rumah energi Indonesia Domestic Biogas Programme: Story of Financing Renewable Energy Project at Community Level

> Jihan A. As-sya'bani 21 June 2023

Give People Power

About IDBP



► Goal

Stimulate grassroot communities in accessing domestic biogas through market approach and circular economy model.

28.864 digesters are built across 19 provinces in Indonesia.

► Impacts

Cost saving of LPG/Firewood purchases IDR 65.000/month*

Additional income around IDR 400.000/month* from bio-slurry selling rumah energ

Emission reduction 3.3 tons CO2e/year/unit

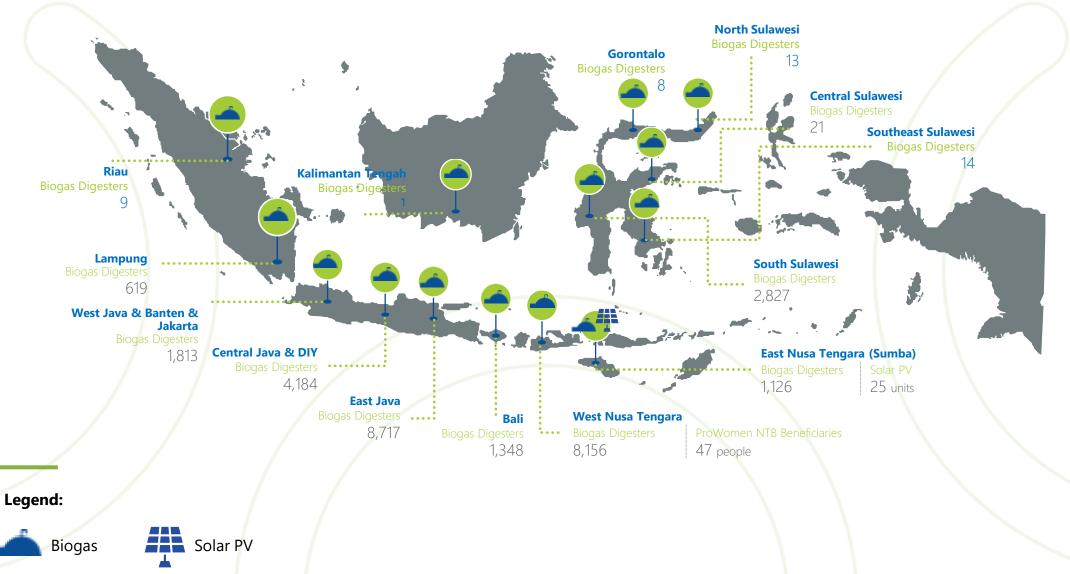
Total Carbon Emission Reduction in IDBP Program: **464,562 tCO2****

 SDGs Contribution
 1 NO POVERTY
 2 ZERO HUNGER
 5 GENDER

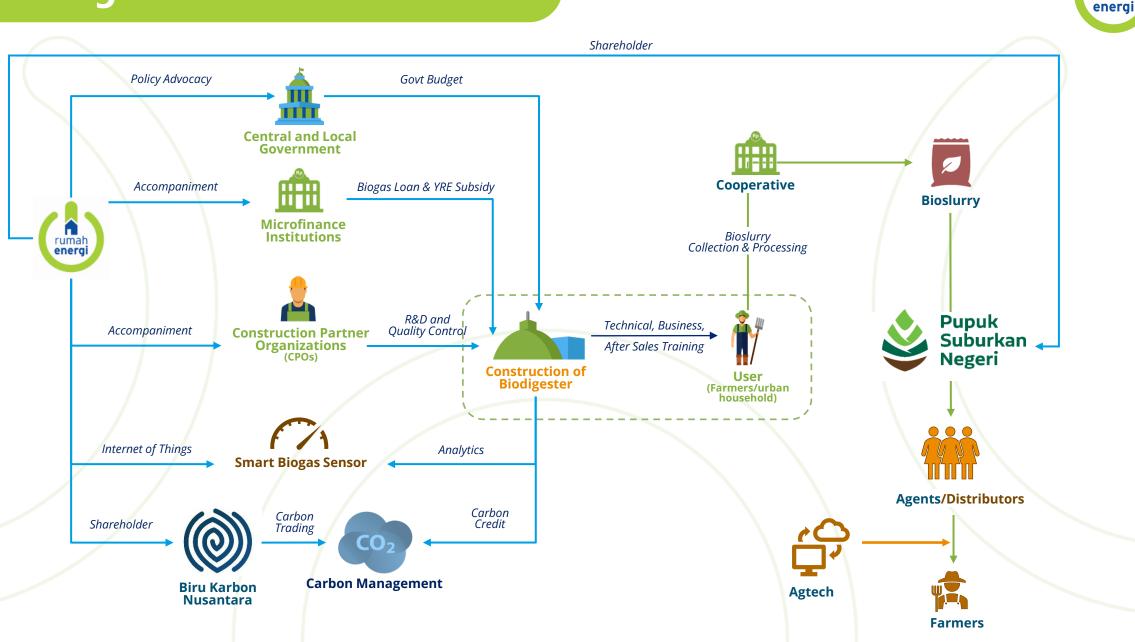
 Image: Signal Constrainty
 Image: Signal Constrainty
 Image: Signal Constrainty

7 AFFORDABLE AND CLEAN ENERGY 8 DECENT WORK AND ECONOMIC GROWTH

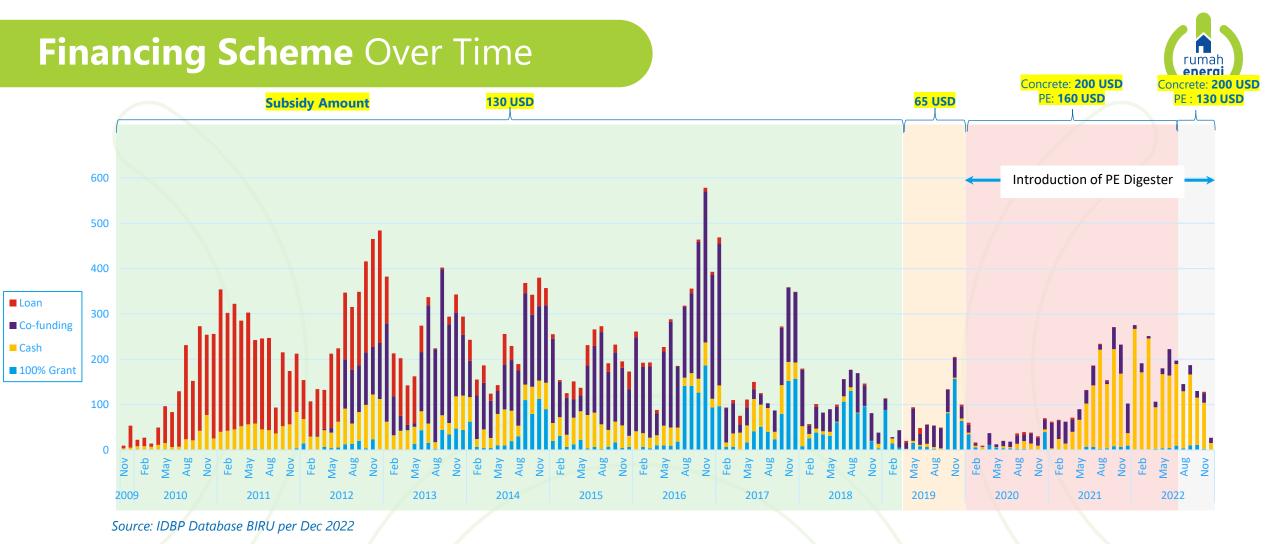




Financing Scheme



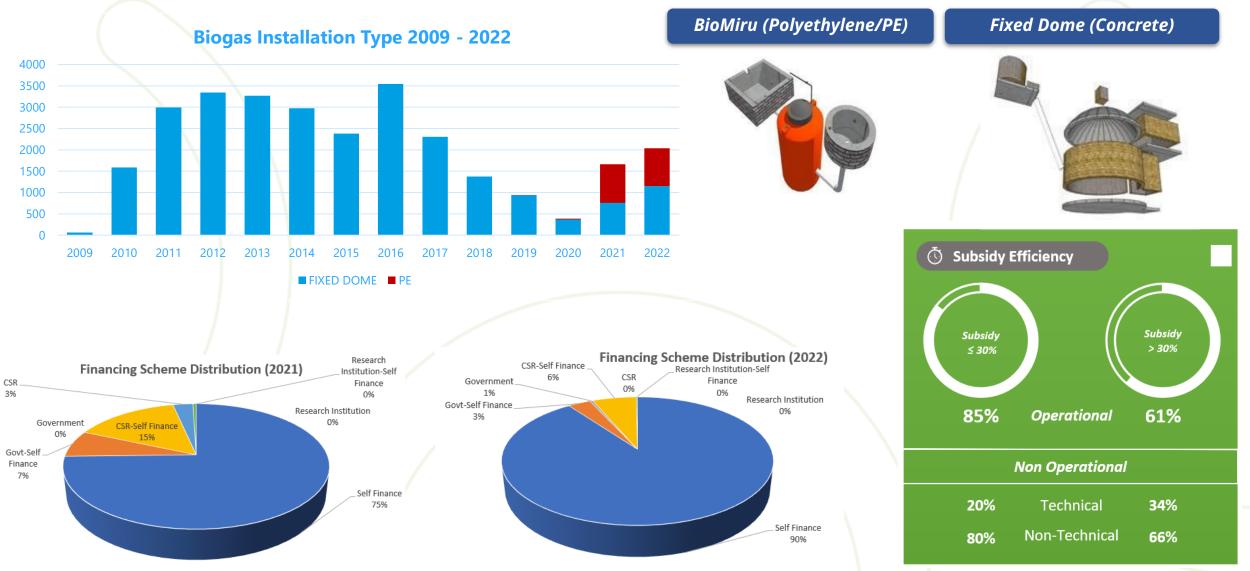
rumah



- IDBP were supported by several Donors (i.e.: EnDev, Royal Netherlands Embassy, Royal Norwegian Embassy, and Millennium Challenge Account Indonesia (MCAI) from <u>2009 to 2021</u>.
- IDBP entered the Voluntary Carbon Market (VCM) after being registered under the Gold Standard Project of Activity (PoA) in <u>2013</u>. Hence subsidy for biogas installation were then combined with funds from carbon ever since.
- Since <u>February 2021</u>, subsidy for biogas installation has been coming **only from carbon fund**. Nevertheless, the number of biogas installation with **financing scheme through cash** (users' out of pocket) **has become the majority** in comparison to grants and co-funding over this time.

Financing Scheme





Challenges & Barriers





RE technologies are expensive

Concrete digester cost: US\$800-1100

Material costs increase rate: 6.87% yoy (BPS, 2022)



Seasonal Farmers Income

High default risks from seasonal income of cattle/dairy farmers;

Lack of Awareness from Microfinance Institutions

Lack of knowledge on climate change, energy transition, green financing, technical aspects of renewable energy technologies



Lack of Supporting Policy

e.g., Comprehensive policy for green financing (not limited to power plant or EV) down to MFI; Tax incentives for MFIs which provides green financing

Opportunities





Correct Model Provides Multiplier Benefits

e.g., Biogas to milk and agriculture value chain



Increasing Interest to Renewable Energy

Increasing interest from the market to renewable sources; Partnership with multinational companies which committed to net-zero by 2050.

Cooperatives as MFI Partner

Strong ties between cooperatives and members reduce default risks

Increasing Global Trends to Green Financing

Global green finance market has grown from \$5.2 billion in 2012, to more than \$540 billion by 2021. (TheCityUK, 2022)



rumah energi

What to do

Recommendations to Policy Makers, Investors, and Stakeholders

- Connect
- Climate and energy transition urgency mainstreaming to MFI (banks, cooperatives, etc.)
- Incentivizes technological and business model innovation creation to reduce renewable energy costs
- Establish comprehensive policy with incentives and de-risking measures

Terima Kasih

Find more about our activities:



🕑 @rumahenergi 🚺 Rumah Energi



Rumah Energi



Yayasan Rumah Energi

Jl. Pejaten Barat No.30A, Ps. Minggu, Jakarta Selatan, DKI Jakarta 12550

Tel. +62-21 782 1086 / 782 1090 **Fax.** +62-21780 4443

E-mail. info@rumahenergi.org www.rumahenergi.org