



**Request for Proposals:
Quantifying the environmental justice impacts of zero-emission vehicles**

February 2022

Background and Objectives

There is increasing recognition of how transportation policy and associated air pollution have exacerbated social and racial inequalities; climate change is likewise contributing to these same challenges. Therefore, governments are examining the differential impacts of ZEVs and their use, as well as how governments might mitigate these and other pre-existing inequities. Although early adopters tend to be relatively affluent, the ZEV market continues to diversify and spread to larger vehicle segments due to falling prices and concerted government policy. Nonetheless, comprehensive data on the purchasing and user behavior of ZEV owners and robust estimates of the impacts of ZEV proliferation for different groups remain elusive, making it difficult for governments and other stakeholders to assess and target policies more effectively.

This research report would review available data on the distribution of ZEVs within major markets. Through dialog with environmental justice experts and new research, it would then assess how environmental justice communities may be affected by changes in air quality, climate change impacts, changes in vehicle ownership costs, and workforce impacts posed by ZEVs. The report would then assess current metrics and approaches adopted by the different jurisdictions to quantify ZEV equity impacts. Finally, the report would compile and evaluate different equity-related provisions of governments' existing ZEV strategies and provide recommendations to strengthen these policies.

About the International Zero-Emission Vehicle Alliance

The International ZEV Alliance is a collaboration of 20 governments, founded in late 2015 to accelerate the global transition to zero-emission vehicles. The member governments are seven countries (Canada, Chile, Costa Rica, Germany, Netherlands, Norway, United Kingdom) and 13 subnational jurisdictions (Baden-Württemberg, British Columbia, California, Connecticut, Maryland, Massachusetts, New Jersey, New York, Oregon, Québec, Rhode Island, Vermont, Washington). The collaboration includes the sharing of data, best practices, and lessons learned and involves coordinating on action plans to help the group collectively achieve its ZEV deployment goals. The International Council for Clean Transportation (ICCT) serves as the Secretariat to the Alliance.

Each year the Alliance selects three high-priority focus area research topics for a deeper technical understanding and policy exchange; the project in question for this RFP is an integral part of one of the focus areas for 2022. This work builds on several previous focus area projects related to equity in ZEVs use and ownership, listed at the end of this document. See these links

for more information on the ZEV Alliance [announcement](#) to accelerate global ZEV sales, [member commitments](#), [publications](#), and [events](#).

Project Elements

The primary project elements are: (1) periodic engagement with the ZEV Alliance and with relevant community groups during the project; (2) engagement with environmental justice (EJ) community experts, which will inform the research scope; (3) an original research report as described below; and (4) one or more webinars or in-person events to publicize the event.

Engagement with the ZEV Alliance includes participation in monthly project management calls with the ZEV Alliance secretariat, an initial teleconference call with interested ZEV Alliance members to discuss the approach and project priorities, a preliminary results briefing, and incorporating feedback on the consultant's draft report from the secretariat and ZEV Alliance members.

Engagement with community groups and environmental justice experts is a critical part of this project. This engagement could include (but is not limited to): facilitating group workshops with EJ groups (e.g., by topic or by region), interviews with experts, and/or conducting surveys. Feedback from EJ experts will help to refine the scope for additional research. Findings from the research process should also be shared directly with these community groups and experts. The proposal should include a description of the consultant's proposed engagement process throughout the project.

Scope and organization of the research report

The key project deliverable is an original research report of between approximately 20 and 30 pages in length as outlined below (page counts only a rough estimate), along with an executive summary highlighting key conclusions.

- **Background and motivation** (1-3 pages)
 - Review of health impacts from road transport tailpipe emissions and how these vary according to sociodemographic and geographic factors.
 - Describe a definition of environmental justice as used in report. Proposals should include the definition the applicant will use.
- **Distribution of ZEV Use and Ownership** (2-3 pages)
 - Analyze and describe the distribution of ZEV use and ownership by key sociodemographic metrics (e.g., income, race, urban vs. rural) and differences among markets (e.g., Europe, United States, Canada). Proposals should describe an approach to analyzing sociodemographic and geographic differences.
- **Assessing environmental justice impacts of ZEVs** (6-9 pages)
 - Based on engagement with stakeholders in environmental justice communities, identify the potential impacts of ZEV use and ownership of greatest interest and concern.
 - Potential categories include air pollution, climate change mitigation, operational costs, road safety, and workforce impacts
 - Quantitatively analyze the impacts of ZEVs for environmental justice communities for the categories determined most impactful.

- Where possible, provide a breakdown of benefits from different vehicle applications (e.g., private cars, regional medium- and heavy-duty, long-haul heavy-duty).
 - Analyze impacts in at least 2 example regions and discuss how impacts may vary according to geography.
 - Identify key uncertainties and opportunities for additional research.
- **Consideration of environmental justice in ZEV policy** (4-6 pages)
 - Review, summarize, and compare how environmental justice outcomes are incorporated into governments' ZEV strategies and investments (including incentives, infrastructure rollout, awareness campaigns, etc.) at the national, regional, and city level. Where available, assess progress towards targets.
 - Identify and highlight best practices and ambitious targets for environmental justice.
 - Summarize and discuss provisions for monitoring environmental justice criteria.
 - **Recommendations for improved incorporation of environmental justice into ZEV strategies** (3-4 pages)
 - Based on analysis and review of other targets, provide recommendations to increase the environmental justice benefits of widespread ZEV proliferation and ownership.
 - Discuss guidance for governments on how to monitor, track, and quantify progress toward environmental justice goals in the context of ZEV policy.

Project Timeline and Engagement Steps

This project timeline is set by the schedule in Table 1 below. The secretariat (International Council on Clean Transportation) expects to notify the selected consultant by early March and sign a contract for this work with the consultant by the end of March. There are several critical dates related to this project. A January 11th ZEV Alliance meeting served as a project kickoff with ZEV Alliance members to discuss priorities, approaches, and related activities for the focus area; the Secretariat will share results of this meeting with the consultant. The consultant's work would primarily be done from March through September. An informal discussion between the consultant and interested ZEV Alliance members will offer an opportunity to further refine the project scope, tentatively scheduled for **April 6th** (but can be rescheduled if necessary).

The consultant would conduct engagement with key environmental justice stakeholders to determine the topics for deeper analysis, as indicated in outline above; initial outreach and consultation should be conducted in March-June. The consultant would provide a briefing on this engagement process and describe the proposed scope for additional research on a **June 14th** teleconference with ZEV Alliance members, who may provide feedback to incorporate into the report. A preliminary draft report would be submitted to the secretariat by **September 2nd** and a complete draft report to the ZEV Alliance members by **September 23rd**.

The secretariat will serve as the project manager to help coordinate with the consultant and meet ZEV Alliance member expectations throughout the project. This includes assisting in collecting and managing ZEV Alliance member input. The engagement also includes short monthly project management check-in calls with the consultant and secretariat from March through November. Following the draft report submission to the ZEV Alliance members by September 23rd, the members will have two weeks to review the draft. The consultant would

incorporate input, with support from the secretariat, by mid-October, at which point the report would be submitted for final publication and design layout steps. Ideally, the report would be released in conjunction with an event in late 2022 (for example, at New York Climate Week, COP27, or a member-hosted event). The report will be made publicly available at the ZEV Alliance page (see [publications](#)), and its findings publicized via a public webinar or event.

Table 1. Timeline for proposed 2022 ZEV Alliance project

Project element	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Submit proposal		/									
Contract agreement signed			/								
Early check-in with interested ZEV Alliance members				/							
Conduct outreach with EJ stakeholders to determine core research questions, share findings						/					
Preliminary presentation teleconference with ZEV Alliance						X					
Quantitative analysis, research, draft report								/	X		
Incorporate ZEV Alliance report input										/	
Finalize report, publish report on ZEV Alliance website										/	X
Present findings via webinar and/or event											X

X = major project milestone; / = interim milestone with the secretariat

Evaluation Criteria for Proposals

Evaluation of submitted proposals will be based on the following six criteria.

(1) Commitment to complete the scope of work (Maximum 2.5 pages)

- The selected consultant must clearly commit to completing all elements of the focus area (the research report, engagement with the secretariat and members of the ZEV Alliance, and presentations) or, if necessary, describe the rationale for excluding or modifying any of the scope elements. The consultant should provide details on where case studies would be conducted where analysis would be tailored to specific geographies.
- The proposal must also describe the consultant’s plan to engage with key environmental justice stakeholders.

(2) Commitment to the project timeline (Maximum 1 page)

- The selected consultant must commit to meeting the specified project timeline. The commitment can be satisfied by copying the “Project timeline” table and text above into the proposal.
- This may also include a description of the consultant’s internal process, use of internal milestones and contingency planning to quickly troubleshoot issues, method for updating and working with the secretariat, and any additional steps needed to ensure the project timeline is met.

(3) Prerequisite technical and policy experience (Maximum 1 page)

- The selected consultant must provide sufficient evidence that it has the prerequisite technical and policy expertise and experience to complete the proposed work by:
 - Sharing (link okay) up to 3 reports authored by the consultant that are most directly related to this work; and
 - Summarizing (in up to 150 words for each public report) how each report relates to this proposed project.

(4) Staff management plan (Maximum 1 page)

- Identify up to three key individual staff members who will work on this project, and for each:
 - Describe (in 300 words or less for each member) their individual roles in completing the work elements above and why they are well suited for the work; and
 - Include the curriculum vitae for the principal investigator who will be the primary contact and responsible for executing the project (max. 3 pages, separate document).

(5) Knowledge sharing and outreach (Maximum 1 page)

- The selected consultant must commit to presenting the findings of the work at a public webinar and/or in-person event(s);
- The proposal should include ideas and examples of how to engage with environmental justice-focused groups in key markets both during and after the research; and
- The proposal should provide examples of past consultant experiences communicating related work.

(6) Additional value-add (Maximum 1 page)

- Please name any additional tools, data, case studies, knowledge-sharing opportunities, or project experience the consultant can offer to advance the overall project objectives in a unique or exceptional way (limit of 500 words).

Budget

- The maximum allotted compensation for the proposed work is \$60,000 (total, including all taxes and fees). **Any proposals exceeding this amount will not be eligible for consideration.** The ZEV Alliance will be able to provide some additional funding to compensate environmental justice stakeholders for their participation in workshops or interviews.
- Please provide a high-level overview of your budget (e.g., amount to be spent on staff time, subcontractors, travel, software and data purchases, etc.) Also include preferred payment timing to match the project timeline and milestones (300 words maximum).

Format, References, and Submission

We emphasize the importance of succinct proposals. Proposals should be between five and eight pages in length and submitted in Word format using 11- or 12-point font. **Proposals exceeding 8 pages will not be accepted.**

Please include two references that can personally attest to the consultant's experience in successfully executing similar projects, ideally on a similar topic. A complete submission should

include only the following: (1) the proposal in Word or pdf format of 5-8 pages; (2) the principal investigator's curriculum vitae of up to 3 pages; (3) 3 examples of related projects, if not publicly accessible online; and (4) contact information for two professional references.

The proposal should be submitted to secretariat@zevalliance.org by **no later than March 10**. If potential bidders express initial interest in submitting a proposal by March 1, the secretariat will email any potential updates to this Request for Proposals. The secretariat may answer or ask questions for clarification but is not obligated to respond to inquiries.

Related ZEV Alliance work

This focus area research should build upon and complement previous ZEV Alliance research, including the following:

Slowik, P. (2019). Expanding Zero-Emission Mobility Equity and Access. International Council on Clean Transportation. <http://www.zevalliance.org/expanding-zev-access/>

Tankou, A., Hall, D., & Lutsey, N. (2021). Understanding and supporting the used ZEV market. International Council on Clean Transportation. <http://www.zevalliance.org/used-zero-emission-dec21/>