

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO-389
ANSWERED ON- 24/07/2024

OBJECTIVE OF NET-ZERO EMISSION

389. SHRI S JAGATHRATCHAKAN
SHRI HARIBHAI PATEL

Will the PRIME MINISTER be pleased to state:-

- (a) whether the Government in respect of nuclear reactors has made any progress in the process of exploring strategies for leveraging nuclear power in achieving the objective of net-zero emissions and sustainable development goals;
- (b) if so, the details thereof and if not, the reasons therefor;
- (c) the details of initiatives taken/being taken by the Government to maximise Nuclear Energy's potential;
- (d) whether the two indigenous nuclear reactors, KAPP-3 and KAPP-4 in Gujarat state will provide clean and sustainable energy; and
- (e) if so, the details thereof along with the role of these two nuclear reactors in augmenting the electricity generation?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS
AND PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH)

- (a) & (b) Indian nuclear power reactors have been generating clean electricity, contributing to the country's objectives of Net Zero emissions by 2070. The country's nuclear power plants have so far generated about 880 Billion Units of clean electricity, avoiding about 757 million tons of CO₂ emissions. A nuclear power capacity expansion programme to enhance the installed capacity from 8180 MW at present to 22480 MW by 2031-32 is presently underway.
- (c) To maximize the potential of India's nuclear energy resources, an indigenous sequential three-stage nuclear power programme has been envisaged. In parallel, Light Water Reactors with foreign cooperation are being implemented as additionalities to the indigenous programme.
- (d) & (e) Yes. KAPS- 3&4 (2 X 700 MW) have already generated 8363 Million Units of clean electricity (up to June-2024), saving about 7 million tons of CO₂ emissions. These reactors are expected to generate about 10.4 Billion Units of clean electricity annually (at 85% Plant Load Factor) and save about 9 million tons of CO₂ emissions every year.
