



REQUEST FOR PROPOSAL (RfP)

'Healthy and efficient buildings'

Literature Review on Retrofit Multiple Benefits and
Review of Vulnerability Mapping Methods and Tools

C40 Climate Leadership Group, Inc.

**120 Park Avenue, 23rd Floor
New York, NY 10017
United States of America 18**

April 2022

1. C40 CITIES CLIMATE LEADERSHIP GROUP

The C40 Cities Climate Leadership Group 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.



C40's team of 200+ staff is headquartered in London, with offices in New York, Joburg, Singapore, Delhi, Rio de Janeiro, Copenhagen, Beijing and Paris, and individual staff based across 25+ different locations, with the Office of the Chair based in London.

The strategic direction of the organisation is determined by an elected Steering Committee of C40 mayors which is chaired by the Mayor of London, Sadiq Khan. 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.

C40 positions cities as a leading force for climate action around the world. We define and amplify their call to national governments for greater support and autonomy in creating a sustainable future. Working across multiple sectors and initiative areas, C40 convenes networks of cities providing a suite of services in support of their efforts, including direct technical assistance; facilitating peer-to-peer exchange; and research, knowledge management and communications.

As a climate organisation of the world's greatest cities, C40 supports its members to move on to a low carbon development pathway, adapt to climate change, curb GHG emissions, and engage in partnerships among themselves and with global organisations, national governments, the private sector and civil society.

To learn more about the work of C40 and our cities, please visit [our website](#), or follow us on [Twitter](#), [Instagram](#), [Facebook](#) and [LinkedIn](#).

2. BUILDING RETROFITS BACKGROUND

The building sector is at the center of socioenvironmental agendas and development debate as buildings operation currently absorbs nearly 55% of global electricity, and buildings operations and construction combined consume one-third of global final energy and respond to around 15% of direct greenhouse gases (GHG) emissions (38% of total global energy-related CO₂ emissions). This percentual is on an upward trend considering that the energy-related emissions from buildings have risen in recent years.

It is also notable the impact that buildings' structural, envelope and appliance conditions have on human health and well-being. Whether living, working, studying, or seeking to meet care and consumption needs, people spend most of their time inside buildings. Thus, indoor air quality, temperature, lighting, moisture, and noise affect human physical and mental health, as well as the capacity for concentration, rest, and interaction. In addition, the increasing cost of energy is a factor of strain and stress for those who experience energy poverty and cannot afford the right building performance conditions

Building retrofitting means changing its systems, conditions, or/and structure after the building's construction and occupation, resulting in increased building performance and improved amenities for occupants. Retrofit investments are crucial for GHG emission reductions, strategical for energy and cost savings, and needed for improving health and quality of life in cities across the globe, especially considering that existing buildings comprise the largest segment of the built environment. Improving [indoor environmental quality](#), decreasing moisture penetration, and reducing mold retrofit actions result in improved occupant health and [productivity](#). At the same time, they can be designed to enhance buildings' [accessibility, safety, and security](#).

On the economic side, by reducing energy consumption and the cost of heating, cooling, and lighting, energy conservation retrofits lower energy expenses, as well as reduce energy poverty. Moreover, as buildings become less costly to operate, they increase in value, last longer, while contributing to a better, healthier, more comfortable environment for people in which to live and work.

According to the International Energy Agency (IEA), one in five buildings worldwide needs to be retrofitted to be zero carbon by 2030. A combination of retrofit actions is required for that, from improving the building fabric to reducing the need for heating and cooling to changing the buildings' services to carbon-free systems (for heating, cooling, ventilation, hot water, electricity).

Nevertheless, cities'-built environment is not yet on this path. For instance, in European Union, deep retrofits that reduce energy consumption by at least 60% are carried out in only 0.2% of the building stock per year.



Investing in building retrofits shows to be even more urgent in the context of the recovery from the COVID-19 crisis. The [C40 Global Mayors COVID-19 Recovery Task Force](#) released research pointing out that if COVID stimulus funds are driven to green solutions they would halt the climate crisis and deliver much faster economic recovery as better buildings tackle many of the problems facing cities: cutting emissions, saving costs, increasing buildings' resilience in face of climate change-induced extreme weather, and improving quality of life for residents. In addition, large-scale programs of buildings retrofit have huge potential to create good and secure jobs.

Numerous reports have highlighted the potential for energy efficiency to deliver substantial local growth and green jobs. The International Energy Agency (IEA) estimates that between 9–30 jobs in manufacturing and construction would be created for every million dollars invested in retrofits or efficiency measures in new builds.

If the central governments have an important role in prioritizing retrofits investment anchored on national strategies and policies, as well as driving international and national resources to the agenda, they are not able to solve the retrofitting gap alone. To reach the most in need infrastructure and populations and to achieve effective and sustainable results, top-down and bottom-up approaches have to be combined for planning, implementing, and monitoring retrofit programs.

Local authorities are well-placed to lead retrofit actions due to their knowledge of the local housing stock and socioeconomic dynamics, being able to establish priorities and embedded strategies. They are in a good position to broker and facilitate dialogues between the industry and homeowners, taking into consideration the climate and energy pledges and policies. This is extremely relevant for coordinating actions and integrating different knowledge fields toward a comprehensive, holistic, and collaborative approach at the city level, overcoming the current fragmentation of the Repair, Maintenance, and Improvement (RMI) into disciplines and technologies.

In this context, it is crucial to disseminate the knowledge available on retrofit actions, provide customized and applicable data for local authorities to design their programs and prioritize investments and promote holistic approaches, which assume buildings as systems with multiple and interconnected functionalities.

3. ABOUT THE 'HEALTHY AND EFFICIENT BUILDINGS' PROJECT

C40 and VELUX have partnered to design and implement the 'Healthy and efficient buildings', a two-year project aiming to provide a detailed local proof of concept and approach for investing in municipal buildings retrofits. That will be reached by supporting five C40 cities to identify actions that increase the sustainability of buildings and the health of those that occupy or use them. The tailored support to the cities embraces three main components: (i) produce evidence of the health benefits and greenhouse gas emissions reduction potential of investing in municipal building retrofits with a focus on indoor comfort parameters like daylight fresh air, thermal comfort, and noise; (ii) help cities build political momentum for ambitious retrofit strategies including health benefits; and (iii) provide concrete recommendations to cities on



how to design policies that both deliver health benefits for inhabitants and reduce greenhouse gas emissions.

Regarding the municipal buildings in focus, at least three categories will be covered: schools, social housing, public buildings (i.e., offices). Among the five cities, there will be different climate patterns, including both predominantly cold and hot, dry and humid climate conditions.

Based on the in-depth support of five cities, the project will also contribute to setting a global agenda for the importance of investing in healthy buildings by scaling results from the city-specific analysis to estimate the potential of investing in healthy buildings in cities across the world.

The project has as main action lines:

- Knowledge development: developing city-driven knowledge and city-specific strategy and action plan for the delivery of sustainable and healthy building retrofits to accelerate retrofits and achieve maximum co-benefits.
- Vulnerability mapping: carrying out a vulnerability mapping – considering environmental, economic, and social criteria - to assess the municipal buildings that pose the greatest risk to the health of the occupants, based on indoor comfort parameters.
- Assessment of health-benefits tool: producing assessments of the health, economic, and carbon reduction benefits of retrofitting a set of municipal buildings, using the C40's multiple benefits of retrofits toolkit, which will be reviewed and expanded within this project.
- Data collection support: working with cities to support data collection, understanding of data challenges and strategies to overcome them.
- Case studies: consolidating the results into a strong case for action for each city that provides the rationale and evidence base for the city to target retrofitting measures including indoor comfort parameters to a set of municipal buildings, delivering health and economic benefits to those most in need.
- Dissemination of project results: undertaking activities to raise awareness and accelerate health- benefits of retrofits in cities globally, as sharing the cases' results at webinars, seminars, and conferences attended by governments, academia, and specialists in the field.

4. DETAILS OF THIS REQUEST FOR PROPOSAL (RFP)

OBJECTIVES

This RFP aims to support two C40 objectives under the Healthy and Efficient Buildings project:

- 1. Expand the C40 knowledge library of resources** connecting **building energy efficient retrofits** and their **impacts on health, well-being and other co-benefits** of occupants.

For that, the consultant will undertake a focused literature review of academic studies and grey literature on building retrofit and interview specialists in the field in order to provide evidence on the connections between deep building retrofit actions and multiple sustainability and health benefits. This literature review should include different types of buildings (schools, social housing, public buildings, etc.), different climate patterns (hot and cold, dry and wet weathers) and urban areas (with diverse density, in central and peripheral areas), as the benefits from retrofit actions, as well as the social groups benefited, vary according to those.

2. **Provide an overview of existing methods and tools** that cities and local governments can use to **map the vulnerability of buildings and social groups** using city facilities.

To support this objective, the consultant will provide an outlook of existing reports, academic articles and methods and tools aimed at discussing and supporting the vulnerability mapping of buildings and social groups using city facilities. The review of secondary sources should be complemented by consulting specialists in the field of built environment and vulnerability mapping.

To achieve these two objectives, the reviews should cover references produced in various regions (both in Global North and Global South). The key geographic areas for the project are: Europe, North America, Latin America and Africa and the consultant should provide inputs based on literature analyzing these regions.

The literature reviews' results will inform the following C40 project components: (i) the expansion of the Multiple Benefits of Deep Retrofits tool, aimed at diversifying the weather patterns, types of buildings and actions covered; (ii) definition and prioritization of data to be collected with the five case study cities; and (iii) the narratives to be built and communicated based on the deep retrofit benefits analysis for the five cities.

4.1 DELIVERABLES:

The selected consultant should deliver two asset categories as completion of this RFP:

Deliverable 1: A detailed literature review on the topic of deep retrofit actions and their multiple benefits (environmental, health and economic benefits). This review will inform the review/expansion of the C40's multiple benefits of retrofits tool, as well as the scoping of cities data collection and case studies; and

Deliverable 2: A detailed review of references and resources of existing methods and tools that can be applied to map the vulnerability of city-built environment. This research will serve as a starting point for developing a common methodology to prioritize the buildings (schools, social housing, public buildings, etc.), within the project's 5 case cities, for which the potential benefits of deep retrofitting will be assessed in the following phases of the project.

Please see below a further description of each of the two expected deliverables.

4.1.1 Deliverable 1: Detailed literature review on buildings retrofit

The literature review has two main components: (i) **mapping out and describing the variety of retrofit actions and associated benefits**; and (ii) **identifying and compiling qualitative and quantitative connectors between actions and resulting environmental, health and economic benefits**.

Connectors are logical relations, chains of causes and effects, and quantitative equations supported by cases and experiments reported in the literature of buildings retrofit and related fields. The benefits from retrofit actions refer to outcomes and impacts from specific changes in the building envelope, building structure and/or other building systems – considering their technology, material and/or operation -, or from a set of combined changes taken all together in a portfolio of buildings or through an entire city-wide programme. For more information on the multiple benefits of deep retrofits, see the [report](#) that accompanies the buildings retrofit toolkit issued by C40, Burohappold Engineering and Rockwool.

Through a literature review on deep building retrofit the consultant will investigate how deep retrofit actions implemented in different types of buildings (schools, social housing, public buildings, etc.), climate patterns (hot and cold, dry and humid weathers) and urban areas (with diverse density, in central and peripheral areas), result in sustainability and health benefits for the social groups using the infrastructure (such as increase in productivity and well-being), as well as for public health (for instance, reduced asthma emergency room visits) and for climate change agenda (slashed GHG emissions and improved resilience to extreme events).

C40 is interested in the following categories of benefits of building retrofits, considering their environmental, health and economic aspects: **indoor air quality improvement, noise reduction, thermal comfort improvement, daylight optimization, energy costs reduction; leading to human productivity or performance increase, greenhouse gases (GHG) emissions reduction, and physical and mental health improvement**. It is worth highlighting that those categories should be covered for the different types of buildings (i.e., schools, social housing, public buildings), climate patterns (marked by cold, hot and both cold and hot seasons, dry and wet weathers), urban areas (central, peripheral, with high and low densities), and geographic contexts (investigating how they result from deep retrofit actions in both Global North and Global South regions).

The literature review delivered through this RFP will build upon the references that C40 has already mapped in two projects, The Multiple Health Benefits of Retrofits, and Heat Resilient Cities, as well as on a preliminary extensive mapping of retrofit actions and their benefits carried out by the project's team. These materials will be shared with the selected consultant. In this way, the work to be developed will add to C40's existing evidence base of deep retrofit buildings concepts, actions and environmental, health and economic benefits.

STRUCTURE of Deliverable 1

The detailed literature review on the topic of deep retrofit actions and their multiple benefits (environmental, health and economic benefits) could be organized in two components, exploring the following questions:

Deep retrofitting overview:

- Which are the main deep retrofit actions for upgrading building efficiency and health explored in the literature and pointed out by specialists of the field? This will build upon the existing retrofit actions mapping that was produced by the project's team; the list of actions shall be reviewed and complemented based on the literature review and consultations to specialists.
- How are these main actions categorized in the literature (per their features, type of benefit generated, components of the building that they apply to, etc.)?
- What benefits from deep building retrofits are mostly identified and discussed in the covered literature?
- How do the highlighted actions, categories and benefits vary in the literature produced in different regions?

Deep retrofit actions and benefits:

- Which are the environmental, health and economic benefits related to each retrofit action based on theoretical and empirical studies? This will consider retrofit actions and related benefits mapped by the project's team prior to the literature review, and add others to the analysis.
- What are the drivers, enablers and barriers for implementing the deep retrofit actions prioritized in the project? What is the estimated investment required for their implementation and the maintenance cost?
- How does each retrofit action relate to different types of building, climate patterns and geographic contexts?
- How do such benefits connect to the action? What are the qualitative elements and quantitative functions/multipliers presented in the case studies, articles and technical reports?

C40 suggests that the consultant work on the following seven steps to carry out the literature review:

1. Revisiting the literature review done in previous related C40 projects and the initial preparatory work done in the current project (mapping of retrofit actions and their benefits, preliminary list of references and identification of key stakeholders)
2. Identifying gaps/additional information needed to inform the research questions listed above
3. Mapping and prioritizing additional references
4. Reviewing the priority references and compiling the data
5. Identifying remaining gaps concerning the research questions
6. Consulting specialists to gather their experiences and recommendation on additional references
7. Complementing the data compilation

Throughout the literature review there will be check point meetings with C40 staff to present and discuss the progress, as well to realign the following steps. The check points will be in steps 3, 5 and 7.

The data from literature review will be used internally, by C40 and project partners. The consultant will not be required to present it to other audiences, but she/he should be available for punctual clarifications during three months after finishing the work.

OUTPUTS of Deliverable 1

At the completion of the literature review, two outputs are expected:

- 1) An **Excel spreadsheet** containing:
 - A tab presenting deep retrofit main concepts and definitions.
 - A tab with a matrix compiling implementation enablers, barriers and investment estimation, maintenance costs per retrofit action and per region/country, when applicable.
 - A tab for each main deep retrofit action covered in the review with a matrix crossing geographic regions and types of buildings, climate patterns and urban areas and presenting the environmental, health and economic benefits resulting from the action, qualitative and quantitative connectors between the action and its benefits, and groups benefited.
 - A final tab with the sources of all data organised between academic publications and grey literature, and indicating if they are peer-reviewed publications, making it possible to track and revisit them if necessary.

- 2) A **Word document** explaining the qualitative elements and quantitative functions/multipliers connecting the retrofit actions covered to their environmental, health and economic benefits. The document should have one section per action unveiling and detailing the connectors of the action to each of its benefits. It is also expected that each sector comments on the limitations and assumptions taken to establish the connections between action and benefits, letting clear which ones are strongly scientific-based and which are not.

4.1.2 Deliverable 2: Review of references, methods and tools on building vulnerability mapping

By reviewing and compiling concepts, references and methods that can be applied to map the vulnerability of a variety of types of buildings (schools, social housing, public buildings, etc.), in different climate patterns (hot and cold, dry and humid weathers) and urban areas (with diverse density, in central and peripheral areas), as well as of the social groups using this built infrastructure, the selected consultant should **describe each method/tool and depict how complementary, diverse, or overlapping are they are.**

Several definitions of vulnerability have been formulated over the last decades. From the perspective of natural disasters, UNDRR formulates vulnerability as the conditions determined by physical, social, economic, and environmental factors or processes which increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards. In the WGII TAR Glossary, vulnerability is defined as a “function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity, and its adaptive capacity.” Vulnerability could be simply understood as the propensity or predisposition to be adversely affected by any hazard unfolding from environmental, social, political and economic change. Nevertheless, it is crucial to consider that ‘propensity’ or ‘predisposition’ results from conditions, situations or intrinsic features of a system (community, infrastructure) influencing its capacity to cope and adapt in face of a change. In this way, vulnerability encompasses the sensitivity or susceptibility to harm, which are frequently associated to societal risks, particularly in low-income economies.

Local authorities, public planners and decision makers need straightforward methods and tools to perform vulnerability assessments to prioritise urban areas and infrastructures for investments and actions aimed at reducing vulnerability. These assessments promote a broader and more profound understanding on the vulnerability factors, meaning the social, economic and environmental characteristics and dynamics, in place in certain neighbourhood or community making them more or less susceptible to a hazard. Hence, mapping a building vulnerability requires, first of all, to identify the hazards they are exposed to (for instance, air pollution, noise, climate events), and then to assess the infrastructural, technological and socioeconomic factors affecting how the building’s components and users are impacted by the hazards in focus.

C40 is specially interested in **references, methods and tools related to the vulnerability of social groups and individuals in schools, social housing and public buildings to air pollution, unappropriated levels of temperature, poor lighting, moisture, noise and energy poverty**. Based on the review, the selected consultant should provide a **panorama of methods and tools clearly communicating their applicability, coverage, pros and cons, step-by-step and data needed to implement each one of them, as well as how they relate to each other** (complementarities, differences and where they overlap).

As the project involves cities in different regions, it is fundamental that the review cover references, methods and tools produced both in the Global North and Global South. In addition, at least one specialist in the North and one in the South should be consulted once a first review of secondary resources is done.

The deliverables produced will serve as basis for C40 to discuss the existing methods and tools with the 5 cities participating in the project and elaborate a method to be applied for mapping the vulnerability and identify the buildings in most need of retrofitting in each city.

STRUCTURE of Deliverable 2

The vulnerability mapping review should comprise two components, exploring the following questions:

1. Overview of buildings vulnerability mapping concepts, methods and tools
 - What are the main definitions of vulnerability mapping adopted in main references, methods and tools focusing on city-built environment?
 - Which are the central concepts adopted and discussed in references/resources for building vulnerability mapping?
 - Regarding the methods and tools coverage and application, how do they complement, diverge and overlap each other?
 - What are the advantages and limitations of each method and tool assessed?

2. Methods and tools application
 - What are types of buildings, regions/geographies and urban areas targeted by each method/tool?
 - Could each method/tool be applied to assess the vulnerability of different social groups and individuals using the buildings?
 - Which of the methods/tools can be applied to map the vulnerability of buildings' users in face of each of the following hazards: air pollution, unappropriated levels of temperature, poor lighting, moisture, noise and energy poverty?
 - What is the step-by-step, resources and **data required** to implement each of the main methods/tools reviewed?
 - Are there examples/cases of the methods/tools' application? What are the main lessons learned and attention points from these cases?

The steps to be followed for the review of vulnerability mapping references, methods and tools are:

1. Mapping out the main references (grey literature, academic publications and other resources) and compiling the types of buildings, regions/geographies, urban areas and hazards they cover.
2. Prioritising, with C40, the references to be studied.
3. Reviewing the priority references and compiling the data.
4. Designing an analytical matrix comparing the methods and tools assessed, highlighting the different amounts and types of data that each one requires to be undertaken and their interrelations (overlaps, divergences and complementarities).
5. Consulting at least two specialists, based in the Global North and Global South.
6. Identifying remaining gaps concerning types of buildings, urban areas and regions/geographies.
7. Reviewing additional references, if available to cover the gaps.
8. Complementing the data compilation and designing a matrix with methods and tools applicability, step-by-step and resources and data needed for their implementation.
9. Discussing the findings with C40, reviewing/complementing the matrixes, if needed, and producing the final deliverables.

OUTPUTS of Deliverable 2

At the completion of the vulnerability mapping review, two outputs are expected:

- 1) An Excel spreadsheet containing:
 - A tab presenting vulnerability concepts discussed and types of buildings, urban areas, regions/geographies and hazards covered in each reference.
 - A tab with a matrix compiling the complementarities, differences and overlaps among methods and tools analysed.
 - A tab with a matrix organised by method/tool presenting the step-by-step, resources and data for its implementation, as well as examples, lessons learned and points of attention from previous applications.
 - A final tab with the sources reviewed organised by academic publications, grey literature and other resources, making possible to track and revisit them if necessary.

- 2) A Word document summarising the main methods and tools reviewed, the advantages and limitations of each one, their applicability, step-by-step and resources/data needed for their implementation. The document should have one section of 2-3 pages per method/tool and bring a diagram representing all methods/tools covered and their interrelations.

4.2 ADDITIONAL GUIDELINES

Language: although the review of the literature and vulnerability mapping methods and tools should cover relevant references and resources produced in different regions and languages, all RfP deliverables should be submitted in English.

Review and approval: intermediary and final deliverables will be reviewed by C40 staff. Reviews will occur at key points in the project, anticipated to be during mid-way/early outline draft review and final deliverables review.

Proposals covering both RfP components are desired, but bidders can also present a proposal for a specific component.

4.3 PROJECT BUDGET

The total budget available is USD 20,000 (twenty thousand USD) divided into the two components of this RfP as following:

Component	USD
Literature review of deep building retrofit actions and benefits	10,000
Review of resources, methods and tools for building vulnerability mapping	10,000
Total project budget	20, 000



Please provide a breakdown of costings, including day rates. Note that all costs (including taxes, etc.) should fall within this amount.

4.4 PROJECT TIMELINE

The two components of this RfP should be developed in parallel, as proposed below:

Deliverable 1 - Literature review of deep building retrofit actions and benefits

Activity and deliverables	Date
List of references to be reviewed and outline of the Excel spreadsheet for data compilation	June 10 th , 2022
1 st version of the complete Excel spreadsheet	July 29 th , 2022
2 nd version of the Excel spreadsheet with additional data	August 12 th , 2022
Word document presenting actions-benefits connectors	August 31 st , 2022

Deliverable 2 - Review of resources, methods and tools for building vulnerability mapping

Activity and deliverables	Date
List of resources and references to be reviewed and outline of the Excel spreadsheet for data compilation	June 10 th , 2022
1 st version of the complete Excel spreadsheet	July 29 th , 2022
2 nd version of the Excel spreadsheet with additional data	August 12 th , 2022
Word document presenting main methods and tools for buildings vulnerability mapping	August 31 st , 2022

4.5 BIDDER GUIDANCE

Bidders should provide the following items as part of their proposal for consideration:

- CVs of the researchers involved highlighting research experience and a brief description of expertise in the building retrofit field (for component 1) and vulnerability mapping/assessment of urban built environment (for component 2) - no more than 2 pages each CV.
- Brief description of the methodological approach proposed for each component (literature review of deep building retrofit actions and benefits and review of resources, methods and tools for building vulnerability mapping) or for the specific component targeted by the proposal.
- Bidders should review the attached C40 Service Providers Agreement (SPA), please either confirm acceptance of the agreement or list out any proposed revisions in the email responding to the RfP.



4.6 BIDDER EVALUATION CRITERIA

- C40 will evaluate proposals based on the following criteria:
- Relevant research experience and expertise in the field of building retrofit and/or vulnerability mapping/assessment of urban built environment.
- Consistency of the methodological approach proposed

Proposals will be evaluated against the following criteria (example table below):

Expertise and experience of the bidder across relevant topics	40%
Interpretation of the work and proposal for delivery approach	20%
Cost effectiveness of the proposal	20%
Project management and ability to deliver products on time	20%

Note that all costs should be included (overheads, incidentals, tax, etc.).

4.7 RFP TIMELINE

RFP response deadline	May 2 nd , 2022
Tender evaluation	May 16 th , 2022
Confirmation with selected consultant team	May 20 th 2022
Project Kick off	May 27 th , 2022
Interim deliverables I deadline	July 29 th , 2022
Interim deliverables II deadline	August 12 th , 2022
Final deliverables deadline	August 31 st , 2022

Each bidder must submit 1 electronic copy of their proposal to the email address below by May 2nd, 2022, by midnight (GMT).

CONTACT

All questions related to this RFP should be directed by email to:
Mariana Nicolletti, C40 Senior Research Manager: mnicolletti@c40.org



APPENDIX: C40 Service Providers Agreement (SPA)

SERVICE PROVIDER AGREEMENT

This SERVICE PROVIDER AGREEMENT (this “Agreement”), is dated as of [redacted] (the “Effective Date”), by and between C40 CITIES CLIMATE LEADERSHIP GROUP, INC., a Delaware non-profit corporation (“C40”), and [redacted] having its principal place of business at [redacted] (“Service Provider”).

WHEREAS, in furtherance of its charitable and educational mission, C40 desires to engage the services of Service Provider, and Service Provider desires to render such services to C40, in accordance with the terms and conditions set forth below.

NOW THEREFORE, in consideration of the covenants and agreements set forth in this Agreement, and for other consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Services. During the Term (as defined below), Service Provider will provide services and/or advice to C40 as set forth in one or more Statements of Work (the “Services”), which shall be signed by both parties in the form attached as Exhibit A. The parties may mutually agree from time to time on additional Statement(s) of Work providing for additional Services to be performed pursuant to this Agreement. In the event of any conflict between the terms of this Agreement and any Statement of Work, the terms of this Agreement shall control and govern.

2. Term. The term of this Agreement (“Term”) will commence on the Effective Date and will terminate 60 days following completion of the Services, unless extended by C40 in writing or earlier terminated in accordance with this Agreement.

3. Fees. Service Provider will invoice C40 for the Services for each of the payments due. Each invoice will be payable to Service Provider within thirty (30) days after its receipt by C40. Invoices will be addressed to C40 Cities Climate Leadership Group, Inc., 120 Park Avenue, Floor 23, New York, NY 10017 USA with attention to C40 Finance and be delivered via electronic mail to: finance@c40.org; *provided*, that if it is impracticable for Service Provider to deliver invoices via electronic mail, invoices may be mailed by post to the following address: C40 Cities Climate Leadership Group, Inc., 120 Park Avenue, Floor 23, New York, NY 10017 USA with attention to C40 Finance. [C40 will reimburse reasonable and necessary pre-approved out-of-pocket expenses incurred by the Service Provider in performing the Services. Service Provider will provide documentation supporting any expenses with the applicable invoice].¹

4. Independent Contractor. The Services will be performed by Service Provider as an independent contractor, and neither Service Provider nor any of its directors, officers, employees, volunteers, agents, or contractors (as applicable) (collectively, “Personnel”) will become, by virtue of this Agreement, an employee or agent of C40. Service Provider Personnel will have no right or authority to assume or to create any obligation or responsibility, express or implied, in the name or on behalf of C40. To the extent applicable, Service Provider will assume all responsibility for unemployment compensation, workers’ compensation, retirement plans, and other benefits, as well as all obligations to pay national, state, local and social security/insurance taxes on any amounts paid in connection with this Agreement. Service Provider acknowledges that C40 has no obligation to Service Provider or any of its Personnel in this regard, and Service Provider agrees to indemnify and hold harmless C40 with respect to any claims or liability regarding such benefits, taxes, and related matters.

¹Include if C40 will reimburse expenses.

5. Performance of Services. The Services will be performed by Service Provider or by Personnel under the control of Service Provider using best efforts. [Service Provider or its Personnel may be subject to background searches as may be required by C40]².

6. Confidentiality.

(A) Confidential Information. During the course of performing the Services, each party may have access to confidential or proprietary information (in print, electronic, or other format) that is not otherwise known to the general public and that is owned by or licensed to a party or its affiliates (or third parties to whom a party owes a duty of confidentiality), which is marked confidential or should reasonably have been known to be confidential (“Confidential Information”). Each party agrees to: (i) keep the other party’s Confidential Information strictly confidential; (ii) use the other party’s Confidential Information solely for the purpose of fulfilling its obligations under this Agreement; (iii) disclose the other party’s Confidential Information only to its Personnel who have an absolute need to know such Confidential Information and who are informed of and agree to be bound by the confidentiality obligations set forth in this Agreement. A party will be liable for any breach of confidentiality obligations by any person or entity to which the party discloses the Confidential Information. Each party will use commercially reasonable efforts to assist the other party in identifying and preventing any unauthorized access to, use or disclosure of its Confidential Information and will immediately notify the other party in writing if it becomes aware of any unauthorized access to, use or disclosure of the other party’s Confidential Information.

(B) Exclusions. Confidential Information does not include information to the extent, as shown by written evidence, that it: (i) is or becomes generally available to the public through no act or failure to act on the part of the receiving party or its Personnel; (ii) was rightfully within the receiving party’s possession, free of any confidentiality obligations, before being furnished by or on behalf of the disclosing party; (iii) becomes available to the receiving party on a non-confidential basis without breach of this Agreement; (iv) is information that the receiving party independently developed without breach of any obligation of confidentiality to the disclosing party; or (v) is released from confidential treatment by the disclosing party’s written consent.

(C) Return of Confidential Information. If requested by the disclosing party upon expiration or termination of this Agreement or at any other time, the receiving party will return or destroy, and provide an officer’s certificate that it has returned or destroyed, all materials and documents (in any format) containing Confidential Information.

(D) Injunctive Relief. Each receiving party agrees and acknowledges that a breach or threatened breach of its confidentiality obligations will cause irreparable injury and that, in addition to any other remedies that may be available at law, in equity or otherwise, the disclosing party will be entitled to seek injunctive relief against the receiving party’s threatened or continued breach of its confidentiality obligations.

7. Work Product.

(A) Works Made for Hire; Assignment. C40 has specially ordered and commissioned all material that Service Provider creates under this Agreement (the “Work Product”) as “works made for hire” under United States copyright laws. Accordingly, subject to the limitations of Paragraphs (B) and (C) of this Section, C40 is the author of the Work Product for all purposes and will forever and exclusively own all worldwide right, title, and interest in the Work Product, including copyrights and all other proprietary rights. If the Work Product, or any part of the Work Product, is determined not to be a work made for hire, then, as of the Effective Date and without further consideration, Service Provider hereby irrevocably assigns to C40 all of its right, title, and interest in the Work Product, including copyrights and other proprietary rights together with all extensions of such copyrights, arising under the laws of the United States or of any other country or under any treaty, convention, or proclamation. Service Provider waives, to the extent they can be waived under any applicable law, all rights known as “moral rights” arising in the Work Product under any present or future law. Service Provider agrees to promptly execute and deliver to C40 any instruments of transfer or other documents C40 requests to confirm and enforce C40’s absolute ownership of any

²Include if applicable (e.g., if SP will be working out of C40/Bloomberg office).

and all rights in the Work Product. Service Provider irrevocably appoints C40 as its true and lawful attorney-in-fact to execute and deliver any such instruments or documents if Service Provider fails or refuses to do so.

(B) Pre-Existing Works. If Service Provider incorporates, in whole or in part, any portion of pre-existing works owned by Service Provider (“Pre-Existing Works”) into any Work Product, Service Provider will identify in writing the Pre-Existing Works. Service Provider hereby grants C40 a worldwide, irrevocable, fully-paid up, and royalty-free license (with the right to sublicense the right) to reproduce, distribute, create derivative works of, publicly display, and perform the Pre-Existing Works as part of the Work Product in any medium now known or later developed in furtherance of C40’s charitable and educational mission.

(C) Third-Party Materials. If Service Provider wishes to incorporate any elements owned by third parties (“Third-Party Materials”) into any Work Product, Service Provider will obtain C40’s prior written consent and obtain in writing, on C40’s behalf, a worldwide, irrevocable, fully-paid up, and royalty-free license (with the right to sublicense the right) to reproduce, distribute, create derivative works of, publicly display, and perform the Third-Party Materials as part of the Work Product in any medium now know or later developed. Service Provider will provide C40 with a copy of all licenses to Third-Party Materials.

(D) Residual Knowledge; Other Engagements. The parties acknowledge and agree that this Agreement is not intended to restrict Service Provider from continuing to use any general ideas, concepts, know how, methodologies, processes, or techniques that Service Provider has acquired and developed as part of its expertise in consulting under this Agreement or to prevent Service Provider from pursuing other business engagements, provided that such use and engagements by Service Provider do not involve C40’s intellectual property or Confidential Information or the Work Product created under this Agreement.

8. [Trademarks. C40 hereby grants Service Provider permission to display C40’s trademarks, C40, C40 CITIES, the C40 logo, (“C40 Trademarks”) for the purposes of the Services. Service Provider may use the C40 Trademarks for other purposes only with C40’s prior written consent. For the avoidance of doubt, Service Provider will not refer to C40 in any Service Provider marketing, advertising, press releases or public statements without C40’s prior written consent. If any use of the C40 Trademarks by Service Provider is unacceptable to C40, C40 has the right to require modification by Service Provider and may at any time and upon notice, require Service Provider cease use of any C40 Trademarks.]³

9. Representations, Warranties and Covenants.

(A) Service Provider represents, warrants and covenants that:

(i) Service Provider has the full right and authority to enter into this Agreement, to grant all rights granted, and has the requisite expertise to perform all Services and will diligently and timely provide the Services in a professional and workmanlike manner in accordance with the highest industry standards;

(ii) by entering into this Agreement, Service Provider will not violate the terms of any pre-existing agreement that Service Provider may have with another party;

(iii) the Work Product will be original except to the extent any Pre-Existing Works or Third-Party Materials are incorporated in the Work Product;

(iv) the Work Product (and any Pre-Existing Works or Third-Party Materials incorporated in the Work Product) will not infringe the copyright, trademark, patent, or other proprietary or other right of any person or violate any law;

(v) Service Provider will comply with all applicable local, city, state, federal and international laws, rules and regulations including, all environmental, safety and health and labor and employment

³Include if C40 needs to give SP trademark license to perform Services.

(including those addressing discrimination, harassment and retaliation) laws, rules and regulations, and will remain in compliance during the Term;

(vi) Service Provider will comply with all applicable affirmative action laws and regulations;

(vii) Service Provider has established adequate safety standards and protocols for its Personnel and will cause Personnel to follow such standards and protocols;

(viii) Service Provider will instruct its Personnel in any safety standards and protocols promulgated by C40, or the management of a facility occupied by C40, and its Personnel will follow such standards and protocols;

(ix) Service Provider has appropriate safeguarding policies, protocols and practices in place to ensure that it does no harm to beneficiaries of its services and its staff. This means having policies in place which reflect the safeguarding practices of C40 (the latest can be found here: <https://www.c40.org/contact>); and

(x) all Personnel are approved and authorized to work in the place they will be working under all applicable rules and regulations.

(B) At any time, C40 may request Service Provider to present copies of Service Provider's programs, policies and/or documentation as to any training provided by Service Provider to its Personnel.

10. Indemnity; Insurance.

(A) Indemnity. Service Provider will indemnify, protect, and hold harmless C40 and its affiliates, and their respective Personnel (collectively, "Indemnitees") against all liability, damages, judgments, costs, fines, penalties, interest and expenses (including reasonable legal and professional fees and similar disbursements incurred in any action or proceeding), to which the Indemnitees may be subject or suffer arising from, or in connection with: (i) a breach of this Agreement by Service Provider, (ii) a breach of any of Service Provider's representations, warranties, and covenants, (iii) the negligent or willful misconduct of Service Provider or its Personnel, in the performance of the Services, or (iv) any third-party claim resulting from or related to the Services, to the extent the liability or harm was not caused by C40.

(B) Service Provider covenants to maintain a workers' compensation insurance policy (with employer's liability coverage), umbrella liability policy, professional liability policy, automobile liability policy, if applicable, and commercial general liability policy with coverage limits that would be maintained by a prudent party in Service Provider's industry performing work similar to the Services. [Service Provider will cause C40 (with the following address: 120 Park Avenue, Floor 23, New York, NY 10017 USA and Attn: C40 Legal) (and any other party that C40 may reasonably request) to be named as an additional insured under the commercial general liability policy and, upon C40's request, will provide C40 with certificates evidencing such policies. Each such policy will have a waiver of any right of subrogation against C40, and will obligate the insurer to provide and pay the costs of defense of the additional insureds on a primary basis without regard to any other potentially applicable insurance available to the additional insureds.]⁴

11. Non-Disparagement and Non-Disclosure. Service Provider recognizes and agrees that as a result of its engagement by C40, it is assuming a position of confidence and trust and as such will not in any way defame, disparage, libel or slander C40 and/or its respective directors, officers, owner(s), affiliates, associates and related entities, and will not, during the Term or thereafter, contact, respond to any request from, or in any way discuss C40 and/or its respective directors, officers, owner(s), affiliates, associates or related entities with any news provider or

⁴ To be included only in the case of outsourcing services.

other media (print, television or otherwise). [Nothing in this provision is intended to affect the Service Provider's ability to give commentary in the academic context.]⁵

12. Limited Liability. C40's liability under this Agreement is limited to the fees earned by and payable to Service Provider pursuant to Section 3, and in no event will include consequential, special or indirect damages or claims for loss of profit or business. No individual director, officer, official, employee, volunteer, agent or affiliate of C40 will be personally liable under this Agreement, and no recourse can be held against any such party's assets by reason of a breach of this Agreement by C40 or otherwise.

13. Termination. C40 may terminate this Agreement upon 30 days' written notice to Service Provider. Following termination, C40's only obligation to Service Provider will be to pay Service Provider amounts due for Services satisfactorily rendered. Upon the termination, Service Provider will immediately deliver to C40 in understandable and organized form, all Work Product (including works-in-progress), and will, at no extra charge, be available to and cooperate with C40's designees in connection with the transition of the Services.

14. Anti-Corruption Laws. Service Provider hereby acknowledges that it is familiar with the terms and provisions of the United States Foreign Corrupt Practices Act of 1977, as amended (the "FCPA"), the UK Bribery Act, (the "Bribery Act") and all applicable international and local country anti-bribery and anti-corruption laws, rules, decrees, orders and regulations (the FCPA, Bribery Act and such applicable international and local country laws, decrees and regulations are individually and collectively referred to as "Anti-Corruption Laws") and the general and specific purposes of such Anti-Corruption Laws. The Service Provider further represents, on behalf of itself as well as its subsidiaries and affiliates, and their respective directors, officers, employees, and agents, that the Service Provider does and will comply in all respects with all applicable Anti-Corruption Laws.

15. Miscellaneous.

(A) Subcontracting. Service Provider may subcontract or delegate its obligations under this Agreement only with C40's prior written consent in each instance; if C40 approves any subcontractor, upon C40's request, Service Provider will promptly provide to C40 all information that C40 reasonably requests concerning the subcontractor. Service Provider is primarily responsible for all acts and omissions of subcontractor and for ensuring subcontractors comply with this Agreement.

(B) Prior Services; Survival. If Service Provider has provided any of the Services before the Effective Date, this Agreement would apply except as expressly stated otherwise. Any Sections that contemplate survival of termination or expiration of this Agreement will survive such termination or expiration, including the Sections "Representations, Warranties and Covenants," "Trademarks," "Limited Liability" and "Indemnity; Insurance".

(C) Notices. All notices under this Agreement must be in writing and be sent by electronic mail, by hand, by courier service, mailed by certified or registered mail (return receipt requested, postage prepaid) or by other method for which the sender has written proof of receipt to the address of a party below (or to another address as a party may designate by notice):

If to C40:

C40 Cities Climate Leadership Group, Inc.
120 Park Avenue, Floor 23
New York, NY 10017
USA
Attention: C40 Legal

⁵ Only include if service provider is an academic or scientific institution.

Email: legal@C40.org

If to Service Provider:

[insert information]

(D) Entire Agreement; Modifications. This Agreement: (i) contains the entire agreement of the parties and supersedes all other oral or written agreements regarding its subject matter; and (ii) may be modified only by a written amendment signed by both parties.

(E) Waiver. Any waiver must be in writing and signed by a party. A waiver in one instance will not be considered a continuing waiver or a waiver in another instance, whether similar or different. No failure or delay in exercising any right, power, or privilege will operate as a waiver, nor will any single or partial exercise of right, power, or privileged preclude any other or further exercise.

(F) Severability. If any provision of this Agreement is held to be unenforceable, the remaining provisions will continue in full force and effect and the invalid or unenforceable provision will be severed from this Agreement and replaced by a lawful and enforceable provision which, as far as possible, achieves the intent of the parties, provided that any modification or deletion of a provision should not significantly alter the benefits or burdens of either party under this Agreement.

(G) Successors and Assigns. This Agreement will be binding upon and inure to the benefit of the parties and their respective successors and permitted assigns.

(H) Assignment. Service Provider may not assign this Agreement without C40's prior written consent and any purported assignment in violation of this provision will be null and void. C40 will have the right to assign this Agreement at any time on notice to Service Provider.

(I) Headings; Including. The headings contained in this Agreement are for reference purposes only and will not affect in any way the meaning or interpretation of this Agreement. The term "including" is illustrative and means "including but not limited to."

(J) Cumulative Remedies. The rights and remedies under this Agreement are cumulative and are not exclusive of any rights and remedies that may be available to any party under applicable law, in equity, or otherwise.

(K) Governing Law; Governing Language; Venue. This Agreement is governed by and should be construed in accordance with the laws of New York applicable to agreements entered into and performed in New York. For all purposes, this English language version of this Agreement is the original, governing agreement and understanding of the parties; if any conflict arises between this English language version and any translation into another language, this English language version will govern and control. If the parties have any dispute under this Agreement, they will use good faith efforts to resolve the dispute through discussions of an executive officer from each party for a reasonable period. Any dispute arising under or related to this Agreement will be resolved exclusively in the applicable federal and state courts in the State and County of New York. Each party irrevocably submits to the exclusive jurisdiction of the foregoing courts and waives any objection to the venue of those courts based on an inconvenient forum or other reasons.

(L) Counterparts; Signatures. This Agreement may be executed in counterparts, each of which will be considered an original and all of which together will constitute one agreement. Signatures on this Agreement delivered by email, PDF, or facsimile will be considered valid and binding.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties to this Agreement have executed this Agreement as of the Effective Date.

C40 CITIES CLIMATE LEADERSHIP GROUP INC.

By: _____
Name: Juliette Carter
Title: Director of Corporate Services

{service provider name}

By: _____
Name: {authorized signer name}
Title: {title of authorized signer}

STATEMENT OF WORK

This Statement of Work is made subject to the Service Provider Agreement dated **{effective date}** by and between C40 CITIES CLIMATE LEADERSHIP GROUP INC., a Delaware non-profit corporation (“C40”), and **{service provider name}** (“Service Provider”).

1. Scope of Work

{a detailed explanation of services to be provided}

2. Term

{time frame of service with an end date}

3. Fees

{Service Provider’s pay rate; examples include: X amount per hour, X amount per month, X amount for service provided}

4. Payment Schedule

{how the Service Provider would like to be paid; examples include: quarterly payments, one time payment, monthly payment *note: C40 does not pay more than once per month}

5. C40 Staff Point of Contact:

{name}

{email}

C40 CITIES CLIMATE LEADERSHIP GROUP INC.

By: _____
Name: Juliette Carter
Title: Director of Corporate Services
Date:

{service provider name}

By: _____
Name: {authorized signer name}
Title: {title of authorized signer}
Date: