

Proof of Concept for a U.S. Air Emissions Physical Flows Account: Data Appendix¹

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Data Appendix File	BEA-Summary-Level-Supply-Use-of-Air-Emissions.xlsx
About the Data Appendix	<p>For readability, the supply and use tables for air emissions presented in “Proof of Concept for a U.S. Air Emissions Physical Flows Account” (Chambers 2023) were aggregated to the North American Industry Classification System (NAICS) two-digit level. The Microsoft Excel file included with this data appendix presents supply and use tables for air emissions by U.S. Bureau of Economic Analysis (BEA) Summary-level industries;² this roughly corresponds to the NAICS three-digit level.</p> <p>The Excel file includes a separate sheet for each year from 2012 to 2017 (inclusive). For each year, a supply table and a use table are given. As defined in the <i>System of Environmental-Economic Accounting</i>, the “use” of air emissions is by the environment, and simply reflects total emissions supplied.</p> <p>Rows in the tables correspond to pollutants, and columns in the supply table represent industries at the BEA Summary level of industry aggregation, as described above and with the exceptions noted in footnote 2.</p> <p>This data appendix provides estimates in both physical mass units and CO₂-equivalent units³ for methane, nitrous oxide, sulfur hexafluoride, and nitrogen trifluoride. The many fluorinated greenhouse gases other than sulfur hexafluoride and nitrogen trifluoride are aggregated together in CO₂-equivalent units⁴ and are not presented separately in physical mass units. The physical mass units used are millions of metric tonnes or megatonnes (Mt). The CO₂-equivalent units used are megatonnes CO₂-equivalent (Mt CO₂e); for each gas, 1 Mt CO₂e is an amount of the gas that has the same global warming potential as 1 Mt of carbon dioxide (see footnote 3 for more details).</p>

1. These data have been estimated as part of an experimental research project. As such, they should be considered of lower quality than officially published statistics and are subject to revisions and/or updates at any time. Any feedback is welcome and can be sent to the [author](#).
2. There are two exceptions: first, the BEA Summary-level industries HS (housing services) and ORE (other real estate) are not separately identified within the real estate industry (NAICS 531); second, the BEA Summary-level industries GFE, GFG, GSLE, and GSLG (federal and state/local government enterprises and general government) are not separately identified within the BEA Sector-level industry G (government).
3. Calculated using 100-year global warming potential values from the [IPCC 4th Assessment Report](#), as used by the EPA in preparation of the [2022 Greenhouse Gas Inventory](#), the primary data source for these estimates.
4. Since this is the only meaningful way to aggregated different greenhouse gases with different global warming potentials.