Annex 3

Terms of Reference

Business Model and Feasibility Study on the Transformation of Provincial Material Recovery Facilities (MRFs) into an Innovation for Circular Economy Hub (ICE Hub)

Period of assignment/services: December 2021 to May 2022
Specific location for this study: Pasig City, Metro Manila
Duty Station: Remote

A. Project Title

00115528 - Accelerator Lab Philippines

B. Background and Description

The circular economy model has been presented by global organizations and development agencies alike as a resilient economic system with the potential to help tackle climate change, prevent biodiversity loss, address waste problems, and provide new green jobs. With the Philippines being named the third-largest source of waste[1] - most of which is plastic waste that ends up in the oceans, the transition to a more circular economic model is seen as urgent.

Urban centers, such as Pasig City, has been confronting the waste challenge for years and has been in the forefront of testing new ideas to encourage proper segregation and disposal, recycling through various initiatives through the materials recovery facilities (MRFs), institutionalization of barangay-based urban gardens, kitchen waste upcycling through organic composting, among others.

With two-thirds of the global population expected to be living in the cities in 2050, according to a UN DESA report in 2018,[2] implementing a circular economy in the city is thought to bring significant economic, social, and environmental benefits. There is a lot of potential in implementing a circular economy in the city as it is naturally a center for innovation and contains a high concentration of capital, resources, and data. In turn, cities can also benefit from this economically through green jobs and environmentally through the departure from the take-make-waste linear model towards a more sustainable one.

The Systemic Design for Circular Economy initiative in Pasig City saw the surfacing of key insights that includes the importance and benefits of adopting a circular economic model in the city. Beyond the major pain point of waste management, multi-sectoral participants pointed to the potential of leveraging waste management infrastructure as spaces for creativity and innovation through upcycling experimentations and collaborative advocacy building. To date, there are nascent infrastructures in select MRFs in Pasig that introduced a combination of projects around segregation-at-source, organic waste composting, recycling, and upcycling, and plastic waste incentivization.

{connect with Portfolio of options identifying and leveraging existing infrastructures to be a CE hub} To attain circularity in the city, The prospect of forming an initiative to prototype how a city MRF can be transformed into

[1] Jambeck, J. R., Geyer, R., Wilcox, C., Siegler, T. R., Perryman, M., Andrady, A., ... & Law, K. L. (2015). Plastic waste inputs from land into the ocean. Science, 347(6223), 768-771.
[2] See https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html

a creative and collaborative innovation hub envisioned to be a rallying point to advocate and promote for circular economy and green sustainable livelihoods in the city. In addition, the Innovation for Circular Economy Hub or ICE Hub will utilize captured waste in the MRF and use it as a resource for creative design in coming up with new projects related to upcycling and recycling. In addition, the ICE Hub is envisioned to be a space for citizens to interact with each other, learn about Circular Economy, and cross-pollinate ideas to implement CE in the city.

The plan is intended to be a pathway to create new opportunities for communities in creating new livelihoods and jobs while encouraging creativity and innovation in proposing and experimenting alternative solutions. Essential to the ICE Hub is the vision that this becomes an instrument for systemic change in the city. In its efforts, it creates space for ongoing learning and systemic awareness of the key drivers at play and brings the community in as part of this learning. As such, the hub becomes a social innovation research institution that will help Pasig City in stewarding not just an economic transition towards circularity but also includes the necessary socio-cultural transitions that are needed for transformative social change. Key components to this initiative are the provision of upcycling equipment for rapid prototyping and the conduct of a study that will identify the business model and programming components for training and capacity development of participants.

From a gender standpoint, women bear a greater share of the cost of the linear economy than males. Despite that, women are more likely to recycle and minimize wastage according to a study by OECD.[3] This initiative will therefore take cognizance with the gender lens by ensuring that women and children in urban communities will be provided greater access to the services of this project.

To achieve this end, **this initiative requires the services of a Firm who shall conduct a business model and feasibility study to determine the viability of the ICE Hub, establish the partnership and capacity development programming components, prototype a small-scale proof of concept in the Pasig city and develop an operations manual that will also include strategies for scaling up, scaling out, and scaling deep in other Philippine cities.**

C. Scope of Work and Outputs

Under the overall guidance of the UNDP Impact Advisory Team–Accelerator Lab and the Climate Action Team, and reporting directly to the Head of Solutions Mapping, the Firm shall be responsible for the following:

1. Conduct a business model and feasibility study to determine the viability and institutional arrangements of the ICE Hub leveraging on the convergence of multiple stakeholders already engaged in the Systemic Design (SD) workshop. In addition, the Firm is expected to foster ongoing system understanding and awareness regarding the vision for CE in Pasig and the systemic drivers inhibiting or promoting required transition.

    1.1. In coordination with the UNDP Circular Economy working group, identify the key research questions that will frame and guide the research process.
    1.2. Identify key programming and operational components of the ICE Hub that are essential for scaling up and scaling out in Pasig City and in other Metro Manila cities (e.g. Manila, Marikina, etc). Also, identify the specifications or requirements in establishing the infrastructure for the ICE hub.
    1.3. Conduct stakeholder mapping and consultations with LGU, private sector, barangay officials, and homeowners' associations (HOAs).

[3] See OECD research entitled Gender-specific consumption patterns, behavioural insights, and circular economy: http://www.oecd.org/env/GFE-Gender-Issues-Note-Session-5.pdf

1.4. Integrate women economic empowerment through waste management, specifically defining their role as promoters, facilitators, and enablers of the circular economy.
1.5. Examine how the following elements can be integrated to the ICE Hub:
    1.5.1. Communications and advocacy to rally support from among the neighboring HOAs.
    1.5.2. Digital platforms as a marketplace to promote CE strategies, including those of recycling.
    1.5.3. Capacity development and training to upskill or reskill participants.
    1.5.4. Circular economy value chain in the city.
    1.5.5. LGU procurement in view of the Circular Economy procurement framework.
    1.5.6. Existing DTI shared service facilities and the Pasig Pangkabuhayan Centers.

2. In consultation with UNDP and Pasig City, the Firm will design and implement a small-scale experiment that to determine ways on how best to operate the ICE Hub. In the conduct of the experiment, the Firm is expected to incorporate advocacy, communications, and community engagement activities to ensure that multiple stakeholders are consulted and part of the process.

3. Submit a final report that includes a Playbook that includes the methodology, stories / use cases / experiences and insights, lessons learned from the prototyping activity(ies), including strategies and recommendations so the ICE Hub may be scaled in other Philippine cities.

In performing the above, the Firm shall consult with key officers and other relevant personnel within UNDP, key partners, as well as with external stakeholders, as may be recommended.

D. Schedule of Submission of Deliverables

The Firm shall perform its responsibilities and deliver its outputs following the schedule below.

Deliverables/ Outputs	Target Due Date from Start of Contract	Review and Approvals Required
Inception Report including work plan and other details agreed during prep meetings with UNDP.	within 3 weeks of contract awarding	*Main:* Head of Solutions Mapping *Alternate:* Head of Exploration
The Firm shall submit the following: 1. First Month Report that will contain the research framework and design, the plans for the stakeholder consultations, the ICE hub prototype experimentation plan including the multi-sprint hackathon, among others. 2. Progress Report (Month 1) that will contain the detailed progress of the experiment	Month 1	
The Firm shall submit the following: 1. Progress reports (Months 2 to 5) that will contain the detailed progress of the experiment 2. First draft of the Feasibility Study 3. Second draft of the Feasibility Study	Months 2 to 5 Month 4 Month 5	
The Firm shall submit the following: 1. Final Research Report including that will summarize the monthly progress reports and the research output.	Month 6	

E. Expected Duration of the Contract

It is expected that the selected firm should be able to submit the final research report within six (6) months. The target start of work date is December 2021 and the end date shall not be later than 31 May 2022.

F. Duty Station

The work is expected to be performed remotely, however, if required, there may be physical meetings. The Firm shall be responsible for providing their personnel with their own ICT equipment, office space, internet connectivity cloud hosting, subscription to online conference/meeting and collaboration tools.

G. Governance and Accountability

1. The contractor will be supervised by the Head of Solutions Mapping, with the Head of Exploration as an alternate. All outputs of the Firm shall be submitted to the UNDP Philippines Accelerator Lab Head of Solutions Mapping and the Head of Exploration for review and approval.

2. In implementing this project, IAT collaborates closely with the Climate Action Programme Team, IAT program analyst and other programme units in UNDP. As such, in the execution of this contract and review of outputs, the Firm may also be required to coordinate with the Programme Team Leader, Programme Analysts, and other key UNDP personnel.
3. The Firm shall consider at least ten (10) working days lead time for UNDP and its partners to review outputs, give comments, certify approval/acceptance of outputs, etc.

H. Key Performance Indicators and Service Level

Performance indicators	Service required	Frequency
Sustained communication with UNDP and other stakeholders	Regular coordination with UNDP and other partners	Monthly meetings
Quality and timely submission of outputs and reports	Prepare and submit outputs and reports as stipulated in Section D	Based on the target dates set in section D

I. Professional Qualifications of the Firm and its Key Personnel

1. The successful Firm must have demonstrable capability and track record to undertake the business model and feasibility study for the ICE Hub and the conduct of the small-scale proof of concept experiment. The Firm must meet the following qualifications:

    a. In operation for at least three (3) years as a private corporate entity, CSO, or academic institution with substantial experience in establishing and/or running innovation hubs, including the implementation of startup incubation and/or acceleration programs and the conduct of multi-sprint hackathons, innovation challenges, design thinking / systems thinking workshops, and other similar activities.

b. Submit a portfolio that lists down and describes at least three (3) similar projects and initiatives that are relevant to the work at hand, including but not limited to the establishing and/or running innovation hubs, including the implementation of startup incubation and/or acceleration programs and the conduct of multi-sprint hackathons, innovation challenges, design thinking / systems thinking workshops, and other similar activities.

c. Has an existing network of partners from the startup innovation ecosystem and social innovation startups which can be leveraged to support the establishment of the ICE Hub.

d. The Firm or its partner (as part of a Joint Venture, Consortium, or Association) must have a local office in Manila.

2. The Firm shall assign its in-house personnel or source these from its partners and rosters for the project. At least one (1) Lead Researcher and Project Manager and one (1) Research Project Assistant shall be assigned to the project. The Firm may propose to include additional personnel as it sees fit, and these will be evaluated by UNDP based on their relevance and value-addition. The Firm must also demonstrate how its senior leadership, researchers, and advisers can be tapped to provide guidance to the project as may be necessary.

   a. Lead Researcher & Project Manager
   – He/she shall be the primary point of contact with UNDP and ensure that the delivery of outputs and advice are done in a timely and high-quality manner. The project lead shall meet the following qualifications:
      i. At least 3 years experience in conducting and managing business model and feasibility studies for innovation hubs and/or incubator/accelerator laboratories.
      ii. At least 3 years experience in managing and/or coordinating an innovation hub, incubator/accelerator laboratories, multi-sprint hackathons, and systemic design/design thinking workshops
      iii. At least has a Masters degree in relevant fields, including but not limited to business and management, innovation, science and technology, social sciences, among others.
      iv. Fluency in English is required as indicated in the CV.

   -The Lead Researcher and Project Manager shall render a minimum of 100 person days spread across 6 months.

   b. Research Project Assistant
   – He/She shall provide the technical specialization required for sensing, experimentation, and/or communication strategy, who shall meet the following:
      i. At least 1 year experience in assisting the conduct of mixed methods research and feasibility studies, assisting social innovation projects, and coordinating community engagement and communications projects.
      ii. At least a bachelor's degree in relevant fields, including but not limited to business and management, innovation, science and technology, social sciences, among others.
      iii. Fluency in English is required as indicated in the CV

-The Research Project Assistant shall render a minimum of 100 person days spread across 6 months.

c. Any additional personnel proposed will be evaluated based on relevance and value-added contribution to the work as well as to cost efficiency.

d. For each of the two key personnel and any additional personnel, the Firm must present the proposed level of effort, in person-days of work rendered, which will be evaluated by UNDP based on sufficiency for the work required.

2. The Firm shall be responsible for ensuring adequate administrative, logistical, and coordination arrangements for its key personnel, including travel and billeting arrangements and coordination. While UNDP staff will collaborate with the Firm with respect to scheduling, logistics, attendance, and other administrative matters related to the works described above, the Firm shall provide for its own logistical and administrative support for its key personnel.

J. Scope of Price Proposal and Schedule of Payment

1. The contract price shall be a **fixed output-based price** regardless of extension of the herein specific duration. Payments shall be made upon submission and acceptance of the outputs as specified in Part D. Acceptance of the outputs shall be based on how these meet evaluation quality standards and address stakeholder requirements.

2. The following components should be included, as a minimum, in the financial proposal:
   a. Professional fees of the proposed team (indicate daily fees and level of effort)
   b. Other professional fees and salaries
   c. Management and operational costs
   d. Others as may be relevant to the scope of work\

2. Payments shall be made upon submission and acceptance of the outputs as specified in section D. Please note that any assets to be procured for this project by the firm (including software) will have to be handed over to UNDP once the project has been completed.

3. The selected Firm shall receive payments based on the schedule below:

Deliverables/ Outputs	Payment from Start of Contract	Indicative Percentage of Lump-Sum Price
1. Upon submission and acceptance of inception Report including work plan and other details agreed during prep meetings with UNDP.	3 weeks after contract awarding	10%
2. Upon submission and acceptance of the following: 1. First Month Report that will contain the research framework and design, the plans for the stakeholder consultations, the ICE hub prototype experimentation plan including the multi-sprint hackathon, among others. 2. Progress Report (Month 1) that will contain the detailed progress of the experiment	Month 1	20%
3. Upon submission and acceptance of the following:	Month 5	30%

Deliverables/ Outputs	Payment from Start of Contract	Indicative Percentage of Lump-Sum Price
1. Progress reports (Months 2 to 5) that will contain the detailed progress of the experiment 2. First draft of the Feasibility Study 3. Second draft of the Feasibility Study		
4. Upon submission and acceptance of Final Research Report that will summarize the monthly progress reports and the research output.	Month 6	40%
	Total	100%

K. Criteria for Selection of the Best Offer

1. The selection process will follow a Combined Scoring Method, using the 70%-30% distribution for technical and financial proposals, respectively.

2. The minimum passing score of the technical proposal shall be 70%. Technical proposals will be evaluated based on the following criteria and corresponding points based on the table below, with total obtainable points of 1,000. Only firms that obtain a minimum technical score of 700 points will be included in the financial evaluation.

3. All proposers will be evaluated based on the Firm's complete submission of requirements, eligibility (list of requirements are posted in the solicitation document) and following the technical criteria below:

Summary Proposal Evaluation		Points Obtainable
1	Firm experience specific to the requirement	300
2	Proposed methodology, approach, and implementation plan	350
3	Management structure and key personnel	350
	Total	1000

Section 1. Firm experience specific to the requirement		Points Obtainable
1.1	Has at least three (3) years as a private corporate entity, CSO, or academic institution with substantial experience in establishing and/or running innovation hubs, including the implementation of startup incubation and/or acceleration programs and the conduct of multi-sprint hackathons, innovation challenges, design thinking / systems thinking workshops, and other similar activities. (*105 points for 3 years; additional 15 points for each additional year up to a maximum of 150 points)*	150
1.2	Has at least three (3) similar projects and initiatives that are relevant to the work at hand, including but not limited to the establishing and/or running innovation hubs, including the implementation of startup incubation and/or acceleration programs and the conduct of multi-sprint hackathons, innovation challenges, design thinking / systems thinking workshops, and other similar activities.	100

	(70 points for 3 projects; additional 10 points for each additional project up to a maximum of 100 points)	
1.3	Has At least ten (10) partners who are from the startup innovation ecosystem and social innovation startups. *(35 points for 10 partners; additional 5 points for each additional partner up to a maximum of 50 points)*	50
Total Section 1		**300**

Section 2. Relevance of methodology/ies to be used in establishing the outputs		**Points Obtainable**
2.1	Overall understanding of the requirement as shown by the alignment of the proposed work plan with the required quantity and quality of outputs as well as timeliness in their delivery.	100
2.2	Appropriateness and rigor of the proposed approach, technology, and methodologies to the research questions and overall objectives, which demonstrate the Firm's understanding of the issue at hand.	100
2.3	Innovativeness in the proposed methodologies and tools to be implemented for the project, and how the use of these methods and tools are relevant and appropriate for the objectives of the project.	150
Total Section 2		**350**

Section 3. Management Structure and Key Personnel			**Points obtainable**
3.1	Qualifications of key personnel proposed		
3.1 a	Lead Researcher and Project Manager		200
	Has at least 3 years experience in conducting and managing business model and feasibility studies for innovation hubs and/or incubator/accelerator laboratories. *(70 points for 3 years' experience, additional 5 points for each additional year up to a maximum of 100 points)*	100	
	Has at least 3 years experience in managing and/or coordinating an innovation hub, incubator/accelerator laboratories, multi-sprint hackathons, and design thinking / systems workshops. *(35 points for 3 years; additional 5 points for each additional year up to a maximum of 50 points)*	50	
	Has at least a Master's degree in relevant fields, including but not limited to business and management, innovation, science and technology, social sciences, among others. *(35 points for Master's degree; 50 points for Ph.D)*	50	
	Fluency in English (as indicated in CV)	Pass/Fail	
3.1 b	Research Project Assistant		150
	Has at least 1 year experience in assisting the conduct of mixed methods research and feasibility studies, assisting social	100	

	innovation projects, and coordinating community engagement and communications projects. *(70 points for 1 year experience, additional 5 points for each additional year up to a maximum of 100 points)*		
	Has at least a bachelor's degree in relevant fields, including but not limited to business and management, innovation, science and technology, social sciences, among others. *(35 points for Bachelor's degree; 45 points for Master's; 50 points for Ph.D*	50	
	Fluency in English (as indicated in CV)	Pass/Fail	
Total Section 3			350

1. In the combined scoring, the Financial Proposal will be computed as a ratio of the Proposal's offer to the lowest price among the proposals received by UNDP.