



Smart JAMP(2021) Pre-feasibility Study on the Introduction of an Advanced Waste Reduction, Recovery and Reuse System in ASEAN

Category of Issues
in the Area



Target Area

- Puerto Princesa City, Palawan Province, The Philippines

Background and Purpose

- Palawan Province is in need of additional power generation to meet the increasing demand for electricity. Issues such as effective utilization of agricultural waste and aging landfill disposal sites have been raised.
- Santa Lucia (a total area of 1,072 ha) is designated as an “Environmental Estate” by the President Proclamation No. 718 and the priority development area by the Puerto Princesa City Master Plan (2017) where energy demand is expected, the project examine the implementation of energy systems in this area.

Related Organization

- City Government of Puerto Princesa, Palawan Electric Corporative (PALECO), etc.

Project Stage

- Pre-feasibility Study

Contents and Results

1. Examination of issues and needs

- Issues for introduction of biomass power using local agricultural wastes (coconut/rice) were organized.
- Specifically, considered the optimal fuel source selection based on the amount of agricultural waste, analyzed business feasibility based on the electricity demand, thought optimized contract forms based on the relevant local laws and regulations, examined the feasibility of the project based on the foreign investment regulations and incentives, and studied the feasibility of introducing Japanese technologies and solutions..

2. Outcomes

- Estimation of the initial investment and maintenance cost for the biomass power generation project using Japanese company’s boiler technology were conducted, and confirmed a necessary scale of power generation to ensure business profitability, optimal investment/loan ratio, fuel price and so forth.

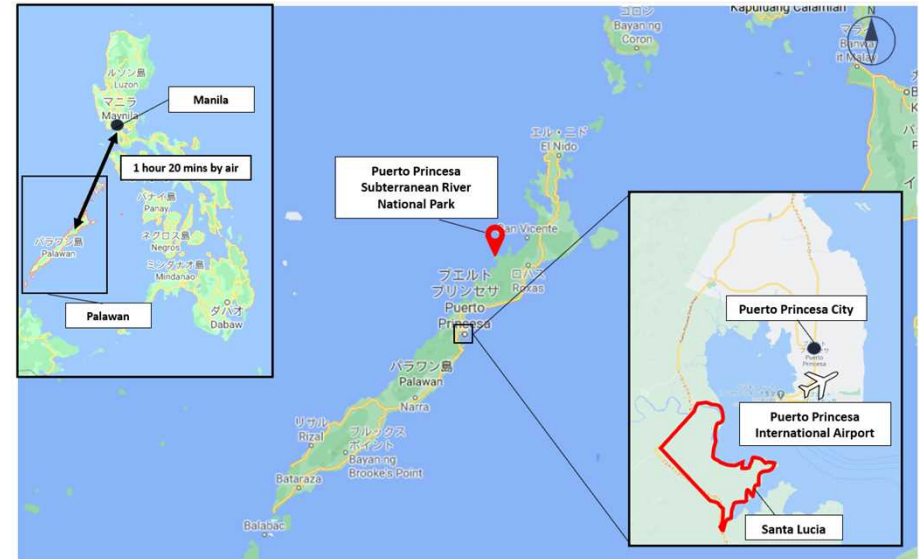


Figure 1 : Target Area



Figure 2 : Puerto Princesa City

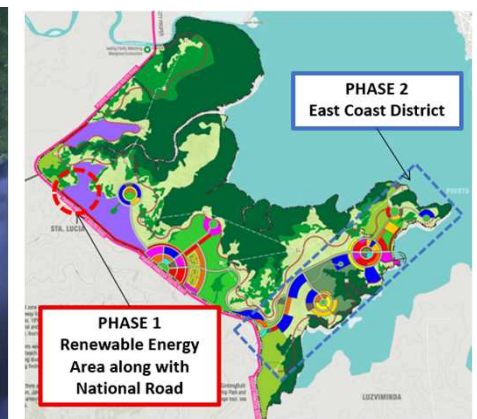


Figure 3 : Santa Lucia as “Environmental Estate”