

GOVERNMENT OF INDIA  
DEPARTMENT OF ATOMIC ENERGY  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO-1125**  
ANSWERED ON 05/12/2024

**SMOOTH TRANSITION FROM CONVENTIONAL ENERGY SOURCES**

1125. SMT. P.T. USHA

Will the PRIME MINISTER be pleased to state:-

- (a) whether Government is intending to augment the potential of small or portable nuclear reactors in the country to effect the smooth transition from conventional sources such as fossil fuel;
- (b) if so, the details thereof;
- (c) whether any Memorandum of Understanding has been entered in this regard to expedite the process;
- (d) whether Government is considering to hold technical strategic collaboration with advanced technology and research institutes in the country to augment the acquisition of the technology under Atmanirbhar platform; and
- (e) if so, the details thereof?

**ANSWER**

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

- (a) & (b) Yes. The standard 220 MW Pressurised Heavy Water Reactor (PHWR), which has a proven safety and performance record, is being upgraded to reduce the land requirement and make it deployable close to the industries for use as a captive power plant. These reactors, termed as Bharat Small Reactors (BSR) are planned to address the decarbonization needs of industries like steel, aluminium, metals etc.  
Small Modular Reactor is being developed by BARC for repurposing of retiring coal based power plants and catering to power requirements at remote locations in the country to facilitate smooth transition from conventional source such as fossil fuel.  
The reactor design is fully compliant to the "Make-In India" initiative by the Government of India. The existing nuclear vendor based in the country can fully support these designs.
- (c) No.
- (d) & (e) With the vast experience and technological know-how in the field within DAE, technical strategic collaboration with advanced technology and research institutes in the country is currently not being explored to augment the acquisition of the technology under Atmanirbhar platform.

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