Semarang **Waste to Energy** 2023

Stable economic and population growth have led to a dire need for a sustainable waste management solution

Starting Point

1000 ton/day sent to Jatibarang Landfill

2 years remaining life of the Landfill

Waste volume is increasing due to population growth and urbanization

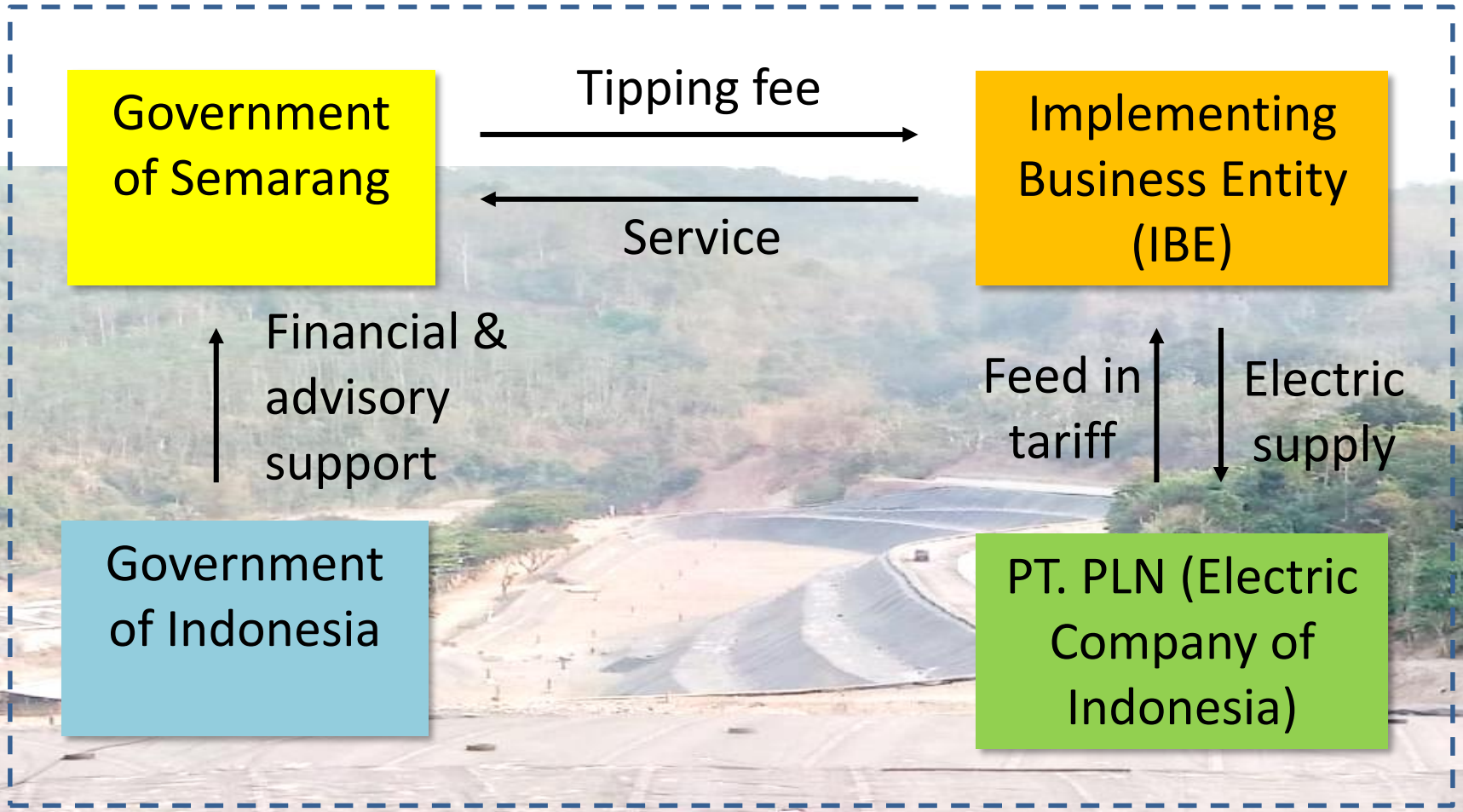
Health risks for surrounding communities

Provision of new waste treatment facility will be the replacement of the existing overloaded landfills

Institutional Setting

Under the President Regulation 35/2018 (Waste to Energy)

Public Private Partnership (PPP) scheme



Approach

Timeline update progress

Preliminary study	Public consultation	Market sounding	Feasibility Study	Procurement

March 2019 ⇩ ⇩ December 2019 | 2020

Stakeholders :
- Scavenger
- Cows owner
- Recycling seller
- Waste bank

Stakeholders :
- Investors, Companies
- Bank, Financial institutions
- Governments
- Electric company of Indonesia (PLN)

Participation, Communication, Coordination

Outputs

Reduction of the amount of waste by a minimum of 80%

Environmental friendly landfill

Integrated waste management in the landfill

Generate electric supply of 17 MW

President Regulation of WtE and Public Private Partnership (PPP) scheme that is used ensure the **value for money** principal for this WtE project to lead to a sustainability of this project

Lessons

- WtE is a very new thing especially for local government. Threfore we must be careful and patient in this preparation phase
- Limited fiscal capacity of local government make us being dependent to the national government subsidi and having limited choice of affordable technology
- Dilemma on executing the reduce waste program in the upstream (targeted 30% reduce of waste in 2024 – national & local official policy & strategy) while in the other hand, we have to ensure the minimum supply of waste to the landfill to fulfil minimum requirements from the WtE plant

Transfer

- Preparing high quality study on waste management including projection of waste growth and detail condition of existing waste management. The characteristic of solid waste composition in most of Asian & African countries is hardly to meet minimum requirements of generating electricity
- Choose the most suitable waste management strategy and make the right policy

DO IT NOW