



# Unlocking the potential of biogas technology in West Java, Indonesia: A multilevel analysis of adoption barriers and opportunities

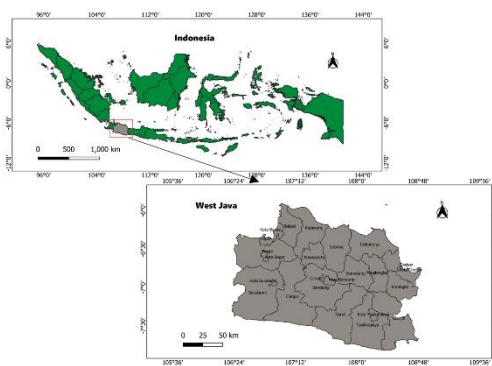
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## Introduction

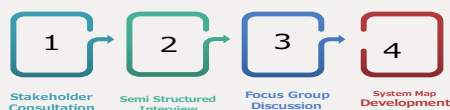
1. Energy scarcity is a global problem, particularly in emerging countries.
2. Biogas is a clean and sustainable energy source for rural areas.
3. Completed studies exploring biogas's social acceptability and economic viability as an alternative energy source.
4. Benefits of biogas for the environment, society and health

## Research Location

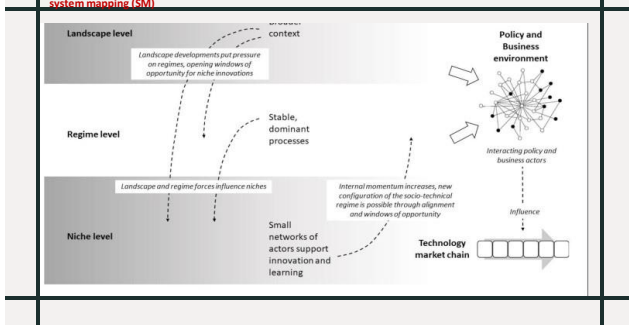


## Materials and Methods

### Methods



Different levels of analysis in the multi-level perspective (MLP) framework (adapted from Geels 2011) and the system mapping (SM)



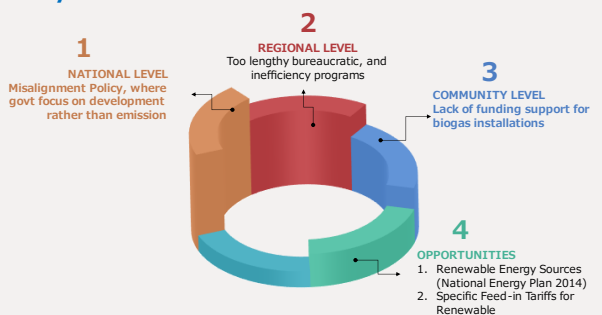
## Conclusions

1. Study assesses biogas technology as an alternative to traditional fuels in West Java, Indonesia.
2. Biogas usage leads to substantial reductions in firewood (58%), charcoal (36%), dung cake (71%), and kerosene (74%) consumption.
3. Chemical fertilizer usage decreased by 94% and combined chemical fertilizer and manure application decreased by 91%.
4. Biogas adoption boosts adopters' annual income and enables toilet construction to address field defecation.

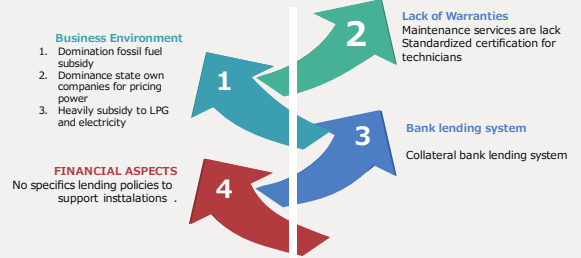
## Results : Barriers and Opportunities



### Policy Environment



### Business Environment



### Market Chain



### Opportunities

