

Impact Assessment of Low Emissions Zones in Warsaw Request for Proposals

Summary

The Clean Air Fund (CAF) is seeking a quantitative research organisation(s) with expertise in air quality modelling to conduct an impact assessment of proposed Low Emissions Zones (LEZ) in Warsaw in Q3-Q4 2022. The scope of the work is outlined below, but in brief includes:

- Modelling changes in air pollutant concentrations as a result of a range of LEZ implementation options.
- Conducting analysis of the socio-economic impact (including distributional analysis, cost-benefit analysis and health impact assessment) as a result of LEZ implementation.
- Using outcomes from the analysis to assist decision making and identify the preferred LEZ option with the greatest air quality benefits.

Research findings and recommendations should be summarised through a report to the City of Warsaw, presentation, public-facing report (in English and Polish), factsheet and targeted engagement with key stakeholders from the Warsaw City Council. The chosen partner will be responsible for the wider communication and dissemination of the report. The intended outcome of this project is the successful implementation of an equitable and impactful LEZ in Warsaw by city authorities based on the evidence provided by this review.

About the Clean Air Fund

Launched in 2019, the Clean Air Fund is a philanthropic initiative with a mission to tackle air pollution around the world. Our aim is to help build and support a powerful global movement for clean air. We achieve this by bringing together funders, researchers, policy makers and campaigners working on a wide range of issues to find and scale solutions that will provide clean air for all.

More information about the Clean Air Fund can be found on our website: www.cleanairfund.org

Breathe Warsaw

This project is part of the [Breathe Warsaw](#) initiative. Launched in 2022 by the City of Warsaw, Bloomberg Philanthropies and Clean Air Fund, the initiative aims to strengthen data, mobilise local partners around clean air campaigns and provide technical assistance to improve air quality across Warsaw. A key part of achieving these aims is supporting city authorities to implement measures that will effectively reduce emissions of air pollutants and reduce exposure to dangerous levels of air pollution.

Background

Polish cities face severe air quality challenges. In 2018, 36 out of 50 most polluted cities in the European Union (EU) were in Poland. The country's capital, Warsaw, is one of the most polluted cities – with exposure to air pollution having a health-related cost to society of an estimated €4.2 billion every year.¹ Transport is a major source of air pollution in Warsaw, contributing 77% to overall NO_x concentrations and 33% of PM₁₀ concentrations.²

¹ Social costs are costs affecting welfare and comprise both direct health care expenditures (e.g. for hospital admissions) and indirect health impacts (e.g. diseases such as COPD, or reduced life expectancy due to air pollution).

CE Delft (2020) [Health costs of air pollution in European cities and the linkage with transport.](#)

² Holnicki et al. (2021) [Impact of Vehicle Fleet Modernization on the Traffic-Originated Air Pollution in an Urban Area—A Case Study.](#)

Warsaw shows one of the highest vehicle ownership rates (859 per 1,000 people) in Europe³ and has seen a growing influx of vehicles from outside of the city. An *Evaluation of real-world emissions in Warsaw*⁴ by The Real Urban Emissions (TRUE) Initiative found that imported second-hand vehicles (ISVs) make up 32% of the measured light-duty vehicle fleet in Warsaw. The average fuel-specific emissions of ISVs are at least double those from domestic vehicles for all pollutants studied. ISVs are on average more than twice the age of domestic vehicles.

Legislative changes approved by the Polish government in 2021, allows for the implementation of tailored LEZ (known in Poland as clean transportation zones/strefy czystego transportu or SCT) in Polish cities. In the absence of nation-wide policies restricting the most polluting vehicles, Warsaw could take steps to address emissions from these vehicles through a LEZ.⁵ A follow-on assessment being carried out by TRUE initiative will assess the impact of a range of LEZ implementation scenarios (implementation timeline and consumer response schedule) on pollutant emissions.⁶

The project described in this RfP aims to use the modelled emissions changes to further understand the impact of proposed LEZ on pollutant concentrations and the resultant socio-economic impact of LEZ. The analyses carried out by the chosen partner will allow the City of Warsaw to better understand the potential health and economic costs impacts of different LEZ scenarios, helping ensure that LEZ design does not disproportionately impact groups of individuals or businesses, and allowing the City to make the case for their preferred policy scenario. The study will also be beneficial in informing politicians and the public on the costs and benefits of LEZ implementation.

Upon satisfactory completion of this project, the selected partner may be approached to carry out work of a similar nature in the Clean Air Fund's geographies.

Outcomes and objectives

An intended outcome of the Breathe Warsaw initiative is to provide technical assistance and policy research to design an ambitious LEZ in the capital by 2024.

The Clean Air Fund is seeking proposals for an Impact Assessment that will assess scenario health and cost impacts from modelled air quality changes because of LEZ implementation in Warsaw. Expertise on air quality modelling and policy impact assessment is required. This study should include:

1. Distributional analysis to assesses the potential impact of a LEZ on pollutant concentrations across the city upon different socio-economic groups.
2. Cost benefit analysis to present the monetisation of the costs of introducing an LEZ.
3. Health Impact Assessment to offer a health-based assessment of the benefits of proposed measures.

Such analyses will allow the City to better understand the potential health and costs impacts of different LEZ scenarios, helping ensure that LEZ design does not disproportionately impact groups of individuals or businesses, and allowing the City to make the case for their preferred policy scenario. The study will also be beneficial in informing politicians and the public on the costs and benefits of LEZ implementation.

Clean Air Fund will facilitate engagement with the City of Warsaw, TRUE Initiative and other stakeholders necessary for data collection.

The following data will be provided:

- Baseline air quality concentration data
- Demographic data

³ Eltis (2019) [Warsaw announces mobility measures to improve air quality.](#)

⁴ TRUE Initiative (2022) [Evaluation of real-world vehicle emissions in Warsaw.](#)

⁵ TRUE Initiative (2022) [Limiting the emission from imported second-hand vehicles in Warsaw.](#)

⁶ See similar study - TRUE Initiative (2021) [Impacts of a Low Emission Zone in Sofia.](#)

For each LEZ implementation scenario:

- Change to vehicle fleet and emissions factors

We also invite proposers to suggest other analyses that will support an impact assessment of proposed LEZ's as part of the proposal. Additional data requirements can be discussed.

Audience and Dissemination

- Policy makers at the city level
- The Clean Air Movement Poland (CAMP) – campaigners working on air quality issues including LEZ
- The general public

The findings of the analyses should be summarised in both English and Polish through a report, public-facing factsheet, presentation, and targeted engagement with Warsaw City Council.

Communication of study findings will be the responsibility of the chosen organisation. Please indicate where this will be outsourced in the proposal.

Deliverables

- Engagement with relevant stakeholders, such as the City of Warsaw and the TRUE Initiative, in the design phase of this project.
- Report and key message deck summarising findings and recommendations to the city of Warsaw. In English and Polish.
- Public-facing report and summary fact-sheet. In English and Polish.
- Communications plan to include report dissemination and press event.

Overview of proposal requirements

- Proposals should not exceed 10 pages, excluding company profile and team profiles.
- You must include CVs (maximum 2 pages) of key project team members.
- Please indicate in your proposal whether translation will be done in house or if additional support is needed.

Proposals must include the following components:

- Study design
- Data collection
- Data analysis
- Report and slide deck creation
- Dissemination
- Timeline and budget

Proposal timeline

Any questions on the RfP should be submitted by COB 7th September 2022. The deadline for submission of proposals is COB 12th September. Proposals must be submitted via email to data@cleanairfund.org. Full timeline below. Project start and completion dates are indicative, alternate timelines may be proposed.

Activity	Deadline
RfP Published	26 th August 2022
Deadline for questions	7 th September 2022
Deadline for proposals	12 th September
Review of proposals	w/c 14 th September
CAF decision on proposal to contract	w/c 19 th September
Contracting	October 2022
Project start	October 2022

Deadline for completing the work	December 2022
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