

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 4615
ANSWERED ON 31.03.2022

POTENTIAL OF OCEAN ENERGY

+4615. SHRI NAYAB SINGH

Will the Minister of New & Renewable Energy be pleased to state:

- (a) the details of estimated potential of ocean energy including tidal energy, wave energy, salinity and energy due to ocean temperature difference, State-wise;
- (b) the quantum of funds allocated for research and development on ocean energy including tidal energy, wave energy, salinity and energy due to ocean temperature difference during the last three years and the current year, State-wise;
- (c) whether the Government has launched any tidal energy project and if so, the details thereof;
- (d) whether the Government proposes to launch any pilot project on ocean energy in the country; and
- (e) if so, the details thereof?

ANSWER

THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER

(SHRI R.K. SINGH)

(a) The Indian Institute of Technology, Chennai in association with Credit Rating Information Services of India Limited (CRISIL) conducted a study on “Tidal & Waves Energy in India: Survey on the Potential & Proposition of a Roadmap” in December 2014. As per this report, the state-wise estimated theoretical tidal and wave power potential are as follows:-

State	Tidal Power Potential (MW)	Wave Power Potential (MW)
Andhra Pradesh	100	6,900
Gujarat	10,425	4,100
Karnataka	100	6,100
Kerala	100	4,900
Maharashtra	200	8,100
Odisha	400	600
Tamil Nadu	230	10,600
West Bengal	900	--
Total	12,455	41,300

The study has not estimated the potential of Ocean Thermal Energy Conversion (OTEC) and salinity.

(b) The quantum of funds allocated for research and development (R&D) in the area of new and renewable energy technologies during the last three years (2018-19, 2019-20 & 2020-21) is Rs. 107 crore & during current year i.e. 2021-22 is Rs. 27 crore. The R&D budget of the Ministry is a composite one without specific allocations for different technologies. Since no viable R&D project was received, no R&D funds have been spent on ocean energy R&D projects.

(c) MNRE had sanctioned a demonstration project for setting up of 3.75 MW capacity tidal power plant in Sunderbans region in West Bengal in 2007. However, the project was not taken up by the Govt. of West Bengal due to high capital cost of Rs. 238 crore. Similarly, the Govt. of Gujarat had proposed 50 MW tidal power project in 2011. This project was also not taken up by Govt. of Gujarat due to high capital cost of Rs. 750 crore.

(d)&(e) Globally, ocean energy is still at a nascent R&D stage. MNRE under its Research, Design, Development and Demonstration (RD&D) programme provides financial support to academic institutions, research and development organisations and industry for research and development in renewable energy projects, which can also possibly include projects for developing Ocean Energy technologies.
