

REQUEST FOR PROPOSAL (RfP)

Market analysis of EV public charging infrastructure in cities - Brazil, Colombia, Mexico & India

C40 Cities Climate Leadership Group, Inc. 120 Park Avenue, 23rd Floor New York, NY 10017 United States of America

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1. C40 Cities Climate Leadership Group Inc. ("C40")

C40 is a network of nearly 100 mayors of the world's leading cities, who are working to deliver the urgent action needed right now to confront the climate crisis, and create a future where everyone, everywhere can thrive. Mayors of C40 cities are committed to using a science-based and people-focused approach to help the world limit global heating to 1.5°C and build healthy, equitable and resilient communities. Through a Global Green New Deal, mayors are working alongside a broad coalition of representatives from labour, business, the youth climate movement and civil society to go further and faster than ever before.

The strategic direction of the organisation is determined by an elected Steering Committee of C40 mayors which is co-chaired by Mayor Sadiq Khan of London, United Kingdom, and Mayor Yvonne Aki-Sawyerr of Freetown, Sierra Leone. Three term Mayor of New York City Michael R. Bloomberg serves as President of the C40 Board of Directors, which is responsible for operational oversight. A nine-person management team, led by Executive Director, Mark Watts, leads the day-to-day management of C40. C40's three core strategic funders are Bloomberg Philanthropies, the Children's Investment Fund Foundation (CIFF) and Realdania.

To learn more about the work of C40 and our cities, please visit our <u>Website</u>, or follow us on <u>X</u>, <u>Instagram</u>, <u>Facebook</u> and <u>LinkedIn</u>.

2. Summary, Purpose and Background of the Project

C40 Cities, in partnership with the International Finance Corporation (IFC), is launching this RFP for a joint study to assess and analyse the public electric vehicle (EV) charging infrastructure landscape in Brazil, Colombia, Mexico, and India, delivered under the umbrella of the **Laneshift initiative (C40) and IFC's Cities Initiative**. Laneshift is a programme, developed through a partnership between C40 Cities and <u>The Climate Pledge</u> (TCP), that aims to accelerate the decarbonisation of freight and logistics across Latin America and India.

The aim of the study is to identify market potential, investment needs, viable business models, and opportunities for expanding public charging infrastructure - focusing on its role in enabling the electrification of transportation, including urban freight, commercial and private vehicles.

Although funded and contracted separately, the project will be delivered as a **single integrated study.**

Project Background

Driven by environmental concerns, commitment to a greener planet and catalyzed by rising fuel prices and lower total cost of ownership, the electric

vehicle (EV) ecosystem is maturing at a rapid pace globally. A critical facilitator of EV adoption is ready availability of slow and fast chargers ensuring easy access to efficient and cost- effective charging. The pace of charging infrastructure development is gaining momentum around the world, driven by policy reforms and continuous expansion by public and private players. In India for example, with an estimated 45-50 million EVs (including 2/3/4



wheelers and buses) on Indian roads by 2030, the potential opportunity for a pure play charging business is enormous¹.

The purpose of this assignment is to develop a thorough understanding of the market landscape of EV charging infrastructure in a select group of target countries and to support investment opportunities in the integrated EV public charging infrastructure space. The markets to be assessed in this study are India, Brazil, Mexico and Colombia ("**Target Countries**"). The focus of the study will be on EV passenger cars (for personal or commercial use cases), electric light- and medium- and heavy-commercial vehicles and electric buses ("**Target Vehicle Categories**"). Broadly, this study will include an analysis of the current and future market environment, regulations, benchmarks from a few developed countries and competitive landscape.

This Request for Proposals (RfP) provides an outline for the consultancy to understand the scope, objectives, and expectations for the study.

Objectives of Request for Proposal

C40 and IFC are looking for a qualified consultancy to undertake the activities listed in the 'Scope of Work' section with the following objectives:

- To deliver a comprehensive, multi-country study on the landscape of public EV charging infrastructure, focusing on its role in enabling the electrification of urban freight and other commercial and private vehicle operations.
- To assess the current and future demand for EV charging stations in Target Countries and Target Vehicle Categories for public charging (cities and highways) and captive charging (residential, commercial and fleets).
- To understand the EV public charging infrastructure stakeholders (incl. the value chain), regulatory environment, examine the differentiation strategies of different players in Target Countries.
- To analyze the competitive landscape and identify key players, their strengths, weaknesses, market strategies, product offerings, business models, profitability, competitive advantage and capex plans, barriers to entry and business opportunities in the segment.
- Identify and assess potential commercial / market related risks, and mitigate strategies being adopted by different players.
- Identify existing and emerging business models, including public-private partnerships, private-led models, and city-supported approaches to

https://assets.kpmg.com/content/dam/kpmg/in/pdf/2022/08/electric-vehicle-charging-next-big-opp ortunity-infrastructure.pdf

establish EV public charging infrastructure, including lessons from a few developed countries.

- Deliver four in-depth city-level case studies, one per country, to illustrate real-world barriers and opportunities.
- Provide actionable recommendations for cities and private sectors actors to accelerate infrastructure deployment.



The assignment will be supervised by members of C40's City Finance Programme and Laneshift teams and IFC's Global Transport, Climate Business and Municipal Infrastructure Departments.

Scope of work

The consultancy is expected to cover the following aspects as part of this exercise:

1. Assessment of Market, Market Size and identifying key Growth Drivers:

Please include the following for each Target Country: (India, Brazil, Mexico, Colombia)

- Characterize the different market and customer segments that are seeing or likely to see EV uptake for the next 5 years, by vehicle type (focusing on Target Vehicle Categories), their corresponding operating patterns (e.g. of personal cars, taxis, intra- and intercity buses, first/mid/last-mile trucking, etc.) and implications for charging needs (AC/DC) at different locations for each of vehicle type (home, workplace, depots, public charging networks, etc.).
- Provide an overview of the current regulatory, policy and governmental incentives context as well as standards in the country for EV charging, and how these impact the current and future evolution of Charge Point Operator (CPO) businesses.
- Identify different business segments across the entire value chain (CPO-B2B/B2C, manufacturer, emobility service providers etc.), profitability and challenges of each segment. Identify key growth drivers leading to growth of the segments including government incentives across different use-cases.
- Identify and analyze key trends, technological advancements (e.g. evolution in battery capacities in different vehicle categories in the target vehicle segments, battery swapping, charging power levels and charging technologies, etc.) as well as evolution in driving patterns (e.g. growth in highway driving for personal cars) for various commuting segments of interest, and how that may impact the growth and profitability of different business models/segments in EV charging.
- Analyze and opine on availability of and ease and cost of interconnection to energy generation/distribution to provide electricity required for charging solutions. Provide analysis on the composition of the energy generated in this context (i.e. % of renewable energy in the generation mix).

 Based on the above assessments, develop 2-3 different possible scenarios ("Scenarios") of future EV adoption in the target vehicle categories (4W+), and the attendant demand that is likely to be generated for public charging. Detail these in terms of the number of stations required to ensure geographic coverage and how that will impact the utilization rate of each station i.e. energy dispensed per station over a given time.



2. Regulatory Assessment:

- Overview of the regulatory & enabling environment in each Target Country from an EV charging manufacturing and deployment perspective (including energy supply & demand charge for charging, special category tariff for charging stations if available).
- Review of the regulatory approvals and clearances required to set up a charging station (including electrical connection, transformer installation/upgrades if required, land lease, role of utilities and electricity sector regulators, etc.)
- Policy, incentives, and government initiative to set-up charging infrastructure and to promote domestic manufacturing of EV chargers, including from federal, state level and municipal level initiatives, as appropriate.
- Summary of regulatory issues faced by EV charging companies (utilities, manufacturers and CPOs).

3. Growth of EV Charging in more mature sample markets of UK and The Netherlands

- Provide an overview of the transportation context in these markets (e.g. personal car usage patterns, price points for ICE and EV cars, average annual kms, range / battery capacities and price points of EVs being adopted, etc.), how EV adoption in personal cars and in fleets has evolved in these regions and how EV charging infrastructure sector has grown in these regions over the last decade or more of EV adoption in these countries. Disaggregate public charging data to distinguish infrastructure installed through PPP models in European cities to enable night-time slow charging (on curb side parking areas) and other public slow and fast charging infrastructure not covered by city-led PPP models...
- Articulate the nature and quantum of government incentives and support that has been made available for public charging infrastructure in these countries over the years and the role it has played in the growth as well as profitability of various charging infrastructure business models.
- Describe the city level initiatives some of these countries have taken to promote PPP models for public charging infrastructure development.

Elaborate on the PPP model structure, roles and responsibilities of the city municipality, private sector entity, utility and other stakeholders, the selection process and criteria for selecting the private sector player, contract tenors, etc.



- Preliminarily assess whether any such models are feasible in the Target Countries, considering context-specific factors such as the regulatory framework, public procurement rules and market maturity.
- Business models within the charging infrastructure value chain that are prevalent in these geographies and assessment of the business metrics of each model (including scalability, investment needs, profitability etc.). In particular for CPO businesses, provide an overview of the scale, investments, utilization rates, pricing, operational challenges reported especially for publicly listed CPO companies and compare these with their projections in earlier years.
- Applicability of these models in Target Countries, taking into account differences in vehicle battery capacities, operating patterns, pricing potential, etc.
- Issues, challenges faced by this sector and companies in the markets of interest.

4. Review of strategy, product offerings of key players

- Provide an overview of the current landscape of public charging infrastructure in the country across the value chain – manufacturers, CPOs, technology providers, eMobility Service Providers (eMSPs), utilities, etc. – and compare their current competitive strengths and positions in the market.
- Identify the top 3-5 CPOs by market share in each Target Country.
- Review and analyze their offerings (present as well as planned), partnerships (existing and planned), existing business model, positioning, pricing strategies and access to capital:
 - Review current products, services (own and operate charging infrastructure, hardware/software solutions, 3rd party aggregator marketplace platform/EMSP etc.), current and future (announced) scale of deployment, future plans including for capex deployment (if available);
 - o Review of partnerships and access to relationships that enable players to situate charging infrastructure at strategic locations, in order to be well positioned to capture market share

The consultancy will be responsible for carrying out steps 1–4 of the assessment for each target country. Recognizing local and regional variations within each country, the consultancy will develop one in-depth city-level case study per country. The selected cities include Rio de Janeiro (Brazil), Mexico City (Mexico), Bogotá (Colombia), and Pune (India). The consultancy is expected to propose a clear and logical structure for the assessment, organizing the findings by step and by country, and integrating the city-level case studies accordingly. The national-level analysis should provide a high-level overview, while the city-level case studies should offer a more granular and detailed examination.



Based on the outcomes of steps 1–4, the consultancy will also be required to provide an informed analysis of:

- For asset heavy CPO's, likely revenues and profitability potential under various EV adoption scenarios, including differing rates of EV adoption, competitive dynamics, and projected demand for public charging infrastructure. Indicate the expected scale at which an asset-heavy CPO could become profitable and how long it might take to get there in each country.
- 2. The estimated total addressable and obtainable market opportunity across relevant segments.
- 3. Expected competitive intensity in each part of the value chain how many players can reasonably flourish in each market.

Deliverables

The consultancy will provide the following deliverables from the date of appointment: ("T"):

- 1. **Deliverable 1:** Kickoff meeting including team introductions, detailed methodology and timelines for the study: T + 1 week.
- 2. **Deliverable 2:** Preliminary findings and insights for review and feedback. Format can be proposed by the consultancy but it should cover all the minimum content detailed in steps 1-4. T + 6 weeks.
- 3. **Deliverable 3:** Final draft report. Comprehensive report including all analyses, findings, and strategic recommendations. T + 9 weeks followed by 2 weeks for C40 and IFC review. Final report to be delivered at T + 12 weeks.
- 4. **Deliverable 4:** 2 webinars: one 1-hour long webinar for IFC only and one webinar to be organized with C40; T + 12-14 weeks. Presentations used in the webinars reflecting the final report content are also part of this deliverable.

All deliverables are to be delivered in English with all materials being made available electronically and are subject to approval by C40 and IFC.

All reports are to be provided in Google docs. The consultancy will adjust the content of the deliverables in line with comments made by C40 and IFC. The

minimum quality requirements for deliverables to be accepted by C40 and IFC are as follows:

- 1. At a minimum the content as described in the scope of work must be covered;
- Deliverables should be submitted according to the pre-agreed deadlines;
- 3. The deliverables should be written in clear and concise language;
- 4. Deliverables must be precise, technically correct and free of grammatical and typing errors;
- Electronic files shall be readable without restrictions. If some parts of files should be locked to avoid unintended modifications or to protect key parameters / calculations, then the passwords / permits should be provided to C40 and IFC;
- 6. Auxiliary files (e.g. Excel macro files, original Excel graphs and respective tables, etc.) as well as input and output data from specialized software should be submitted to C40 and IFC.

Timeline

The contractor is expected to submit all deliverables within 5 months from the date of signing the contract:

Deliverable		Submission Date
1	Kickoff meeting	1 weeks after project award.
2	Preliminary findings / draft report	6 weeks after project award. Corresponding to point 1-4 of the Scope of Work
3	Final draft report	9 weeks after project award. Corresponding to point 1-4 of the Scope of Work
	Final report	12 weeks after project. Corresponding to point 1-4 of the Scope of Work
4	Webinars	To be completed within 2 weeks of signoff of the final report.

Kick-off of the project is expected as soon as possible. C40 and IFC reserves the right to adjust this indicative schedule and to take up to 10 business days for the review of deliverables. Transparent reflections on the above timeline and structure will be strongly appreciated in the proposals.

The contract will be set-up as a lump-sum contract. The Consultancy should therefore include a detailed budget that encompasses all proposed activities and expenses in the proposal.



Project Contracting

This RfP encompasses the full scope of the study. However, for contracting purposes, the work will be divided into two separate contracts, with deliverables organized into Package A and Package



B. Package A will be contracted by C40, while Package B will be contracted by IFC. Bidders are required to submit a comprehensive proposal and quotation for the entire scope of the RfP, as well as separate quotations for each package (Package A and Package B) to facilitate the dual contracting approach. C40 is leading the RfP process, with proposals to be jointly reviewed by C40 and IFC. Following the evaluation, the selected bidder will enter into a contract for Package A with C40, based on the outcome of this RfP. In parallel, IFC will engage the selected bidder for Package B through a single-source selection process. (IFC will use a separate similar TOR including the deliverables for Package B only).

As mentioned, in addition to the financial proposal for the entire scope, please provide separate quotations for each package. Both packages should be of the same US\$ value.

Package A (C40): Deliverables 1-4 for Brazil and Mexico. Package B (IFC): Deliverables 1-4 for Colombia and India.

3. Proposal Guidelines

This Request for Proposal represents the requirements for an open and competitive process. Proposals will be accepted until **21 July 2025**. Any proposals received after this date and time will not be accepted. All proposals should include clear timetables, how you will work with C40, clear costs and detail on experience in this area.

The proposal should give C40 evaluators all the information they need to assess your bid. Please clearly indicate where applicable:

- How your proposal is responsive to the Evaluation Criteria;
- The assumptions you are making about the project;
- Risks you have identified and appropriate mitigation measures;
- Information about your fee;
- Proposed timeline of implementation;
- Any additional support that you need to make the project a success, including any inputs you will need from third parties or C40 staff;
- Proposed working partnership with C40 and IFC, including (as applicable) project governance and management, key personnel, key roles and responsibilities, and escalation procedure for issues.
- Examples of past work;
- Resumes of proposed key personnel.

The proposal should not exceed 15 pages, excluding CVs.

Supplier Diversity



C40 is committed to supplier diversity and inclusive procurement through promoting equity, diversity and inclusivity in our supplier

base. We believe that by procuring a diverse range of suppliers, we get a wider range of experiences and thoughts from suppliers and thus are best able to deliver to the whole range of our diverse cities and the contexts that they operate within.

We strongly encourage suppliers (individuals and corporations) that are diverse in terms of size, age, nationality, gender identity, sexual orientation, majority owned and controlled by a minority group, physical or mental ability, ethnicity and perspective to put forward a proposal to work with us.

Feel welcome to refer to <u>C40's Equity</u>, <u>Diversity and Inclusion Statement</u> as supplier diversity and inclusive procurement is one element of applying equity, diversity and inclusion to help the world limit global heating to 1.5°C and build healthy, equitable and resilient communities.

Contract

Please note this is a contract for professional services and not a grant opportunity. Individuals unable to accept contracts for professional services should not submit bids. The work will be completed on the <u>C40 Standard Services Contract</u>

These terms and conditions are accepted as drafted by the majority of our suppliers and we reserve the right to penalise your bid on the basis of non-acceptance of terms. If you do wish to include any requested amendments with your proposal, please do not mark up the document in tracked changes but provide a separate document for review setting out clearly your rationale for the change.

If C40 is unable to execute a contract with the winner of this competitive process, we reserve the right to award the contract to the second highest Potential Supplier.

Package B, contracted by IFC, has to follow the World Bank's General Terms and Conditions Consulting Services.

https://thedocs.worldbank.org/en/doc/f9fd931b1d771033773ea466e82ed5eb-018001 2023/original/WBG-Terms-and-Conditions-Consulting-Services-English-2023.pdf

Subcontracting

If the organisation submitting a proposal needs to subcontract any work to meet the requirements of the proposal, this must be clearly stated. All costs included in proposals must be all-inclusive of any outsourced or contracted work. Any proposals which call for outsourcing or contracting work must include a name and description of the organisations being contracted.

4. RfP and Project Timeline



RfP Timeline:

RFP Timeline	Due Date
Request for Proposals sent out	June 26, 2025
Questions submitted to C40	July 1, 2025
C40 responds to questions	July 8 , 2025
Deadline for receiving Offers	July 21 , 2025
Clarification of Offers	July 22-25, 2025
Evaluation of Proposal	July 22-25, 2025
Presentation on Proposal	August 4, 2025
Selection decision made	August 5, 2025
All Potential Suppliers notified of outcome	August 7, 2025

5. Proposal Evaluation Criteria

The Consultancy company, or consortium of companies, needs to demonstrate that they have necessary capacity from a technical standpoint as well as coordination expertise to manage each of the task listed in this TOR.

The Consultancy team shall at minimum include the following qualified experts:

- Proven experience in conducting market studies and commercial due diligence in the EV Charging sectors in the Target Countries for the Target Vehicle Categories, and in the US and either the UK and/or the European Union.
- Detailed knowledge of the various businesses in the charging infrastructure value chain in the Target Countries and in the US, China and European markets and how they have performed over time.
- Knowledge of the Target Countries, US, and EU EV markets and regulatory environments and the players in these markets.
- Team must include members based in US or western EU countries who have directly worked on similar projects in those countries, in addition to team members who are based in two or several Target Countries (minimally one Latin America and one in India) and have similar experience.

 Project leader should have at least 15 years of consulting experience with over 10 years in the e-mobility space, including leading projects related to CPO business assessments. The project leader is required to participate in all meetings with C40 and IFC.



Proposals will be evaluated against the following criteria

Evaluation Criteria	Weighting
TechnicalApproach&Methodology:Clarity, feasibility,andappropriatenessoftheproposedmethodologyfordeliveringtheobjectivesofbothPackage A and BB	20%
Relevant Experience: Demonstrated experience in EV infrastructure, urban freight, public-private business models, and market assessments in similar geographies.	30%
Understanding of Regional Context: Insight into local challenges, stakeholders, and policy environments in India, Brazil, Mexico and Colombia.	15%
Value for Money: Overall cost-effectiveness, clarity of cost breakdown, and efficient use of budget across both packages.	10%
Project Management & Timeline Feasibility: Ability to manage the dual-package contract structure and deliver work on schedule.	15%
Equity, Diversity, and Inclusion: C40 is looking to appoint an organization that shares our values and is grounded in the context of the local community.	10%

6. Project Budget

The total budget available for this assignment is up to USD 125,000, to be divided into two separate contracts one of up to USD 75,000 and another of up to USD 50,000. These are referred to as Package A (C40-funded) and Package B

(IFC-funded). Potential suppliers must submit one integrated financial proposal, clearly separating the cost breakdown for each package. The financial proposal should outline all relevant budget items including personnel cost, travel (if applicable), and any additional expenses. Suppliers are expected to provide:



- A detailed line-item budget for each package (A and B),
- Clearly separated costs for personnel, and any research or analysis-related expenses
- All applicable taxes, VAT, and other charges
- And the total cost per package, not exceeding USD 75,000 and USD 50,000.

C40 is leading the RfP process, with proposals to be jointly reviewed by C40 and IFC. Following the evaluation, the selected bidder will enter into a contract for Package A with C40, based on the outcome of this RfP. In parallel, IFC will engage the selected bidder for Package B through a single-source selection process. (IFC will use a separate TOR including the deliverables for Package B only).

Package A (C40): Deliverables 1-4 for Brazil and Mexico. Package B (IFC): Deliverables 1-4 for Colombia and India.

Proposals must demonstrate value for money and align the scope of each package with its respective budget.

All proposals must include proposed costs to complete the tasks described in the project scope, including all VAT and taxes. Costs should be stated as one-time or non-recurring costs or monthly recurring costs. All costs incurred in connection with the submission of this RfP are non-refundable by C40.

7. C40 Policies

C40 expects third parties to able to abide by these C40 policies

- Non-Staff Code of Conduct Policy <u>here</u>
- Equity , Diversity and Inclusion Policy <u>here</u>

IFC Policies:

General terms and conditions consulting services <u>here</u>

8. Submissions

Each Potential Supplier must submit 1 copy of their proposal to the email address below by **July 21, 2025** at 17 pm EST:

- 1. Delia Nickson, Administration Officer Zero Emission Freight <u>dnickson@c40.org</u>
- 2. Bianca Macedo, Senior Manager Clean Transport Finance in Climate Finance <u>bmacedo@c40.org</u>

- 3. Kartik Gopal, Electric Mobility Expert IFC kgopal@ifc.org
- 4. Diana Ayoub, Investment Analyst IFC <u>dayoub@ifc.org</u>

Any pre-bid questions should be submitted to the above emails by **July 1, 2025 at 17 pm EST.** Anonymised responses to questions will be provided <u>here</u> when the Q&A period closes.



Based on the submissions received, C40 reserves the right to promote the establishment of consortium relationships or request potential suppliers refine their submission after receipt.

Disclaimer

C40 will not accept any liability or be responsible for any costs incurred by Potential Suppliers in preparing a response for this RFP. Responses submitted will be accessible by all C40 staff and external evaluators (if any).

Neither the issue of the RFP, nor any of the information presented in it, should be regarded as a commitment or representation on the part of C40 (or any of its partners) to enter into a contractual arrangement. Nothing in this RFP should be interpreted as a commitment by C40 to award a contract to a Potential Supplier as a result of this procurement, nor to accept the lowest price or any tender.