

The Nitrogen Footprint for INI2020

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Abstract

Global scientific conferences bring together scientists from all over the world. The related travel activities, the facilities of the venue, and the catering influence the environmental footprint of such events. With our work, we present the environmental footprint, specifically the nitrogen related footprint, of the 8th Global Nitrogen Conference (INI2020), which will take place from 3rd to 7th May 2020 in Berlin, Germany. We will compare INI2020's nitrogen footprint to that of other conferences and will present opportunities for footprint reductions.

Keywords: nitrogen footprint, conference, sustainability, INI2020

1. Introduction

Environmental footprints of conferences and attendees are still rather large mainly due to necessary travel activities to attend the conference. Consequently sustainability aspects of travel are gaining the attention of international institutions (EC (2018), UNEP (2012)). Several conferences have already calculated their nitrogen footprint to raise awareness about and reduce their conference-related nitrogen emissions (Leip et al. 2014).

To reduce the environmental footprint of the INI2020 conference, the conference organizers adhered to the national guidelines of the German Ministry for the Environment and the German Environment Agency (BMU, 2015). The following actions were undertaken:

- Serving only vegetarian and vegan food low in nitrogen and other emissions
- Adopting a paperless conference concept to avoid unnecessary paper waste
- Selecting a certified hotel as conference venue with excellent access to public transport.

However, it was not possible to compensate for emissions from travel activities related to the attendance. Consequently, these travel emissions are expected to dominate the environmental and nitrogen related footprints.

Acknowledging the resulting emissions of our conference and to be most transparent on sustainability aspects within this study, we will calculate the conference's and average attendees' nitrogen footprints.

2. Methods

To calculate INI 2020's environmental footprints (nitrogen and greenhouse gas), we use information about the number of attendees and country they are traveling from, the menus and number of meals served, food waste estimates within the catering system of the venue, daily commuting to the conference, and hotel energy use.

To calculate the footprints we use emission factors defined in the German Nitrogen Footprint calculator (Klement, 2020) and in the University of New Hampshire's SIMAP platform (<https://unhsimap.org>).

We will compare the resulting overall and per capita footprints to footprints of other conferences, the previous INI conferences, and average per capita footprints of different countries.

3. Results

Results can only be calculated after the attendee registration process has been completed..

References

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