



**Request for Proposal**

*Climate Action Planning Database*

*10<sup>th</sup> March 2020*

# **1 Background**

## **1.1 About C40**

The C40 Cities Climate Leadership Group (C40) is a network of the world's megacities committed to addressing climate change. Acting both individually and collaboratively, C40 cities are having a meaningful global impact in reducing both greenhouse gas (GHG) emissions and climate risks. C40 brings together a unique set of assets and creates a shared sense of purpose. C40 offers cities an effective forum where they can collaborate, share knowledge and drive meaningful, measurable and sustainable action on climate change. 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.

## **1.2 Climate Action Planning Database**

C40 is developing an SQL database and website to improve the internal management of data and analytics. The database will provide a single source of truth for use in research and analysis, business reporting and monitoring and evaluation. It will improve the accessibility, integrity and security of C40's data and support advanced analytics.

## **2 Introduction**

C40 has developed a PostgreSQL database hosted on Amazon Web Services (AWS) for storing climate action data. The database has around 70 tables organised into 5 schema including city data, country data, technical parameters and reference tables. The database has a dimensional design, optimised for analytical queries, and is populated using Python Extract, Transform and Load (ETL) scripts.

C40 has also started to develop a Flask web-application for enabling non-technical users to extract data from the database and to view analytics. The site will be used by *up to* 300 staff. The website will consist of three main areas: a data tab, where datasets can be searched and accessed; an analytics tab, where live dashboards will be presented for key programmes; and a cities area, where users will be able to view data for specific cities.

The successful bidder will support C40 to finalise the Flask application to a high standard of design, functionality and security.

## **3 Objectives of request for proposal**

C40 is seeking consultancy services to help finalise a web application for sharing data and analytics within the organisation.

## **4 Deliverables**

The deliverables will be split into two phases. The aim of phase one will be to create a rough and ready site which can be deployed by the end of May 2020. The aim of phase two will be to add more advanced design and data visualization features to the site.

#### 4. Phase 1: A rough and ready web application

##### 4.1.1. Review of application structure and industrialization

<b>Activity</b>	The consultant will work with C40's Climate Analytics Manager to review and transform the Flask application. Activities will include developing a system for managing log-ins using C40 Gmail addresses, creating a token-based authentication system for the API, simplifying application routes, optimising database queries and making possible architecture changes to accommodate further implementations.
<b>Time estimated</b>	5 days
<b>Indicative timeline</b>	15 April 2020
<b>Output</b>	A fully functional Flask web-application

##### 4.1.2. User Experience and Design

<b>Activity</b>	The consultant will work with C40's Climate Analytics Manager to strengthen the design of the data portal. Activities will include scoping to precisely define the intended uses, development of wireframes for any proposed changes and consideration of user experience with key changes being implemented.
<b>Time estimated</b>	5 days
<b>Indicative timeline</b>	30 April 2020
<b>Output</b>	Fully functional Flask web-application with satisfactory design

##### 4.1.3. Deployment

<b>Activity</b>	The consultant will work with C40's Climate Analytics Manager to deploy the web application to Heroku, or an equivalent hosting service. Activities will include providing support in configuring GitHub accounts, setting secret keys for environment variables and outlining process for making changes to live site.
<b>Time estimated</b>	1 day
<b>Indicative timeline</b>	1 May 2020
<b>Output</b>	A live web-application which can be accessed by C40 staff

#### 4. Phase 2: An attractive web application

##### 4.1.1. Advanced data visualisation and design

<b>Activity</b>	The consultant will work with C40's Climate Analytics Manager to improve data visualizations by choosing and customizing charts as well as making them dynamic (dynamic filtering, scaling, zooming etc) and will help to improve the design of the log-in and home pages.
<b>Time estimated</b>	5 days
<b>Indicative timeline</b>	1 June 2020
<b>Output</b>	A fully functional Flask web-application

#### 4.1.2. Data development

<b>Activity</b>	The consultant will work with C40's Climate Analytics Manager to implement expert storage and query systems to improve the expressivity of data for the end user allowing aggregation, scoping and filtering of the data from the website. A system will also be created for enabling technical users to access datasets using API tokens from Excel and Python.
<b>Time estimated</b>	5 days
<b>Indicative timeline</b>	1 July 2020
<b>Output</b>	A fully functional Flask web-application

#### 5 Budget

Phase One: £7,500 (GBP)

Phase Two: £7,500 (GBP)

**Total: £15,000 (GBP)**

#### 6 Project specification

##### 6.1 Programme Management

**The project will be managed by the C40 Climate Analytics Manager who will oversee the project and be an active partner.** The successful bidder will be expected to foster close and constructive working relations with the project manager who will be available to provide extensive technical support as they have data and software development expertise. All interim deliverables and change requests will need to be approved by the project manager.

##### 6.2 Documentation

Documentation will be developed by C40 with advice from the successful bidder.

#### 7 Proposal

##### 7.1 Submission details

Submissions should include:

- A full, detailed, cost breakdown for each of the deliverables, inclusive of taxes and hours allocated to tasks per project team member and daily rates of project team;
- Details of the organisation and proposed project team – please include relevant experience and expertise and limit CVs to two pages per person;
- Examples of relevant previous work;
- At least two recent references with phone and email contact details;
- Confirmation of adherence to C40's terms and conditions;
- Any additional deliverables and/ or information relevant to this tender

##### 7.2 Time schedule

A tender in response to this request for proposal should be submitted no later than **17:00 (GMT) on Thursday 2 April** to **Emma Blunt, Team Coordinator, Measurement and Planning, eblunt@c40.org**.

The tender evaluation will take place on *3 April* and the bidder may be invited for a virtual meeting after this period, with project kick-off starting on 6 April.

### 7.3 Evaluation

Submissions will be evaluated against the following criteria:

<b>Criteria</b>	<b>Weighting</b>
Interpretation of brief and proposal for delivery	25%
Project management – ability to deliver outputs to time and quality	25%
Expertise and experience of project team	25%
Value for money	25%

### 7.4 Terms and Conditions

C40 Cities Climate Leadership Group reserves the right to change or cancel the above requirements at any time, without incurring any liability towards any interested party and/or any obligation to inform any interested party of the grounds for its action. All costs incurred in connection with the submission of this RFP are non-refundable by C40 Cities Climate Leadership Group.

### 7.5 Contact

All questions related to this RFP should be directed by email to **Emma Blunt, Team Coordinator, Measurement and Planning, eblunt@c40.org**.

## 8 Appendix / Appendices

- C40's Standard Service Provider Agreement