatial scale of the Scottish Nitrogen Balance Sheet

The Scottish Government proposes that the Scottish Nitrogen Balance Sheet (SNBS), at the point of its establishment, will be national in scale. Further outputs will also be prepared at regional and sector by sector scales, where data availability allows for this. We further propose that the SNBS should also be designed as flexibly as possible, to allow it to fit together with any higher spatial resolution data sources that may become available in the future (e.g. data at the river catchment, farm or community levels). It is recognised that nitrogen accounting at more detailed levels could be of value in terms of understanding improvements in national nitrogen use efficiency and giving appropriate credit for these. Under the proposed approach, the possibility of further development in these directions will be kept under regular review and updates provided to Parliament (see Q5 for the frequency of these reviews).

Do you:

fully support the proposal

support the proposal to some extent

not support the proposal
don't know/don't have an opinion

Do you have any changes you would like to suggest and/or any other comments?

For the success of the balance sheet, it is crucial that the results are not too coarse and this will be determined by the spatial scale of the exercise. Producing sector specific scales will of course be interesting, but as the topography and geography of Scotland is so different, so are the businesses that work within them. A large farmer growing barley in Angus for example, will have a very different approach to inorganic nitrogen and/or manure use and access to resources than a hill farmer in the Highlands. It is imperative that the scale of data becomes granular enough so that it can inform policy that can make real change on the ground. Further, this granularity will then, hopefully, be able to better capture the impacts of changing farming practices such as the inclusion of nitrogen fixing plants, which will be particular to individual farmer's decisions.

This data should also be available to those with decision-making powers at multiple levels too, for example at local authority level and for Regional Land Use Partnerships. It is key that the data is collected but also then used effectively. By reviewing improvements at high resolutions it will be able to show what works and what doesn't.

3. Setting targets based on the Scottish Nitrogen Balance Sheet

The Scottish Government's view is that targets for improving national nitrogen use efficiency cannot be meaningfully set until the baseline evidence base has first been established. However, we also recognise that such targets may be appropriate in the future. As such, we propose that the setting of targets based on the Scottish Nitrogen Balance Sheet should be kept under regular review and updates should be provided to Parliament (see Q5 for the frequency of these reviews) following its initial establishment.

Do you:

fully support the proposal
support the proposal to some extent
not support the proposal
don't know/don't have an opinion

Do you have any changes you would like to suggest and/or any other comments?

We absolutely agree that the Scottish Nitrogen Balance Sheet should lead to the creation of targets for the reduction of nitrogen waste. The UK has signed up to the ambition of halving nitrogen waste by 2030 as part of the Colombo Declaration so we would hope that the actual targets for Scotland are more ambitious than that and informed by the Balance Sheet.

Reducing nitrogen waste will directly impact nitrous oxide emissions, an important part of Scotland's climate targets. We would suggest that as the Balance Sheet is part of the Climate Act, reviews of the targets should align with the Climate Plans so targets should be set for the next Climate Plan due in 2025.

4. Making the Scottish Nitrogen Balance Sheet as accessible as possible

The Scottish Government proposes that, in order to make the Scottish Nitrogen Balance Sheet (SNBS) as user friendly as possible, the outputs should also include a suite of non-technical factsheets. These should set out the key findings on nitrogen use efficiency at national and sector by sector scales.

Our intention is that these factsheets will help with broader understanding of the cross-cutting nature of nitrogen across the economy and the environment, and help to support the wider development of joined-up strategies and policy measures. Where possible, the factsheets could include relevant contextual information alongside the nitrogen flow data themselves – for example on the impacts associated with nitrogen losses.

Do you:

fully support the proposal

support the proposal to some extent

not support the proposal

don't know/don't have an opinion

Do you have any changes you would like to suggest and/or any other comments? In particular, are there any other outputs you would like to see?

Improving nitrogen and climate literacy is crucial, across all parts and sectors of Scottish society. We support the need for sector by sector scales but would also urge caution that the information is so non-technical that it doesn't inspire any action. This must also include ammonia. We would also urge that the nuances between different farming practices are looked at. Nitrogen use and thus its waste will vary depending on the farming sector, as well as on the farming practice. Organic farming for example, uses different forms of nitrogen than many conventional practices. Identifying the potential for waste and unintended emissions in different farming practices would be ideal.

5. How often should the Scottish Nitrogen Balance Sheet be updated?

The Scottish Government proposes that the frequency of review and updating of the Scottish Nitrogen Balance Sheet (SNBS) should be annual, following its initial establishment by March 2022.

Annual updates would match reporting cycles for other key datasets, such as agricultural census/survey data, the UK National Atmospheric Emission Inventory and the Scottish Pollutant Release Inventory. However, not all of the data will be available on an annual basis. This means that the largest nitrogen flows and those expected to change most over time will need to be prioritised in the updates, with very small flows potentially being updated on a less frequent cycle.

Do you:

fully support the proposal

support the proposal to some extent

not support the proposal

don't know/don't have an opinion

Do you have any changes you would like to suggest and/or any other comments? In particular, if you do not support the proposed annual update frequency, please say which frequency you would prefer.

An annual update would create a sense of continuity and hopefully show key trends. However, there must be consistency between the dates set for targets as mentioned above and the SNBS updates to ensure that all the necessary datasets can inform targets and any required policy changes.