ELECTRIC COOKING
CHALLENGES TO ITS ADOPTION IN INDIA
Why Electric Cooking?

- Around a third of the world’s population — nearly 2.4 billion people — still lack access to clean cooking solutions, resulting in immense damage to the climate, public health and local economies.
- In India, about 120 Million (12 Crore) households still use some form of biomass or kerosene to cook food.
- 600,000 premature deaths every year in India solely due to Indoor Air Pollution (IAP).
Number of Deaths attributable to Indoor Air Pollution – Global vs India (Source: State of Global Air, 2020)
Why Electric Cooking?

• Government has taken the issue seriously, and has been trying to encourage cleaner cooking fuel adoption
  
• Rajiv Gandhi Gram LPG Vitrak Yojana (RGGLV scheme), 2009
• Pradhan Mantri Ujjwala Yojana (PMUY), 2016
• Over 100 Million (10 Crore) households covered
• LPG used by approx. 300 Million (30 crore) households*
• Village household level biogas schemes since 1960s
• Toilet-Linked-Biogas cookstoves

*source: Petroleum Planning & Analysis Cell (PPAC)
Why Electric Cooking?

• But, all of these schemes have not succeeded in sustaining or completely switching to cleaner cooking fuels
  • Lack of strong LPG distribution networks in rural areas
  • High price of LPG refills – lack of subsidy
  • Social/ Cultural norms

• Majority of the biogas plants in villages are not functioning anymore
  • 5 million biogas plants in India right now

• Over 50% of households under PMUY scheme have not refilled their LPG cylinders
  • Approx. 50 million beneficiaries still use biomass as primary fuel
Why Electric Cooking?

• LPG cannot be the only clean cooking option for the country
• India’s net-zero by 2070 ambition needs another alternative
• High prices of oil and gas
• Gas import bill of approx. USD 13 Billion every year, which is 10% of India’s energy imports
• Significant gap in India’s future energy security
Major challenges to Adoption

- High upfront costs: appliance cost, utensil costs
- Unreliable/ low quality electricity supply: Grid infrastructure
- Lack of consumer awareness: Market needs to expand
- Preference for traditional customs: Behavioural patterns
- Social/Cultural norms: Cooking patterns vary by region
- Distributed Renewable Energy (DRE) expensive to set-up & run
Thank you

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