

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO-1628
ANSWERED ON-29/07/2021

TIDAL ENERGY POTENTIAL

1628. SHRI SUNIL DATTATRAY TATKARE

SHRI RATANSINH MAGANSINH RATHOD

SHRIMATI SUPRIYA SULE

SHRI MANICKAM TAGORE B.

DR. SUBHASH RAMRAO BHAMRE

DR. AMOL RAMSING KOLHE

SHRI KULDEEP RAI SHARMA

DR. DNV SENTHILKUMAR. S.

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

- a) the estimated tidal energy potential of the country along with the potential areas of generation;
- b) whether the Government proposes to take up the tidal power and research programme in a big way, if so, the details and the outcome thereof;
- c) whether a study was undertaken for the assessment of tidal energy potential in the country and if so, the details thereof, State-wise;
- d) whether the Government has failed to produce energy from tidal waves in the country despite having huge potential, if so, the details thereof and the reasons therefor;
- e) the challenges faced by the Government while producing tidal energy;
- f) whether the Government has a national policy for developing energy from the tidal waves, if so, the details thereof and if not, the reasons therefor;
- g) whether the Government proposes to formulate such a policy; and
- h) if so, the details thereof and the other steps taken by the Government to boost production of tidal energy?

ANSWER

THE MINISTER OF NEW & RENEWABLE ENERGY AND POWER

(SHRI R.K. SINGH)

(a) to (h) As per a study conducted by the Indian Institute of Technology, Chennai in association with CRISIL Risk and Infrastructure Solutions Limited in December 2014, the tidal power potential of the country is estimated at around 12,455 MW. The potential areas with low/medium tidal wave strength are in the Gulf of Khambat & Gulf of Kutch in Gujarat, Palk Bay-Mannar Channel in Tamil Nadu, and Hoogly river, South Haldia & Sunderbans in West Bengal.

The State-wise estimated theoretical potential of tidal energy is as follows:

State	Estimated Theoretical Potential (MW)
Gujarat	10,425
West Bengal	900
Odisha	400

Tamil Nadu	230
Maharashtra	200
Andhra Pradesh	100
Karnataka	100
Kerala	100
Total	12,455

The earlier efforts for harnessing tidal power were not successful due to high capital cost ranging from Rs. 30 crore to Rs. 60 crore per MW. 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.

At present, due to very high capital cost, the Government of India has not put in place any policy or programme for production of tidal energy.
