

Request for Information – DOCKET 1: Climate Pollution Reduction Grants [60114] - [Docket ID: EPA-HQ-OAR-2022-0873-0001](#)

The American Lung Association appreciates the opportunity to offer some general comments followed by specific ones on the disbursement of Climate Pollution Reduction Grants ([Docket ID: EPA-HQ-OAR-2022-0873-0001](#)) authorized by the Inflation Reduction Act.

Climate change is a health emergency that requires multiple approaches to mitigate its impacts. Even though a global problem, climate crisis must be addressed at the local level - by empowering impacted communities to identify and reduce local greenhouse gas (GHG) emissions which cause anthropogenic climate change, and to develop multi-pronged mitigation strategies that are tailored to those local emission sources.

Emission profiles of carbon-based GHGs overlap to a large extent with those of conventional air pollutants such as criteria air pollutants (CAPs) and some hazardous air pollutants (HAPs). Across all sectors, fuel combustion is the major source of carbonaceous greenhouse gases (GHGs) which account for nearly 90% of the total GHGs.¹ Fuel combustion is also the major source of CAPs and several HAPs.² Additionally, climate change imposes a penalty on conventional air pollutants by contributing to their ambient concentrations and adverse health effects.^{3,4} Therefore, plans to reduce GHGs will also help reduce CAPs and some HAPs and in avoiding the climate change penalty. Such plans must target all sources, and since their number and variety varies with location, the plans must be specific to the location.

QUESTIONS:

1. What are the most promising greenhouse gas (GHG) planning and reduction opportunities that could be catalyzed by the Climate Pollution Reduction grants, taking into consideration:
 - a. Total potential for GHG reductions and other co-benefits;
 - b. Gaps in existing resources, programs, or policies;
 - c. Availability of other government funding streams?
- Any plans to reduce the emissions of GHGs at their sources should maximize all benefits in the form of concomitant decreases in conventional air pollutants, prioritizing improved air quality, public health, and health equity.
- EPA should work with individual grant awardees (local governments) in an ongoing consultation to integrate and build on any on-the-books and on-the-way GHG programs, identify gaps in existing resources, programs, or policies, and the availability of other government funding streams to address climate change in their local areas. This would inform and continue to shape the implementation of the grant specifics for optimal outcomes.

¹ US Environmental Protection Agency. [Overview of Greenhouse Gases](#)

² University Corporation for Atmospheric Research (UCAR): [Air Pollution: How We're Changing the Air](#)

³ Lihua Shi. (Jun. 28, 2022). [Sensitivities of ozone and particulate matter to temperature in the US: Insights from high-resolution exposure assessment](#). Session 3: The "Climate Penalty": How Heat and Carbon Dioxide Influence Ozone Exposures and Health, Part 2; Health Effects Institute (HEI) Annual Conference, Washington, DC.

⁴ Clean Air Scientific Advisory Committee (CASAC). (11/22/2022). [CASAC Review of the EPA's Integrated Science Assessment \(ISA\) for Ozone and Related Photochemical Oxidants](#). Advisory Report EPA-CASAC-23-001

- There are several GHG reduction opportunities across all GHG emission sectors, under the broad umbrellas of reducing energy consumption, improving efficiency of consumption, and transitioning to zero-emission electricity generation and transportation. We urge EPA to prioritize measures that not only reduce GHGs but offer added benefits of reducing criteria air pollutants and hazardous air pollutants whose emission profiles closely align with each other. Grant awardees could include any or all measures that best suit their local airsheds and have the best health outcomes for their communities. Some examples include:
 - Reducing non-essential energy consumption in buildings (lighting, heating, cooling)
 - Improving energy efficiency of physical facilities (LEED certification of buildings, improved HVAC, switching to energy efficient appliances, etc.)
 - Converting/transitioning combustion-fueled processes, services, and products to run on electricity
 - Purchasing or installing sources of renewable energy (e.g. rooftop solar, community microgrids)
 - Improving access to active transportation
 - Funding for free public transportation (where available) in a public-private partnership (with contributions from local employers in all sectors)
 - Installing public transportation where it is not available
 - Converting vehicle fleets to zero-emission

Additional measures that promote health and health equity beyond reducing or eliminating fossil fuel use include:

- Reducing landfill/incinerator-bound waste which is a major source of methane
- Changes in plant and animal agricultural practices
- Mandatory natural sequestering of carbon dioxide by increasing greenery at site (e.g. increasing tree canopy, installing roof gardens, no-lawn alternatives);
- Requiring mandatory green open spaces and green buffer zones (e.g. Boulder, CO) – size determined by local population size

It is imperative that EPA ensure that these grants do not further entrench fossil fuel use or promote energy sources such as biomass or allow hydrogen blending of natural gas, all of which undermine climate change mitigation efforts besides producing harmful co-pollutants.

2. How should the EPA integrate the needs of underserved communities into the design of this program, taking into consideration:

- a. What equity and justice concerns, opportunities, or priorities are most relevant for this program and how can EPA best help address them?
 - b. How can EPA best address the statutory requirement to consider the “degree to which greenhouse gas air pollution is projected to be reduced in total and with respect to low-income and disadvantaged communities”?
- To integrate equity and justice concerns of underserved communities, and to best address the statutory requirement to consider the “degree to which greenhouse gas air pollution is projected to be reduced in total and with respect to low-income and disadvantaged communities,” it is essential to recognize climate change impacts and air quality needs of

such communities. The overburdened communities tend to be historically marginalized communities of color, with disadvantaged socioeconomic status related to race, ethnicity, class, low income. Such communities reside in locations that tend to have more stationary and mobile sources of emissions of GHGs and conventional air pollutants, and poorer public health.

- The first step in addressing the concerns of underserved communities and in protecting public health is to identify such overly impacted communities. EPA's [EJ SCREEN](#) tool and [HHS's Environmental Justice Index](#) are mapping tools that help identify overburdened communities and cumulative air quality impacts.
- The second step is to identify local/hyperlocal sources of GHG emissions in such communities. Currently, EPA's annual Greenhouse Gas Reporting Program (GHGRP) collects detailed GHG emissions data and other relevant information from large emission sources, fuel and industrial gas suppliers, and CO₂ injection sites in the US.⁵ This national GHG Inventory provides a high-level perspective on the national carbon footprint with detailed information on the sources and types of GHG emissions at individual facilities. Per the GHGRP, which uses a bottom-up approach, the largest GHG emitting facilities (~8,000) are required to report their emissions data⁶ which account for 85-90% of total GHG emissions of the nation.⁷
- In this third step, having identified underserved and overburdened communities and GHG emission sources (reporting to GHGRP) in their localities, GHG reduction plans need to be developed. EPA and grant awardees could collaboratively develop these plans drawing from/integrating with/extending any available existing plans relevant to the source sector using best available technologies. The plans could include some of the measures we outlined in Question #1, and should maximize opportunities to reduce both GHG and other harmful emissions at the same time.
- In the final step, adequate funding should be made available to ensure complete implementation and rigid enforcement of plan specifics with input from and in consultation with the impacted community.
- In subsequent phases of the grant awards, EPA could expand the GHG emissions database by helping awardees acquire data from local sources/sectors which are not required to report to the GHGRP. We recommend funding local air agencies to develop, curate, QA/QC, & maintain inventories of GHG emissions from non- GHGRP governmental, industrial, commercial, and residential sources, which also tend to be CAP emission sources. All the steps in this data acquisition process must be transparent and be made publicly available.

3. This program consists of \$250 million in planning grants, \$4.607 billion in climate implementation grants, and \$142.5 million for administrative funding. How should EPA

⁵ <https://www.epa.gov/ghgreporting/greenhouse-gas-reporting-program-and-us-inventory-greenhouse-gas-emissions-and-sinks>

⁶ <https://www.epa.gov/ghgreporting>

⁷ Q413. What percentage of total U.S. GHG emissions is covered in the GHG Reporting Program?
<https://ccdsupport.com/confluence/pages/viewpage.action?pageId=141983792>

implement and coordinate planning and implementation funding to make the greatest impact with the funds as a whole?

To make the greatest impact with the funds, we recommend investing resources in thoughtful, and deliberate planning, implementation, and enforcement, as we detailed in our input for Questions #1 & 2.

4. EPA plans to provide technical assistance to grant recipients.

- a. **What technical assistance would be most helpful to eligible entities as they develop climate plans under the Climate Pollution Reduction Program?**
- b. **What technical assistance would be most helpful as applicants prepare for the implementation phase of the program?**

- Provide guidances, tech transfer, training, consultations and other support, as needed, to grantees to inform and guide their planning, implementation, and enforcement.
- Facilitate collaboration between grantees to exchange data and draw on combined resources.
- Develop Best Practices documents tailored to specific source sectors and technologies

7. What metrics should this program use for measuring success and ensuring accountability?

- To ensure both accountability and success of funded programs, metrics and benchmarks are needed for every step of the process from planning through implementation and enforcement. Such metrics and benchmarks should be informed by the verified successes (documented success stories) of climate pollution mitigation programs in both reducing GHGs and reducing co-pollutants and projects currently being implemented by government at all levels from each state.
- This opportunity must be used to also identify partly successful and failed programs, approaches, and strategies to avoid them and save resources. We recommend creating a web portal for all interested governments to upload (and draw from) such data. A systematic review of these data would help define the metrics and benchmarks which could be further informed by successful local climate programs in existence in the international space.
- Develop matrices and checklists of requirements for all steps and ensure they are all rigidly implemented and enforced.
- Documented (recorded and verified) decreases in GHG emissions using monitored and estimated/calculated data should continually guide the program forward.
- We also recommend releasing the funds in installments (instead of a lump-sum award) with the stipulation that the award of each installment is contingent on the previous one meeting the required metrics.

8. How can EPA structure this program to facilitate cooperation and coordination within and across tribal, local, regional, and state agencies to implement climate policies?

- We recommend promoting and helping develop regional collaboratives to manage anthropogenic GHGs. For GHG emissions trading and allowance caps, we recommend

adopting the successful cooperative market-based strategies of the Regional Greenhouse Gas Initiative (RGGI) formed by 12 states in the northeast & mid-Atlantic US.⁸ To develop uniform sector/source-specific GHG emissions reduction plans across regions or groups of localities, we encourage EPA to consider the paradigm adopted by the Ozone Transport Commission (OTC), a multi-state (12 northeast & mid-Atlantic states and the District of Columbia) organization created under the Clean Air Act⁹. OTC develops and implements regional plans to reduce the emission and transport of ground-level ozone which is a criteria air pollutant.

- We also recommend considering inter-governmental partnership with Department of Energy and other federal agencies to help develop renewable energy portfolio goals and standards (RPG/RPS)¹⁰, and renewable energy credits (RECs) in states that currently do not have them or expand and expedite RPG/RPS in states that already have them.

11. EPA wants to ensure applicants have adequate time and funding to develop their climate action plans before the deadline to apply for implementation funds. In your experience, how much time and funding is required to complete a state, municipal, or tribal climate action plan?

- A maximum of 6 months should be ample time for developing climate action plans, using readily available resources from existing climate change mitigation projects and programs currently in implementation in this country and across the world. The climate crisis is already here and any delay to use these funds would undermine their benefits.

12. Please provide any additional comments you would like EPA to consider, which are not covered by the prior questions.

- Provide funding to research and develop alternatives to and scrubbers to remove non-carbon anthropogenic GHGs such as nitrous oxide (N₂O) and fluorinated gases which account for 7% and 3% of total GHG emissions in US,¹¹ but whose 100-year global warming potential (>270 and > 25,000 times that of CO₂ respectively) and atmospheric residence times (>100 years & 1000s of years respectively, relative to CO₂)¹² dwarf those of the more abundant carbonaceous GHGs.
- Education of citizens to: reduce their carbon footprint, reduce landfill or incinerator bound municipal waste, reduce residential GHG emissions, change personal consumption and other behavioral aspects to minimize environmental impact.

⁸ <https://www.rggi.org/>

⁹ <https://otcair.org/>

¹⁰ [Database of State Incentives for Renewables & Efficiency® - DSIRE \(dsireusa.org\)](https://www.dsireusa.org/)

¹¹ <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>

¹² <https://www.epa.gov/climate-indicators/greenhouse-gases>