# REQUEST FOR PROPOSAL (RfP)

## Promotion of BMA electronic bus feeder lines through connectivity facilitation and aggregation of parking data

13 March 2025

## 1. Background

**Breathe Cities:** Breathe Cities is a first-of-its-kind initiative from Clean Air Fund, C40 Cities, and Bloomberg Philanthropies to clean our air, cut carbon emissions, and enhance public health in cities around the world. Launched in June 2023 by Michael R. Bloomberg, the UN Secretary-General's Special Envoy on Climate Ambition and Solutions and founder of Bloomberg Philanthropies, and London Mayor and C40 Cities Co-Chair Sadiq Khan, it aims to break down barriers to action and ensure communities around the world have access to clean air.

Breathe Cities brings together air quality data, communities, and city leaders to reduce air pollution and planet-warming emissions by 30% across participating cities by 2030 compared to 2019 levels, which would prevent 55,000 premature deaths and around 111,000 new cases of asthma in children, save $147 billion in avoided hospitalizations and deaths and avoid 394 megatonnes of $CO_2e$ emissions.

**Breathe Bangkok:**

The Bangkok Metropolitan Administration (BMA) has joined the Breathe Cities Programme as one of the pilot cities in April 2024. The Breathe Cities' support in Bangkok (later referred to as "Breathe Bangkok") will address air pollution in the city and connect it with a broader network of cities that promote global clean air actions. The Breathe Bangkok program, spanning from 2024 to 2026, focuses on two Policy Objectives, including (1) adoption of a strategic and long-term clean air management plan and inclusive and participatory air quality governance, and (2) formulation and adoption of innovative, inclusive and sustainable transport measures to reduce air pollution.

**Project:**

The Bangkok Metropolitan Administration (BMA)'s free electric shuttle bus feeder service connecting communities to major transit hubs or the "BMA Feeder" is facing significant challenges – limited parking near transit hubs, inefficient drop-off areas, and absence of real-time parking data – that constrain ridership, hinder seamless connectivity, and threaten the financial sustainability of this service.

Breathe Bangkok team is currently accepting proposals to support the BMA laying the foundation for a seamless, efficient, and inclusive urban mobility system by optimizing Bangkok's feeder transportation and smart parking systems. Ultimately, the project aims to encourage public transport use, decrease car dependency and support Bangkok's long-term sustainable mobility goals.

Service Providers are welcome to submit proposals to either one of both work packages of this RfP.

## 2. Proposal Guidelines

### 2.1 Proposal Requirements

This Request for Proposal represents the requirements for an open and competitive process. Proposals will be accepted until *5pm GMT+7/ Bangkok Time, 3 April, 2025*. Any proposals received after this date and time will not be accepted. All proposals should include clear timetables, a description of how you will work with Breathe Cities, clear costs, and details on your experience in this area.

The proposal should give the Breathe Cities team evaluators all the information they need to assess your bid. Proposals should be limited to 8 pages (front and back), not including a cover page / letter and attachments. All applications must be submitted in PDF and Microsoft Word formats with at least one inch margins. The text type must be 11 points or larger. **The proposal needs to be submitted in Thai and English.**

Your proposal must include adequate information about how it responds to the evaluation criteria, assumptions about the project, risks you have identified, and appropriate mitigation measures. In addition, your proposal also needs to show that the costs were calculated to enable evaluation of cost reasonableness. Your proposal should be organised accordingly and should include (but is not limited to) the information below:

1. Organisational Profile and Key Staff
    a. Resumes of proposed key personnel
    b. Proposed Work Plan and Timeline
2. Management Plan
    a. Explanation of how the service provider proposes to work with and involve the Bangkok Metropolitan Administration and Breathe Bangkok team - key roles and responsibilities, reporting, change requests, escalation of issues, sign-off of work stages and acceptance criteria.
3. Risk Management Approach
    a. Description of any risks and assumptions made in planning the project, along with appropriate management and mitigation strategies. Details on how a risk assessment would be completed and what it would include.
4. Budget
    a. Detailed breakdown of costs in USD and THB for each project task. You must include adequate information about how your costs were calculated to enable evaluation of cost reasonableness. Prospective service provider(s) may apply for either one or both work packages, with a justified budget that aligns with the scope of work package(s) they are applying for.
5. References
    a. At least two recent references with phone numbers and e-mail contact details.

**2.2 Supplier Diversity**

Breathe Cities is committed to supplier diversity and inclusive procurement by promoting equity, diversity, and inclusivity in our supplier base. We believe that procuring a diverse range of suppliers gives us a wider range of experiences and thoughts from suppliers and thus best enables us 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 ownership and control by a minority group, physical or mental ability, ethnicity, and perspective to put forward a proposal to work with us.

**2.3 Subcontracting**

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

## 3. Project Purpose & Scope

The project lays the foundation for a seamless, efficient, and inclusive urban mobility system by optimizing Bangkok's feeder transportation and smart parking systems. By assessing feeder service operations, connectivity gaps and equity challenges, this project will provide data-driven insights to enhance routes, accessibility and ridership. The project will also evaluate parking infrastructure and real-time data integration along BTS Green Line Main Route (Sukhumvit Line) and BMA feeder route, building the base for a technology-driven, inclusive parking ecosystem that can guide commuters to park near transit stations, reduce inner-city congestion, pollution and travel time. Ultimately, the project aims to encourage public transport use, decrease car dependency and support Bangkok's long-term sustainable mobility goals.

**The scope of work is anticipated to include the following stages. Responses may propose reasonable alternative approaches, provided all deliverables are met.**

## Work Package 1: Optimising feeder service for seamless connectivity.

This work package aims to enhance the efficiency, accessibility and inclusivity of feeder services, ensuring better first- and last-mile connectivity.

**Activity 1 Comprehensive Feeder Service and Commuter Needs Assessment**
The service provider will:

- Review BMA's available data and collect and analyze additional data[1] of BMA feeder services, private shuttles (e.g., shuttle buses provided by condominiums or malls) and other feeders (e.g., motorcycle taxi, tuk-tuk) along key routes[2].
- Collect equity-related data (e.g., income, age, and occupation, mobility patterns) and assess travel behaviors, mobility patterns and commuter needs along the same routes, particularly for underserved frontline groups (e.g., persons with disabilities, older adults, women and low-income communities and/or underserved neighbourhoods).
- Identify (physical, economic, and other access) barriers to adoption of the BMA feeder service and explore opportunities to improve the efficiency of its services.

**Activity 2 Financial, Economic, Social, and Environmental Impact Analysis**
The service provider will:

- Analyze financial feasibility of BMA Feeder lines using the cost data gathered in Activity 1 and the inclusive pricing mechanism suggested in Activity 3
- Evaluate the BMA Feeder service's impact on traffic congestion, air pollution and greenhouse gas emissions, as well as the potential social (including health) and economic inequalities that should be mitigated or addressed going forward.

[1] Key data points will include, but not limited to, accessibility (e.g., nearby parking infrastructure), service coverage, ridership, operational costs, land use, and parking data.
[2] The number of (existing or future) routes to be analyzed will be decided upon discussion with the BMA and available budget provided by the service provider.

- Develop a comprehensive demand forecasting model and analyse demands, and environmental and social impacts under current operational conditions and potential future mobility demand and feeder routes.

**Activity 3 Optimisation Strategies for Feeder Services**
The service provider will:

- Recommend route optimisation, and inclusive and equitable pricing strategies should the Department of Land Transport provide concessions for the route. These practical policy recommendations should clearly outline how the feeder service can better mitigate and or address any existing (physical, economic, and other access) barriers limiting current and potential commuters as described in activity 1.

**Activity 4 Needs Assessment for Feeder Route Integration**
The service provider will:

- Collect relevant data to evaluate the effectiveness of first-mile and last-mile connectivity and integration of BMA feeder service with key transfer hubs (major and informal) and surrounding areas. Diverse perspectives from current and potential commuters, especially people representing frontline groups as described in Activity 1 should be used to evaluate this *effectiveness*.
- Identify gaps in walkability, cycling infrastructure, and accessibility for frontline groups, and understand how the gaps identified impact their daily lives and routes.
- Conduct a socio-economic impact assessment of various connectivity solutions (e.g., parking management, pedestrian pathways, bicycle-sharing systems, micro-mobility solutions) for transfer stops along the feeder routes. For example, reduction in traffic congestion, cost of travelling time saved, and equity considerations for frontline groups as described in activity 1.

**Activity 5 Infrastructure and Design Enhancement for Pick-Up/Drop-Off Areas**
The service provider will:

- Develop recommendations to improve pick-up/drop-off areas, including better design, parking capacity expansion, and accessibility enhancements.
- Propose policy measures, incentives and infrastructure upgrades to enhance the users' experience and encourage feeder service adoption bearing in mind equity considerations as outlined in activity 4.

## Work Package 2: Establishing a Smart Parking Ecosystem for Public Transport Integration

This work package lays the foundation for a real-time parking system along the BTS Green Line and its BMA feeder line, enhancing public transport connectivity while ensuring inclusivity and sustainability.

**Activity 1 Comprehensive Parking Inventory Development**
The service provider will:

- Develop a comprehensive inventories of public, informal and private parking spaces near the selected BMA's owned BTS Green Line Main Route Sukhumvit Line (18 stations from Mo Chit to Onnut stations and connect with the BMA feeder line from BTS Sanampao to BMA City Hall).
- Combine BMA feeder service data (Activity 1, Work Package 1) with parking inventory data to identify synergies and gaps.

**Activity 2 Assessment of Real-Time Parking Data Availability**
The service provider will:

- Evaluate the availability and accessibility of real-time parking data along the above BTS line and BMA Feeder route connected to the BTS line for public use, with a focus on ensuring

equitable access for groups that may face digital barriers (e.g. older people) (drawing on insights from Activity 1, Work Package 1).
- Identify access gaps and potential data sources (e.g., private parking facilities have internal smart parking systems but do not yet share real-time data with the public).
- Assess the feasibility of integrating real-time data into a centralized platform managed by BMA.

**Activity 3 Analysis of Barriers to an Integrated Digital System**
The service provider will:
- Identify gaps in BMA's ability to aggregate and display real-time parking data on a unified platform, including technological, operational and regulatory barriers preventing an integrated digital system.
- Provide policy recommendations to address these challenges in integrating the real-time digital parking database, with a focus on inclusivity.

**Activity 4 Inclusive and Equitable Parking Ecosystem Design**
The service provider will:
- Develop recommendations (partially drawing on insights from Activity 4 and 5, Work Package 1) for inclusive and equitable parking ecosystem design and delivery for the BTS Green Line, considering inclusive elements such as accessible features for people with disabilities, affordability for low-income groups, and safety measures for women and vulnerable groups.

**Activity 5 Development of Collaborative Mechanisms for Digital Integration**
The service provider will:
- Provide recommendations for possible collaborative models (e.g., public-private partnership) and explore green finance opportunities to develop a user-friendly, inclusive, digital platform for real-time parking information, building on insights from Activity 3 and 4.
- Provide ad hoc support to BMA in developing and implementing the real-time digital parking system.

Notes:
- Interim (draft) and final deliverables are to be submitted in both Thai and English.
- Convening and training activities will be delivered in Thai with presentation materials will be in English and Thai.

## 4. Budget

The total contract amount for this project (i.e., work package 1 + 2) will be no more than USD 152,000 including applicable taxes. Prospective service provider(s) may apply for either one (i.e., 1 or 2) or both work packages, with a justified budget that aligns with the scope of work package(s) they are applying for.

## 5. RfP & Project Timeline

RfP Timeline

| **Step** | **Date** |
|---|---|
| Request for Proposals sent out | 13 March 2025 |
| Deadline for receiving proposals | 3 April 2025 |

| | |
|---|---|
| Evaluation of written proposals | 4 - 11 April 2025 |
| Presentation on Proposal | 21 April 2025 |
| Selection decision made | 25 April 2025 |
| All bidders notified of outcome | 25 April 2025 |

Project Deliverables and Timeline (project end date is September 2026)

| **Activity** | **Deliverable** | **Description** | **Duration (suggestive)** |
|---|---|---|---|
| 0 | 0.1 | Inception meeting | Month 1 |
| Work Package 1. Optimising feeder service for seamless connectivity. | | | |
| 1 | 1.1 | Summary of methodology for needs assessment (e.g., survey design, target groups identification, data collection plan, stakeholder engagement strategy) | Month 2 |
| 2 | 1.2 | Data collection report - detailed analysis of BMA feeder services, private shuttles and informal transport modes. | Month 5 |
| 3 | 1.3 | Equity and commuter needs assessment report | Month 5 |
| 4 | 1.4 | Barrier analysis report | Month 5 |
| 5 | 2.1 | Summary of methodology for financial feasibility and the impacts assessment | Month 2 |
| 6 | 2.2 | Financial feasibility report | Month 7 |
| 7 | 2.3 | Air pollution and GHG impact analysis report | Month 7 |
| 8 | 2.4 | Socio-economic impact report | Month 7 |
| 9 | 2.5 | Demand forecasting model and methodology | Month 2 |
| 10 | 3.1 | Route optimisation plan | Month 7 |
| 11 | 3.2 | Inclusive pricing strategy report | Month 7 |
| 12 | 3.3 | Barrier mitigation strategy report | Month 7 |
| 13 | 4.1 | Summary of methodology for needs assessment and data collection | Month 2 |
| 14 | 4.2 | Data collection report | Month 5 |

| | | | |
|---|---|---|---|
| 15 | 4.3 | Connectivity effectiveness and accessibility gap analysis report | Month 7 |
| 16 | 4.4 | Socio-economic impact report on connectivity solutions. | Month 7 |
| 17 | 5.1 | Pick-up/drop-off site improvement plan | Month 9 |
| 18 | 5.2 | Policy and incentive recommendations | Month 9 |
| Work Package 2: Establishing a Smart Parking Ecosystem for Public Transport Integration | | | |
| 1 | 1.1 | Parking inventory database | Month 6 |
| 2 | 1.2 | Parking and feeder service integration report | Month 6 |
| 3 | 2.1 | Real-time parking data assessment report | Month 6 |
| 4 | 2.2 | Summary of methodology to conduct feasibility study | Month 2 |
| 5 | 2.3 | Feasibility study report on data integration | Month 6 |
| 6 | 3.1 | Barrier analysis report | Month 6 |
| 7 | 3.2 | Policy recommendations for digital integration | Month 6 |
| 8 | 4.1 | Inclusive parking ecosystem framework | Month 9 |
| 9 | 5.1 | Collaborative model recommendations | Month 9 |
| 10 | 5.2 | Green finance and funding report | Month 9 |
| 11 | 5.3 | Digital integration support plan | Month 9 |
| 12 | 0.2 | Project close-out report and evaluation | Month 10 |

## 6. Proposal Evaluation Criteria

**Proposals will be evaluated by a panel of staff from C40, Clean Air Fund against the following criteria:**

| ***Evaluation Criteria*** | ***Weighting*** |
|---|---|
| ***Workplan:***<br>*Work plan demonstrates understanding of project requirements and risks; Robustness of the project delivery and suitability of methodology; ability to meet the requirements listed* | *25%* |
| ***Expertise and Experiences***<br>*Capability, experience, and availability of the proposed team* | *45%* |
| ***Equity and Ethical Alignment*** | *10%* |

| | |
|---|---|
| ***Cost Reasonableness***<br>● *Economy: minimising the cost of resources used / spending less*<br>● *Efficiency: the relationship between the output from goods / services and the resources to produce them*<br>● *Effectiveness: the relationship between the intended and actual results*<br>● *Equity: the extent to which services reach the intended recipients fairly* | *20%* |

## 7. Submissions

Proposals will be accepted until *5pm GMT+7/ Bangkok Time, 3 April, 2025*. Any proposals received after this date and time will not be accepted. Please submit proposals via email to:

Miranda Jakubek
Manager, Breathe Cities Coordination and Engagement
mjakubek@c40.org

and

Pongsatorn Greigarn
City Advisor, Breathe Cities, Bangkok
pgreigarn@c40.org

and

Nuttawut Teachatanawat
Breathe Cities Lead - Thailand
nteachatanawat@cleanairfund.org

*One-on-one conversations with potential suppliers can expose staff to allegations of collusion. Proposals should be submitted to a member of staff from CAF (i.e. City Lead or Portfolio Manager) and C40 (City Advisor) to protect the integrity of the competitive process.*

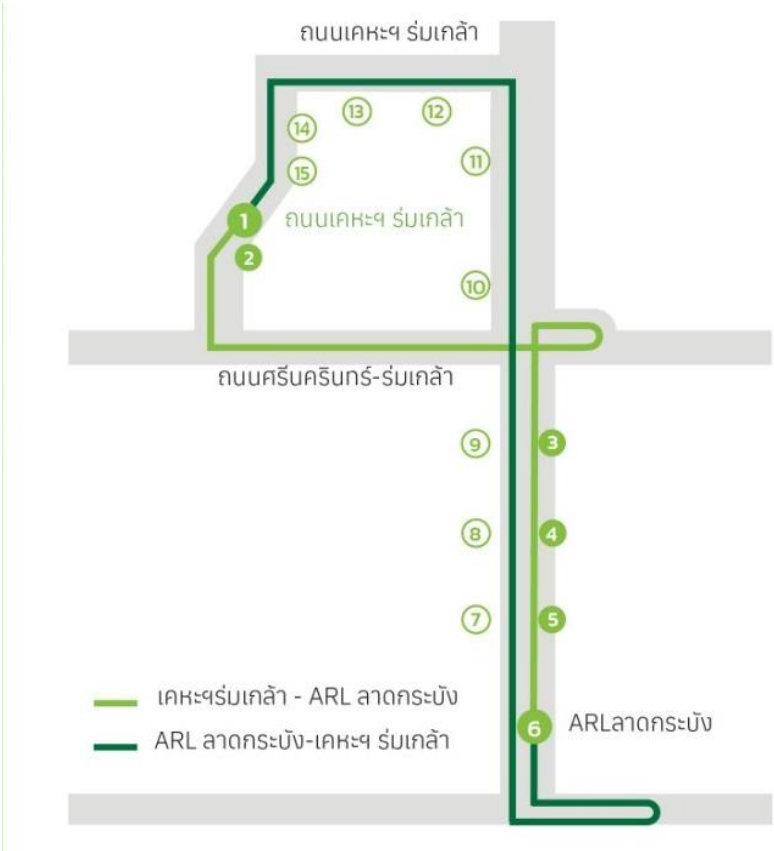
**Disclaimer**

Clean Air Fund will not accept liability or responsibility for potential suppliers' costs incurred in preparing a response for this RFP. 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 the Clean Air Fund to enter into a contractual arrangement. Nothing in this RFP should be interpreted as a commitment by Clean Air Fund or C40 to award a contract to a Potential Supplier as a result of this procurement, nor to accept the lowest price or any tender.

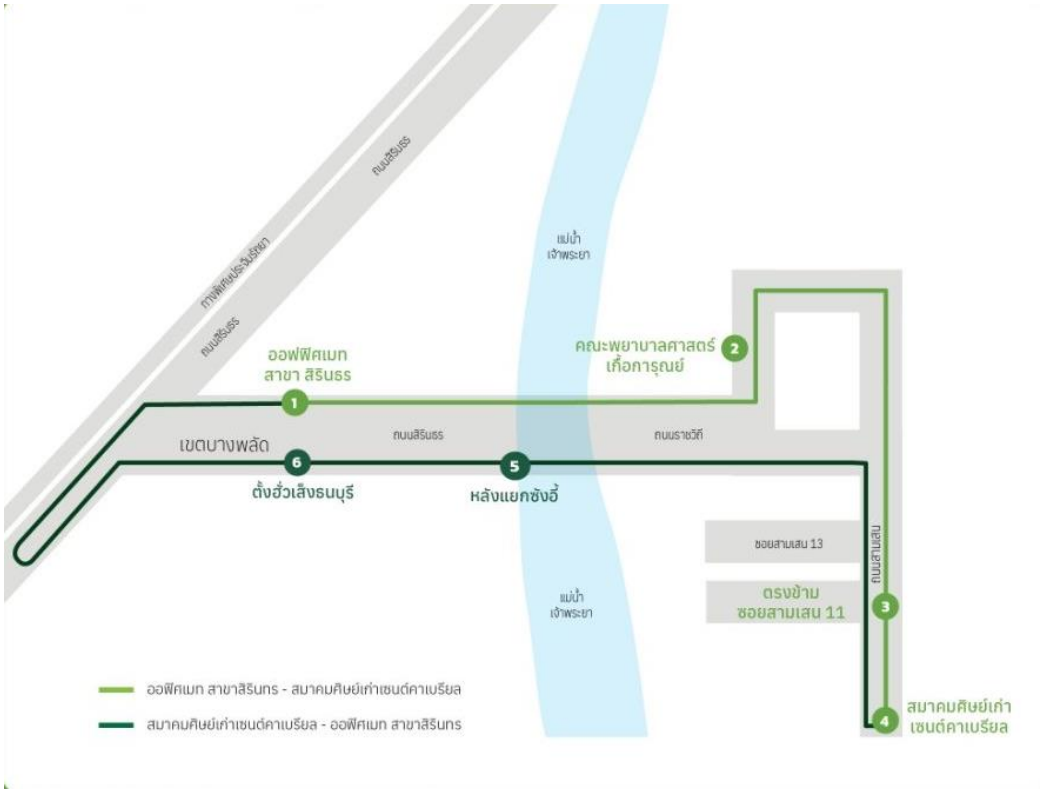
# Annex: Map of BMA Feeder Lines

1. Dindaeng – BTS Sanampao Line


2. Keha Romklao – ARL Ladkrabang Line



3. Samsen – Thonburi Line




4. MRT Bang Khun Non – Taling Chan Floating Markets Line


**ให้บริการวันเสาร์ - วันอาทิตย์ เวลา 09.00 – 16.45 น.**

5. World Market – MRT Lak Song Line