

State Resources for Action on Climate

Frequently Asked Questions & Answers

1. Why is EPA developing this data now?

EPA is in a unique position to provide existing data on state-level GHG estimates that are consistent with the Inventory of U.S. Greenhouse Gas Emissions and Sinks because of the work that EPA already undertakes in preparing the national Inventory that requires consistency with international reporting guidelines. EPA also already prepares the Global Mitigation of Non-CO₂ Greenhouse Gases: 2015-2050 and has prepared a comparable analysis and data for U.S. States.

This data will provide state governments, independent researchers, and other stakeholders with a rich dataset for policy making and policy assessment (e.g., filling gaps in sectors that are particularly challenging to estimate such as agriculture, land use change and forestry).

Finally, this effort will also provide updated information for EPA's existing state Inventory and Projection Tool (SIT), which allows states to compile and analyze their own estimates that reflect state policies and priorities.

More information is available at <https://www.epa.gov/ghgemissions/state-and-tribal-greenhouse-gas-data-and-resources>.

2. How do official inventories published by states inform EPA's estimates?

EPA's state-level GHG data should not replace official state GHG Inventories. We understand that some states develop independent inventories of their own GHG emissions, in some cases making use of different estimation methodologies, data inputs and/or inclusions/omissions of GHG source and sink categories, geographic boundaries and choice of scopes. Often state-level inventories are central to planning, implementing, and assessing state-specific laws and regulations. States may wish to make use of this EPA state-level data as complementary and supplementary information appropriate within their own state inventory frameworks.

To achieve the goal of providing estimates that are consistent with the Inventory of U.S. Emissions and Sinks (see Q5 below), EPA's state-level estimates need to be linked directly with the national methodologies and datasets, rather than compiled from independent reports. Again, we recognize that there will likely be differences between the EPA state-level estimates and some state GHG inventories developed independently by states. This is due to different state regulations and scope of state-level emission estimates. EPA has prepared a

methodology report describing methodological and accounting approaches used in the Inventory by state to facilitate understanding of differences with how states may compile their inventories available at <https://www.epa.gov/ghgemissions/state-ghg-emissions-and-removals>.

We are also providing information on how the public, including researchers, can access up-to-date official data from state governments where it exists. EPA has a new web page providing these links. EPA has included caveats in presenting data to ensure it is not viewed as official data of any state government.

We anticipate that as individual states continue to improve their own inventories, there will be targeted case by case opportunities to incorporate new state-level information into national-level calculations. These opportunities could come where national level methods can accommodate state and regional inputs, and where improving data at this scale will lead to a more accurate national total. Improvements to national estimates will then also be reflected in better state-level disaggregation.

3. How does EPA's data compare with existing states Inventories?

We recognize that there will likely be some differences between the EPA state-level estimates and some state GHG inventories developed independently by states. We understand that states develop independent inventories of their own GHG emissions, in some cases organizing and allocating estimates by economic sector rather than IPCC sector, making use of alternate methodologies, data inputs and/or inclusions/omissions of GHG source and sink categories, geographic boundaries and choice of scopes. Often state-level inventories are central to planning, implementing, and assessing state-specific laws and regulations. States may wish to make use of this EPA state-level data as complementary and supplementary information appropriate within their own state inventory frameworks.

4. How do the mitigation estimates overlap with potential CH₄ regulations?

The mitigation estimates represent a snapshot of currently available mitigation opportunities. Potential future CH₄ regulations may take advantage of the mitigation opportunities estimated by the analysis, but the analysis does not explicitly model potential future CH₄ regulations.

5. What does "consistent with the Inventory of U.S. Greenhouse Gas Emissions and Sinks" mean?

Disaggregation consistent with the Inventory of U.S. Emissions and Sinks means that the state-level estimates:

- *Adhere to international standards, including the Intergovernmental Panel on Climate Changes (IPCC) Guidelines and United Nations Framework Convention on Climate*

- Change (UNFCCC) transparency reporting system (i.e., the emissions and removals presented in this report and the report are organized by source and sink categories within the five IPCC sectors [energy, industrial processes and product use (IPPU), agriculture, Land Use, Land-Use Change, and Forestry (LULUCF) and waste] and their respective source and sink categories).*
- *Are based on the same methodologies as the national Inventory and reflect the latest methodological improvements in the national Inventory, including the use of Greenhouse Gas Reporting Program (GHGRP) data.*
 - *Cover the complete time series consistent with the national Inventory, starting with 1990 through the latest national Inventory year (i.e., 2021)*
 - *Cover all anthropogenic sources and sinks, and all seven gases (carbon dioxide [CO₂], methane [CH₄], nitrous oxide [N₂O], hydrofluorocarbons [HFCs], perfluorocarbons [PFCs], sulfur hexafluoride [SF₆], and nitrogen trifluoride [NF₃]). The completeness and geographic disaggregation of the report are consistent with the national Inventory, meaning in addition to estimates for states, the methods also address emissions and removals occurring in the District of Columbia, U.S. territories, and tribal lands.*
 - *Estimates were compiled to avoid double counting or gaps in emissions coverage between states. This ensures that state totals, when summed, will equal totals in the national Inventory. This is important for those looking for consistent, comparable, and complete state data for analyses and other purposes where double counting or omissions would be problematic.*

6. Can states that have developed their own estimates contribute directly to EPA's analysis?

To achieve the goal of providing estimates that are consistent with the Inventory of U.S. Emissions and Sinks (see answer to question #5 above), EPA's state-level estimates need to be linked directly with the national methodologies and datasets, rather than compiled from independent reports.

We understand that U.S. states develop independent inventories of their own GHG emissions, in some cases making use of alternate methodologies, data inputs and/or inclusions/omissions of GHG source and sink categories, geographic boundaries and choice of scopes. Often these state-level inventories are central to planning, implementing, and assessing state-specific laws and regulations. States may wish to make use of this EPA state-level data as supplementary information appropriate within their own state inventory frameworks.

We anticipate that as individual states continue to improve their own inventories, there will be targeted case by case opportunities to incorporate new state-level information into national-level calculations. These opportunities could come where national level methods can accommodate state and regional inputs, and where improving data at this scale will

lead to a more accurate national total. Improvements to national estimates will then also be reflected in better state-level disaggregation.

7. What is the relationship between the state GHG Inventory and Projection Tool (SIT) and the Inventory by State data?

The SIT tool was developed to assist states in compiling their own GHG inventories. The tool provides users with a choice between default emissions factors and activity data and entering state-specific data and emissions factors. The default information in the SIT is largely based on methodologies, emissions factors, and other data from the national Inventory. In some cases, state-level data has not been available (e.g., due to confidential business data or the use of national level modeling) or lags behind national-level data. Therefore, the default approaches in SIT may not fully reflect the latest updates for some categories (e.g., use of GHGRP data) and may not reflect all categories reflected in national Inventory for which 2006 IPCC Guidelines provide methods. In addition, the SIT provides two alternate approaches to estimating emissions (calculating CO₂ from transportation based on vehicle miles traveled (VMT) and calculating emissions from electricity consumption), which are not based on national Inventory methods. EPA is providing a crosswalk of the methodologies and data used by the GHG Inventory by U.S. State and SIT to clarify the differences between the two resources. Download the crosswalk at either of the following pages: <https://www.epa.gov/ghgemissions/methodology-report-inventory-us-greenhouse-gas-emissions-and-sinks-state-1990-2020> or <https://www.epa.gov/statelocalenergy/state-inventory-and-projection-tool>.

The versions of SIT published in January and June 2023 include several updates that bring it in closer alignment with the first release of the GHG Inventory by U.S. State data, updating default activity data and emissions factors across all sectors, and moving to regional apportionment of ODS substitutes. EPA is currently evaluating how to use the additional state-level data and/or methodological approaches available through the national Inventory disaggregation to supplement or improve the embedded calculations and defaults in SIT. SIT users will retain the ability to customize the tool with their own data in lieu of using defaults. EPA will continue to coordinate with state agencies on how to prioritize and implement updates to SIT. Note: The updated SIT reflecting data covering 1990-2021 that EPA just published is expected to be published in late 2023 or early 2024.