

Clean Cooking Fuel in India

Why in news?

In the recently conducted India Energy Week exhibition the Indian oil has launched Surya Nutan which could be the sustainable solution for clean cooking fuel.

What is clean cooking fuel?

- Clean fuels and technologies are those that attain the fine particulate matter (PM2.5) and carbon monoxide (CO) levels recommended in the WHO global air quality guidelines (2021).
- Modern and clean cooking fuels are fuels with very low levels of polluting emissions when burned. Examples include biogas, LPG, electricity, ethanol, natural gas, and solar power (BLEENS).
- Pellets used in specialised biomass stoves can also be a clean fuel.

What is the need for clean cooking fuel?

- Provides energy access to poor people of the country.
- Reduces health issues and premature deaths.
- Helps India achieve its net zero targets by reducing <u>carbon</u> emissions.
- Boost GDP by reducing the economic burden resulting from the use of unsustainable fuels.

What are the challenges to India's clean cooking transition?

- **Cylinder refill being costly** Over 50 % of the households that received new LPG cylinders did not choose to refill due to high costs of refill.
- **Cylinder distribution networks** Lack of access to the cylinder distribution networks especially in rural India.
- Lack of choice The government only promotes LPG cylinder leaving out the alternatives such as electric cooking (e-cooking), especially <u>solar</u> photovoltaic (PV) connected e-cooking.

What are the measures taken for clean cooking fuel?

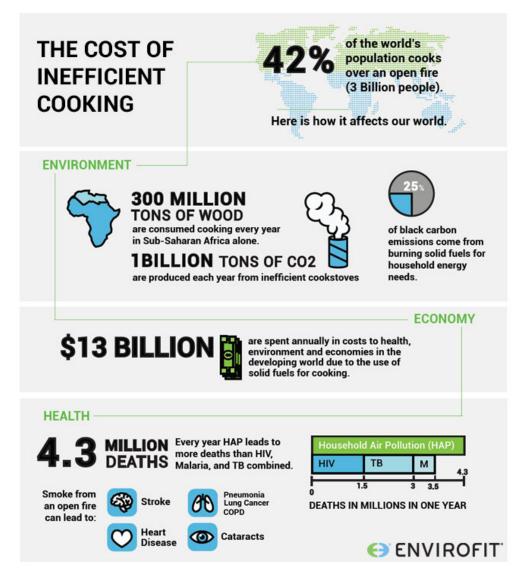
- **Rajiv Gandhi Gram LPG Vitrak Yojana (RGGLV scheme)** Was launched in 2009 to provide clean coking fuel.
- **Pradhan Mantri Ujjwala Yojana (PMUY)** It aimed to replace solid and other biomass-based polluting cooking fuels used in urban and rural households in India with Liquefied Petroleum Gas (LPG).
- Launched in 2016 and replaced the RGGLV scheme.
- Piped natural gas (PNG) The government has been actively promoting PNG, which

is a more economically viable fuel than LNG.

- Go Electric campaign It encourages the use of electric vehicles and electric cooking.
- **Energy Efficiency Services Limited** Working towards better utilization of renewable <u>energy</u> in cooking sector.
- **Surya Nutan** It is an indigenous, stationary, rechargeable and kitchen-based indoor solar cooking platform.
- Developed by *Indian Oil Corporation* and Union Ministry of Petroleum and Natural Gas.
- Works in hybrid mode, using both solar energy as well as an auxiliary energy source.
- The Energy Sector Management Assistance Programme (ESMAP) It announced clean cooking fund for assistance through technical support and investments in developing nations.
- The programme is by World Bank.
- In India, this programme is being developed through the *Modern Energy Cooking Services programme.*

What are the impacts of unclean fuels?

- The air quality index will further be worsen.
- Cause adverse long-term health impacts.
- Impact GDP due to sickness and loss of productivity.
- Wooden fuel leads to deforestation.



Quick facts

Energy Efficiency Services Limited (EESL)

- EESL was founded in 2009 and promoted by Ministry of Power.
- EESL is a *Joint Venture* of four reputed public- sector undertakings such as - NTPC (National Thermal Power Corporation) Limited,
 - Power Finance Corporation Limited,
 - REC (Rural Electrification Corporation) Limited and
 - POWERGRID Corporation of India Limited.
- EESL focuses on solution-driven innovation *without taking support of any subsidy* from the Government.

• EESL is a Super Energy Service Company (ESCO), which enables consumers, industries and governments to effectively manage their energy needs through energy efficient technologies.

References

- 1. Down To Earth Measures Taken For Clean Cooking Fuel
- 2. Down To Earth Challenges For Clean Cooking Fuel
- 3. <u>EESL</u> About EESL

