

Department of Industry, Science, Energy and Resources submission to the House of Representatives Standing Committee on the Environment and Energy Inquiry into the *National Greenhouse and Energy Reporting Amendment (Transparency in Carbon Emissions Accounting) Bill 2020*

Key messages

- The Australian Government places great importance on compliance with the UN climate treaties' transparency framework and ensuring transparency and accountability in the way Australia's carbon emissions are reported internationally and to the Australian public.
- Under the terms of every UN climate treaty since 1992, the Australian Government is accountable for the emissions occurring within Australia's territorial boundaries.
- This principle of accountability underpins the Australian Government's emission reduction commitments for 2020 and for 2030.
- The Government releases the National Greenhouse Accounts each year to provide a comprehensive set of transparent accounts for emissions in Australia that track the Australian Government's progress towards acquitting this accountability.
- The Department provides a timely update of the Government's progress every three months in the *Quarterly Update of the National Inventory*.
- NGERs has been designed to operate within the UN climate treaties' transparency framework – the approach taken in NGERs is consistent with UN climate treaty decisions and with the advice of the IPCC.
- The concept of a scope 3 emission, however, is complex with high information requirements and depends on an understanding of the economic flows of goods and services.
- The proposal to require NGER reporters to estimate scope 3 emissions would take NGER reporting outside of the UN transparency framework. It would likely impose significantly higher compliance costs, rely on hard-to-verify data and generate uncertain estimates.
- The Climate Change Authority, in its review of the NGER legislation in 2018, found that it is working well, fit for purpose and has strong support from industry, governments and others.
- Further the CCA concluded that 'reporting of scope 3 emissions should not be required at this stage' under NGERs.
- The Department shares this conclusion and draws attention to the risks that public perceptions of the quality of the emission estimates currently reported under NGERs could be undermined by any expansion of NGERs into the reporting of scope 3 emissions.

The Australian Government's existing transparency and accountability arrangements

1. The Australian Government places great importance on compliance with the UN climate treaties' transparency framework and ensuring transparency and accountability in the way Australia's carbon emissions are reported internationally and to the Australian public.
2. Each year, the Department of Industry, Science, Energy and Resources prepares an annual national greenhouse gas inventory report which is an account of Australia's emissions that is submitted under the UN Framework Convention on Climate Change. Emission estimates are prepared and reported by the Department in accordance with the decisions adopted under the UN transparency framework. Those decisions require emissions estimation consistent with Intergovernmental Panel on Climate Change (IPCC) guidelines, and that information reported adheres to requirements for transparency, accuracy, time series consistency, completeness and comparability with other countries.
3. More generally, the Australian Government's system of National Greenhouse Accounts has been designed to be as comprehensive, transparent and as timely as any emissions accounting system in the world. Each year, in addition to submitting Australia's national greenhouse gas inventory to the UN, the Department prepares the National Greenhouse Accounts that provide information on emissions at national level and disaggregated by State and Territory, by IPCC and by ANZSIC classifications. These data are made publicly available in report format and via an interactive database known as the Australian Greenhouse Emissions Information System (AGEIS) for maximum transparency and to encourage public scrutiny.
4. National emissions estimates are produced in a timely way. Estimates are updated every quarter in the *Quarterly Update of the Australian national greenhouse gas inventory*. The Australian Government is amongst only a few governments that report quarterly emissions on a comprehensive basis. New Zealand, Sweden and the Netherlands also publish quarterly data relatively quickly, for example, although they focus on energy and/or electricity emissions only.
5. The Australian Government has been held to account for the way in which it reports Australia's emissions through the UN climate treaties' audit process for the last twenty years. Each year, the Government's annual national inventory report to the UN is subject to an international expert audit. These audits bring together a team of inventory experts from around the world for the minimum of a week to intensively review Australia's inventory report. They review the emissions estimates, and the underpinning national inventory system that produces the estimates, for compliance with the UN transparency framework rules.
6. The Australian Government's inventory has been consistently assessed as being of high quality. The latest international expert audit found the systems supporting the delivery of Australia's national inventory, of which NGERs is an integral part, are working well. Domestically, the 2016-17 Australian National Audit Office performance audit concluded that the Department has established appropriate processes to prepare, calculate and publish Australia's national inventory.
7. The Australian Government is recognised internationally for excellence in emissions estimation and its underpinning national inventory system, with other countries actively seeking to learn from this experience and expertise. With the Department's support, the Government of the Kingdom of Thailand has designed and developed a national inventory IT system (TGEIS) mirroring

Australia's own. TGEIS is critical to Thailand's climate action through its establishment of governance and institutional arrangements, and the production of timely, high quality and transparent greenhouse gas emissions data. The Department also has a long collaboration with China under which it shares its expertise and experience in the measurement, reporting and verification of emissions, and related institutional and governance arrangements. Other countries such as the Republic of Korea have acknowledged key elements of Australia's national inventory system, specifically NGERs, as a model for their own national inventory systems.

NGERs is consistent with approaches of major international economies

8. The *National Greenhouse and Energy Reporting (NGER) Act* is a critical part of the Government's information architecture on greenhouse gas emissions. The NGER Act was passed in 2007 and the NGER Regulations and NGER Measurement methods established in 2008. NGERs is amongst the most comprehensive mandatory company greenhouse gas data reporting systems in the world; covering approximately 60 per cent of Australia's scope 1 emissions¹.

9. The 2018 Climate Change Authority (CCA) review focused on the NGER legislation, finding it is working well, is generally fit for purpose and has strong support from industry, governments and others. The review also stated the CCA's view that NGERs is meeting the objective of the legislation through the provision of high quality emissions data, and found that NGERs plays an essential role in Australia meeting its international reporting obligations on greenhouse gas emissions.

10. Many of the elements in NGERs are comparable with approaches adopted elsewhere, including the European Union ETS Directive (2003) and the US Greenhouse Gas Reporting Program (2009). Like NGERs, the major international emissions data collection mechanisms, such as those in the European Union and the United States, do not require companies to report estimates of scope 3 emissions.

NGERs is designed to operate within the UN climate treaties' transparency framework

11. NGERs is designed for consistency with the UN climate treaties' transparency framework in order to support the object of the Act that is to assist in meeting Australia's international reporting obligations.

12. The UN transparency framework is built around each government reporting the emissions that occur within its country's territorial borders. Further, the Australian Government's climate treaty emission reduction commitments are based on the national greenhouse gas inventory that is an account of the emissions that occur within Australia's borders.

13. The concept of an emission used by the UN transparency framework is that of a release of gas from a specific location to the atmosphere. 'Scope 3 emission' calculations, on the other hand, attach estimates of emission impacts to the production, supply and use of goods and services. Elements of these scope 3 emission calculations relate to the economic flows of goods and services that cross international borders and are, therefore, not consistent with the UN transparency framework established by the international community to ensure transparency and accountability in emissions reporting.

¹ Clean Energy Regulator Annual Report 2018–19, page 49

14. The proposal for NGER participants to report a scope 3 calculation that includes the impacts on emissions arising overseas, for example, from the combustion of exported fossil fuels, would not be consistent with the UN transparency framework. In addition, such an approach would not be supportive of the NGER Act's first object of supporting the Government in meeting its international emission reporting commitments, and by extension, its emission reduction commitments under the UN climate treaties.

15. The rationale for the existing UN transparency framework for emissions reporting, to which the Australian Government adheres, is very clear.

16. The IPCC provides the basis for the UN transparency framework. The IPCC's key concept of "national territory", that governments take responsibility for emissions occurring within their own territorial borders, is set out in the *Revised 1996 IPCC Guidelines for the preparation of national greenhouse gas inventories*, the *2000 IPCC Good Practice Guidance*, the *2006 IPCC Guidelines for the preparation of national greenhouse gas inventories* and the *2019 IPCC Refinement to the 2006 IPCC Guidelines*.

17. The principle of government responsibility for the reporting of those emissions occurring within a government's own borders is the basis for all UN treaties on climate change. Australia and other signatories negotiated these treaties in recognition that climate change is a global problem requiring a global solution. Each signatory makes its contribution, and in the case of the transparency framework, does so by being accountable for the emissions within its own territory. The approach avoids double counting and promotes complete, global coverage of emissions.

18. The UN Framework Convention on Climate Change (UNFCCC) has overwhelming international support and was ratified by 197 governments in all, with the Australian Government being one of the first governments to ratify, in 1992. This treaty, in Articles 4 and 12, effectively set out the concept of "national territory" emissions reporting for the first time.

19. The same approach was adopted for the Kyoto Protocol in 1997 and, again, more recently in the commitments made by all parties to the Paris Agreement, negotiated in 2015, through a new Paris Agreement Enhanced Transparency Framework (Article 13.7).

20. Consequently, the Australian Government commitments for emission reduction targets for 2020 and for 2030 utilise a national greenhouse gas inventory estimated on the principle that the Australian Government is accountable for the emissions occurring within Australia's territorial boundaries.

21. NGERs has been designed to operate within the UN transparency framework – the approach taken is consistent with UNFCCC decisions and the advice of the IPCC. The NGER facility is responsible for all emissions generated on-site. For example, all emissions from the combustion of fossil fuels regardless of whether the fuel is domestically produced or imported must be estimated. This emissions data reported under NGERs is then used by the Australian Government in its preparation of the national greenhouse gas inventory submitted to meet the Government's international treaty commitments.

22. The proposal to require NGER reporters to estimate scope 3 emissions would take the NGER reporting framework outside of the UN transparency framework. The scope 3 calculations do not fit

with the role of NGERs in supporting the implementation of the Government's emission reporting or emission reduction commitments under the Paris Agreement.

23. An amendment to NGERs is not necessary to support international reporting of Australia's fossil fuel exports under UN climate treaties. The Australian Government already undertakes international reporting of fossil fuel production and exports for the purpose of providing context for policy makers, while not impinging on the UN transparency framework for emissions accounting and the principle of territorial responsibility for emissions.

24. There are many DISER and ABS publications that already track Australia's energy production and exports: – the DISER publications *Australian Energy Statistics* and the *Resources and Energy Quarterly* and the ABS publication *International Trade Statistics*, which provides data on a monthly basis.

25. Drawing on these data sources, the Australian Government transparently documents Australia's reserves, production and export of fossil fuels within the UN transparency framework. This was done in the Australian Government's 7th National Communication, for example, in accordance with Government's climate treaty requirements.

NGERs provides reliable data of high integrity to support Government mitigation policy instruments

26. Since its inception the NGERs has also been used to provide critical data to support the implementation of key policy and emissions mitigation instruments.

27. Data collected under NGERs is currently utilised for the implementation of the Government's Safeguard Mechanism and for the Carbon Farming Initiative/Emission Reduction Fund. Financial flows are generated under these instruments and the values of these financial flows derive in part from data reported under NGERs. The credibility of NGERs data provides an important foundation for the overall performance of these policy instruments.

28. In the Department's view, the inclusion in NGERs of estimates of Scope 3 emissions, which are far less reliable than estimates for the UN concept of an emission, would risk undermining confidence in the integrity of existing NGER data and, by extension, the policy instruments that utilise NGER data.

Mandatory reporting of scope 3 emissions would raise implementation concerns

29. Some companies have begun making and publishing estimates of scope 3 emissions voluntarily in their public reporting in order to support analyses of financial exposure to climate-related risks.

30. The proposition to make the reporting of scope 3 emissions mandatory for all major companies through NGERs, however, would raise a number of implementation concerns.

31. The concerns arise because the concept of a scope 3 emission is much more complex than the concept of an emission applied by the UN transparency framework for emissions accounting.

32. The complexity stems from the intensive information requirements. In essence, to prepare an estimate of scope 3 emissions, the operator of a facility needs to also make an estimate of the emissions associated with the upstream supply of all inputs into the facility's production as well as an estimate of emissions associated with all elements of the downstream supply chain of all of its products until the good or service is utilised by a consumer.

33. For example, to prepare an accurate scope 3 emission estimate, the operator would need to know not only how much coal or gas the facility consumes directly (scope 1), but would also need to know the quantities of coal or gas attributable to individual mines and individual gas basins since each upstream mine or basin has a quite separate greenhouse gas emissions profile. This would also be the case for every single supplier used by that facility. Many inputs into production, such as capital equipment, are often imported with estimates dependent on the emissions profile of the country from which the equipment was imported. Similarly, for the downstream users, the operator would need to know not only how much of each good was produced by a facility, but would also need to know each and every market where each of the goods were utilised. It will matter how the good was used by the consumer as well as where, as that will affect, for example, emissions from transport. See Attachment A for some examples of how scope 3 might work in practice.

34. The high information requirements make the scope 3 emission estimates more costly to generate and make it more difficult for the estimates to be verified.

35. As the Australian economy is highly integrated with the global economy, in many cases suppliers or users of a facility's product will be based overseas. Obtaining accurate information from these overseas entities may be relatively costly. Verification of any information obtained from entities from outside the jurisdiction of the Australian Government may also prove difficult.

36. In these circumstances, approximate estimates could be developed at lower cost, but the resulting estimates would be relatively uncertain. To provide an analogous example, in NGERs, approximations of a facility's emissions may be obtained through the application of a 'Method 1' approach to estimation. Under the Method 1 approach, the facility adopts a method specified in the NGER Measurement Determination that is derived from the National Greenhouse Accounts, as prepared by the Department of Industry, Science, Energy and Resources. A drawback of this approach is that the results obtained reflect typical industry profiles rather than facility-specific information associated with the facility's actual production or commercial decisions. As an indicator of an individual facility's scope 3 emissions, these Method-1 type approaches generate estimates of relatively higher uncertainty.

37. The limitations of the Method 1 approach are acknowledged in the existing NGER architecture. For some sectors in NGERs, for example, like electricity production or coal mining, the use of the simplified Method 1 to estimate scope 1 emissions is not permitted because the resulting uncertainty of the emission estimate is not considered acceptable.

38. While the Department could develop a Method 1-like approach for scope 3 emissions consistent with information reported in the National Greenhouse Accounts, the resulting estimates would be relatively inaccurate for an individual facility.

39. For the above reasons, mandatory reporting of scope 3 emission estimates through NGERs would likely impose costs on companies significantly above current compliance costs for NGER

participants, would rely on data that is more difficult to verify or, using a Method 1 approach, would generate estimates for companies that are relatively uncertain.

40. The Climate Change Authority, in its review of NGERs in 2018, also considered the proposition that it should be mandatory for companies to report scope 3 emissions. The Authority came to the view that ‘the resources required to collect and analyse these emissions is unlikely to be proportionate to its value for data users at this stage’. It also noted other avenues through which companies could voluntarily report scope 3 emissions.

41. The Department notes the Authority’s conclusion that ‘reporting of scope 3 emissions should not be required at this stage’ under NGERs.

Conclusion

42. The Department notes that the Australian Government places great value on ensuring that Australia’s emission accounts are prepared in accordance with the UN climate treaties’ transparency framework and that, consistent with international requirements, the Government is accountable for emissions occurring within Australia’s territorial borders.

43. Introduction into NGERs of elements of a scope 3 emission calculation that reflect the flow of goods and services across international borders would not be consistent with the UN transparency framework and would not support the Government’s Paris Agreement emission reduction commitments.

44. The Department also draws the attention of the Committee to the risk that public perceptions of the quality of the emission estimates currently reported under NGERs could be undermined by any expansion of NGERs into the reporting of scope 3 emissions. This risk would need to be actively considered given the valuable role played by NGER data in supporting a range of existing emissions mitigation instruments.

Attachment A Examples of Scope 3 emission implications

Example 1: Supermarket retailing

Consider the case of a large supermarket retailing food and other household items.

To estimate scope 3 emissions, the steps would be:

1. trace all contributors to the supply chain (both upstream and downstream);
2. add up the emissions associated with every point in the whole of the supply chain; and
3. allocate the total emissions along the supply chain to every contributor along that supply chain.

For example, the supermarket retailer's scope 3 emission estimate would include all of the emissions generated by the distributors, the wholesalers, the manufacturers and packagers and the primary producers (and the suppliers to the primary producers) of the products sold by the retailer.

Emissions generated by livestock industries, grain growers, orchardists and wine makers, for example, would be part of the supermarket retailer's scope 3 calculations – and vice versa. As a result, the same emission would be double (and potentially triple or quadruple) counted.

This approach will also extend the coverage of NGERs considerably as scope 3 emissions for a retailer of food would encompass emissions from agricultural producers, for example.

Example 2: Transport

Consider an example of the consumption of petroleum products by Australian freight companies and motorists.

Since 2005, emissions arising from the consumption of these fuels in Australia has increased by 22 per cent. The fuel associated with these increased emissions is likely to have been supplied by refineries located in Singapore.

Under the UN climate treaties' transparency framework accountability for the increased emissions is clear - the Australian Government is responsible for the emissions because they occurred within Australia's territory.

Under an approach based on scope 3 emissions, however, the emissions would end up being 'double counted' across international borders as Singapore should be accountable for them as part of its 'downstream' scope 3 emissions while Australia should be accountable for them as part of its 'upstream' scope 3 emissions.

This example applies to all international supply chains in a scope 3 scenario. Every contributing country in the international supply chain would be notionally accountable but without the clear delineation of responsibility between each country that underpins the UN transparency framework.

The proposed scope 3 approach lies outside the internationally agreed UN transparency framework and risks reducing transparency and clarity over accountability of emissions.

Example 3: Australian exports of fossil fuels

Under the UN climate treaties' transparency framework, and on the advice of the IPCC, it is those nations where Australian exports of fossil fuels are combusted and generate emissions that are accountable for the emissions.

Specifically, the three biggest destinations of these exports, the Governments of Japan, Republic of Korea and China will estimate and report emissions from these combustion processes under the UN transparency framework. In addition, from 2021, under the Paris Agreement, each of these countries have committed to Nationally Determined Contributions under which emissions from such exports would be taken into account.

Under the UN transparency framework all suppliers are on a level playing field. Each government will report those emissions that occur from fuel combustion within its own borders. This approach avoids double-counting and promotes complete, global coverage of emissions, as well as transparency, accuracy, and comparability across all countries.

Under the proposed scope 3 approach for NGERs, contrary to the UN transparency framework, the Australian exports alone would be tagged with a 'scope 3 emissions' label whereas international and domestic competitors in Australia's export markets would not.

The proposal would represent a unilateral approach not shared by Australia's international and domestic competitors.