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# **METHODS FOR ESTIMATING GREENHOUSE GAS EMISSIONS FROM FOOD SYSTEMS PART II: WASTE DISPOSAL**





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# METHODS FOR ESTIMATING GREENHOUSE GAS EMISSIONS FROM FOOD SYSTEMS PART II: WASTE DISPOSAL

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## Abstract

This paper is part of a series detailing novel methodologies for estimating key components of food systems emissions, with a view to disseminate the information in FAOSTAT. It provides a methodology for estimating the greenhouse gas emissions associated with emissions from waste in the food system (e.g. food-related processes in landfills, incineration, wastewater management processes), in an effort to inform countries of the environmental impacts and possible options to reduce them. Based on the proposed methodology, we build a new database of the annual carbon footprint of food disposal, on a country basis and with global coverage, for the period 1990–2019.

Our efforts help to better characterize food systems and the role they can play in achieving the Sustainable Development Goals (SDGs). In particular, they align well with SDG 12 to ensure “sustainable consumption and production patterns”, specifically Target 12.2, “achieve the sustainable management and efficient use of natural resources” and Indicator 12.2.1, which monitors the “material footprint, material footprint per capita, and material footprint per GDP” of different products.

This paper covers four categories of food systems waste disposal: (1) solid food waste disposed in landfills; (2) domestic wastewater; (3) industrial wastewater; and (4) incineration of materials used in food systems.



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