

● Terms of Reference for a Data Collection Expert to support Data Modelling

IKI 100% Renewables Cities and Regions Roadmap

As of 1 August 2020

1. About the 100% Renewables Cities and Regions Roadmap Project

The 100% Renewables Cities and Regions Roadmap (100%RE) is an international project implemented by ICLEI – Local Governments for Sustainability with support from the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety (BMU).

The 100% RE is the first global initiative that aims to accelerate the utilization of renewable energy by raising local awareness on renewable energy sources, showcasing how local and national governments can create coordinated enabling frameworks and policies, exploring access to public and private sector finance, and building local renewable energy projects addressing electricity and heating and cooling. ICLEI works together with local and regional governments from Argentina, Kenya, and Indonesia to develop community-wide 100% renewable energy (RE) strategies.

In Indonesia, ICLEI Indonesia has committed to assist the Government of West Nusa Tenggara (WNT) Province, Mataram City, and Sumbawa Regency. The project will foster multilevel governance, and put that collaboration at the heart of the sustainable energy transition in the region. This approach will allow cities and regions to not only unlock one of the largest potential solutions for GHG emission reduction, but also drive sustainable growth and local job creation, as well as various social benefits.

Local strategies towards 100% RE are developed by the deep-dive cities/regions, using available tools, and validating international methodologies for their own local context. Therefore, modelling and screening of community-scale pathways to transition to 100% RE is an important process. The modelling process will be conducted by Fraunhofer ISE. In order to support the modelling process, it is important to provide the data required.

2. Term of Reference for a Data Collection Expert to support Data Modelling

The project requires the services of local expertise that will support the objective of collecting the data for data modelling. The experts will be providing its services for data collection in West Nusa Tenggara. The expert must have experiences in conducting energy modelling and collecting the data in West Nusa Tenggara. The expert will conduct 1) data gap analysis to identify the data requirements; 2) data survey and research using both primary and secondary data; 3) data processing; and 4) data filling and reporting.

2.1 Scope of Work

The Data Collection Expert does not need to be stationed in Yayasan ICLEI Indonesia office located in DKI Jakarta. Reporting will be on a as-need-arises basis and for major activity and events. She/he shall work closely with the relevant Project Officer in assisting the data collection process of the project. The following activities will need to be undertaken in order to help meet the objectives of the project.

Specific Duties and Responsibilities		
No.	Work Packages	Deliverables
1	Data Gaps Analysis	• Conduct preliminary data analysis on the following information/data in West Nusa Tenggara. (The data required will be from 2014 to recent years) 1. General Information and Spatial Data (Map, GIS) 2. Macroeconomics 3. Total Demand by fuel (Solid, Liquid, Gas, etc.); by sector; and by end use (Electricity, Cooling, Heating) 4. Demand by Sector (a detailed information and fuel breakdown for the following sector: Residential, Industry, Transportation, Commercial, Agriculture, Other) 5. Demand Time Series in hourly resolution 6. Grids 7. Total Generation and generation capacity by fuel type 8. Generation Time Series in hourly resolution 9. Renewable Potential (including area for PV, radiation, area for wind, wind speed, biomass data, geothermal, etc.) 10. Cost Data 11. Other information • Outline the data gaps from the given spreadsheet • Coordinate with West Nusa Tenggara's officials in identifying gaps • Identify data requirements to fill the gaps and the source to get the data.
2	Data Survey and Research	• Design appropriate methodology for effective and efficient data collection • Develop and distribute survey questionnaire • Conduct field-work and coordination with relevant stakeholder • Collect the required data
3	Data Processing	• Processing the survey data into the information that is suitable for filling the given spreadsheet • Develop derivative data from the survey

4	Data Filling and Reporting	• Complete the given spreadsheet and make comments on the data source • Validate the data with the relevant stakeholders • Make adjustment on the data (if necessary) with assumption justification • Reports on the overall process and lesson learned during the data collection • Assist in data modelling process • Update information during the data modelling process • Monitor, evaluate, and validate the result in the data modelling process
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2.2 Deliverables and Time Frame

The work will entail leading the development and delivery of data collection. The consultant is expected to work closely with the project team at Yayasan ICLEI Indonesia, the ICLEI Southeast Asia Secretariat, ICLEI World Secretariat, Fraunhofer ISE, and representatives of West Nusa Tenggara Provincial Government.

A maximum of **30 working days** are estimated to complete the deliverables as stated below. The engagement and consultation with ICLEI and West Nusa Tenggara Provincial Government will be made both in-person and online (e.g. via e-mail). The following table lists the deliverables and their respective delivery date.

Deliverables	Indicative number of working days	Indicative timeframe deadline
Data Gaps Analysis	5	4 th week of August 2020
Data Survey and Research	15	2 nd week of September 2020
Data Processing	5	3 rd week of September 2020
Data Filling and Reporting	5	3 rd week of September 2020
Total	30	

3. Payment

Yayasan ICLEI Indonesia shall pay the expert for the services herein stipulated. Payment will be made following the schedule of tranches.

PERCENTAGE (%)	MILESTONE
40%	Upon contract signing (Mobilization Fund)
30%	Upon partial completion of the data gaps analysis (at least 50% of the task done or as evaluated by the ICLEI's Project Officer)
30%	Upon delivery of the complete data collection spreadsheet

4. Service Provider Requirements

The successful provider must:

- At least 3-5 years of experience in energy planning and renewable energy
- Experience on data collection for data modelling
- Experience on data modelling using LEAP, Balmorel, KomMod, or another energy planning modelling.
- Research and analytical skills
- Knowledge of West Nusa Tenggara's energy system will be an advantage.
- A university degree in Environment, Urban and Regional Planning, Engineering, Energy, Statistics, or relevant majors.
- Proficiency in Microsoft Office applications
- Excellent command of written and spoken English.
- Excellent writing, presentation, communication, and facilitation skills.

5. Reporting Requirements and Management

- The expert will report to Mr. Muhammad Saladin Islami, Project Officer, and Ms. Emy Aditya, Project Assistant, for 100% Renewables Cities and Regions Roadmap (100%RE) Project of Yayasan ICLEI Indonesia and the activities in Jakarta will be implemented in close collaboration with team members from Yayasan ICLEI Indonesia and ICLEI Southeast Asia Secretariat based in Manila.
- Regular meetings/calls to report on progress on specific tasks and deliverables will be required.

6. Requirements for the Proposal

The following information must be provided in the proposal:

- Letter of Intent addressed to Mr. Muhammad Saladin Islami, Project Officer for 100% Renewables Cities and Region Roadmap (100%RE) Project of Yayasan ICLEI Indonesia;
- Latest CV;
- Work plan and financial proposal; the financial proposal should outline professional fee (day rate in IDR) and breakdown of direct costs (such as survey or fieldwork needs, etc).

7. Closing Date for Submission

To apply, please submit a **Letter of Intent** that demonstrates your experience, qualifications, and proposed professional fee along with your **latest CV, proposal** (work and budget plan), and supporting documents.

Please send all materials in one PDF document via email with subject "Data Collection Expert 100%RE" to iclei-indonesia@iclei.org and CC to iclei-sea@iclei.org no later than Monday, 17 August 2020 at 5.00 pm (Indonesia time).

For any queries related to submission, please contact Yayasan ICLEI Indonesia via the e-mail address above.

Please use English for all communications. Only successful candidates will be contacted. Due to the volume of applications being received, our office would not be able to entertain phone calls. For more information about ICLEI Southeast Asia Secretariat and ICLEI Indonesia Office, visit <https://icleiseas.org/>.