

Updated On: December 10, 2024

Note: This document provides answers to technical questions asked during or after EPA's Climate Pollution Reduction Grants (CPRG) Technical Assistance Forum meetings or office hours for planning grantees. The questions are separated out by topic headers.

I.	Greenhouse Gas (GHG) Inventory and Projections3
	Cross-Sectoral
	Q2: How do you convert GHG data from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4) to the Fifth Assessment Report (AR5) for the GHG inventory, specifically for semiconductors or other non-CO2/CH4/N2O emissions such as those from ozone depleting substances (ODS) or foam blowing activities?
	Q3: For a state that is a net exporter of energy and products from other GHG emitting sectors (e.g., agriculture or industry), and/or that is a net importer in sequestering CO2, could you provide guidance on how to account for and communicate these roles in our CCAP? Specifically, we'd like to understand the best way to contextualize our role in national and global systems and highlight the environmental benefits of CO2 captured and stored within our state from out-of-state sources
	Q4: Without implementation funds and where measures are all voluntary, how can the GHG projections reflect full implementation of measures?4
	Transportation
11.	Co-Pollutant Impacts Analysis
III.	Target Setting6Q1: How should a grantee set targets for GHG reductions by 2030 and 2050?6
IV.	Reduction Measures6
	Cross-Sectoral



Updated On: December 10, 2024

	Q1: Many potential measures we have identified do not fit neatly into one sector. Do you have guidance or resources for how to sort and categorize measures into sectors?	. 7
	Industrial Q2: Our state's Cap-and-Trade program prohibits most action from agencies in addressing the industrial sector. What is the expectation for this component if grantees do not have the authority?.	. 7 . 7
V.	Climate Planning Process	. 7 . 7
VI.	Workforce Planning Analysis	, 8 fit . 8
	Q2: What is a good approach to address Workforce Development (e.g., by sector, measure)?	. 8
VII.	Interagency/Intergovernmental Coordination	.9
	Tribes & Territories Q1: Are there any federal guidelines for communications with Tribal governments?	. <i>9</i> .9



Updated On: December 10, 2024

I. Greenhouse Gas (GHG) Inventory and Projections

Cross-Sectoral

Q1: Should the base year used in the Priority Climate Action Plan (PCAP) GHG emissions inventory be the basis of emissions reduction goals documented in the Comprehensive Climate Action Plan (CCAP)? Most agencies appear to use either 1990 or 2005 as the baseline for their reduction targets. If we do the same, can we keep 2020 as the base year for our inventory? (added 12/10/2024)

A1: When setting their GHG reduction targets, grantees may use whatever base year makes sense for them, but the base year should be a year for which they have inventory data. The target setting base year does not need to be the same as the most recent inventory year. If historic GHG inventory data is not available back to 2005, we recommend using a more recent year for which data is available. Please see the <u>Target Setting workshop presentation and worksheet</u> for additional help in making decisions about baselines.

Q2: How do you convert GHG data from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4) to the Fifth Assessment Report (AR5) for the GHG inventory, specifically for semiconductors or other non-CO2/CH4/N2O emissions such as those from ozone depleting substances (ODS) or foam blowing activities? (added 12/10/2024)

A2: The 100-year global warming potentials (GWPs) for fluorinated GHGs (F-GHGs) from AR5 without climate carbon feedbacks are in Table A-233 (pg. A-505) of <u>Annex 6 to the GHGI</u>. If you need GWPs for F-GHGs not included in this table, you can also find updated AR5 values in the Federal Register in Tables 2 and 3 available at this <u>link</u> (89 Fed. Reg. 31812, April 25, 2024; see page 31812).

Q3: For a state that is a net exporter of energy and products from other GHG emitting sectors (e.g., agriculture or industry), and/or that is a net importer in sequestering CO2, could you provide guidance on how to account for and communicate these roles in our CCAP? Specifically, we'd like to understand the best way to contextualize our role in national and global systems and highlight the environmental benefits of CO2 captured and stored within our state from out-of-state sources. (added 12/10/2024)

A3: Under international reporting frameworks and EPA's recommended GHG inventory methods for states, GHG inventories are production based not consumption based (i.e., they account for emissions that were produced or captured within state borders). In other words, the inventory would include emissions associated with fuel production located in their jurisdiction but not emissions associated with consumption of exported fuel. Similarly, the inventory includes emissions associated with producing agricultural or industrial products even if they are exported. In terms of carbon capture, the emissions are removed from the inventory at the point of capture not the point of final sequestration.



Updated On: December 10, 2024

Grantees may include additional discussion in their CCAPs that describes local circumstances to add context about the GHG emissions. This could include noting the amount of fuel or products that are exported, the relative share of emissions associated with exported energy or products, the extent to which their sequestration sites enable national net CO2 emission reductions from carbon capture and/or the impact of exports or sequestered CO2 to other states' inventories. Grantees may also choose to add a discussion on the impact of planned GHG reduction measures on emissions outside of their state boundaries.

Q4: Without implementation funds and where measures are all voluntary, how can the GHG projections reflect full implementation of measures? (added 12/10/2024)

A4: Grantees are required to present an "implementation scenario" projection demonstrating the potential reductions associated with full implementation of their measures. These projections, as well as targets presented in the Comprehensive Climate Action Plan, do not represent a binding commitment to achieve the projection scenario. For voluntary measures, grantees can make reasonable assumptions about the extent to which the measure will be implemented. For example, it would be reasonable to assume that an EV purchase incentive will deploy fewer EVs than an EV purchase mandate. Grantees may also choose to present results from more than one implementation scenario (e.g., high-level implementation and low-level implementation) to address implementation uncertainty.



Updated On: December 10, 2024

Transportation

Q5: What methods exist for attributing vehicle miles travelled (VMT) to zero-emission vehicles (ZEVs) / electric vehicles (EVs), and can these separately address light-duty vehicles (LDVs) and medium- and heavy-duty vehicles (HDVs)? This is from an inventory/actual emissions perspective. For example, how can we tell what portion of our current VMT is from EVs and how do we account for that in our transportation emissions? (added 12/10/2024)

A5: Attributing VMT to EVs would require local information on EV driving behavior, which could be difficult to obtain. If you have location specific information detailing distinct driving behavior for the different vehicle-fuel combinations, you can use the MOtor Vehicle Emission Simulator (MOVES) to model the impacts through separate runs for each fuel combination. For example, if electric buses have different activity characteristics than diesel buses, you cannot estimate them in the same run. Splitting runs is necessary since MOVES assumes the same driving behavior for a source type, regardless of fuel or technology (e.g., the same average speed and road type distributions).

If local driving behavior is not available, as is likely the case for most grantees, an assumption that all fuel types for a given vehicle type are driven the same way is appropriate for estimating emissions. MOVES attributes VMT to EVs via the Alternate Vehicle Fuel and Technology (AVFT) fuels input, which specifies the fraction of the modeled vehicle population capable of using different fuel types (e.g., gasoline, diesel, electricity). The most common source of local vehicle population information is vehicle registration data. Sources of vehicle registration data, which you may then use to create fuel type distributions in MOVES, include:

- 1. State vehicle registration records.
- 2. Information on vehicles from large fleet owners.
- 3. EPA-compiled inputs for the National Emissions Inventory (NEI) data for 2020. This dataset is a combination of state submitted data and EPA information and is available from EPA's <u>Onroad NEI Data website</u>.

For more information on modeling EVs in MOVES using the AVFT tool, see Section 4.10.3 of the *MOVES GHG Guidance*.



Updated On: December 10, 2024

II. <u>Co-Pollutant Impacts Analysis</u>

Q1: What tool could we use to quantify co-pollutant reductions from greenhouse gas reduction measures associated with the following source categories: (added 12/13/2024)

- Anaerobic digesters
- o Class II and VI wells
- Geologic sequestration
- Hydrogen production
- Low carbon ammonia via hydrogen
- Decarbonization of tire manufacturing
- Reclamation of asphalt and other measures including lower temperatures during production
- Landfill updates and composting

A1: Preferentially, co-benefits will be quantified independently from greenhouse reductions. WebFIRE and AP-42 are two sources that may provide relevant emissions factors for a particular GHG reduction measure. Alternatively, the tools being used to estimate reductions in greenhouse gases may already estimate reductions in co-pollutants, or emissions factors can be added (e.g., from WebFIRE or AP-42) to include those estimates. Finally, if other options are limited, one could simply apply a ratio of greenhouse gas emissions reductions to all relevant copollutants, based on an assumption that all pollutants proportionally scale. For instance, if an unabated process emits 1 ton of NH3 and 10,000 tons of GHGs and the targeted measures reduces GHGs by 10(to 9,000 tons), one could assume that the process also reduces NH3 10 (to 0.9 tons).

III. Target Setting

Q1: How should a grantee set targets for GHG reductions by 2030 and 2050? (added 12/10/2024)

A1: Grantees should set targets based on local conditions and are not required to adopt previously identified national GHG reduction targets. EPA recommends that grantees consider the following factors when setting targets: current levels of GHG emissions; GHG emission trends; interactions with pre-existing targets (if applicable); state and local priorities for specific policies and measures; science-based reduction trajectories; and technical and economic feasibility. EPA further encourages grantees to explain in their CCAP which of the preceding or other factors influenced their GHG targets. Targets established in the context of the CPRG program are not binding or federally enforceable. Additional guidance on GHG target setting for the CCAP can be found in the *TAF library*.

IV. <u>Reduction Measures</u>



Updated On: December 10, 2024

Cross-Sectoral

Q1: Many potential measures we have identified do not fit neatly into one sector. Do you have guidance or resources for how to sort and categorize measures into sectors? (added 12/10/2024)

A1: Where measures implicate actions and/or emission changes in multiple sectors, grantees have discretion to decide the most appropriate sector to assign the measure to. It may help to consider assignments most consistent with the CCAP's GHG inventory structure (i.e., aligning the measure's sectoral classification with the inventory sector from which it reduces the most emissions). Grantees may also use multi-sectoral classifications or include a cross-sectoral grouping if that presents a more logical organizational scheme for the CCAP and does not lead to double-counting emission reductions.

Industrial

Q2: Our state's Cap-and-Trade program prohibits most action from agencies in addressing the industrial sector. What is the expectation for this component if grantees do not have the authority? (added 12/10/2024)

A2: To the extent feasible, the CCAP must include GHG reduction measures from all major emitting sectors, including the industrial sector. The CCAP must identify the quantifiable GHG emissions reductions, key implementing agency or agencies, implementation schedule and milestones, expected geographic location if applicable, milestones for obtaining implementation authority as appropriate, identification of funding sources if relevant, and metrics for tracking progress. It must also include cost information for each measure. *Grantees may omit or provide a limited number of measures for sectors where they have minimal emissions or limited authority, in which case they should explain the rationale for limiting or omitting measures.*

V. <u>Climate Planning Process</u>

Q1: Is a CCAP outline available? (added 12/10/2024)

A1: Yes, the <u>Comprehensive Climate Action Plan (CCAP) outline for states and MSAs</u> was posted in the TAF Resource Library on 12/4/2024. The outline includes three parts: an introduction explaining how to use the outline and how it relates to the CPRG planning grants program guidance; an outline that grantees can follow, section by section, to develop a CCAP; and an appendix presenting additional CCAP development resources and alternate CCAP formatting options. The outline is intended to help clarify the CCAP requirements, highlight best practices, and simplify plan development. However, grantees are not required to follow the outline. A companion outline for Tribes and territories is under development and will be shared in early 2025. Note, the CCAP outline must be downloaded as a copy in order to edit it directly.



Updated On: December 10, 2024

VI. Workforce Planning Analysis

Q1: Are there resources to assist with the workforce planning analysis for non-electrification sectors (e.g., Agriculture / Natural Working Lands, Waste), and specifically about the job classifications that fit specific measures within non-electrification sectors? (added 12/10/2024)

A1: Assuming that "job classifications" refer to industries and occupations, you may map the specific measures to North American Industry Classification System (NAICS) codes (industries) and SOC codes (occupations). For industries, you may choose to use the <u>North American Industry</u> <u>Classification System 2022</u>, which provides a list of NAICS industries and descriptions. Another resource that provides a quick look-up and search function can be found <u>here</u>. Find the NAICS industry that matches most closely with the specific measures within non-electrification sectors, using the most detailed NAICS code as possible (4-to-6-digit code). For example, AG would be within a sector under 111 Crop Production, NWL would be 115310 Support Activities for Forestry, and Waste would be a sector under 562 Waste Management and Remediation Services. To look up occupations within industries that align with specific measures, map the measures to SOC codes. A list of SOC codes with descriptions for each occupation can be found on <u>US Bureau of Labor Statistics May 2023 Occupation Profiles</u>. For data on skill and credential requirements by occupation see these resources: <u>O*NET Online</u> and <u>BLS Occupational Outlook Handbook</u>.

Q2: What is a good approach to address Workforce Development (e.g., by sector, measure)? (added 12/10/2024)

A2: There are many ways to address workforce development in the CCAPs, and workforce development should be created for your own unique organizational circumstances. EPA intends to provide additional guidance in an upcoming Workforce Planning Analysis guidance document to be released in January/February 2025. In the meantime, check out the **CCAP Workforce Planning Analysis Training Webinar** that took place on June 17, 2024, and the **Workforce Planning Analysis Webinar** that took place on August 23, 2023, on the CPRG Training, Tools and Technical Assistance under the <u>CPRG Planning Training Webinars section</u>.



Updated On: December 10, 2024

VII. Interagency/Intergovernmental Coordination

Tribes & Territories

Q1: Are there any federal guidelines for communications with Tribal governments? (added 12/10/2024)

A1: There are specific guidelines for federal agencies to consult with federally recognized Tribes on a government-to-government basis. However, there are no recognized federal communications guidelines that would apply to non-federal entities regarding their communications with Tribes. In general, it is recommended that all parties who work with Tribes recognize that every Tribe is different, and that each federally recognized Tribe is sovereign and should be addressed with the appropriate level of respect. In working with a Tribe, it will be beneficial to learn about its Tribal culture, its leadership structure, and who the Tribe has empowered to work with you on their behalf. It will also be beneficial to be an active listener when working with Tribal representatives, since their responses may be influenced by cultural norms and traditions or based on history outside your knowledge area.