

WRITTEN ANSWERS TO UNSTARRED QUESTIONS

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO-1921
ANSWERED ON-08/08/2024

**EFFECTS FOR MAKING AATMANIRBHAR BHARAT IN ATOMIC ENERGY
SECTOR**

1921. SMT. SANGEETA YADAV

Will the PRIME MINISTER be pleased to state: -

- (a) the efforts made by Government to make 'Aatmanirbhar Bharat' in the Atomic Energy sector;
- (b) whether Government has drawn any roadmap for enhancing the share of Atomic Energy in the energy basket of the country, if so, the details thereof;
- (c) whether efforts by the DAE in the last decade have helped in improving Atomic Energy sector's contribution to achieve country's energy security; and
- (d) if so, the details thereof and if not, the reasons therefor?

ANSWER

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

(a) India had made consistent efforts to become 'Aatmanirbhar' in nuclear power. India has acquired comprehensive capabilities in nuclear power and associated fuel cycle technologies. Indian industry has also evolved to supply components and equipment and execute works for the nuclear power programme, thus becoming Aatmanirbhar. To further encourage the Aatmanirbhar initiatives, the Government sanctioned 10 indigenous 700 MW reactors in fleet mode, which are under pre-project stage.

Atomic Energy (Amendment) Act, 2015 allows Indian public sector companies (from the non-nuclear sector) to build nuclear facilities in the country, under joint-venture.

Under the initiative of 'Aatmanirbhar Bharat', the 500 MWe Prototype Fast Breeder Reactor (PFBR) project at Kalpakkam, Tamil Nadu is fully designed, constructed and in the advanced stage of commission with indigenous technology.

(b) Yes. The share of nuclear power in the country's energy basket is proposed to be increased by augmenting the installed capacity. A capacity addition programme to increase the installed capacity to 22480 MW by 2031-32 from 8180 MW at present is under implementation.

(c) & (d) Yes. India is implementing an indigenous three-stage nuclear power programme aimed at ensuring long term energy security of the country. In the last decade, the first twin

unit KAPS 3&4 (2X700 MW) of indigenous 700 MW Pressurised Heavy Water Reactors of the first stage commenced commercial operation. Another 14 such reactors of the same series are underway.

The annual generation of electricity from nuclear energy in the country has increased about 35% over last decade and continues to grow with addition of new plants to the national grid. Year-wise Gross Generation of nuclear electricity in the last decade is given in the table below:

Financial Year	Gross Generation (Million units)
2014-2015	35592.35
2015-2016	37455.81
2016-2017	37674.49
2017-2018	38335.69
2018-2019	37812.811
2019-2020	46472.410
2020-2021	43029.016
2021-2022	47111.996
2022-2023	45854.794
2023-2024	47970.654
