State Agency Greenhouse Gas Emissions Reporting Instructions

Background

The State Agency Emissions Reporting Program is a critical part of Washington State's efforts to reduce climate pollution. RCW 70A.45.050[1] describes agency emission limits:

- 15% below 2005 levels by 2020
- 45% below 2005 levels by 2030
- 70% below 2005 levels by 2040
- 95% below 2005 levels by 2050, and achieve net zero

To track progress toward meeting these limits, each covered agency must:

- Estimate emissions using a calculator provided by the Washington State Department of Ecology (Ecology)
- Provide a report on the agency's greenhouse gas emissions reduction strategy to the State Efficiency and Environmental Performance Office (SEEP) at the Washington State Department of Commerce (Commerce)

Both submissions listed above are due by May 30, 2025.

This document includes:

- Instructions for completing Ecology's greenhouse gas emissions calculator
- Link to SEEP's greenhouse gas emissions reduction strategy web-form[2]
- Instructions for uploading the calculator spreadsheet and any other documents to Ecology's State Agency Greenhouse Gas Emissions (SAGE) application via your Secure Access Washington (SAW) account
- Information on Office hours, co-hosted by the departments of Ecology and Commerce
- Links to recorded trainings
- Contact information

[1] https://app.leg.wa.gov/RCW/default.aspx?cite=70A.45.050
[2] https://app.smartsheet.com/b/form/b2783e36f0c14573a216cf11cf3ac3fc

Collecting Data to Prepare for Greenhouse Gas Reporting

Every year, Ecology and SEEP collect data from state agencies. On even-numbered years, Ecology and SEEP submit a report to the Governor and Legislature including complete emission reduction strategy documents from each agency. Past reports are on Ecology's state agency greenhouse gas reporting webpage. [3] On odd-numbered years, we seek a simplified progress update on the strategies, to include successes, challenges, and changes to the previous submission. Agencies must upload a completed emissions calculator to the SAGE application using a SAW account and complete the emission reduction strategy web-form.

To prepare for greenhouse gas reporting, agencies must collect data on facilities, fleets, and other emissions sources. The following resources may help agencies collect the necessary information:

- For your owned and leased square footage, access the current year's Facilities Inventory[4] at the Washington State Office of Financial Management (OFM)
- Utility bills
- Energy Star Portfolio Manager
- Asset management software
- Vehicle fuel card data
- Fuel data for Washington State Department of Enterprise Services (DES) permanently assigned and leased vehicles and daily trip vehicles is located within the emissions calculator
- Vehicle fuel data (jet fuel, propane)

Agency reporters should work with their facility and fleet managers, fiscal departments, and representatives in SEEP working groups to support data collection efforts. *Your agency's SEEP Governing Council member can assist with issues that arise as well.*

[3] https://ecology.wa.gov/Air-Climate/Reducing-Greenhouse-Gas-Emissions/Tracking-greenhouse-gases/State-agency-greenhouse-gas-reports
[4] https://ofm.wa.gov/facilities/facilities-inventory

Completing the Greenhouse Gas Emissions Calculator

Download the emissions calculator from Ecology's state agency greenhouse gas reporting webpage. [5]

The calculator is a Microsoft Excel file, and it includes six tabs:

1. Instructions – provides background, contact information, and updates from previous versions of the calculator. No data are entered on this tab.
2. Report – all required data are entered on this tab. Detailed instructions are in this document below.
3. Agency Fuel Use – this tab includes the fuel use by agency from DES leased and permanently assigned vehicles.
4. Reference – this tab provides emission factors, unit conversion factors, and other data references. No data are entered on this tab.
5. Emission Reduction Estimates – this tab provides a simple tool for estimating emission reductions from projects. This information is voluntary, for your internal information, and is not included in reports. This tab is unprotected to allow flexibility for your analysis.
6. Historic Data and Limits – this is the record of each agency's emissions.

Report tab

In the Report tab, enter data in the yellow cells.

Section 1: agency information

Type the agency name and add the date the spreadsheet was last saved. Enter your name and contact information. Enter the name of your agency's executive lead. For SEEP agencies, this will be your Governing Council lead. For other agencies, this is the executive leader responsible for ensuring the greenhouse gas emission limits are met.

Section 2: building energy use

This section is for reporting stationary fuel sources, including natural gas, fuel oil, and other fuels, in addition to purchased electricity, and steam. Include electricity purchased from 'green' contracts. For most agencies, this data will align with Energy Star Portfolio Manager, but utility bills should be the definitive source of energy use data.

[5] https://ecology.wa.gov/Air-Climate/Reducing-Greenhouse-Gas-Emissions/Tracking-greenhouse-gases/State-agency-greenhouse-gas-reports

Facility square footage:

The source for this data is OFM's Facilities Inventory. [6]

Electricity consumption:

For electricity consumption, enter the standard utility electricity purchases, purchases through a green power program, and/or agency-owned or on-site renewable electricity production.

On-site generation of renewable electricity:

Definition of Renewable Resources (RCW 19.285.030) [7]: "Renewable resource" means:

a) Water;

b) wind;

c) solar energy;

d) geothermal energy;

e) landfill gas;

f) wave, ocean, or tidal power;

g) gas from sewage treatment facilities;

h) biodiesel fuel that is not derived from crops raised on land cleared from old growth or first-growth forests where the clearing occurred after December 7, 2006; or

i) biomass energy.

Calculations for on-site generation of renewable electricity for this emissions calculator:

- Generation consumed on site *with* renewable energy credits (RECs) intact = Report electricity in kilowatt-hours (kWh) as renewable electricity production.
- Generation consumed on site *without* RECs = Report electricity in kWh in calculator by adding to standard utility retail purchases. This generation will be assigned the WA state average emission factor. Selling RECs means selling the rights to claiming the renewable attributes to this electricity.
- Surplus renewable generation sold back to the utility with the agency retaining all environmental attributes (meaning the agency is not selling RECs AND the utility is not claiming RECs) = record electricity in kWh in cell E25.
    - *Note: this data is for informational purposes only and not required for greenhouse gas emissions reporting. Renewable generation sold back to the utility where the utility claims the RECS is no longer considered renewable and not recorded here.*
    - Purchasing RECs does not qualify as a green electricity purchase.

[6] https://ofm.wa.gov/facilities/facilities-inventory
[7] https://app.leg.wa.gov/rcw/default.aspx?cite=19.285.030

Thermal energy consumption:

Examples of stationary fossil fuel combustion include boilers, furnaces, generators, or any other on-site combustion from non-mobile sources. Examples of stationary renewable thermal energy include geothermal/ground source heat pumps, solar hot water, renewable gas such as biogas or landfill gas, or biomass. If thousand British thermal units (kBtu) production data is not available, report system design size and/or projected energy reductions in the comment space provided. If this is also not possible, please share what information you can. This data is not required for greenhouse gas emissions reporting, but it will be part of cataloging existing renewable resources in state use. For steam from fossil fuel sources, enter the amount of purchased steam in thousand pounds (klbs).

Electricity emission factors (EF):

We require all agencies to use the same three-year average emission factor for statewide electricity sold to Washington state consumers. The reasons for this decision include:

- The three-year average remains consistent with recent reports.
- A statewide average EF better reflects the aggregate emissions impact of all state government operations.
- Incorporating utility EFs adds complexity to the reporting process, which we strive to keep simple.
- Emissions associated with utility-provided electricity are passed through to the consuming agency and not directly under agency control.
- The use of a three-year average reduces seasonal fluctuations.

Section 3: fleet energy use

Enter information about fleet and mobile equipment owned by the agency or leased from the state motor pool. For vehicles that refuel at WSDOT pumps, the percentage of biofuels is provided. If you use a different percentage of biofuel used, it may be entered here as well.

There is a new, voluntary option for reporting fuel used for landscape equipment, off-road vehicles, construction vehicles and equipment, agricultural or other uses not reported elsewhere. Agencies may provide fuel quantities and fuel type for each vehicle/equipment category in the comment box. This data will not be included in agency-level reports but may be aggregated for a statewide estimate.

Section 4: fossil greenhouse gas emissions summary

This section shows the greenhouse gas emissions from the reported energy use. The energy use data are converted to emissions using factors listed on the Reference tab. Biogenic emissions are excluded from the total but can be viewed in the detailed emission tables below the summary.

Agency fuel use

This tab includes the fuel use by agency from DES leased and permanently assigned vehicles. Gallons are computations sourced from AssetWorks fleet management system. The values combine Fuel Tickets from both WEX and WSDOT Fuel. If your organization uses other fuel card networks, those are not included in these results. These results only apply to DES Fleet owned and operated vehicles. If your organization owns and operates other equipment, that fuel usage must be reported in addition to these results.

Reference tab

This tab is locked but visible for your reference. It contains the emission factors and documentation used to make the calculations in this worksheet.

Emission reduction estimates tab

This tab provides a variety of simple tools for roughly estimating greenhouse gas emissions reduction and cost savings for mitigation projects. This tab is not locked so copies can be saved and cells altered to meet your needs. *This tab is available for your agency's internal use and is not required for reporting.*

Estimate emission reductions

In the orange cells, enter the annual fuel use before the project is implemented and the expected reduced fuel use after the project is implemented. The chart on the right will show the emissions baseline, the emissions after the project is implemented, and the cumulative emissions avoided. This is projected for 10 years.

Estimate cost savings

Average fuel costs are pre-populated in the orange cells. You may enter your own data here. The chart will show the baseline costs, the new annual costs after the project is implemented and the cumulative savings over 10 years. Note that fuel costs are held steady over this period.

Electricity emissions forecast:

As agencies plan future emission reduction projects, keep in mind that the electricity grid is moving toward carbon neutrality by 2030, making all-electric buildings and vehicles zero greenhouse gas emissions. The transformation away from fossil fuels requires that all energy be used as efficiently as possible and remaining energy use come from clean electricity and renewable fuels. This simple calculator does not include a projection of declining future emissions from electricity - it holds current emission levels steady into the future.

The Clean Energy Transformation Act (CETA) (SB 5116, 2019) requires that electricity providers eliminate coal by 2025, be greenhouse gas neutral by 2030 and 100% clean by 2045. The intent of this law is to eliminate fossil fuels from the electricity supply.

For more information, visit the CETA webpage[8] on the Department of Commerce's website.

Completing SEEP's Greenhouse Gas Emissions Reduction Strategy Report

Full emission reduction strategy reports are due to the legislature only for even numbered years and a simplified strategy update is required for odd-numbered years. The strategy update is submitted via the web-form link.[9]

If your agency has associated plans or documents (like an electrification plan or sustainability action plan), please consider uploading this document to the SAGE application along with your greenhouse gas emissions calculator. The form asks the following questions:

- Regarding your agency's priority action plans for 2023-2025 Biennium:
  - What successes would you like to report?
  - What has changed?
  - Are there any challenges so far that your agency would like to share?
- Regarding your agency's long-term strategy for 2030, 2040, and 2050, what has changed?
- Based on what you know about your agency's budget for the 2025-2027 Biennium, is there anything your agency may not be able to accomplish, or possibly accomplish sooner? (optional)
- Regarding the data you submit with the greenhouse gas calculator, have you encountered any challenges that you would like to share? i.e., energy consumption data for leased facilities (optional)
- Is there anything that the SEEP Office/Governing Council can do to support your greenhouse gas emissions reduction strategies or priorities?

Submitting Documents to Ecology

Reporters will need to have a Secure Access Washington (SAW) account, add the Climate Pollution Reduction Program (CPRP) Portal to your SAW account, and add the State Agency Greenhouse Gas Emissions (SAGE) application to your CPRP Portal.

[8] https://www.commerce.wa.gov/energy-policy/electricity-policy/ceta/
[9] https://app.smartsheet.com/b/form/b2783e36f0c14573a216cf11cf3ac3fc

A guidance document[10] is available for creating a new SAW account and/or adding the SAGE application to your SAW account. If you already have a SAW account, you may access it here: Secure Access Washington. [11]

Ecology created the SAGE application for agencies to upload and store their documents. This includes the emissions calculator and any supplemental documents. Note that the SAGE application accepts Excel, Word, and PDF documents only. Reduce file size of PDFs prior to uploading (within Adobe, go to File > Reduce File Size). Documents in other formats must be emailed directly to Ecology or SEEP contacts.

Document naming conventions

Greenhouse gas emissions calculator spreadsheet: [year of data]_[agency acronym]_GHG.xlsx

Example: 2024_ECY_GHG.xlsx or 2024_WWU_GHG.xlsx

The emissions calculator must be saved as an Excel file.

Optional or supporting documents name as follows: [year]_[agency acronym]_[short description].doc

Example: 2024_ECY_FleetElect.doc or 2024_COM_FacilPlan.pdf

Additional documents may be saved as a MS Word document or PDF. Reduce file size of PDF documents prior to uploading.

Instructions for uploading documents

1. Log into your SAW account and navigate to the SAGE application via Ecology's Climate Portal.
2. From the SAGE application home page, use the search box to find your agency and select it from the drop-down list. Then, click "Next."
3. Review and edit the agency and user information.
4. Ensure that the "Reporting Year" is set to "2024." Then, click "Next."
5. On the final page, click "Choose File" and select the file from your computer.
    - Ensure that your file follows the naming convention listed above.
    - Reduce file size before uploading documents.
    - The system will allow you to select and upload only one document at a time.
6. Click "Submit."
7. If necessary, repeat steps 5 and 6 to upload any additional documents.

[10] https://apps.ecology.wa.gov/publications/SummaryPages/2414035.html
[11] https://secureaccess.wa.gov/

Office Hours

This year, Ecology and Commerce will be co-hosting "Office Hours" where you can ask questions about completing the emissions calculator and strategies web-form. Subject matter experts from the SEEP Guidance Team will be on the call to share best practices based on the question you ask. You can attend one or all sessions. The Office Hours sessions are scheduled for the following dates: April 2, April 16, May 7, and May 21, 2025, at 9-10am. These sessions will not be recorded. Calendar invites for the scheduled Office Hours will be sent to the reporter contacts only.

Recorded Trainings

- Gathering Data,[12] recorded February 9, 2022
- Completing the Calculator,[13] recorded March 20, 2024
- Completing the Emission Reduction Strategy Web-form,[14] recorded April 17, 2024

Contact Information

Climate Pollution Reduction Program

P.O. Box 47600
Olympia, WA 98504-7600
Phone: 360-407-6800

Website: Washington State Department of Ecology[15]

For questions related to the greenhouse gas emissions calculator, creating a SAW account, or uploading documents to the SAGE application, please email us at: cprsage@ecy.wa.gov.

ADA Accessibility

To request an ADA accommodation, contact Ecology by phone at 360-407-6831 or email at ecyadacoordinator@ecy.wa.gov, or visit https://ecology.wa.gov/accessibility. For Relay Service or TTY call 711 or 877-833-6341.

[12] https://youtu.be/wZLiRRwGt-E
[13] https://youtu.be/SNpPyFeuxmM
[14] https://www.youtube.com/watch?v=dZszexGelRU
[15] www.ecology.wa.gov/contact