

Building the case for action on super pollutant tropospheric ozone

*Request for Proposals
July 2024*

Summary

Targeted action on climate super pollutants is critical to avoid the worst effects of climate change in the coming decades, alongside deep decarbonisation. The latest science highlights that rapidly reducing levels of these potent climate forcers presents the most direct way to turn down the heat pre-2050¹. The world is waking up to the importance of tackling methane emissions. And now, in tandem with these efforts, we also need to get smarter on other super pollutants, including tropospheric ozone.

Clean Air Fund is looking for organisations/consultants to set out the case for action to reduce tropospheric ozone, engage key stakeholders to support it, and create a powerful policy brief and launch at COP29. The project will require: (1) providing a policy-relevant explainer on tropospheric ozone and its climate, health and agricultural impacts; (2) collating case studies of past successes in mitigating tropospheric ozone and - where this is not already undertaken - to build on these case studies to estimate the climate, agricultural and health benefits that are associated with the reductions achieved; (3) developing a suite of recommendations for each set of key stakeholders (policy makers, the research community, industry etc.) for advancing global action on tropospheric ozone; (4) packaging the work completed in phases 1-3 into a concise and compelling narrative and final output; (5) disseminating and driving engagement during COP29; and (6) supporting post-COP29 activities including follow-up with key stakeholders and planning for continued momentum-building on tropospheric ozone and super pollutants generally.

It is critical that this project considers tropospheric ozone within the wider super pollutants movement and encourages a broad and coordinated approach across sectors, locations, and policy frameworks to advance that movement. Given project timelines, the chosen project partner will be required to work at pace and closely with the Clean Air Fund team over the project period.

We encourage submissions **by end of the day 5 August 2024** from organisations, consultants and consortia with expertise on climate change, short-lived climate pollutants and air pollution, as well as a track record of producing impactful, policy-relevant analysis. Team experience in government relations and advocacy would also be preferable. Submitted proposals should be short and include links to relevant previous work.

Background to Clean Air Fund

Launched in 2019, the Clean Air Fund is a global philanthropic organisation working with governments, funders, businesses and campaigners to create a future where everyone breathes clean air.

In 2024, Clean Air Fund launched a Super Pollutants portfolio. The Super Pollutants team is pushing for air pollution and climate change to be tackled together and delivering high-impact projects to help mitigate near-term warming, avoid climate tipping points and reduce the chronic health impacts of air pollution. The first focus of our Super Pollutants portfolio is black carbon. At COP28, we released a report on the [Case for Action on Black Carbon](#). We currently lead a broad programme of work spanning research, campaigns and policy to drive increased country, city

¹ [Dreyfus, Gabrielle B., et al. "Mitigating climate disruption in time: A self-consistent approach for avoiding both near-term and long-term global warming." Proceedings of the National Academy of Sciences 119.22 \(2022\): e2123536119.](#)

and corporate action on reducing black carbon emissions. We seek to expand our Super Pollutants portfolio to include tropospheric ozone given its climate, health and air pollution impacts.

Find out more: www.cleanairfund.org.

Why tropospheric ozone?

Tropospheric ozone's global warming impact is close to that of methane, with an effective radiative forcing 87% of that of methane's. Approximately 0.25°C of present-day warming is due to changes in tropospheric ozone concentrations. Among that, methane-mediated tropospheric ozone formation contributes to a warming of 0.13°C, while the nitrogen oxides-carbon monoxide-non-methane volatile organic compounds (NO_x-CO-NMVOCs) mediated ozone formation pathway contributes to a warming of 0.17°C.²

Tropospheric ozone is also a designated air pollutant that is harmful to human health and has significant impacts on crop yields and biodiversity. It is associated with almost 500,000 premature deaths annually, up to 26% of global crop loss, and is responsible for a decrease of up to 11% of global forest coverage.^{3,4} In addition to premature mortality, tropospheric ozone causes a range of health impacts by reducing lung function. Ozone can inflame the lining of the lungs, triggering a variety of health problems including chest pain, coughing and throat irritation and worsens respiratory conditions including bronchitis, emphysema, and asthma.⁵

Tropospheric ozone therefore sits at the centre of the global climate and health crises. The World Health Organisation has set air quality guidelines for tropospheric ozone ambient air concentrations⁶ and it is considered as a criteria pollutant (part of national ambient air quality standards) in multiple countries. Yet in 2020, 93% of the world's population lived in areas with ozone levels higher than the WHO guideline levels.⁷ Tackling elevated concentrations of tropospheric ozone requires a multi-pollutant, integrated approach which is absent from present air quality management frameworks for most countries. Despite its significant contribution to global warming, tropospheric ozone remains largely absent from the international stage and global climate negotiations.

Greater understanding, awareness and ambition on tropospheric ozone is important to securing near-term climate mitigation and improving health outcomes worldwide. This project represents a step towards unlocking the current negative cycle of low interest, mixed messaging, insufficient funding and ultimately a lack of policy commitments to reduce tropospheric ozone. It builds on other work to push action on super pollutants up the climate agenda, including interest from the governments of USA and China.⁸

We seek to make a compelling and concise case for action on tropospheric ozone as part of a broader push to act on super pollutants, that can be launched at COP29.

Project objectives and prospective activities

² IPCC Assessment Report 6. Climate Change 2021: The Physical Science Basis. Chapter 6, Figure 6.12.

³ Health Effects Institute, State of Global Air 2024. Available at: <https://www.healtheffects.org/announcements/new-state-global-air-report-finds-air-pollution-second-leading-risk-factor-death>

⁴ Wittig, Victoria E., et al. "Quantifying the impact of current and future tropospheric ozone on tree biomass, growth, physiology and biochemistry: a quantitative meta-analysis." *Global change biology* 15.2 (2009): 396-424.

⁵ Effects of Ground Level Ozone, IOWA Department of Natural Resources. Available at: <https://www.iowadnr.gov/Environmental-Protection/Air-Quality/Air-Pollutants/Effects-Ozone>

⁶ WHO, WHO global air quality guidelines 2021. Available at: <https://www.who.int/publications/i/item/9789240034228>

⁷ Health Effects Institute, State of Global Air 2024. Available at: <https://www.healtheffects.org/announcements/new-state-global-air-report-finds-air-pollution-second-leading-risk-factor-death>

⁸ U.S. Department of State, Readout on Meeting of the U.S.-China Working Group on Enhancing Climate Action in the 2020s. Available here: <https://www.state.gov/readout-on-meeting-of-the-u-s-china-working-group-on-enhancing-climate-action-in-the-2020s/>

The objectives of this project are set out below. Prospective activities are listed under each objective. Proposals with additional or alternative ideas are welcome, where relevant.

1. Deliver a compelling, designed policy briefing/s outlining the case for action on tropospheric ozone to secure fast climate mitigation. This may require several reports for different audiences, including a 5-10 page, non-technical report for policymakers and a longer report for more technical stakeholders. This work should include:
 - a. An overarching narrative centering tropospheric ozone within the climate and super pollutants agenda at COP29 with a positive framing as an opportunity to affect change in the next few years.
 - b. A simple policy-relevant explainer on tropospheric ozone, including how it interacts with other key designated pollutants or climate forcers (e.g. methane, NMVOCs, NO_x, CO) and the resultant different impacts on concentrations on each of these in different spatio-temporal contexts; its climate, health and agricultural impacts; its global trends via both observed and modelled levels particularly in regions facing notable ozone challenges; and its relevant significance within the broader climate challenge.
 - c. An overview of the key policy options and management measures available for tackling elevated concentrations of tropospheric ozone. This should describe the potential win-wins and trade-offs for other designated pollutants/climate forcers, if and how policy measures should be selected and adapted to reflect key impacting parameters (e.g. emissions of precursors, climatic conditions).
 - d. Identification and analysis for at least 5 case study success stories on tackling ozone. These will showcase work in different geographies and source components and will emphasize the influence of regulatory frameworks, enforcement, and technical solutions that have led to ozone reduction across different spatial scales.
 - e. Where it is not already done, to compile as far as possible, quantitative estimates of the climate, health and agricultural benefits of the reductions in tropospheric ozone concentrations achieved.
 - f. A list of key recommendations and next steps for each key stakeholder group (e.g. policy makers, scientific researchers, industry, NGOs etc) conveyed as a call to action for governments, international development funders, and philanthropic foundations with clear recommendations for future work in this space.
 - g. Establish an advisory group comprised of a diverse range of expert stakeholders to provide high-level input into the project.

Proposed activities:

- Literature review on the latest research and evidence covering tropospheric ozone, precursor emissions, atmospheric chemistry, and its climate, health and agricultural impacts.
 - Assessment of key policy options for tropospheric ozone, how such measures impact on other designated air pollutants and climate forcers and how policy might need to be adapted to different spatio-temporal environments and contexts.
 - Build a strong overarching narrative, alongside Clean Air Fund and other partners, to deliver a compelling and simple message on a complex topic, including how efforts on tropospheric ozone fit within the broader drive to tackle super pollutants
 - Compiling case studies of success stories of reducing tropospheric ozone levels and developing an approach/method for analysing the climate and air quality benefits of these. This may include engaging relevant government representatives in the case study and collating quotes for the final report.
 - Draft report with a focus on displaying information through diagrams and visualisations.
 - Collaborate with the Clean Air Fund team to revise the and deliver a final draft.
 - Support the design and visualization of report in collaboration with Clean Air Fund's communications and design partners.
2. Support Clean Air Fund's communications partner with a media and digital launch of the report during COP29, to drive interest and awareness with key stakeholders and global media. The digital launch, amplification on social

media and via media coverage will be led by the Clean Air Fund's comms team/agency. The selected supplier will comment on the draft media release and must consider this launch when shaping and producing the report and policy recommendations.

Proposed activities:

- Collaborate as needed with Clean Air Fund and partner communications agency on development of a press release, launch video, social media toolkit etc., with input from project partners.
- Support the report launch in-person (preferred) or online at COP29 through participation of senior stakeholders at events and dissemination of report to networks and key contacts.
- Acknowledging limited time ahead of COP29, work with Clean Air Fund and partners to effectively plan and maximise engagement and advocacy through side events, speaker panels and other potential outreach activities. We welcome applicants to recommend and suggest opportunities to drive engagement in the lead up to and at COP29.

3. Post-COP29, develop a blueprint for how to advance action on tropospheric ozone over the period 2025-2028 and work towards consensus with key stakeholders on next steps.

Proposed activities:

- Support follow-ups from COP29 outcomes.
- Convene key stakeholders to get inputs from the research community, philanthropy, governments and intergovernmental organisations.
- Develop a blueprint (written output) for activities needed to advance action on tropospheric ozone over the next three years, including cost estimates and proposed roles and responsibilities.
- Lead COP29 and report wash-up and reflection on lessons learned.

Target audience

Wide range of climate stakeholders present at COP29, including:

- National policy makers from the most influential countries, the highest contributors to ozone and most affected by ozone;
- The wider philanthropic and development funding community to encourage more funding going towards the super pollutants movement.
- The broader ecosystem of IGOs, INGOs and technical experts whose work influences the above stakeholders.

Proposal format and requirements

We are looking for organisations/consultants either as individuals or as part of a consortia proposal with strong existing knowledge and experience of climate change, short-lived climate pollutants and air pollution to deliver this work. Experience in translating complex science into policy-relevant documents is also crucial. Experience with government relations and advocacy is also preferable. Bids encompassing Global South organisations/experts are particularly welcome, as we are interested in prioritising Global South perspectives in our work.

We welcome suggestions from partners on additional, optional activities within the project budget, e.g. to bolster communications efforts, maximise advocacy and engagement at COP29, strengthen government relations activities, advance knowledge efforts with additional scientific activities, or deepen engagement of other priority stakeholders such as in the food and agriculture sector.

Given the short timeline, we will be looking to work with partners that have high levels of interest and availability across August to November 2024 to deliver the policy brief by **4 November 2024**.

Applicants should provide:

- A written proposal covering proposed activities, deliverables and associated deadlines to meet the project objectives. We prefer high-level, short proposals for this work and suggest proposals are kept to a **maximum of 10 pages**.
- A budget, including day rate, number of days anticipated and other relevant budget lines, up to a maximum of USD \$400,000, including all applicable taxes.
- CVs of relevant personnel that would be working on delivering the project.
- Examples of previous policy-facing reports and outputs delivered by the organisations/consultants.

Timeline and submission

Any questions on the RfP should be submitted by end of day 29 July 2024. The deadline for submission of proposals is end of day 5 August 2024. Proposals must be submitted via email to superpollutants@cleanairfund.org.

Activity	Deadline
RfP published	18 July 2024
Deadline for questions	29 July 2024
Deadline for proposals	5 August 2024
Review of proposals and decision on preferred bidder	6-9 August 2024
Proposal finalisation and contracting	26 August 2024
Project kick off meeting	30 August 2024
Draft outline of report	30 September 2024
1 st draft of report	15 October 2024
2 nd draft of report	22 October 2024
Deliver final report	1 November 2024
Digital and media launch	w/c 4 November
COP29	11-22 November 2024
Deadline for completing the blueprint and follow-up work	31 March 2025