



CleanPower
Indonesia

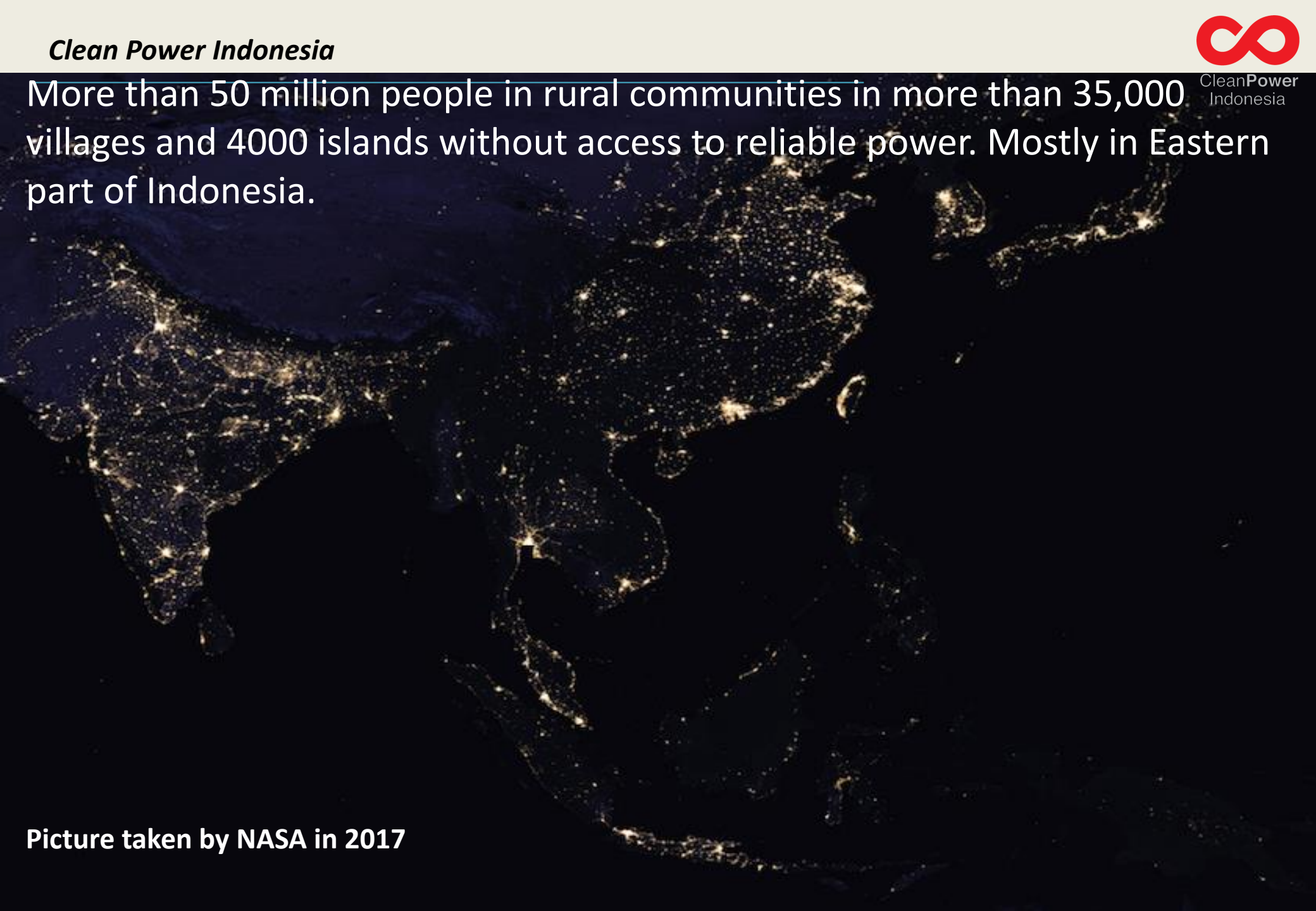
*Community based Renewable Energy in Mentawai
Alternative Rural Electrification Development Mechanism in
Indonesia*

Jaya Wahono
Clean Power Indonesia

Indonesia Development Forum
July 11th 2018

More than 50 million people in rural communities in more than 35,000 villages and 4000 islands without access to reliable power. Mostly in Eastern part of Indonesia.

Picture taken by NASA in 2017



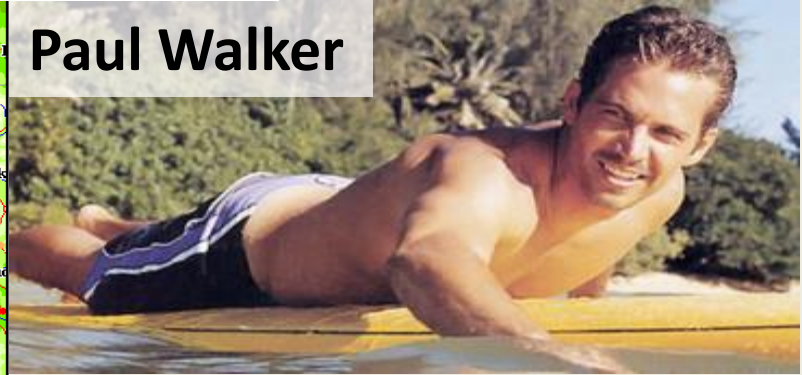
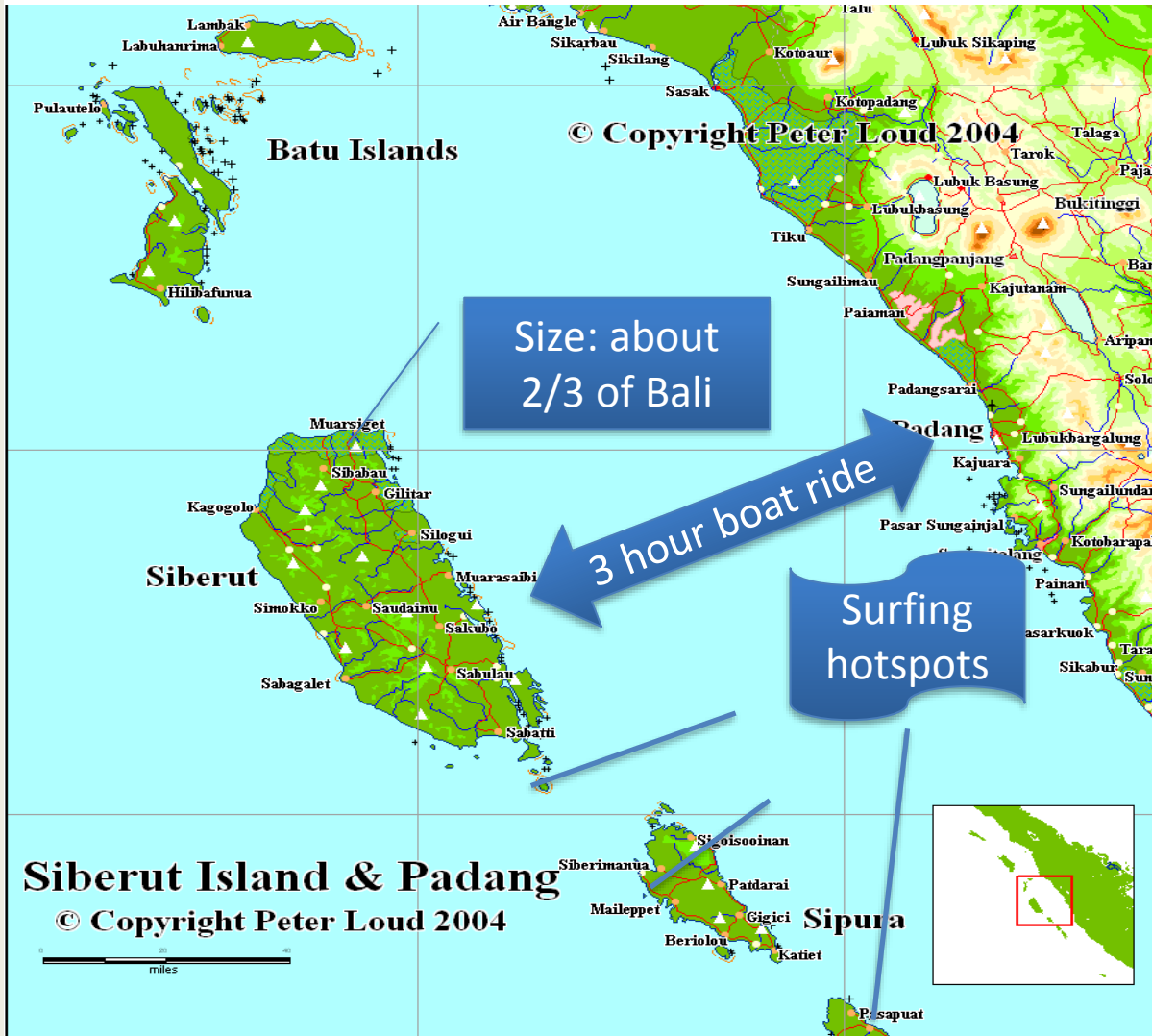
Paradise Lost



No electricity,
No telephones,
No internet,
No infrastructure,
BUT people



... yet is known as World Surfing Destination



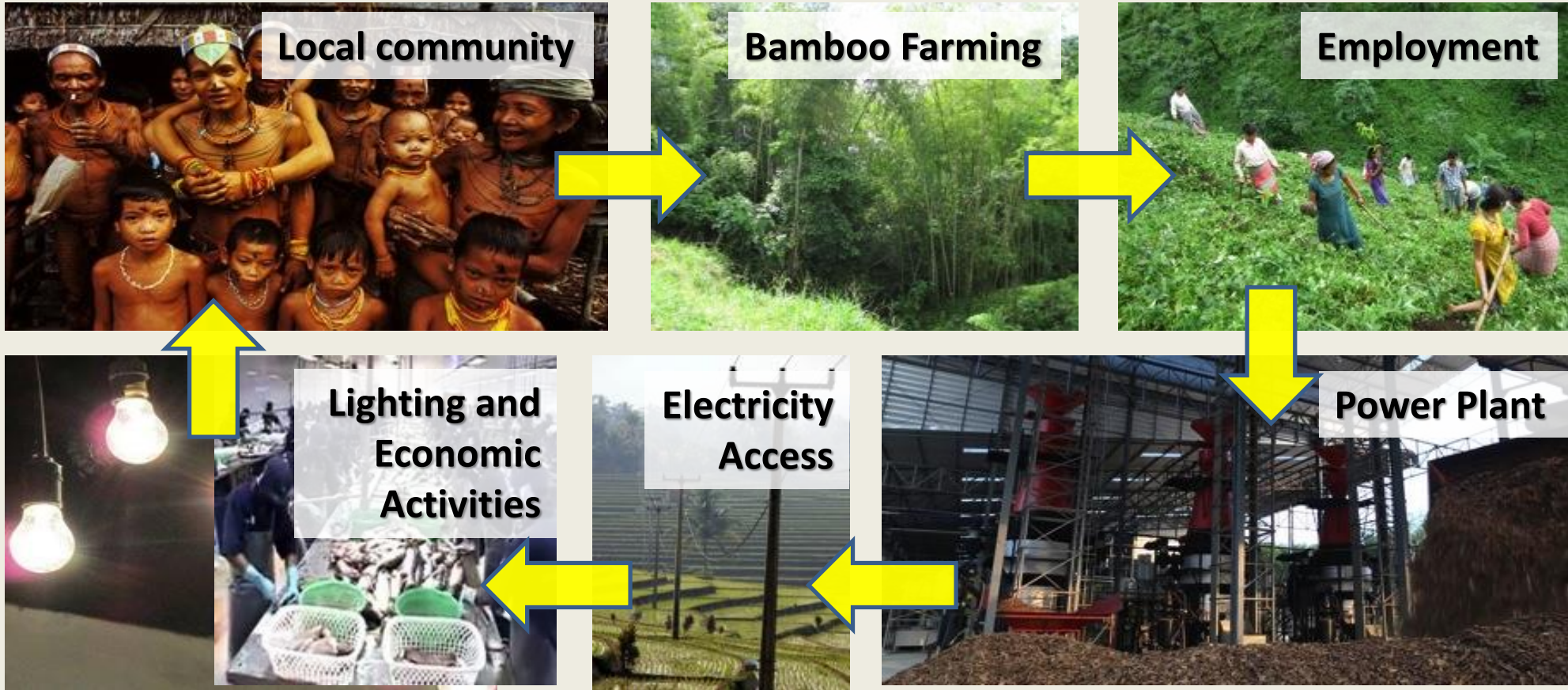
Paul Walker



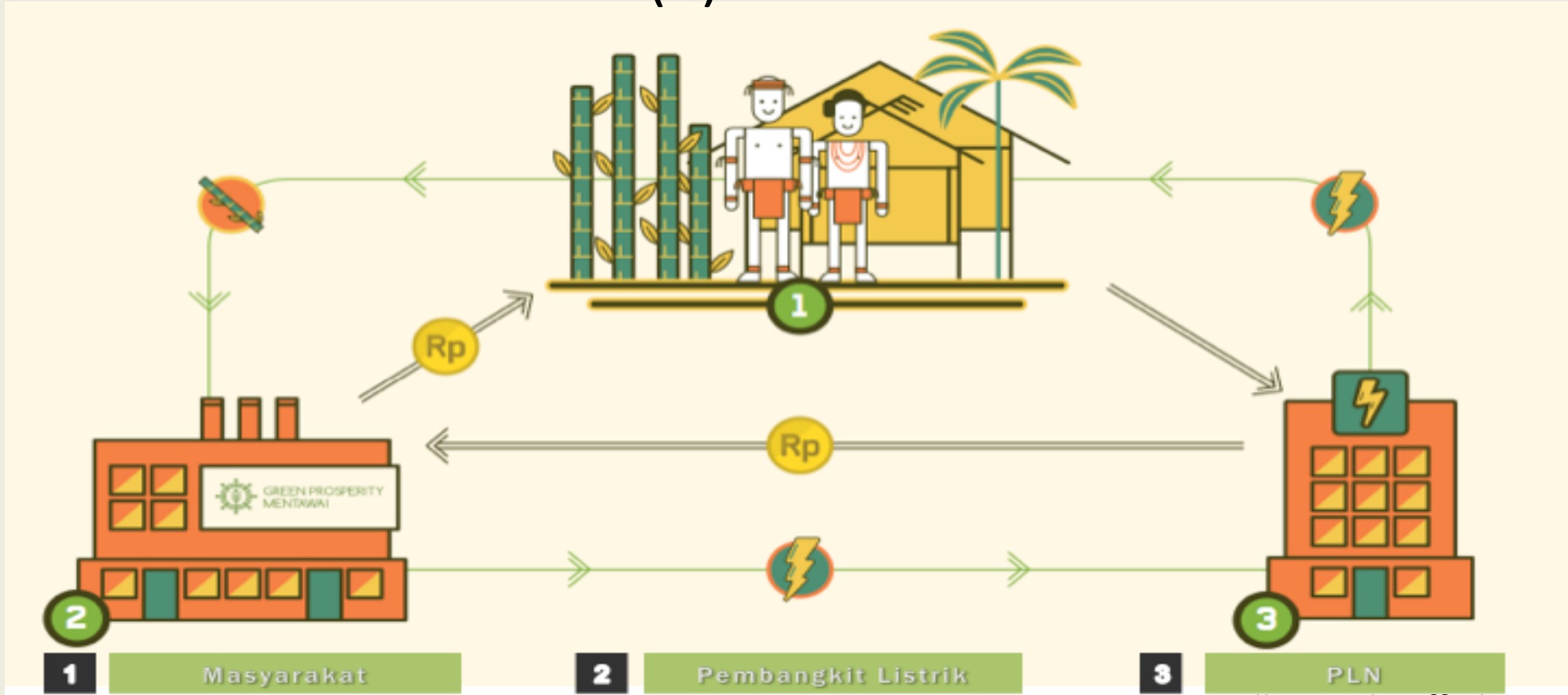
Hemsworths

20,000 foreign
visitors per year

Community based off-grid electricity scheme (1)



Community based off-grid electricity scheme (2)



Local Village will provide bio-mass for power plant and Regional Government will become part owner of the power plant.

Private Developer will develop and build the source of **biomass feedstock, the power plant and the distribution network.**

PLN will provide offtaker guarantee and distribute government's subsidy to local communities

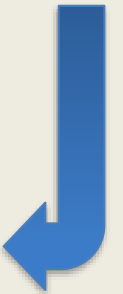
MENTAWAI MODEL



Crop Drying System



Cooking fuel



Planting Activities



Every household receives:

100 bamboo seedlings

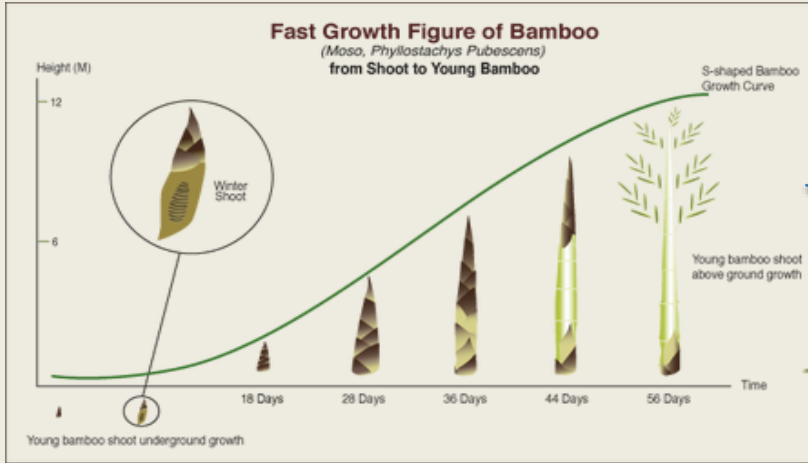
1 seedling => **100 poles** within 5 years

1 pole => 20-30 kgs.

1 household will only need **2-3 poles/month** to fulfill their energy needs.



Bamboo Growth



Challenge on electrifying remote villages

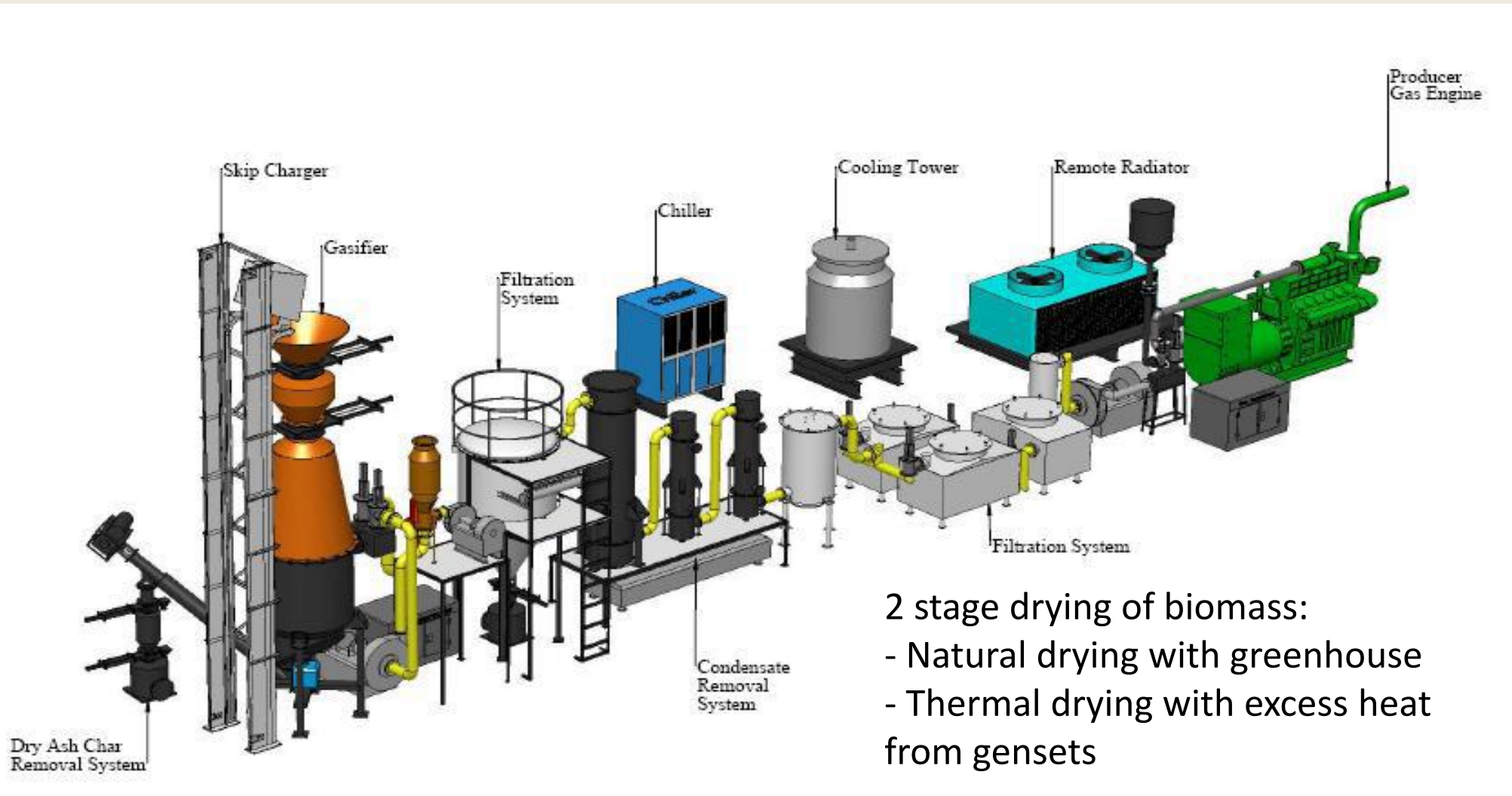


Matotonan Village:
1 x 100 kWe + 1 x 50 kWe



Feb 21, 2018

Typical System Configuration



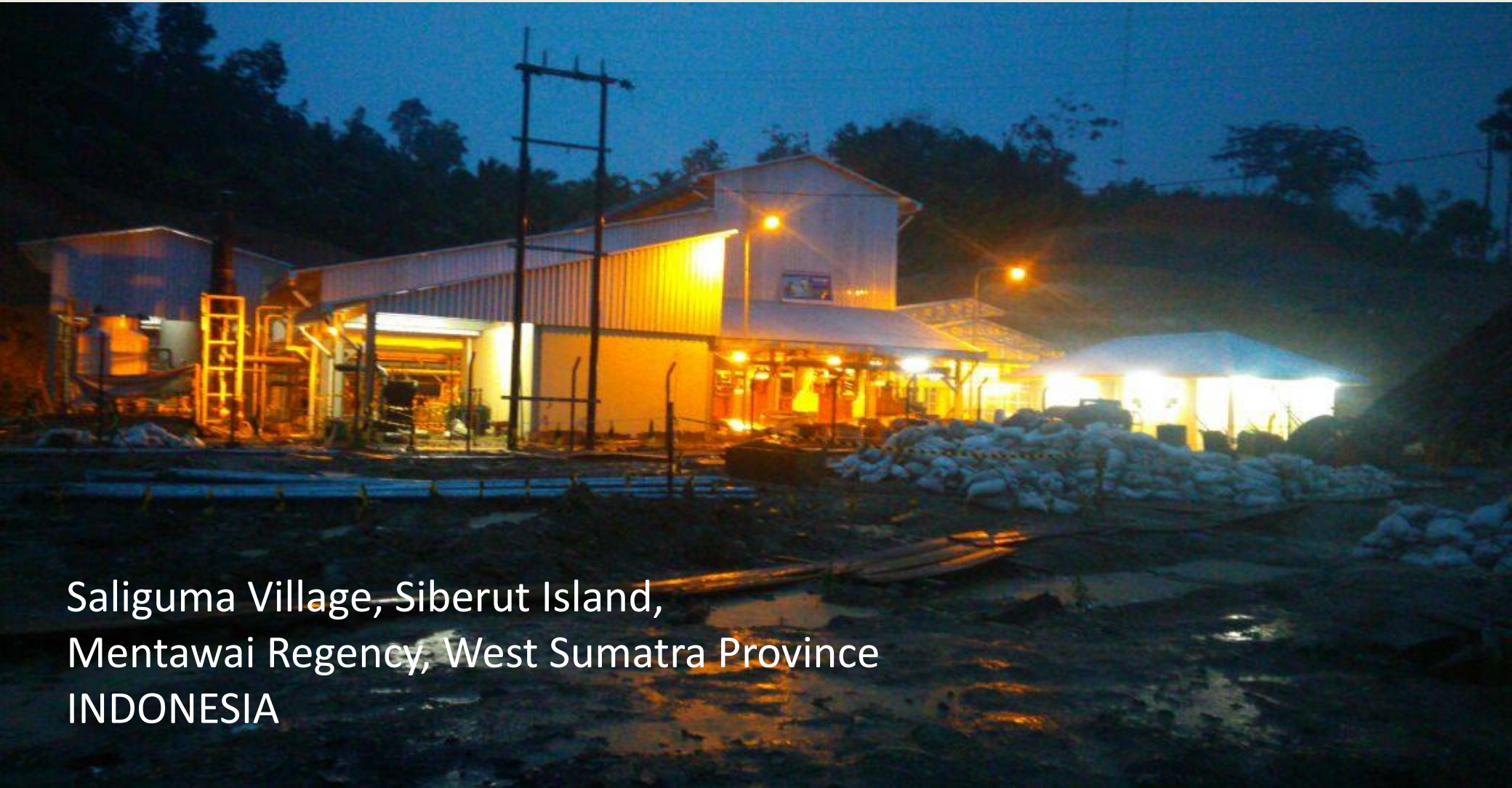
Locals are being trained as operators



Feedstocks are supplied by locals



First Light on First Bamboo Biomass Power Plant in Asia Pacific

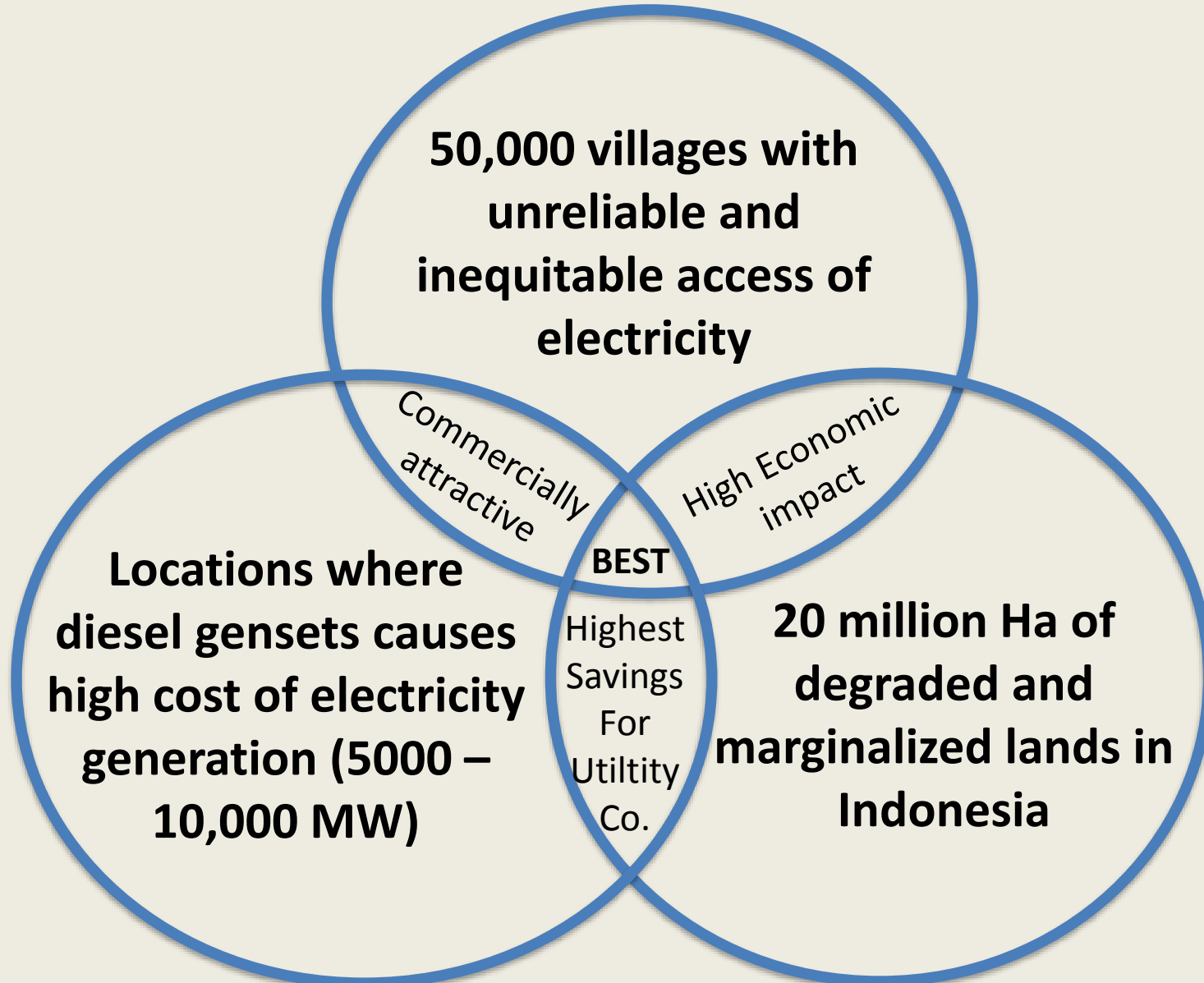


Saliguma Village, Siberut Island,
Mentawai Regency, West Sumatra Province
INDONESIA

First Light on First Bamboo Biomass Power Plant in Asia Pacific (2)



Strategy for Development



INDONESIA 2045



1st centennial
celebration

The Government aims to bring universal access of electricity to Indonesia and increase electricity consumption by 300% before 2045

