

# The mega conversion program from kerosene to LPG in Indonesia:

A case study of lesson learned and recommendations for future clean cooking energy expansion

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# Program goals and implementation process

- Government-led program
- *Initial goal:* 42 Million free conversion packages to replace kerosene between 2007-2012
- *Target:* Households with expenditure of less than US\$ 110 a month and without a gas stove and small and medium enterprises (SME) using kerosene
- *Implementers:*
  - ✓ Inter-ministerial group coordinated by the Ministry of Energy and Mineral Resources (MEMR)
  - ✓ National Oil Company (Pertamina)
- Government LPG cylinder price is US\$0.45 per kg against a full-cost price of US\$0.99 per kg

Pre-conversion kerosene stove



Post-conversion LPG stove + 3Kg cylinder + accessories



# Phases of conversion from 2007 to 2016

... 2004

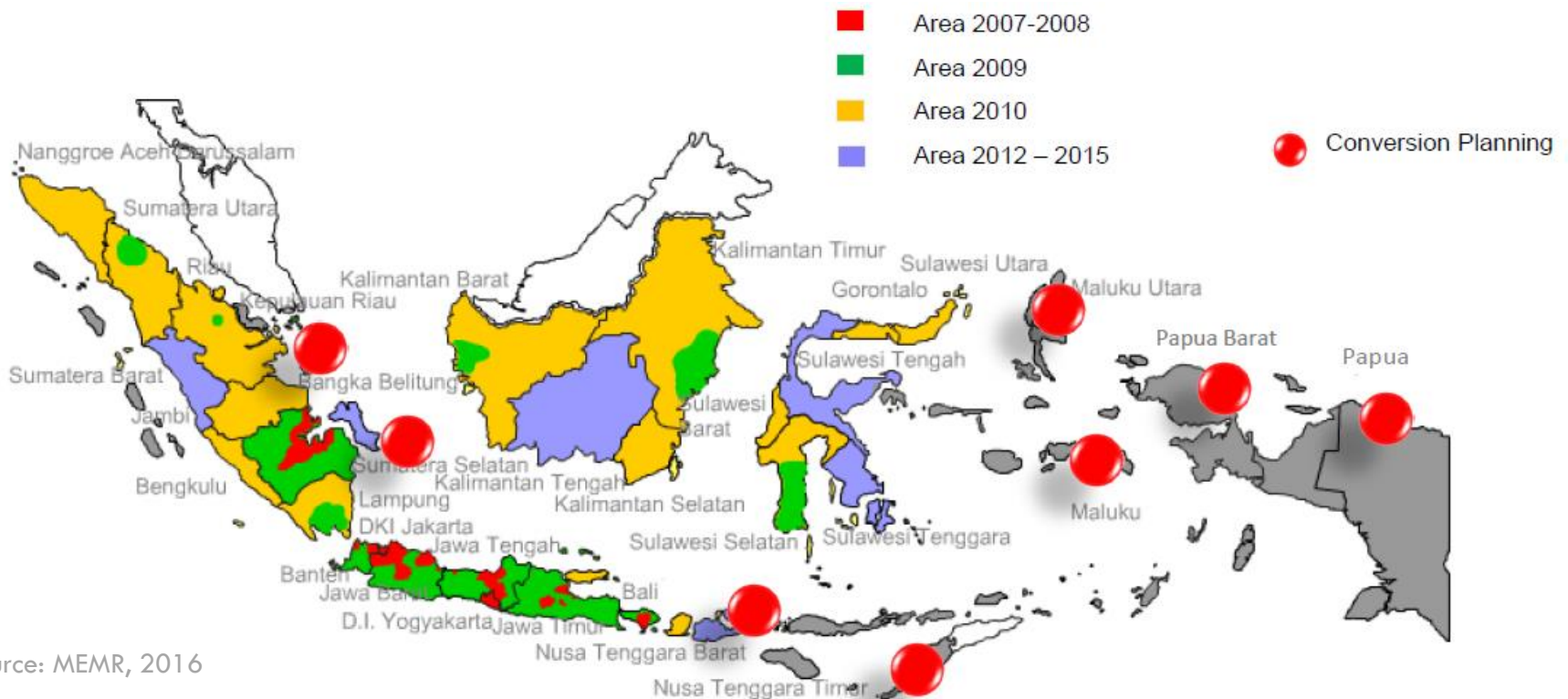
- Kerosene used by **48 M HHs** and heavily subsidised

2007-2011 (Main phase)

- Govt. Program: 42 Million LPG conversion packages to be distributed
- **50 million distributed already by 2011**

2012-2015

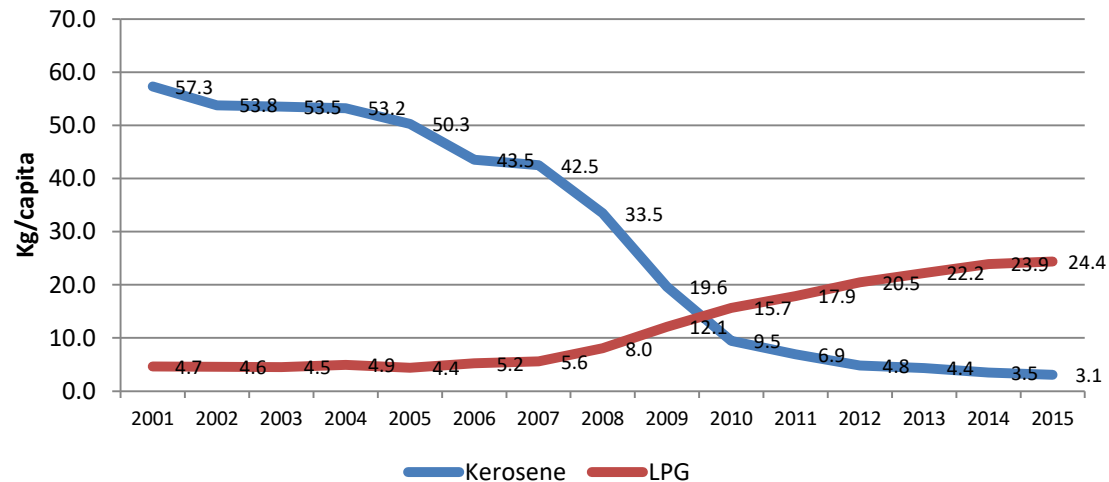
- Program continued to expand in non-initially converted areas
- Around 57 Million households converted by 2015



Source: MEMR, 2016

# Findings (I)

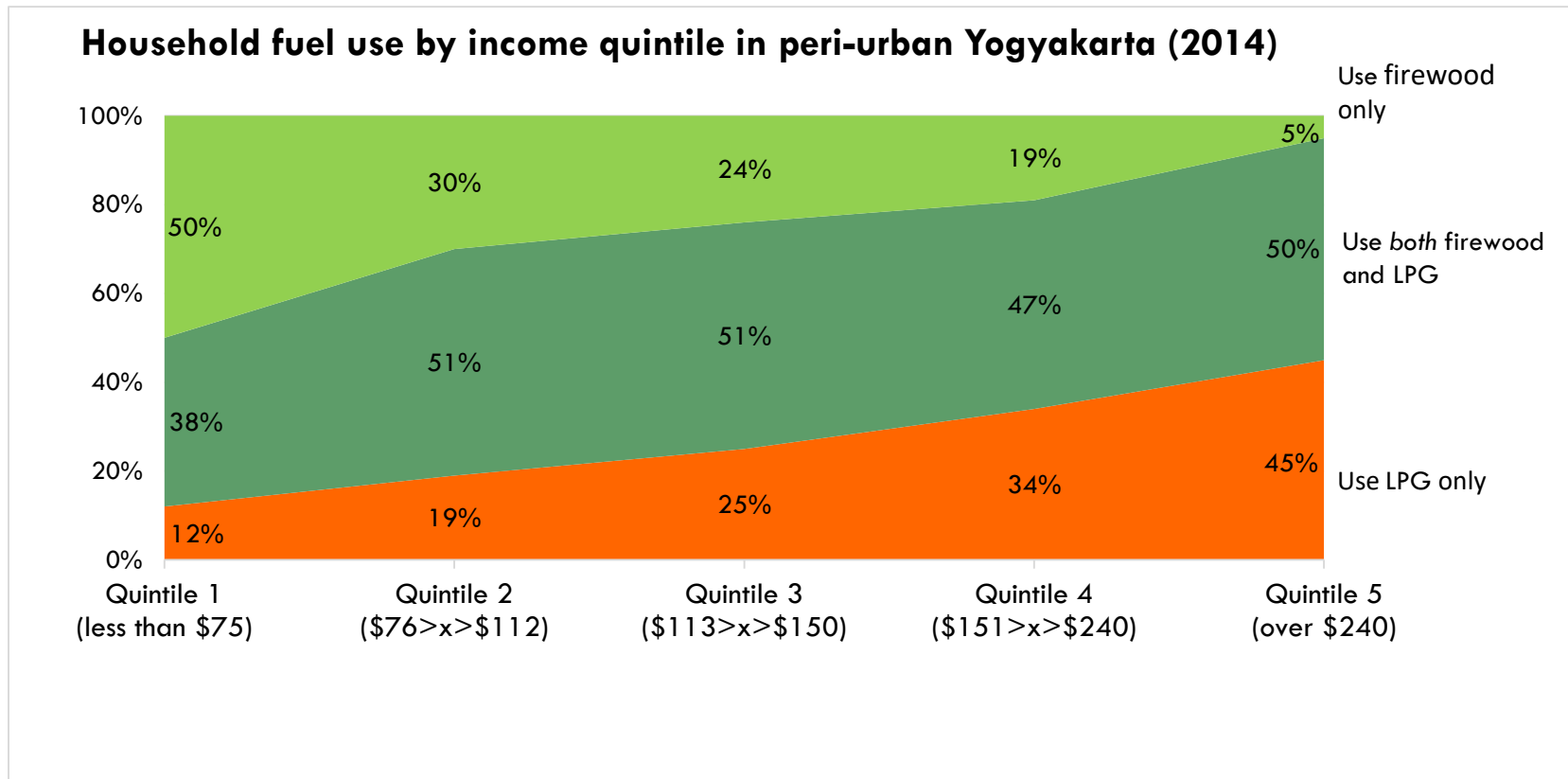
- Conversion Program successful in shifting kerosene users to LPG



LPG consumption rose from 4.7 kg/capita to 24.4 Kg/capita

- Subsidy savings (2007-2016): IDR 216.37 trillion (US\$ 14.80 billion)
- **Success factors** included: (i) created a strong enabling environment, (ii) addressed accessibility and created reliable supply chains; (iii) addressed consumer affordability, (iv) undertook socialization.

# Findings (II)



- ↑ HH income, ↑ LPG use
- Fuel stacking remains common practice across HH

# Concluding remarks

- Addressing household air pollution (HAP) was not an objective of the program; consequently, there is limited documented evidence of impact in this area.
- Missed opportunities in terms of influencing cooking behavior change among solid fuel users.
- From 2018 the open subsidy for LPG will be replaced by one targeted at lower income households



# Thank you



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