

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO-646
ANSWERED ON 05/02/2026

NUCLEAR ENERGY

646. SHRI TEJVEER SINGH

Will the PRIME MINISTER be pleased to state:-

- (a) the steps taken to expand nuclear energy capacity so as to promote clean and sustainable energy sources in the country;
- (b) the details of recent policy decisions taken in connection with indigenous nuclear technology, research and safety standards; and
- (c) the progress made so far in energy security, reduction in carbon emissions and technological self-reliance as a result of these efforts?

ANSWER

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

- (a) The Government has announced a Nuclear Energy Mission to reach a capacity of 100 GW nuclear power capacity by 2047. The Government has also enacted the SHANTI Act to enable wider participation of private sector in nuclear power towards the accomplishment of the Nuclear energy Mission.
- (b) The Government has announced development of five indigenous Small Modular Reactors (SMRs) designs to be deployed by 2033. BARC has undertaken design, development and establishment of SMRs [220 MWe Bharat Small Modular Reactor, 55 MWe Small Modular Reactor, Up to 5 MWth High Temperature Gas Cooled Reactor] and suitable for deployment as captive power plants for the energy intensive sectors, repurposing of retiring fossil fuel-based power plants, and deployment in remote location with no grid connectivity. Under the Nuclear Energy Mission, funds have also been allocated for R&D of indigenous SMRs by 2033.
- (c) At present, seventeen nuclear reactors with a total capacity of 13600 MW (including PFBR) are at various stages of implementation, which are expected to be completed progressively by 2031-32. The Government has drawn up a comprehensive road map to reach a capacity of about 100 GW by 2047. The present nuclear power capacity is planned to be increased to about 22 GW by 2031-32 on progressive completion of projects under implementation.
