

April 27, 2020

Call for data on climate footprints and costs of mitigation options within the transport sector

The writing team of the sixth assessment report of the Intergovernmental Panel on Climate Change (IPCC), Working Group III is launching a call for quantitative data on climate footprints and costs of mitigation options within the transport sector. The data provided will support the evidence base for Chapter 10 (transport sector) of working group three of the sixth assessment cycle.

Letter of Support from IPCC WG3 co-chairs Jim Skea and PR Shukla is appended.

Overview

This call is for the LCA and transport research communities, to make results on climate footprints and costs of different mitigation options for land-based passenger and freight transport, as well as maritime transport to be used for the Sixth Climate Assessment Report (AR6).

The submitted data will be collated into an online database hosted and managed by the Norwegian University of Science and Technology (NTNU) under an agreement with the IPCC. A prerequisite is that the submitting party holds rights to the data, for which they will maintain the full rights to use and share. In addition, data submitters give the authors of Chapter 10, Transport, the right to use the data for the sole purpose of the IPCC assessment. The data will remain strictly confidential until the 6th Assessment Report is published. At that point, the [full] database will be made public.

Those who submit data transfer a non-exclusive right to the IPCC (and NTNU on IPCC's behalf) to publish their submitted data in the AR6 of IPCC Working Group III, once the report is approved.

The publication of the database will allow free use of all data contained in the database, but not its reproduction in whole or in part by third parties without proper authorization from the data owners/authors. The remainder of this note describes the background to the call, the scope of the data requested, eligibility for submission, mechanisms for submission and terms of agreement.

Background

As part of the IPCC's upcoming AR6, Working Group III is performing an updated assessment of the literature on climate change mitigation options for the transportation sector. To facilitate the assessment, research teams specialized in LCA or climate footprints of transportation technologies are invited to submit results to a database hosted by the Norwegian University of Science and Technology on behalf of the IPCC. This database is being established for the sole purpose of informing the AR6.

As the intention is to make the widest possible selection of relevant literature accessible for quantitative assessment for AR6, please distribute this note to all parties of which you are aware that have been working on climate change mitigation and transport.

It is important to note that the AR6 will seek to cover the broad literature on carbon footprints of different transportation technologies fully into account, independently of whether the underlying data is submitted to the AR6 database. However, submitting LCA results data will provide added value to the assessment, as this more easily allows for a quantitative comparative analysis and harmonization. Conversely, submission to the database does not guarantee that a particular study will be included in AR6. This decision rests with the AR6 authors of Chapter 10 and will be based on the needs of the assessment.

What to submit?

We are seeking results on the life cycle greenhouse gas emissions and life cycle costs of transportation technologies for the movement of passengers and goods on land and at sea. Applications/vehicles/vessel segments for which data are needed include motorized two and three-wheeler vehicles, light-duty passenger vehicles (4 wheels), medium and heavy-duty trucks, buses, transit rail, freight rail, as well as maritime vessels.

To facilitate harmonization efforts, we also request that authors provide as much detailed information as possible about the assumptions embedded in their life cycle greenhouse gas emissions and life cycle costs estimates. Such assumptions include vehicle/vessel vintage, lifetime, annual miles travelled, fuel type, fuel efficiency, emissions factors for the fuels, assumptions about the emissions from vehicle/battery/vessel manufacturing, among others. The Excel templates included with this request include a complete list of variables for which data are requested. The Excel file also includes specific comments describing each data category. We request all submitters use the appropriate template for their category of study.

Eligibility for submission

The criteria for inclusion in the database are:

1. The data need to be part of a publication that has been deemed eligible for the AR6. Eligible results have to be published in a peer-reviewed journal article that has been submitted for publication by June 15th 2020, and accepted by January 19th 2021. Alternatively, the data must be part of a report that has been determined by IPCC to be eligible grey literature and that has been published by 19 January 2021. The IPCC's Technical Support Unit (TSU) will make decision on grey literature on a case-by-case basis.
2. Submitting authors have accepted the terms of use of the database and have not withdrawn their data prior to the date of the finalization of the database on 19th January 2021.

Submission of preliminary data

Given that studies may still be underway, researchers are encouraged to register and submit preliminary data from these ongoing studies, with the expectation that the final data will be updated when the studies are complete and the associated journal articles have been submitted (and a second time when they are accepted). It is important, though, that preliminary data considered for submission have already reached a high level of maturity after substantial analysis. Researchers are asked to refrain from submitting preliminary results, if they believe there will be substantial future changes to these data that would fundamentally alter the nature of the results.

By submitting preliminary data to this database, researchers are giving their explicit approval to use these data in preliminary drafts of AR6 of Working Group III of the IPCC, which will be subject to confidential external peer review. By marking the data as preliminary when submitting it, researchers are also explicitly asserting that the preliminary data will be updated or replaced with final data when the studies are complete and published. Preliminary data submitted to the database will only be directly accessed by selected authors and review editors of AR6 of Working Group III of the IPCC and will remain confidential unless explicit approval of authors is obtained. Only data that fulfill the eligibility criteria above, are published in time, and are submitted in their final published form will be considered for the assessment for the final draft of AR6.

Timeline for data submission, updating, and database publication

The following dates apply:

- 15th June 2020: Literature deadline. Literature for consideration by report authors must be submitted to publishers by this date.
- 15th June 2020: Data submitted by this date can be considered for inclusion in the AR6 second order draft of Working Group III.
- 30th November 2020: The database closes for submission of updated and/or new data. Teams who hope to have additional LCAs published by 19th January 2021 have to submit the associated preliminary data by the November deadline to allow the WGIII author teams to have an overview of available data for the preparation of the final order draft. Teams are also encouraged to update any preliminary information, since the data set available by this time will be used in the writing of the Final Order Draft of the Chapters and the Second Order Draft of the Summary for Policy Makers in November and December 2020.

- 19th January 2021: By this date, any preliminary data must have been finalized and updated based on an accepted paper or a published eligible report. Data not fulfilling this requirement will be removed from the assessment. No further updates are possible and the submitted data can no longer be withdrawn.
- 19th July 2021: Database publication following the publication of the AR6 of IPCC Working Group III when approved by the IPCC plenary.

All data submitters registered in the database will be notified of any changes in this timeline.

Terms of submission

1. Authors retain full rights to sharing and use of their data. Those rights will not be affected by submission, use, and publication of their data in the AR6 transport LCA / LCC database.
2. By submitting to the AR6 database, authors confirm they possess transferable user rights and transfer to selected authors of the AR6 the right to use their data for the sole purpose of the AR6 assessment. AR6 authors remain under the obligation to keep submitted preliminary and unpublished data strictly confidential. Use or disclosure of the data outside the AR6 assessment will require separate and explicit approval from data owners.
3. Submitting authors retain the right to withdraw their data after submission at any time before 19th January 2021, when the database will be closed for further changes.
4. Upon closing the database on 19th January 2021, submitting authors automatically transfer a non-exclusive right to IPCC and NTNU as cooperation partner of the IPCC, to publish the submitted data at the time the AR6 of IPCC Working Group III is published. The publication of the database will allow free use of data contained in the database, but not its reproduction in whole or in part by third parties.

How to submit?

Data submission requires:

- Registration using a contact email address of the owner of the submitted data.
- Submission of data in the common reporting templates (one dedicated to land transport and one for maritime), with particular attention to the specific variable identified as most relevant for the different options.
- Data submitters are encouraged to carefully consider what data to submit, since any material in the database could end up being assessed in the AR6.

Download data submission forms:

[Land transport](#)

[Shipping](#)

Visit the data portal to register and to upload your data: <https://ipcc-wg3-icadata.ntnu.edu>.

Thank you for your consideration of this request for transport emissions data. The authors of the AR6 will greatly appreciate your willingness to share your data with them.

Contact

Anders Hammer Strømman (Lead Author Chapter 10 – Transportation)

Paulina Jaramillo (Lead Author Chapter 10 – Transportation)

For general questions about this request for data, please contact: ipcc.wg3.lcadatabase@gmail.com

For technical assistance, please contact: ipcc.wg3.lcadatabase@gmail.com

April 16, 2020

Dear colleagues,

As Co-chairs of Working Group III (WG III) of the Intergovernmental Panel on Climate Change (IPCC), which addresses the mitigation of climate change, we are writing to support the call for LCA/LCC data issued by the lead authors of Chapter 10 – Transport. The call aims to collect relevant life cycle assessment data for transportation technologies that can support a transition to a low-carbon transportation system consistent with climate stabilization targets.

IPCC's role is to assess literature relevant to climate change and as such does not develop its own estimates or scenarios. It is therefore reliant on the scientific community to make the results of their work available in a structured and readily accessible form. We thus strongly encourage life cycle analysis researchers and practitioners to deposit LCA/LCC data relevant to the IPCC 6th Assessment Report (AR6) in the new database. The database will provide a confidential database resource to IPCC Lead Authors and then will become public open access upon approval of the AR6 report.

We realize this is the first time that the IPCC has an official request for data from the life cycle assessment community, so we want to highlight that your contribution will help to build a substantial and authoritative evidence base for the IPCC AR6 and contribute to a robust characterization of the carbon mitigation potential of different transport technologies. Please consider contributing to this effort if you can.



Jim Skea



PR Shukla