

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 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.

Table of Contents

I. Quality Assurance Project Plans (QAPPs).....	9
<i>Q1: How rigid are the QAPP templates? For example, if we have an existing inventory, can we change the structure of the QAPP to meet our needs?</i>	<i>9</i>
<i>Q2: The initial draft of the QAPP is due soon. Will this be an iterative process where we can address comments on our initial submission?.....</i>	<i>9</i>
<i>Q3: The Tribal QAPP template in Appendix B asks for statistics as percent signed bias and percent.....</i>	<i>9</i>
<i>variance. The note says that it would be calculated in accordance with the EPA’s Data Assessment Statistical Calculator (DASC) Tool, but the tool gives choices for Criteria Pollutants but not CO2e. How should the percent signed bias and percent variance be calculated?</i>	<i>9</i>
<i>Q4: Is the Priority Climate Action Plan (PCAP) QAPP expected to cover CCAP and Status Report activities as well? Will additional QAPPs be necessary for the CPRG program?.....</i>	<i>10</i>
<i>Q5: Will each planning grant recipient be required to attach or submit their approved QAPPs with their PCAP documents?</i>	<i>10</i>
<i>Q6: Is it necessary to include the National Emissions Inventory (NEI) for the co-pollutant benefit analysis under QAPP task 1 found in section 2.1.2 Identification of Data Sources and Acquisition?.....</i>	<i>10</i>
<i>Q7: We’ve had to do another round of edits on our QAPP. Can we request an expedited review upon resubmission? We would like to be able to offer modified (shortened) public comment period our PCAP, but we need to have the QAPP approved first.....</i>	<i>10</i>
II. Grants Management	10
<i>Q1: Regarding procurement of professional services to support software and technical assistance related to the GHG inventory and data work this grant will require, what procurement steps do we need to be considering from the EPA/Federal level?</i>	<i>10</i>
<i>Q2: Can I use grant funds to provide food and refreshments or stipends to maximize community member participation and engagement during public meetings?</i>	<i>11</i>
<i>Q3: Are there any restrictions on the use of contractual assistance in the development of the PCAP? Any suggestions on things to include or avoid in developing request for proposal (RFPs) or request for qualifications (RFQs)?</i>	<i>11</i>
<i>Q4: What is the process for submitting the PCAP? I.e., do we send to our program officer, submit through a portal?.....</i>	<i>11</i>
<i>Q5: Do you know the file size limit EPA has for EPA's email servers?.....</i>	<i>11</i>

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q6: If there is a Tribal PCAP, does it have to be adopted by the Tribe council? 12

III. Interagency/Intergovernmental Coordination 12

Q1: I have repeatedly contacted a regional partner organization with no response. How can I coordinate if they don't respond to my request to coordinate? 12

IV. Greenhouse Gas (GHG) Inventory and Projections 12

Q1: Where can I find emissions and sinks information on aquatic vegetation, algae, and moss?..... 12

Q2: How should I calculate emissions from residential wood stoves? Can I convert Particulate Matter (PM) emissions to carbon dioxide equivalent (CO₂e)? 13

Q3: Is there a timeframe for the annual GHG and co-pollutants reduction calculation? For example, 2025-2030, 2025-2050?..... 13

Q4: For the PCAP, can our tribe focus in on one specific sector if this sector happens to be the largest source of greenhouse gas emissions? Or do we need to include all sectors?..... 14

Q5: Do we have to utilize the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) or can we use Sixth Assessment Report (AR6)?..... 14

Q6: Regarding the selection of a base year for the GHG inventory, we have yet to identify a single year for which all emission data sources are available. Some datasets are from 2021, some from 2019, etc. How can we rectify this issue when selecting a base year and conducting the inventory?..... 14

Q7: May we remove Open Water Area from the Urban Total Area figure when accounting for the percentage of Urban Area with Tree Cover in the Local Greenhouse Gas Inventory Tool (LGGIT) Urban Forestry Carbon Sequestration Summary? 15

Q8: Is there a federal data source for GHG estimates of county level fertilizer use?..... 15

Q9: Can you please provide guidance on how to best estimate GHG emissions from local lawn and garden equipment? I am not seeing anything about that source category in the guidance documents, LGGIT, or the NEI..... 16

Q10: Can you please talk about the GHG Protocol guidance for accounting for the emissions scopes for on-road transportation? Also, is this differentiation in scope even important for the PCAP?..... 16

Q11: We are using State and Local Planning for Energy (SLOPE) data for electric generation and natural gas combustion emissions estimates. We are also using Facility Level Information on GreenHouse gases Tool (FLIGHT) data for large industrial facility emissions. Does FLIGHT data include emissions from combustion of natural gas purchased from local utilities? If so, does using FLIGHT and SLOPE in the same inventory result in a double count of industrial combustion of natural gas purchased from local utilities? How can we avoid this issue?..... 17

Q12: The QAPP template references a QC version of the Tribal Greenhouse Gas Inventory Tool (TGIT) tool for any significant differences with the primary versions of the TGIT that our consultant would be presenting. Where can I find this QC version of the TGIT?..... 17

Q13: Is it acceptable to present GHG emissions only in CO₂e? The tool (ICLEI ClearPath) we are using

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

only provides the results for each sector in CO₂e and doesn't provide a full breakdown of all GHG gases for each sector. 18

Q14: As an MSA, we are thinking of using a state focused tool and scale the results using similar factors that were recommended for scaling the GHG inventory. Is that a defensible approach?..... 18

Q15: We received an email today saying there is a new SIT update. We used the SIT tool for our GHG inventory with 2020 data. Do we need to redo the inventory prior to submitting our PCAP? 18

Q16: The SIT tool says it uses AR4 for GWPs; do we need to address this somehow when using AR5 for GHG reduction measure quantification? 19

Q17: If your tribe is in a rural census tract, do you need to record any urban forestry data? Both the Government and Community Tribal Greenhouse Gas Inventory tool ask you to enter in Urban forestry data. 19

Q18: I had a question regarding the data input for the solid waste sector in the inventory. We are using ClearPath for the inventory and need CH₄ emissions estimates from landfilled and incinerated waste. This data is available on the EPA FLIGHT Tool in tons of CO₂ equivalence, but ClearPath requires this data in tons of methane. Is there a standardized conversion factor that the EPA accepts to convert tons of CO₂ equivalence back into tons of methane?..... 20

Q19: Can you provide guidance on how to estimate Scope 3 Agriculture emissions for a GHG Inventory?..... 20

Q20. We would like to use the Tribal GHG community and govt. operational modules for calculating our annual emissions. However, data like non road mobile emissions do not allow data like fuel/hr. Also, wood burning (stationary combustion) could be added to the simplified GHG calculator but is not an option in the modules. Is there a way to use the modules with these included? Should we just continue to use the simplified GHG Calculator and build our own figures/tables? 20

Q21: When entering On Road mobile emissions entries into the TGIT, is there a standard VMT that we input? In a previous presentation, I saw that box pre-filled with 140,000 miles. 21

Q22: The TGIT wants vehicle miles traveled. However heavy equipment is not calculated this way. Please provide guidance. 21

Q23: In using the TGIT for Urban Forestry calculation, I got a wildly different value of carbon sequestered compared to just crunching the number myself. I calculated only 0.101 MT CO₂e per hectare from my backend calculations compared to 3618 MT CO₂E from the tool. I suspect I got some conversion wrong, but it was also different from the number I got from just multiplying the tree km² by the number included in the factors sheet (987.14 MT). 21

Q24: If we know that the tribe gets all of its electricity from a specific provider, should we use the market-based emission rates? 21

Q25: Can we scale down SLOPE county data to get tribal electricity use data?..... 21

V. Reduction Measures..... 22

Q1: Does the PCAP require a quantitative calculation and, if so, what does this quantitative calculation

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

entail? Does it cover the year of the PCAP submission or a future year? Or can it be a qualitative analysis of emissions reductions supported by expert insight? Are qualitative estimated emissions reductions appropriate when data is not available for calculations?..... 22

Q2: For many waste and materials strategies, to fully quantify the GHG benefit of an action, using a consumption or lifecycle approach is important. For CPRG quantification purposes, are there recommended methodologies for consumption or lifecycle based technical analysis? Relatedly, if we wish to use methodologies that we have developed, what documentation or substantiation should be provided?..... 22

Q3: What are the geographic scope requirements for the GHG reduction measures?..... 22

Q4: What is the preferred method for emission reduction quantifications to be included in the PCAP? What level of details is expected to be included in emission reductions associated with PCAP measures? 23

Q5: Are the priority measures we are proposing in our PCAP appropriate to ensure wide eligibility for Phase 2 applications?..... 23

Q6: Are there GHG emissions reduction and/or modeling tools that can incorporate building retrofits for both individual buildings as well as campus facilities? 24

Q7: When replacing internal combustion vehicles with electric vehicles (EVs), should I calculate annual emissions reductions cumulatively or apply the lifetime emission reduction for all years? 25

Q8: Can we see an example of using a tool to quantify GHG reductions for specific transportation measures? 25

Q9: If we plan to include measures in the State PCAP suggested by local governments during our outreach, should we quantify the measures specifically for the municipality/region that suggested the measure or scale-up for statewide?..... 26

Q10: What is required in terms of GHG reduction measures for the PCAP?..... 26

Q11: Can the PCAP priority measures be the same as the measures in the implementation grant application?..... 26

Q12: How specific should the measures be for quantifying reductions? Should we quantify a broad/umbrella measure or quantify more specific activities that support these broad/umbrella measures? 26

Q13: What level of specificity and detail is required for the PCAP on measures where partners are designated as the lead for implementation?..... 27

Q14: How should we discuss measures that are not yet associated with specific implementation timelines? 27

Q15: Can you please provide an example of the level of detailed required for the "authority to implement" each measure? 27

Q16: We have some measures that were reviewed and have not been chosen as a priority, we had thought about having these listed in a chart in our Next Steps as part of the starting point for the

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

CCAP. Would that confuse readers thinking that if one of these were a measure, they wanted to create an implementation grant that they could? It would not have all the information on the priority measures. 27

Q17: We have two quantified priority goals in our PCAP: (1) 25% reduction in energy use for existing residential buildings by 2030, and (2) 20% electrification of existing residential buildings by 2030. We have a proposed building priority measure to design a "multifamily upgrade program for buildings under 20,000 sf and/or with 10-20 units with onsite fossil fuel combustion." Is the proposed priority measure (multi-family program) considered "quantified" based on the quantified goals?..... 28

Q18: The grid is going to change significantly over the period of some of the implementation measures. How can we address that in our GHG reduction calculations?..... 29

Q19: What are the available tools and methods for calculating emissions reductions associated with policies to reduce vehicle idling, such as traffic sensors and traffic light signal system coordination? ... 29

Q20: What are the tools and methods available to calculate mode-shifting to estimate emissions reductions associated with bike/ped or greenway infrastructure? 29

Q21: What are the tools and methods available to estimate emissions reductions for a new inter-city passenger rail line? 30

Q22: What are available tools and methods to estimate greenhouse gas reductions associated with land conservation and keeping forests and farmlands from conversion to development?..... 30

Q23: Does EPA expect a sum of total GHG reductions from the PCAP? In other words, adding all GHG reductions across sectors to present a final number? 30

Q24: For states that are including measures in their PCAPs for Tribes and local governments, I see that we don't have to detail those measures as fully. Do we have to include GHG reduction estimates for those measures? 31

Q25: What are the available tools and methods for calculating emissions reductions associated with a policy to expand the percentage of plant-based meals at community organizations like schools and hospitals? 31

Q26: The tools that have been discussed in the Transportation TAF seem to be better suited for large geographic scales, such as cities and counties. What is the best way to quantify GHG reductions in a small Tribal fleet? Say a Tribe has 60 ICE vehicles and plans to replace half with electric vehicles. 31

Q27: I'd like some guidance on quantifying reduction strategies. We did a robust regional CAP in 2021 and quantified reductions at eight "objective" levels (e.g. Decarbonize transportation). Under each objective are specific measures that were not individually quantified (e.g. transition fleets to zero emission vehicles). For our PCAP, we don't want to exclude any measures from our previous CAP so that we can address the priorities of all jurisdictions and stakeholders in the region. We cannot possibly quantify all strategies. Choosing a handful of "priority strategies" feels exclusive. How can we present quantified reduction measures in a way that meets EPA requirements and serves our constituents? 32

Q28: Is it acceptable to just do a "typical" GHG reduction? For example, we know we want to include

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

municipal solar installations, but we might not have all the details from all entities who want to install solar to calculate. Can we just do a "range" of expected benefits from municipal solar installation? 32

Q29: Our estimates of GHG reductions for each measure are based on some modeling a contractor did last year. Do we need to include an appendix with that model for the PCAP? Or an explanation of the model inputs?..... 32

Q30: Can you explain more on what "implementation-ready" reduction measures means?..... 32

Q31: For the GHG reduction quantification, we grouped our PCAP measures together by sector to show estimated reductions in 2030 and 2050. We also reference more specific reductions by measure based on the literature in our PCAP. Is this acceptable? 33

Q32: If a measure is in the PCAP but then does not get funded via the Implementation Grants Competition, is the authority still on the hook to implement? 33

Q33: If we have a measure in our PCAP that includes rooftop solar, do we have to address the potential barrier of replacing/repairing the roofs for the panels?..... 33

Q34: If we have an electrification of transportation measure that states ATVs etc. apply as electric vehicles, do we have to spell that out? 33

VI. Climate Planning Process 34

Q1: Would EPA be willing to produce a PCAP template for the benefit of all? Example measures would also be helpful. 34

Q2: Is there a PCAP page limit? 34

Q3: What is the submission process for the PCAPs? Are they supposed to be emailed to our EPA Project Leads by March 1 in addition to being posted on our websites so that they are publicly available?..... 34

Q4: Can you clarify how grantees should determine whether the "other funding opportunities" are actually viable/probable (given the actual funding amount that is possible from other funding opportunities is unknown, beyond estimated floors and ceilings for a given federal grant, and given the fact that entities will not have even applied for those funding opportunities yet), and how to factor those other funding opportunities into the "quantitative cost estimate" for each GHG reduction measure in the PCAP? 34

Q5: What are the PCAP submittal deadlines? 35

Q6: What technical appendices are required for the PCAP and what else is required for them?..... 35

Q7: If there is a funding gap for implementing an entire project to complete a measure, how should that be addressed within the PCAP?..... 35

Q8: Regarding Workforce Funding Needs section of the PCAP. What level of analysis/detail is expected in the PCAP? Should EPA work models be completed or is that too in-depth for this effort?..... 35

Q9: We would like to incorporate a youth empowerment project into our PCAP. Since that topic doesn't fit nicely into any of the sectors, how do you suggest we include it? 35

Q10: Can you please provide an example of the level of detail required for the funding analysis for the

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

PCAP? 36

Q11: After submission, will PCAPs receive any feedback from EPA on things such as future refinement, better reduction calculations, etc.?..... 36

Q12: Is an executive summary expected?..... 36

Q13: Is there a maximum level of recommended detail for the Workforce portion, given that it's technically not required for the PCAP? 36

Q14: We are submitting our PCAP on Friday (3/1/24). Can we submit an extra measure on April 1st? ... 36

VII. LIDAC Benefits Analysis and Meaningful Engagement..... 37

Q1: When identifying a census tract for a non-stationary project (e.g., purchase of a vehicle), how can we geographically attribute the benefits?..... 37

Q2: For the purposes of LIDAC analysis etc., should the PCAP treat a transit strategy as applying to the entire region, or only to the areas that receive investment?..... 37

Q3: For the LIDAC benefits analysis in the PCAP, should the analysis be presented by measure in the PCAP, or can it be a stand-alone section in the PCAP? 37

Q4: What are the LIDAC engagement requirements for the PCAP? It is unclear from the guidelines if this is a component that is required in the PCAP, and if so, is it just for the Regional Measures or all measures? 38

Q5: Do we need to include a list of census tracts that will be impacted as part of our LIDAC benefits analysis?..... 38

Q6: EPA should clarify that the EPA Disadvantaged Communities mapping tool is also a tool to identify LIDACs. As it is described as such here: EPA has provided a layer to EJScreen that combines CEJST and EJScreen data to identify whether a community is disadvantaged for the purposes of implementing EPA programs under the Inflation Reduction Act, including the Climate Pollution Reduction Grants program. The EJScreen layer can be found on the EJScreen tool under “Places” tab and by selecting “EPA IRA Disadvantaged”: <https://ejscreen.epa.gov/mapper/>..... 39

Q7: Can you discuss the 'quantitative vs. qualitative" requirements for the LIDAC Benefits Analysis?..... 39

Q8: How detailed does the climate risk identification need to be? 39

Q9: Do the qualitative LIDAC benefits need to come directly from the input sessions held as part of the CPRG grant? Can they come from other related input gathering sessions in the community?..... 39

Q10: 1. I have both census tract dataset (CEJST) and census block group dataset (a state-level dataset). Do you expect to have both census tract and block group IDs, or just one of them? Also, is there any reason for any preference? (It can also help my team understand how granular they should be for some of the projects). 2. CEJST data is based on 2010 census tracts. The state level census block group data set is from 2019. Is there any concern about the year differences?..... 40

Q11: Concerning this statement: “EPA has developed a layer that combines the CEJST information and the EJ screen supplemental indices into one layer,” since each tool looks at different population/household sizes, wouldn't this create a problem when trying to describe percentiles to

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

<i>stakeholders?.....</i>	40
<i>Q12: For states with large communities who engage with us virtually and don't want to provide location information, do you have advice on capturing/describing engagement - especially when conversation with those communities revolves around LIDAC topics?.....</i>	40
<i>Q13: When evaluating the community engagement for a Tribe are you more interested in the tribal community or the wider community around the casino where the project would be located?</i>	41
VIII. Co-pollutant Impacts Analysis	41
<i>Q1: Does the base-year for the co-pollutant inventory (in the benefits analysis) have to be the same as the base year for the GHG inventory?.....</i>	41
<i>Q2: Can you provide additional information on the Avoided Emissions and geneRation39 Tool (AVERT) and how different technologies can be tested?.....</i>	41
<i>Q3: If AVERT is a more regional model, is there also a better tool for a single solar project, rather than region-wide?.....</i>	41
<i>Q4: When we use AVERT's online tool to estimate emissions reductions estimates from switching to an EV, it comes up as 0, possibly because reductions would be so small. Would MOVES be a better option for this particular project?</i>	42
<i>Q5: What are best practices for using AVERT to estimate emissions reductions in future years given the tool uses today's electricity grid for its calculations?</i>	42
<i>Q6: Can we go over methods for developing a co-pollutant baseline for Tribes and territories? The reservation area is very small in comparison to the county-scale inventory, so any actions at the reservation level will be well below the level of precision for county-scale, making the county-scale data not very useful. Also is the co-pollutant baseline a requirement for the PCAP?.....</i>	43

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

I. Quality Assurance Project Plans (QAPPs)

Q1: How rigid are the QAPP templates? For example, if we have an existing inventory, can we change the structure of the QAPP to meet our needs?

The QAPP template is entirely optional. The template includes a framework for developing QAPPs consistent with the [EPA's Environmental Information Quality Assurance Project Plan \(QAPP\) Standard](#). Sample text is provided under each element of the outline. These example approaches are optional, and grantees are free to independently develop their QAPP elements consistent with the EPA's published guidance for QAPPs, commensurate with the complexity and type of work, how the results will be used, the available resources, and unique needs of the grantee.

Q2: The initial draft of the QAPP is due soon. Will this be an iterative process where we can address comments on our initial submission?

Yes. If the EPA QA staff have questions or comments on your QAPP, they will return it for you to address. In some EPA regions, your QAPP may be reviewed by a contractor before being submitted for EPA approval (please confirm the review process with your project officer). The contractor may provide comments or recommendations for you to make prior to final submission. In addition, if you need to amend your QAPP after it is approved, you may do so.

Q3: The Tribal QAPP template in Appendix B asks for statistics as percent signed bias and percent variance. The note says that it would be calculated in accordance with the EPA's Data Assessment Statistical Calculator (DASC) Tool, but the tool gives choices for Criteria Pollutants but not CO2e. How should the percent signed bias and percent variance be calculated?

The examples in the Appendix of the QAPP Template are based on comparing a series of primary estimates to a series of independent but comparable Quality Control (QC) estimates. This QC methodology is not required, and grantees may elect to use other QC methodologies. At this point in the project planning phase, you may not have the data necessary to complete a comparative statistical calculation. If so, you are not expected to have this information in the QAPP. Your QAPP may reflect the general approach that you expect to take. For additional detail, please consult with your project officer.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q4: Is the Priority Climate Action Plan (PCAP) QAPP expected to cover CCAP and Status Report activities as well? Will additional QAPPs be necessary for the CPRG program?

The EPA's Standard for [Quality Assurance Project Plans](#) (CIO 2105-S-02.0) requires that your QAPP cover all work performed under the grant that involves "the collection, production, evaluation, or use of environmental information" The QAPP will be effective for the entirety of the grant and is reviewed annually to confirm if updates are needed. As such, the QAPP should cover the appropriate CCAP and Status Report activities as well as the PCAP. QAPPs may be modified or updated as needed over the course of the grant period.

Q5: Will each planning grant recipient be required to attach or submit their approved QAPPs with their PCAP documents?

Grantees are not required to submit their QAPPs with their PCAP documents.

Q6: Is it necessary to include the National Emissions Inventory (NEI) for the co-pollutant benefit analysis under QAPP task 1 found in section 2.1.2 Identification of Data Sources and Acquisition?

No. The text in the QAPP template is provided as an example and may be modified. Data from the NEI is one example of data that can be used, but grantees may use other data sources in addition to or in place of NEI.

Q7: We've had to do another round of edits on our QAPP. Can we request an expedited review upon resubmission? We would like to be able to offer modified (shortened) public comment period our PCAP, but we need to have the QAPP approved first.

Reach out to your project officer directly to better understand timelines for QAPP review.

II. Grants Management

Q1: Regarding procurement of professional services to support software and technical assistance related to the GHG inventory and data work this grant will require, what procurement steps do we need to be considering from the EPA/Federal level?

When procuring property and services under a Federal award, a recipient must follow requirements as described in 2 CFR Part 200 and by the EPA [Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements](#). EPA's Office of Grants and Debarment has posted materials from a webinar on this topic [here](#).

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q2: Can I use grant funds to provide food and refreshments or stipends to maximize community member participation and engagement during public meetings?

Meals and light refreshments may be eligible costs if they are in accordance with EPA's grant policy and you have prior approval for the expenses. Provision of meals or light refreshments must be necessary to achieve the objectives of the event, and the objectives of the grant. For more information, please see Section 5 of the [Office of Grants and Debarment Guidance on Selected Items of Cost for Recipients](#).

Eligible costs related to intergovernmental coordination and public engagement may include stipends to cover expenses to attend meetings associated with the program. More details are available on the [EPA Guidance on Participant Support Costs webpage](#). Such costs must be included in the approved budget for the project and support the objectives of the grant.

Q3: Are there any restrictions on the use of contractual assistance in the development of the PCAP? Any suggestions on things to include or avoid in developing request for proposal (RFPs) or request for qualifications (RFQs)?

There are no limitations on the dollar value or percentage of total funds used for contracts under the CPRG planning grant. When procuring property and services under a Federal award, a recipient must follow requirements as described in 2 CFR Part 200 and under the [Best Practice Guide for Procuring Services, Supplies, and Equipment Under EPA Assistance Agreements](#). Recipients may be able to use an existing long-term contract that preceded the EPA assistance agreement, if that contract was procured competitively consistent with Federal financial assistance regulations (including Disadvantaged Business Enterprise considerations) in effect at the time. Some guidance on procuring technical services to assist with emissions inventory development was discussed on the November 9 Climate Planning Analytics TAF and examples of state, local, and tribal procurements can be found in the Grants Management section of the Technical Assistance Forum Resource Library (contact cprg@endyna.com if you are a CPRG planning grantee or grantee partner and would like access).

Q4: What is the process for submitting the PCAP? I.e., do we send to our program officer, submit through a portal?

Please submit your PCAP to your project officer via email. If the files are too large to send via email, please contact your project officer to arrange for an alternate means of submission.

Q5: Do you know the file size limit EPA has for EPA's email servers?

EPA's file size limit is 150MB, but files can also be zipped and shared with EPA. Please reach out to your project officer for further guidance.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q6: If there is a Tribal PCAP, does it have to be adopted by the Tribe council?

EPA does not require a PCAP to be formally adopted by a Tribal Council. However, your own Council might have requirements regarding approval of such documents.

III. Interagency/Intergovernmental Coordination

Q1: I have repeatedly contacted a regional partner organization with no response. How can I coordinate if they don't respond to my request to coordinate?

Please contact your EPA Regional Office for assistance. Either your Project Officer or Technical Contact can check on this issue for you.

Please note, there is no requirement that every jurisdiction or organization within the scope of a planning grant actively participate. The lead organization should collaborate to the extent possible and must consider the entire geographic region in developing deliverables, even if not all jurisdictions participate.

IV. Greenhouse Gas (GHG) Inventory and Projections

Q1: Where can I find emissions and sinks information on aquatic vegetation, algae, and moss?

EPA's National Greenhouse Gas Inventory includes aquaculture as a part of coastal wetlands. However, this category is excluded from the state, local, and tribal Greenhouse Gas Inventory tools currently, as this data is not generally available at that level. EPA uses IPCC Tier 1 method and Tier 1 emission factor (from the IPCC 2013 Wetlands Supplement) to estimate N₂O emissions for the national GHG Inventory. [National GHG Inventory Chapter 6](#) [starting on page 6-119]:

The activity data EPA uses is annual fish production (i.e., mass of production of different type fish-quantity of food stock produced). There is more information available in Section 4, Coastal Wetlands in the [IPCC 2013 Wetlands Supplement](#) (starting on page 159) and a worksheet available for you to use on page 308 to calculate emissions for aquaculture.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q2: How should I calculate emissions from residential wood stoves? Can I convert Particulate Matter (PM) emissions to carbon dioxide equivalent (CO₂e)?

Particulate matter (PM) is not a direct greenhouse gas (GHG) so is not reported in GHG inventories. Burning biomass (e.g., wood) generates CO₂ in addition to CH₄ and N₂O. CO₂ emissions from burning biomass (e.g., wood) are calculated based on an assumed carbon content and oxidation percent. These CO₂ emissions from wood burning are accounted for only as informational emissions because they are biogenic and net carbon fluxes from changes in biogenic carbon reservoirs are accounted for in LULUCF sector fluxes. Consistent with GHG accounting practices, non-CO₂ emissions are reported (CH₄ and N₂O) and included in GHG inventory totals. EPA does provide biomass CO₂ emissions for informational purposes and to provide detail on biomass and biofuels consumption. [Annex 3.1. Table A-74](#) contains emissions factors for residential, commercial, and industrial wood burning and provides more information on the methods to find CO₂ equivalent values. EPA does publish state level estimates of non-CO₂ emissions from wood use in residential sector in its [Inventory of U.S. Emissions and Sinks by State](#), including information on methods and data (find data under Key Links, click on “Download consolidated data for all states (zip)”).

Q3: Is there a timeframe for the annual GHG and co-pollutants reduction calculation? For example, 2025-2030, 2025-2050?

EPA does not require a specific start year or base year; inventory years or a time series start year should be chosen based on availability of underlying data and to support development of GHG targets. GHG emissions projections are not required for the PCAP, but near-term (e.g., 2030-2035) and long-term (e.g., 2050) projections of GHG emissions are required to be included in the CCAP. This element includes projections of GHG emissions (and sinks, if feasible) in the absence of plan measures (e.g., a “business-as-usual” projection), and a projection of GHG emissions under a scenario where the plan is fully implemented. The inclusion of sector-based projections is strongly recommended (e.g., establishing a separate GHG emissions projection for transportation, electricity generation, commercial and residential buildings, industry, agriculture, and waste and materials management). Grant recipients with existing GHG projections may use those projections, but are encouraged to update, modify, or expand those projections for the CCAP as appropriate. Similarly, EPA does not require a specific start year or projections year for any co-pollutant emissions analysis, and inventory years should be based on availability of underlying data.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q4: For the PCAP, can our tribe focus in on one specific sector if this sector happens to be the largest source of greenhouse gas emissions? Or do we need to include all sectors?

PCAPs may focus on a specific sector or sectors and do not need to comprehensively address all the Tribe's/Tribes' or territory's sources of GHG emissions and sinks. Grantees may also use a simplified greenhouse gas inventory for the PCAP. Note that a comprehensive greenhouse gas inventory and measures (e.g., for all sectors) is required for the CCAP.

Q5: Do we have to utilize the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5) or can we use Sixth Assessment Report (AR6)?

While CPRG planning grants program guidance does not specify if grantees should use Global Warming Potentials (GWPs) from a specific source, the Implementation Grants NOFOs specifically ask applicants to use IPCC AR5 GWPs (see [Appendix B in the NOFO](#)).

Further, EPA uses 100-year GWPs from IPCC's AR5 to calculate CO₂ equivalent GHG data as required for international reporting of annual inventories. This ensures that national GHG Inventories and related data reported by all nations are comparable.

Q6: Regarding the selection of a base year for the GHG inventory, we have yet to identify a single year for which all emission data sources are available. Some datasets are from 2021, some from 2019, etc. How can we rectify this issue when selecting a base year and conducting the inventory?

Ideally, grantees will select a base year for which all datasets are available, but it is inevitable that there will be some data gaps. If it is not possible to identify a single year for which complete data are available, consider which datasets might be easiest to supplement using proxy calculations or fill data gaps using available historical data. Grantees might also consider other factors in selecting a base year, like consistency with existing emissions reductions targets and policies, or avoiding anomalous years with particularly high or low emissions. See also the [inventory 101 training presentation](#) from June 2023 for additional considerations in selecting a base year.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q7: May we remove Open Water Area from the Urban Total Area figure when accounting for the percentage of Urban Area with Tree Cover in the Local Greenhouse Gas Inventory Tool (LGGIT) Urban Forestry Carbon Sequestration Summary?

The Urban Forestry Inventory sheet within the [LGGIT](#) aims to measure the carbon impacts of urban trees. Open water areas, even when located within larger urban areas, do not fall under this category and can be subtracted from total urban areas. However, please note that vegetation such as mangrove forests or other riparian vegetation along open water banks located within urban areas should be considered within urban forestry calculations. <https://www.epa.gov/statelocalenergy/local-greenhouse-gas-inventory-tool>

According to the [GHG Protocol for Cities](#), areas covered or saturated by water for all or part of the year are considered wetlands. Open water can be subtracted from the total land area to accurately assess GHG emissions sequestration by urban forestry as long as that area is accounted for in the wetlands category.

Q8: Is there a federal data source for GHG estimates of county level fertilizer use?

The U.S. Department of Agriculture (USDA) National Agricultural Statistics Service provides fertilizer use data at the state and federal levels. The EPA hosts a guide to access the USDA Quick Stats data as well as guidance on scaling fertilizer consumption data to sub-state scales as part of the "Guidance for County and Regional Inventories." Fertilizer data can be queried directly from [Quick Stats](#) as well as [Quick Stats access and scaling guidance](#).

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q9: Can you please provide guidance on how to best estimate GHG emissions from local lawn and garden equipment? I am not seeing anything about that source category in the guidance documents, LGGIT, or the NEI.

The National Emissions Inventory (NEI) does include data for local lawn and garden equipment in the "NEI nonroad sources" category. You can find NEI data for 2020 using the [2020 Online NEI Data Retrieval Tool](#). For more information about how to use this data, consult the [NEI's Data and Documentation resources](#).

If you would like to calculate your own inventory, you could use a number of approaches. A fuel-based method could be used to quantify CO₂ emissions if you know how much fuel is used by the lawn and garden fleet. Emission factors for fuel-based methods can be found on [EPA's GHG Emission Factors Hub](#). If fuel quantity is unknown, EPA's MOVES model can calculate emissions from 88 different nonroad sources in its Nonroad module, including the lawn and garden sector. Emissions from lawn and garden equipment, which includes mowers, trimmers, leaf blowers, and several other residential and commercial equipment, can be calculated for the entire sector (SectorID 4) using default or local information. For guidance on calculating emissions using the MOVES Nonroad module, see Section 5 of the [MOVES Technical Guidance](#). See Appendix B of that guidance for the specific nonroad equipment that MOVES can model. MOVES training, including hands-on training slides, is also available on the [MOVES training webpage](#).

Q10: Can you please talk about the GHG Protocol guidance for accounting for the emissions scopes for on-road transportation? Also, is this differentiation in scope even important for the PCAP?

EPA provides flexibility on the emissions sources and scopes that are included in the simplified greenhouse gas inventory in the PCAP. Regardless, according to GHG Protocol guidance, the scope of on-road transportation emissions depends on the fuel source. Emissions from internal combustion engines fall under Scope 1 emissions (direct emissions). Emissions from electric vehicles fall under Scope 2 emissions if the electricity consumed is generated outside the geographic boundaries of the inventory scope. Be cautious of double counting electricity emissions for electric vehicles in both transportation and electric power sectors.

Some governments may also wish to evaluate Scope 3 transportation emissions such as those from employee commuting, however these are typically conducted as part of a government operations inventory, rather than an MSA-wide inventory approach.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q11: We are using State and Local Planning for Energy (SLOPE) data for electric generation and natural gas combustion emissions estimates. We are also using Facility Level Information on GreenHouse gases Tool (FLIGHT) data for large industrial facility emissions. Does FLIGHT data include emissions from combustion of natural gas purchased from local utilities? If so, does using FLIGHT and SLOPE in the same inventory result in a double count of industrial combustion of natural gas purchased from local utilities? How can we avoid this issue?

[FLIGHT](#) data reports emissions from facilities that combust natural gas on site, which includes natural gas purchased from utilities. Data by fuel type can be filtered in FLIGHT or downloaded through this [resource](#). In addition, fuel use and fuels listed are available by facility in the detailed facility overview and/or actual report in FLIGHT (click on an individual facility and open the report, bottom left-hand side of facility overview screen).

For industrial facilities reporting to FLIGHT, onsite combustion is covered under 40 CFR Part 98 and includes fuels like natural gas. However, some entities report combined process and combustion emissions and there is no way to parse out the combustion only emissions for those sources. Therefore, the data in FLIGHT are not comparable with the industrial data in [SLOPE](#) which are estimates for combustion only. The two data sources should not be combined as it will lead to double counting and there is no simple way to correct for this.

Estimated emissions from purchased electricity are not included in FLIGHT, therefore SLOPE estimates for those emissions may be used in conjunction with FLIGHT data without double counting.

Q12: The QAPP template references a QC version of the Tribal Greenhouse Gas Inventory Tool (TGIT) tool for any significant differences with the primary versions of the TGIT that our consultant would be presenting. Where can I find this QC version of the TGIT?

The QAPP guidance includes quality control (QC) as an important step of verifying collected data. One way to verify data is by comparing it to other estimates (e.g., does data for my Tribe reflect the same general trends as data for my state?). [TGIT](#) does not have a specific "QC" version, rather this refers to running a second copy of the tool with QC data to generate output for comparison. Note: this is one approach to quality control but is not a required approach.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q13: Is it acceptable to present GHG emissions only in CO₂e? The tool (ICLEI ClearPath) we are using only provides the results for each sector in CO₂e and doesn't provide a full breakdown of all GHG gases for each sector.

Yes. For the PCAP, results may be presented in CO₂e. Note: existing GHG inventory reporting guidance (and best practices) at all scales (nations, states, communities) recommend presenting emissions results in CO₂e to facilitate comparison between years, sectors, and gases. You should document the global warming potentials (GWPs) applied within the tool to estimate CO₂e or CO₂ equivalent emissions (e.g., 100-year GWP from IPCC Fifth Assessment Report).

For the CCAP, a comprehensive inventory must include all GHG emissions and sinks by emission source and sink category following commonly accepted protocols for the following sectors: industry, electricity generation and/or use, transportation, commercial and residential buildings, agriculture, natural and working lands, and waste and materials management comprehensive inventory covering all major sectors. Footnote 12 on page 50 of the Program Guidance states: "Emissions in GHG inventories should be expressed both in metric tons of each GHG and in metric tons of carbon dioxide equivalent (CO₂e)." In sum, for the CCAP grantees will need to provide inventory data by sector (and underlying category level) in CO₂e in addition to inventory totals in CO₂e, along with the same data in metric tons of each GHG. Finally, note while CPRG Planning Phase guidance does not specify if grantees should use GWPs from a specific source, the Implementation Grants NOFO specifically asks applicants to use IPCC AR5 GWPs, see [Appendix B](#).

Q14: As an MSA, we are thinking of using a state focused tool and scale the results using similar factors that were recommended for scaling the GHG inventory. Is that a defensible approach?

EPA does not recommend or endorse specific quantification methodologies for GHG reduction measures. More information can be found on the [CPRG Tools and Technical Resources - Greenhouse Gas Inventory and Projections webpage](#). EPA encourages grantees to use methods that are most suitable for the data at hand. Scaling data can be an appropriate method to generate activity data when actual activity data are unavailable. Variations of this approach are used in existing inventories, including the U.S. Greenhouse Gas Inventory by State. Regardless of approach, it is important to document and explain the approaches used, including underlying assumptions and factors, in addition to presenting results, etc.

Q15: We received an email today saying there is a new SIT update. We used the SIT tool for our GHG inventory with 2020 data. Do we need to redo the inventory prior to submitting our PCAP?

You do not need to redo your inventory for your PCAP but please document the version of the tool, scope, years, GWPs used, etc. used in your PCAP so that the reader can understand your approach.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q16: The SIT tool says it uses AR4 for GWPs; do we need to address this somehow when using AR5 for GHG reduction measure quantification?

You are not required to convert your existing inventory data to use AR5 GWPs. For comparison of measures using AR5, EPA recommends using the same GWP to compare/perform analysis. If you have results from SIT by gas in CO₂e, it is a simple conversion step to update to AR5 GWPs for non-CO₂ gases (i.e. divide current CO₂e estimates by the AR4 100-year GWPs to get data in units GHG and then multiply those units by the AR5 values specified in [Annex B](#) and you will have data in CO₂e using AR5 GWPs). Note: The SIT release in June 2023 was updated to use AR5 GWPs, so grantees are encouraged to use the June 2023 or later versions of SIT for future work.

Q17: If your tribe is in a rural census tract, do you need to record any urban forestry data? Both the Government and Community Tribal Greenhouse Gas Inventory tool ask you to enter in Urban forestry data.

In EPA's U.S. GHG Inventory that uses the IPCC Guidelines to estimate GHG emissions and removals from land use and forestry across the entire U.S. land base, if a parcel of land (greater than or equal to 0.25 acres in area) contains a human-built structure, that parcel of land is classified as a settlement. If an entity were to use this land-use classification methodology, accounting for trees that occur on settlements in this "urban forestry" designation that's used in the EPA inventory tool allows inventory compilers to account for the GHG removals that these 'urban' forests contribute, i.e. trees that occur on settlements, that would otherwise be omitted if this entire parcel was simply classified as a 'Settlement'. Because rural parcels of land might host the type of structures that lead to the "Settlement" land-use designation using this methodology, accounting for "urban forestry" carbon accumulation applies to rural regions as well as more densely populated urban centers. See [page 6-16 in the Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990–2022](#) draft report for a more detailed definition of "Settlements" in the U.S. GHG Inventory.

Please note, grantees are not required to include forestry data in their PCAP if it is not a sector they plan to address with priority measures.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q18: I had a question regarding the data input for the solid waste sector in the inventory. We are using ClearPath for the inventory and need CH4 emissions estimates from landfilled and incinerated waste. This data is available on the EPA FLIGHT Tool in tons of CO2 equivalence, but ClearPath requires this data in tons of methane. Is there a standardized conversion factor that the EPA accepts to convert tons of CO2 equivalence back into tons of methane?

A: The data provided in FLIGHT includes information about which Global Warming Potential (GWP) was used to convert reported methane emissions to CO₂ equivalencies. In FLIGHT, the methane specific GWP is drawn from the Intergovernmental Panel on Climate Change's (IPCC) Fourth Assessment Report (AR4). The AR4 100-year GWP for methane is 25, meaning the CO₂ equivalents in FLIGHT should be divided by 25 to convert to tons of methane. Detailed gas quantities are available in FLIGHT as well, when viewing an individual facility's full report. More information on the GWPs used in GHGRP published data can be found on the GHGRP web site, [here](#) or the GHGRP's Frequently Asked Questions, FAQ 799, available [here](#).

Q19: Can you provide guidance on how to estimate Scope 3 Agriculture emissions for a GHG Inventory?

The GHG Protocol defines 15 categories of Scope 3 emissions, and the "Scope 3 Standard" protocol can be found [here](#). This report includes details on all Scope 3 categories and requirements, case studies of Scope 3 inventories, and guidance on reporting Scope 3 emissions. Specific calculation guidance is detailed [here](#). Note, companies or organizations with agricultural operations may also want to review [the GHG Protocol Agricultural Guidance](#).

Q20. We would like to use the Tribal GHG community and govt. operational modules for calculating our annual emissions. However, data like non road mobile emissions do not allow data like fuel/hr. Also, wood burning (stationary combustion) could be added to the simplified GHG calculator but is not an option in the modules. Is there a way to use the modules with these included? Should we just continue to use the simplified GHG Calculator and build our own figures/tables?

You are correct that the Tribal GHG Inventory Tool does not allow fuel consumed/hour as an activity input. The tool can still be used, but you may need an extra conversion step to convert to the annual consumption rate needed. For example, if you know the total volume of fuel consumed in a year, or know how many times per year fuel burning sources are used so you can convert an hourly use rate to an annual one, you can calculate an annual amount of fuel consumed.

There are two options for wood burning combustion sources. First, there is no requirement to use the Tribal GHG Inventory Tool, so it is possible to continue to use the simplified GHG calculation to estimate and submit emissions. The second option is to include those additional sources in a broader inventory using the Tribal inventory tool. Within the tool, there is an option to include additional, externally estimated emissions sources. There is an explanation of this in the user guide; be careful to use the correct units of measure when adding sources. Additionally, EPA does not include wood burning because the CO₂ emissions from wood burning are typically considered to be in equilibrium with the carbon sequestered. However, it can be included as an additional source.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q21: When entering On Road mobile emissions entries into the TGIT, is there a standard VMT that we input? In a previous presentation, I saw that box pre-filled with 140,000 miles.

The prefilled box was likely an example for that presentation. An entity should enter its own specific VMT in that section based on collected data for their inventory area. Sources of VMT data were presented during the 12/20 Transportation TAF and the 1/23 Tribal TAF. Alternatively, if the volume of fuel consumed is known, it can be used to calculate transportation sector CO2 emissions.

Q22: The TGIT wants vehicle miles traveled. However heavy equipment is not calculated this way. Please provide guidance.

Nonroad mobile sources, including agricultural, mining, and construction equipment, are calculated using fuel consumption by volume. VMT is only used for on-road mobile sources.

Q23: In using the TGIT for Urban Forestry calculation, I got a wildly different value of carbon sequestered compared to just crunching the number myself. I calculated only 0.101 MT CO2e per hectare from my backend calculations compared to 3618 MT CO2E from the tool. I suspect I got some conversion wrong, but it was also different from the number I got from just multiplying the tree km2 by the number included in the factors sheet (987.14 MT).

If the EF was directly multiplied by the square kilometers, there is likely a missing conversion from carbon to CO2 and kilometers to hectares. Those conversions are embedded at the bottom of the “urban forestry” tab in the “results” section.

Q24: If we know that the tribe gets all of its electricity from a specific provider, should we use the market-based emission rates?

EPA is not prescriptive for which emission factors (EFs) or methodologies are used for quantification. The most important thing is to document what was done and why and how it was done.

Q25: Can we scale down SLOPE county data to get tribal electricity use data?

Scaling of data is a reasonable approach. EPA provides guidance on scaling factors in the TAF library. You may want to consider how to adjust scaling factors based on your knowledge of how Tribal lands and activity compare with county level data. For example, household size, building size, urban vs rural, etc. You may want to reference this [User’s Guide to Incorporating Existing GHG Inventories into a PCAP LIVE 508.pdf](#)

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

V. Reduction Measures

Q1: Does the PCAP require a quantitative calculation and, if so, what does this quantitative calculation entail? Does it cover the year of the PCAP submission or a future year? Or can it be a qualitative analysis of emissions reductions supported by expert insight? Are qualitative estimated emissions reductions appropriate when data is not available for calculations?

Yes, the PCAP must include "quantified emissions reductions" that are to be based on quantitative calculations to estimate the effectiveness of a particular reduction measure or measures at lowering GHG emissions. However, EPA does not prescribe specific analytical approaches or methods to conduct this analysis. EPA also does not prescribe the particular year of the projection, although 2030 and 2050 are "default" years used by many other public and private entities to establish GHG reduction targets. Additionally, trainings and technical tools to aid in quantifying GHG reduction measures can be found on the CPRG technical tools [website](#).

Q2: For many waste and materials strategies, to fully quantify the GHG benefit of an action, using a consumption or lifecycle approach is important. For CPRG quantification purposes, are there recommended methodologies for consumption or lifecycle based technical analysis? Relatedly, if we wish to use methodologies that we have developed, what documentation or substantiation should be provided?

EPA does not recommend or endorse specific quantification methodologies for greenhouse gas (GHG) reduction measures, including waste and material management strategies. Nor does EPA establish specific documentation requirements for measure-level GHG emission analyses in the planning grants program guidance. For waste material strategies or other GHG reduction measures appearing in PCAPs, grantees applying for implementation funds to implement those measures may want to consider the informational and documentation requirements described in [Appendix C of the Notice of Funding Opportunity](#) (NOFO p. 65).

Q3: What are the geographic scope requirements for the GHG reduction measures?

For the purposes of CPRG, GHG reduction measures should be implemented within the geographic scope covered by the relevant PCAP or CCAP.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q4: What is the preferred method for emission reduction quantifications to be included in the PCAP? What level of details is expected to be included in emission reductions associated with PCAP measures?

EPA does not recommend or endorse specific quantification methodologies for greenhouse gas (GHG) reduction measures. There are several useful tools and methodologies available under the [CPRG Training, Tools, and Technical Assistance webpage](#). An applicable PCAP is one that geographically covers an entity and contains GHG reduction measures that can be implemented by the entity. A PCAP may include GHG reduction measures that apply broadly and can be implemented by the municipalities or other jurisdictions comprising the state, metro area, territory, or Tribe. While the PCAP does not necessarily need to quantify specific GHG reductions by location, it should describe the GHG reduction measures with enough detail that implementation grant applicants can provide an estimation of future GHG reductions associated with the measure. Therefore, the PCAP should provide information at a sectoral resolution that facilitates an analysis at the measure-level. The PCAP does not need to identify the specific names of other eligible entities (e.g., such as specific cities or counties) that may or may not implement a particular measure.

Q5: Are the priority measures we are proposing in our PCAP appropriate to ensure wide eligibility for Phase 2 applications?

Due to the competitive nature of the implementation grant phase of the CPRG program, EPA is not able to provide feedback on PCAPs. EPA has published the competition details for the implementation grants well in advance of the application deadline so that entities considering whether to submit an implementation grant application will be able to take elements of the implementation evaluation criteria into consideration when developing their PCAP. Planning grantees may wish to review Sections IV and V of the NOFO as they consider what measures to include in their PCAP.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q6: Are there GHG emissions reduction and/or modeling tools that can incorporate building retrofits for both individual buildings as well as campus facilities?

EPA does not recommend or endorse specific quantification methodologies for greenhouse gas (GHG) reduction measures. A selection of technical tools to aid in quantifying GHG reduction measures can be found on the CPRG Training, Tools and Technical Assistance [webpage](#). In addition, for the analyses required to estimate the impact of building sector measures across an entire state or community, grantees may find the NREL [ResStock](#) and [ComStock](#) tools useful. These tools help states and localities identify which building stock improvements optimize cost savings and GHG emissions reductions. They also offer useful data for grantees who are not modeling GHG emissions. The ResStock tool offers fact sheets with insight into the state's potential energy and utility cost savings and specific home updates that would save effective cost and energy-saving home updates. The ComStock tool offers timeseries, nationwide energy consumption data for the commercial building stock. ResStock uses DOE's open-source building energy modeling ecosystem of [OpenStudio](#)[®] and [EnergyPlus](#)[™]. Comstock samples building characteristics from DOE's [Commercial Prototype Building Models](#) and [Commercial Reference Buildings](#).

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q7: When replacing internal combustion vehicles with electric vehicles (EVs), should I calculate annual emissions reductions cumulatively or apply the lifetime emission reduction for all years?

The CPRG program guidance does not specify that a particular methodology be used for the quantified GHG measures requirement, such as estimating annual emissions reductions for consecutive years. In addition to a GHG inventory, the PCAP must include quantification of emissions reductions from priority measures, but these do not need to be calculated for multiple years. The grantee can choose one future year and/or calculate total emissions reduced up until that year for all years where the project would be implemented.

EPA explains how to estimate emissions reductions from the replacement of vehicles using MOVES in Section 2.6 of the [Diesel Retrofit and Replacement Projects guidance document](#). If you are using another tool to quantify emissions, a similar methodology (i.e., calculating the emissions difference between a base and control case) could still be employed. The result of the calculations, regardless of the tool used, would provide a total emissions reductions estimate for the remaining useful lives of the replaced vehicles.

If you do plan to calculate annual emissions reductions for a series of years to estimate the total emissions reductions from replacing vehicles with lower emitting ones within a certain time period, the approach outlined in the Diesel Retrofit and Replacement Projects still applies. To implement this approach, the emissions from both the base and control case would be estimated for all calendar years until the end of the replaced vehicles' useful lives. The emissions difference would then be calculated for each calendar year.

Q8: Can we see an example of using a tool to quantify GHG reductions for specific transportation measures?

EPA provided several examples of using tools to quantify transportation sector GHG reduction measures on the November 29th Transportation Technical Assistance Forum meeting. A recording of the presentation and slides are available on the TAF Resource Library (contact cprg.epa@endyna.com for access).

You can also visit the [CPRG Tools and Technical Resources – Transportation Sector](#) webpage for examples of quantification methods and tools that can be used by states, local governments, Tribes, and territories to quantify GHG reduction measures in your PCAPs and CCAPs.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q9: If we plan to include measures in the State PCAP suggested by local governments during our outreach, should we quantify the measures specifically for the municipality/region that suggested the measure or scale-up for statewide?

When developing the municipal/air district section of a PCAP or CCAP, states are not expected to provide a full analysis of GHG reductions or LIDAC benefits as these will be variable depending on the level of implementation by those substate jurisdictions. If the state intends to propose an emissions reductions measure at the state level, then the estimated emissions reductions from that measure should be quantified at the state level.

Q10: What is required in terms of GHG reduction measures for the PCAP?

A PCAP must include a focused list of near-term, high-priority, implementation-ready measures that have been identified for implementation by the lead organization and other collaborating entities. For the lead organization, such measures should be those that it plans to implement directly and/or in partnership with collaborating agencies as described in their workplan. The PCAP should also indicate which measures could be implemented by other entities (e.g., air pollution control agencies, counties, and municipalities) within the state or metropolitan area.

For each measure, the PCAP must provide an estimate of the quantifiable GHG emissions reductions, key implementing agency or agencies, implementation schedule and milestones, expected geographic location if applicable, milestones for obtaining legislative or regulatory authority as appropriate, identification of funding sources if relevant, and metrics for tracking progress. As outlined in the PCAP guidance, grantees may choose to include quantitative cost estimates for each reduction measure, but this is not required.

Q11: Can the PCAP priority measures be the same as the measures in the implementation grant application?

The PCAP is a prerequisite for the implementation grants. In order to apply for implementation grants, the measures in your application need to be in an applicable PCAP.

Q12: How specific should the measures be for quantifying reductions? Should we quantify a broad/umbrella measure or quantify more specific activities that support these broad/umbrella measures?

EPA does not specify the type and level of quantification that is required for the PCAP. Grantees have significant discretion to decide what works best. However, measures must be specific enough to be able to describe the implementation schedule and milestones, authority to implement, expected GHG reductions, and preliminary LIDAC benefits.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q13: What level of specificity and detail is required for the PCAP on measures where partners are designated as the lead for implementation?

EPA's CPRG planning grants program guidance requires states to include measures that municipalities or Tribes could implement, and we have encouraged MSAs to include measures that other individual municipalities in their MSA can implement. EPA does not expect a full analysis of measures that may be implemented by other parties. Please see the footnote on page 53 of the [States and MSAs Program Guidance](#) for more information.

Q14: How should we discuss measures that are not yet associated with specific implementation timelines?

Provide as much information as possible in the narrative, including a suggested or planned timeline. The PCAP is focused on priority measures that can be implemented in the short term. If you are including a longer-term measure in the PCAP, please provide as much information as possible in the narrative, including a suggested or planned timeline for implementing the measure.

Q15: Can you please provide an example of the level of detailed required for the "authority to implement" each measure?

A review of "authority to implement" is one of the four required elements of the PCAP, but it can be as simple as a statement or sentence confirming the existing authority of the implementing agency. EPA wants to understand which of the PCAP measures can actually be implemented and which may have barriers to implementation. In a scenario where there is no authority to implement, the PCAP must include a schedule of milestones for actions needed by key entities (e.g., legislature, administrative agency, etc.) for obtaining any authority needed to implement the measure.

Q16: We have some measures that were reviewed and have not been chosen as a priority, we had thought about having these listed in a chart in our Next Steps as part of the starting point for the CCAP. Would that confuse readers thinking that if one of these were a measure, they wanted to create an implementation grant that they could? It would not have all the information on the priority measures.

A "Next Steps" list could be helpful to signal where this work is going in the future. If you do want to include such a list, be as clear as possible that these are not priority measures, but future measures.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q17: We have two quantified priority goals in our PCAP: (1) 25% reduction in energy use for existing residential buildings by 2030, and (2) 20% electrification of existing residential buildings by 2030. We have a proposed building priority measure to design a "multifamily upgrade program for buildings under 20,000 sf and/or with 10-20 units with onsite fossil fuel combustion." Is the proposed priority measure (multi-family program) considered "quantified" based on the quantified goals?

No, this specific measure would not be considered quantified. The impact of each PCAP measure should be individually quantified, along with the magnitude of its expected contribution toward any related emissions reduction goals. That is, the PCAP needs to identify the amount of reduction in energy use and/or electrification that is expected from the multifamily upgrade program and the associated GHG reductions.

EPA does not recommend or endorse specific quantification methodologies for GHG reduction measures. However, there is a selection of tools to aid in this type of quantification on the [CPRG Tools and Technical Resources – Commercial and Residential Buildings Sector webpage](#). If grantees are analyzing the impact of building sector measures across an entire state or community (also known as building stock analysis), they may find the NREL's [ResStock](#) and [ComStock](#) data sets and tools useful. ResStock and ComStock contain detailed time series data for the residential and commercial building sectors, respectively. Multifamily buildings are part of the ResStock data set. For both data sets, users can access the data directly, but there are also tools that can help states and localities navigate the data and explore scenarios to identify how different building stock improvements optimize cost savings and GHG emissions reductions. For example, NREL offers state fact sheets with insight on the impacts of different measures and data navigators that can analyze at the substate level. NREL staff presented to the Commercial and Residential Buildings Technical Assistance Forum on ResStock and ComStock – the presentation and meeting notes, including resource links, are available in the TAF Resource Library SharePoint Site.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q18: The grid is going to change significantly over the period of some of the implementation measures. How can we address that in our GHG reduction calculations?

Yes, the electricity generation mix on the power grid is expected to change over time and this will impact the effectiveness of end-use electrification (e.g., of buildings, transportation, and industry) in reducing greenhouse gas emissions. EPA does not recommend or endorse specific quantification methodologies for GHG reduction measures, however projections of the future electric generation mix are available from sources such as the Energy Information Administration (EIA) in products like the Annual Energy Outlook and the Short-term Energy Outlook. Another option is power projections from the [EPA's Power Sector Modeling platform](#). The electric utilities in many states have also developed both short-term and long-term plans that are often publicly available. Modeling tools may also be useful for developing future-year projections. See the [Tools and Technical Resources webpages](#) for some EPA options, but non-Agency tools are available as well, including the Energy Generation Unit Projection Tool, developed by the Eastern Regional Technical Advisory Committee (ERCAT). The EPA does not prescribe a projection approach for use with CPRG activities.

Q19: What are the available tools and methods for calculating emissions reductions associated with policies to reduce vehicle idling, such as traffic sensors and traffic light signal system coordination?

EPA does not recommend or endorse specific quantification methodologies for GHG reduction measures, however the [CPRG Technical Resources webpage for the Transportation Sector](#) provides several tools and resources to quantify the emissions reductions from traffic management policies. A few options to quantify benefits include DOT's Congestion Mitigation and Air Quality (CMAQ) Toolkit worksheets for "Adaptive Traffic Control Systems (ATCS)," "Congestion Reduction and Traffic Flow Improvements," and "Diesel Idle Reduction Strategies." For those familiar with MOVES, project-scale MOVES runs with and without traffic light system coordination could be another way to quantify its effects. For any project that will result in a traffic flow improvement, such as traffic signal coordination and electronic tolling, it's important to include the effects of induced travel demand.

Q20: What are the tools and methods available to calculate mode-shifting to estimate emissions reductions associated with bike/ped or greenway infrastructure?

EPA does not recommend or endorse specific quantification methodologies for GHG reduction measures, however the [CPRG Technical Resources webpage for the Transportation Sector](#) provides several tools and resources to quantify the emissions reductions from bike/ped infrastructure. A few options to quantify benefits include EPA's Travel Efficiency Assessment Method (TEAM) and DOT's CMAQ Toolkit worksheet for "Bicycle, Pedestrian, and Shared Micromobility."

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q21: What are the tools and methods available to estimate emissions reductions for a new inter-city passenger rail line?

EPA does not recommend or endorse specific quantification methodologies for GHG reduction measures, however the [CPRG Technical Resources webpage for the Transportation Sector](#) provides several tools and resources to quantify the emissions reductions from transit projects. EPA’s Travel Efficiency Assessment Method (TEAM) could be used to quantify benefits from rail projects.

Q22: What are available tools and methods to estimate greenhouse gas reductions associated with land conservation and keeping forests and farmlands from conversion to development?

EPA does not recommend or endorse specific quantification methodologies for GHG reduction measures. However, several tools exist to estimate emissions reductions associated with conserving forestland and cropland areas. Grantees can explore the land-use emissions/removal estimates provided in [EPA’s SIT Tool Land Use, Land-Use Change, and Forestry \(LULUCF\) Module](#). The SIT Tool is pre-populated with state level land-use area estimates for “Forest Land Remaining Forest” and “Forest Land Converted to Land” as well as the relevant cropland remaining and converted land-use categories; to explore the impact of reducing land-use conversions, users could input different area numbers in the “Forest Land Converted to Land” tab and compare the resulting emissions estimates to those calculated from the pre-populated data for each land-use category.

Similarly, the [Agriculture and Land Use](#) (ALU) software features a Mitigation Analysis module that allows users to estimate the emissions reductions that can be attributed to land-use decisions.

The International Council for Local Environmental Initiatives hosts a tool, the [Land Emissions and Reductions Navigator](#) (LEARN), which models changes in greenhouse gas emissions resulting from land-use change and allows for analysis of county-level land-use data.

Q23: Does EPA expect a sum of total GHG reductions from the PCAP? In other words, adding all GHG reductions across sectors to present a final number?

No, a sum of total GHG reductions from quantified GHG reduction measures is not a requirement for the PCAP.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q24: For states that are including measures in their PCAPs for Tribes and local governments, I see that we don't have to detail those measures as fully. Do we have to include GHG reduction estimates for those measures?

States are not expected to estimate GHG reductions for measures that would be implemented by individual municipalities or Tribes as reductions will be variable depending on the level of implementation by those sub-state jurisdictions. States may choose to include an estimate of aggregated emissions reductions if all jurisdictions implemented a measure.

Q25: What are the available tools and methods for calculating emissions reductions associated with a policy to expand the percentage of plant-based meals at community organizations like schools and hospitals?

EPA's US Environmentally Extended Input Output (USEEIO) model can be used as a basis to quantify an estimated baseline GHG emissions of institutions' food purchases, and then estimate the potential reduction from switching from animal product heavy meals to plant-based meals. The [Supply Chain GHG Emission factors](#) is an USEEIO product designed for easy use for a particular purpose like estimating embodied GHGs in food purchases. Users can calculate GHG emissions for food purchases by finding matching food factors for the baseline scenario, and then reallocate those dollars to different food categories and re-calculate the GHGs emissions. To learn more about this approach, here's a link to an

EPA webinar on ["Using the Supply Chain GHG emission factors."](#) Please note that EPA does not recommend or endorse specific quantification methodologies for greenhouse gas (GHG) reduction measures, including waste and material strategies.

An example is New York City's PlaNYC which has a quantified goal to "promote reduction in institutional food-related emissions by 25% by 2030." You can learn more and access a link to that plan from EPA's webpage of [Example Government Climate Action Plans that Address Materials Management and Waste](#).

Q26: The tools that have been discussed in the Transportation TAF seem to be better suited for large geographic scales, such as cities and counties. What is the best way to quantify GHG reductions in a small Tribal fleet? Say a Tribe has 60 ICE vehicles and plans to replace half with electric vehicles.

The CPRG Technical Resources webpage for the Transportation Sector provides several tools and resources to quantify the emissions reductions from transitioning to clean vehicles. One option that wasn't discussed in detail in the Transportation Technical Assistance Forum is the DOT's CMAQ Toolkit worksheet for ["Electric Vehicles and EV Charging Infrastructure."](#)

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q27: I'd like some guidance on quantifying reduction strategies. We did a robust regional CAP in 2021 and quantified reductions at eight "objective" levels (e.g. Decarbonize transportation). Under each objective are specific measures that were not individually quantified (e.g. transition fleets to zero emission vehicles). For our PCAP, we don't want to exclude any measures from our previous CAP so that we can address the priorities of all jurisdictions and stakeholders in the region. We cannot possibly quantify all strategies. Choosing a handful of "priority strategies" feels exclusive. How can we present quantified reduction measures in a way that meets EPA requirements and serves our constituents?

A general goal to reduce emissions from a sector does not meet the expectations to quantify measure level emissions impacts. It would be helpful to provide additional detail beyond the eight high level groupings if possible. For example, if each high-level category has multiple measures or strategies within it, it will be difficult to understand the relative impact of those strategies without additional detail. Similar measures (e.g. multiple strategies that all promote efficient appliances) may be bundled for quantification. Please note, priority measures intended for other entities to implement do not need to be quantified.

Q28: Is it acceptable to just do a "typical" GHG reduction? For example, we know we want to include municipal solar installations, but we might not have all the details from all entities who want to install solar to calculate. Can we just do a "range" of expected benefits from municipal solar installation?

Yes, quantified emissions reductions may be presented as a range of reductions. In this case, grantees may consider presenting a low, medium, and high market adoption scenario for technologies like solar PV installation or EV purchases. Grantees are encouraged to include details of the assumptions made for the range of reductions.

Please note, priority measures intended for other entities to implement do not need to be quantified.

Q29: Our estimates of GHG reductions for each measure are based on some modeling a contractor did last year. Do we need to include an appendix with that model for the PCAP? Or an explanation of the model inputs?

You may provide the modeling results as an appendix if desired. In the body of the PCAP, indicate the model that was used to generate the emissions reductions as well as key assumptions that were made.

Q30: Can you explain more on what "implementation-ready" reduction measures means?

For the purposes of the PCAP, implementation-ready means near-term, high-priority projects that the grantee has (or can reasonably obtain) authority to implement. To align with the implementation grants, near-term could be considered to be implementable in the next 5 years.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q31: For the GHG reduction quantification, we grouped our PCAP measures together by sector to show estimated reductions in 2030 and 2050. We also reference more specific reductions by measure based on the literature in our PCAP. Is this acceptable?

Yes, this provides an estimate for the potential reductions even if it might not be specific to a certain region. If there are specific factors that might significantly impact those potential reductions in your specific area, those should be accounted for and discussed.

Q32: If a measure is in the PCAP but then does not get funded via the Implementation Grants Competition, is the authority still on the hook to implement?

The PCAP is a planning document that is meant to help you identify projects, programs, and policies that you are interested in implementing but it does not create a legal obligation or requirement to implement measures.

Q33: If we have a measure in our PCAP that includes rooftop solar, do we have to address the potential barrier of replacing/repairing the roofs for the panels?

As noted in the PCAP Guidance Outline, grantees should include information about the implementation schedule and milestones, funding sources, and other feasibility indicators for each GHG reduction measure. If roofs must be repaired or replaced prior to solar installation, and grantees determine that this could be a barrier to implementation, grantees should account for these replacements or repairs in the overall timeline of the planned actions. If the PCAP includes cost estimates, such estimates could include costs for necessary repairs or upgrades, such as for new or repaired roofs or upgraded electrical panels.

Q34: If we have an electrification of transportation measure that states ATVs etc. apply as electric vehicles, do we have to spell that out?

You do not need to spell out exactly what technology types are covered, but it could be helpful to indicate which vehicle or equipment types are being prioritized (e.g. light duty vs heavy duty). You could also categorize vehicle types like on-road, off-road, recreational, etc. to clarify.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

VI. Climate Planning Process

Q1: Would EPA be willing to produce a PCAP template for the benefit of all? Example measures would also be helpful.

EPA is providing PCAP resources including PCAP outlines for both States and MSAs and Tribes and Territories. These outlines provide optional examples of how to structure a PCAP, including headings and content guidance. The PCAP guidance for Tribes and Territories is accompanied by a resource document listing illustrative examples of greenhouse gas reduction measures, links to technical trainings related to tribal and territorial PCAP elements, and other resources. All three documents are available on the CPRG Technical Assistance Forum Resource Library site (See the Supplemental Resources > Climate Planning Process > EPA & Federal Resources folder).

Q2: Is there a PCAP page limit?

There is no page limit or minimum page requirement for the PCAP.

Q3: What is the submission process for the PCAPs? Are they supposed to be emailed to our EPA Project Leads by March 1 in addition to being posted on our websites so that they are publicly available?

PCAPs should be submitted via email to your EPA Project Officer. If the file is too large to email, please contact your project officer to discuss alternatives. Planning grant recipients must also make their PCAPs available to other entities for use in developing their implementation grants and are therefore strongly encouraged to post their PCAPs on a public website. EPA plans to also post all submitted PCAPs on the [CPRG website](#).

Q4: Can you clarify how grantees should determine whether the "other funding opportunities" are actually viable/probable (given the actual funding amount that is possible from other funding opportunities is unknown, beyond estimated floors and ceilings for a given federal grant, and given the fact that entities will not have even applied for those funding opportunities yet), and how to factor those other funding opportunities into the "quantitative cost estimate" for each GHG reduction measure in the PCAP?

EPA understands that the viability of other future funding opportunities cannot always be known. As part of their PCAP, grantees are encouraged to consider the potential to leverage other funding mechanisms in determining their priority measures. Please note that the "Intersection with other Funding Availability" section is encouraged but not required for the PCAP.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q5: What are the PCAP submittal deadlines?

The deadline for the PCAP for states and MSAs is March 1. The deadline for the PCAP for Tribes and territories is April 1, unless they plan to apply for a CPRG implementation grant under the general competition. In such case, Tribes and territories are subject to the March 1 PCAP submittal due date.

Q6: What technical appendices are required for the PCAP and what else is required for them?

There is no specific format or technical appendix required for the PCAP. EPA has shared two general outlines - one for states and MSAs and one for Tribes and territories (located on the TAF Resource Library – contact cprg.epa@endyna.com for access). This is just one option for a formatting approach. As long as all required elements laid out in the CPRG planning grants program guidance are covered in the body of the PCAP, there is no specific technical appendix required.

Q7: If there is a funding gap for implementing an entire project to complete a measure, how should that be addressed within the PCAP?

As noted in the PCAP Guidance Outline, grantees should include information about the funding sources associated with each GHG reduction measure. Thus, the PCAP should quantify emission reductions from all proposed measures, regardless of their funding source. If additional funding is needed to fully implement the measure, this can be stated in the PCAP. The goal of the PCAP is for grantees to develop a list of near-term, high-priority, implementation ready measures to reduce GHG pollution and an analysis of GHG emissions reductions that would be achieved through implementation.

Q8: Regarding Workforce Funding Needs section of the PCAP. What level of analysis/detail is expected in the PCAP? Should EPA work models be completed or is that too in-depth for this effort?

Planning grant recipients are encouraged, but are not required, to include an analysis of workforce development activities, if any, that are needed to implement the priority measures included in the PCAP. EPA work models are not required.

Q9: We would like to incorporate a youth empowerment project into our PCAP. Since that topic doesn't fit nicely into any of the sectors, how do you suggest we include it?

Planning grantees have flexibility to structure their PCAP as best meet their needs. Additional sections or headings beyond the required elements or listed sectors may be added as long as they are consistent and aligned with the goals of the CPRG program and the terms and conditions of the grant. Grantees may wish to include a "cross-cutting programs" or similar section for projects that apply to more than one sector.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q10: Can you please provide an example of the level of detail required for the funding analysis for the PCAP?

A funding analysis is encouraged but not required in the PCAP. Such an analysis could identify other funding programs that are available to the recipient or have been secured by the recipient from federal, state, local and private sources that could be leveraged to pursue the priority measures identified in the plan.

Q11: After submission, will PCAPs receive any feedback from EPA on things such as future refinement, better reduction calculations, etc.?

Project officers will review the PCAPs for completeness to ensure all required elements are included. Subsequent support and technical assistance from EPA will be focused on CCAP development, which will take into consideration lessons learned from PCAP development, including substantive areas where additional training may be beneficial to grantees.

Q12: Is an executive summary expected?

No, EPA does not require an executive summary as part of the PCAP.

Q13: Is there a maximum level of recommended detail for the Workforce portion, given that it's technically not required for the PCAP?

Grantees should balance the level of effort required to include this optional component with the effort to meet the requirements in the PCAP. EPA recommends not pursuing a level of analysis that would compromise the quality of the required elements.

Q14: We are submitting our PCAP on Friday (3/1/24). Can we submit an extra measure on April 1st?

If you are submitting on March 1 to apply under the general competition, anything that would be in your application for the general competition everything should be in the March 1 version. Generally, our guidance would be to not add or remove any measures after submitting your PCAP. There could be some flexibility if the April 1 version is solely for the Tribes and Territories competition, but we would encourage you to avoid changes if possible. Anything that is added later will not be retroactively included in the general competition and could cause confusion about eligibility.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

VII. LIDAC Benefits Analysis and Meaningful Engagement

Q1: When identifying a census tract for a non-stationary project (e.g., purchase of a vehicle), how can we geographically attribute the benefits?

There are a number of methods that exist to spatially allocate emissions for specific air pollution source types – determining the most appropriate method for each source type/application is up to the grantee.

For reference, EPA uses a range of data sets to inform spatial allocation of mobile and area source pollutants. For example, EPA uses population, National Land Cover Database data, the OpenStreetMap database, the American Community Survey for census-related data, among others. For the onroad example provided, vehicle miles traveled (VMT) on a specific road-type could be an option. EPA has documented these and other potentially useful datasets in technical support documentation available online, for example the [Technical Support Document \(TSS\): Preparation of Emissions Inventories for the 2020 North American Emissions Modeling Program](#).

Q2: For the purposes of LIDAC analysis etc., should the PCAP treat a transit strategy as applying to the entire region, or only to the areas that receive investment?

EPA’s CPRG planning grants program guidance is not prescriptive about how to calculate benefits or what types of benefits to include in the PCAP. The goal is to capture – in a qualitative or quantitative way -- the benefits to the impacted communities and areas from the GHG reduction measures included in the plan. It is up to the grantee to determine how to best do that, meaning it could be for the full area/region touched by the measure, or for the specific LIDACs benefitting from it.

Q3: For the LIDAC benefits analysis in the PCAP, should the analysis be presented by measure in the PCAP, or can it be a stand-alone section in the PCAP?

There is some flexibility in terms of formatting for the PCAP. As long as it is clear that you are meeting the requirements, the formatting and structure are flexible depending on how you want to present the information.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q4: What are the LIDAC engagement requirements for the PCAP? It is unclear from the guidelines if this is a component that is required in the PCAP, and if so, is it just for the Regional Measures or all measures?

Meaningful community and stakeholder engagement is a required component for all deliverables under this grant program. In addition to expectations described in the CPRG planning grants program guidance, EPA's [LIDAC Technical Guidance Document](#) (page 10) further explains:

At a minimum, the PCAP should include:

- A preliminary analysis that identifies low-income and disadvantaged communities that will be affected by the GHG reduction measures in the PCAP;
- For each community that may be affected by a proposed measure, provide either the Census tract ID (from CEJST) or the Census block group ID (from EJScreen);
- A qualitative discussion of the expected benefits to LIDACs associated with the GHG reduction measures included in the PCAP (including direct and indirect benefits, as described above); and,
- An overview of planned and/or ongoing engagement with representatives and residents of LIDACs to inform PCAP and CCAP development and implementation.

As noted above, EPA strongly encourages grantees to use CEJST to identify low-income and disadvantaged communities in the development of PCAPs and CCAPs. EPA also encourages grantees to use the Supplemental Indices in EJScreen to better inform the identification of communities in their jurisdiction. If additional tools or data are used to identify LIDACs, grantees should include a comparison of identified Census tracts with CEJST to determine if there is overlap between the two methods and build better awareness of LIDACs when planning engagement activities and policy design.

Q5: Do we need to include a list of census tracts that will be impacted as part of our LIDAC benefits analysis?

Planning grant recipients must include a preliminary analysis of benefits for LIDACs anticipated to result from the GHG reduction measure(s) in their PCAP. To the extent possible, PCAPs should include either the Census tract ID (from [CEJST](#)) or the Census block group ID (from [EJScreen](#)) with their list of identified low-income and disadvantaged communities expected to benefit from GHG measures. Note: this list does not need to be provided at the measure level, it can be aggregated across all measures. Please see the [Technical Reference Document on LIDAC Benefits Analysis](#) for more information.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q6: EPA should clarify that the EPA Disadvantaged Communities mapping tool is also a tool to identify LIDACs. As it is described as such here: EPA has provided a layer to EJScreen that combines CEJST and EJScreen data to identify whether a community is disadvantaged for the purposes of implementing EPA programs under the Inflation Reduction Act, including the Climate Pollution Reduction Grants program. The EJScreen layer can be found on the EJScreen tool under “Places” tab and by selecting “EPA IRA Disadvantaged”: <https://ejscreen.epa.gov/mapper/>.

EPA has developed a layer that combines the CEJST information and the EJ screen supplemental indices into one layer. The combined layer shows all communities that fit either or both of the definitions under CEJST or EJ screen. This combined layer can be found on the EJScreen tool under “Places” tab and by selecting “Justice 40/IRA” then “EPA IRA Disadvantaged Communities.”

Q7: Can you discuss the 'quantitative vs. qualitative' requirements for the LIDAC Benefits Analysis?

EPA is asking for a qualitative analysis of the benefits provided to low income and disadvantaged communities in the planning grant PCAPs. Under a qualitative approach, you should try to identify the communities that are affected by the measures included in your PCAP. This does not need to be a quantitative analysis, it can be qualitative, but it should identify the communities that are impacted by the proposed measures and describing the expected benefits. If quantitative information is available, you are welcome to include it, but it is not required.

Q8: How detailed does the climate risk identification need to be?

Grantees should consider the climate impacts or risks to which disadvantaged communities in their jurisdiction are particularly vulnerable. This could be as simple as a list of the climate impacts or risks to each community. Grantees could provide a more detailed risk or vulnerability assessment, if desired.

Q9: Do the qualitative LIDAC benefits need to come directly from the input sessions held as part of the CPRG grant? Can they come from other related input gathering sessions in the community?

The LIDAC benefits analysis should describe the benefits of the proposed GHG emissions reductions measures to the LIDACs in the grantee’s geographic area. This analysis would be generated by the grantee with input from the residents in LIDACs. The benefits described in the LIDAC benefits analysis do not need to be exclusively from the input sessions related to the CPRG planning grant. Grantees may include additional benefits identified through other input gathering sessions. Such other input gathering sessions should be in consistent with principles of meaningful engagement identified in the CPRG guidance. Grantees can consult the [LIDAC Benefits Analysis Webinar](#) and the [technical reference document](#) for assistance regarding the content of this section.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q10: 1. I have both census tract dataset (CEJST) and census block group dataset (a state-level dataset). Do you expect to have both census tract and block group IDs, or just one of them? Also, is there any reason for any preference? (It can also help my team understand how granular they should be for some of the projects). 2. CEJST data is based on 2010 census tracts. The state level census block group data set is from 2019. Is there any concern about the year differences?

We only expect to have one level – either census tract or block group IDs. Whether the census tract or the census block group ID is reported will depend on the tool that is used. CEJST uses census tracts and EJScreen uses the census block group ID. You can report whichever is generated by the tool you use. Please use the most recent year data that you have and indicate the year of the data in the description.

Q11: Concerning this statement: “EPA has developed a layer that combines the CEJST information and the EJ screen supplemental indices into one layer,” since each tool looks at different population/household sizes, wouldn't this create a problem when trying to describe percentiles to stakeholders?

CEJST and EJScreen use different criteria in defining communities. When identifying LIDAC communities, grantees may use the CEJST tool, the EJScreen tool, or the layer that combines the CEJST and EJScreen data. For more information on the criteria that serve as a basis identifying LIDAC communities for the CEJST tool and the EJScreen tool, please review the documentation [here](#) and [here](#), respectively. EPA does not have further guidance for describing the documentation underlying these tools to stakeholders.

Q12: For states with large communities who engage with us virtually and don't want to provide location information, do you have advice on capturing/describing engagement - especially when conversation with those communities revolves around LIDAC topics?

The goal is to ensure that there is an adequate description of the state's efforts to meaningfully engage with communities. In instances where there are gaps in demographic or location information, be sure to provide a thorough description of the approach employed to ensure targeting of communities identified as LIDAC for the virtual engagement event. This description should also include a note outlining the community's resistance to providing additional information and how this hurdle may be addressed in future engagement events. Additional approaches to employ for building trust with the community are detailed further [here](#).

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q13: When evaluating the community engagement for a Tribe are you more interested in the tribal community or the wider community around the casino where the project would be located?

In this instance, it is important to focus on the impact of the proposed action along with its potential impact to the tribal community and the wider community. The data gathered after assessing the potential impact should then be used to prioritize the target area for engagement.

VIII. Co-pollutant Impacts Analysis

Q1: Does the base-year for the co-pollutant inventory (in the benefits analysis) have to be the same as the base year for the GHG inventory?

The base year for the co-pollutant inventory does not need to be the same as the base year in the GHG inventory.

Q2: Can you provide additional information on the Avoided Emissions and generation39 Tool (AVERT) and how different technologies can be tested?

More information about [AVERT](#) can be accessed in the [AVERT User Manual](#) and the [FAQ](#) online. This information covers more information on how AVERT works, the data on which it relies, how users can manipulate the tool, which technologies are explicit in the tool (and how to include those that are not), how to interpret results, and much more.

Q3: If AVERT is a more regional model, is there also a better tool for a single solar project, rather than region-wide?

[AVERT](#) can be used to model single solar projects, but the model has lower fidelity when the changes are very small relative to the regional load. We have an [FAQ](#) on the AVERT website that discusses modeling small changes in load. For very small changes/projects, you can also use the AVERT-generated emissions rates, which are annual emissions rate derived from a suite of AVERT scenarios. You can find these emissions rates on the AVERT website.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q4: When we use AVERT’s online tool to estimate emissions reductions estimates from switching to an EV, it comes up as 0, possibly because reductions would be so small. Would MOVES be a better option for this particular project?

[AVERT](#) takes a “tailpipe-to-smokestack” approach to estimating emissions changes associated with electric vehicle deployment scenarios—the avoided transportation sector emissions and associated power sector emissions changes of the scenario are calculated. Since the power sector operates regionally, very small inputs—for example, only a few light-duty electric vehicles—may create load impacts that fall within the margin of error of the tool.

The [CPRG Technical Resources webpage for the Transportation Sector](#) provides several tools and resources (including MOVES) to quantify the emission reductions from vehicle replacement projects. MOVES and other tools that use MOVES emissions factors (like the CMAQ Toolkit’s Electric Vehicles and EV Charging Infrastructure spreadsheet and AVERT) output emission reductions of CO₂, CO_{2e}, and co-pollutants from a project, as well as the total energy consumption from the replacement electric fleet. EPA publishes AVERT-generated power sector emission factors, which can be multiplied by EV energy consumption to calculate the contribution to power sector emissions. Other power section emission factors can be found in the Emissions and Generation Resource Integrated Database ([eGrid](#)).

Q5: What are best practices for using AVERT to estimate emissions reductions in future years given the tool uses today’s electricity grid for its calculations?

[AVERT](#) can be used to model future years up to five years ahead of the baseline Regional Data File (RDF) loaded into the Main Module. The most current RDFs available are year 2022, with year 2023 RDFs likely available in April 2024. EPA publishes the [AVERT Future Year Scenario Template](#) along with the AVERT Statistical Module. When used together, these tools allow users to create their own RDF. The Future Year Scenario Template allows users to add or retire fossil fuel units reflective of some future year. Annually published information regarding planned power plant additions and retirements can be found in Form 860 published by the Energy Information Administration (and “860M” for preliminary monthly updates). While Form 860 can provide insights into the plans of utilities and power companies into the future, users should note that this information can and does change. For users seeking to estimate only CO₂ emission changes in future years, the National Renewable Energy Laboratory publishes the Cambium data sets which contain hourly and annual emission rates representing a suite of different future scenarios. AVERT contains information on a selection of these Cambium emission rates for comparison with the emission rates produced in AVERT (see Step 4: Display Results “Emission rates over time” summary table). When estimating emission impacts of future years, it is typically a best practice to assess a range of potential outcomes.

Qs and As from the Climate Pollution Reduction Grants (CPRG) Planning Grants Program



Updated On: March 28, 2024

Q6: Can we go over methods for developing a co-pollutant baseline for Tribes and territories? The reservation area is very small in comparison to the county-scale inventory, so any actions at the reservation level will be well below the level of precision for county-scale, making the county-scale data not very useful. Also is the co-pollutant baseline a requirement for the PCAP?

The co-pollutant impact analysis is not a PCAP requirement for States and MSAs, but an assessment is a requirement for Tribes for the PCAPs because there is no standalone LIDAC benefits analysis for the PCAP. EPA has developed a [supplemental technical reference document](#) providing more information about guidelines and general approaches for how to approach the co-pollutant impact assessment. EPA also provided a training in July 2023 on Co-pollutant Inventory and Future Projections Benefits Analysis that includes example calculations that may be of interest. In the absence of existing tools/models/datasets, use the best information available to you and document your approach and any assumptions that were used.