

**LOK SABHA  
UNSTARRED QUESTION NO- 4432  
TO BE ANSWERED ON 27 MARCH 2025**

**WAVE ENERGY PROJECTS**

4432. SHRI JASHUBHAI BHILUBHAI RATHVA :

पेट्रोलियम और प्राकृतिक गैस मंत्री

Will the Minister of PETROLEUM AND NATURAL GAS be pleased to state:

- (a) the steps that would be taken to scale up wave energy projects from pilot to commercial-scale installations;
- (b) the financial or policy incentives the Government would provide to support wave energy integration;
- (c) the Key Performance Indicators (KPIs) that would be used to assess the efficiency of wave energy conversion; and
- (d) the measures that would be in place to prevent any adverse effects on marine ecosystems?

**ANSWER**

पेट्रोलियम और प्राकृतिक गैस मंत्रालय में राज्यमंत्री  
(श्री सुरेश गोपी)

**MINISTER OF STATE IN THE MINISTRY OF PETROLEUM AND NATURAL GAS  
(SHRI SURESH GOPI)**

(a) to (d): Wave energy is still at a nascent Research & Development (R&D) stage in the country. Ministry of New & Renewable Energy (MNRE) is implementing a Renewable Energy Research and Technology Development Programme (RE-RTD) through research institutions and industry to develop indigenous technologies for new and renewable energy including wave energy. Under RE-RTD programme, Government provides up to 100% financial support to Government/non-profit research organizations and up to 70% to industry, start-ups, private institutes, entrepreneur, and manufacturing units. An R&D Project by Bharat Petroleum Corporation Limited (BPCL) has been taken up in collaboration with Eco Wave Power, Israel, to establish the country's first wave energy pilot project at BPCL's Marine Oil Terminal, Mumbai using wave energy converter technology. Conversion Efficiency of the unit and Levelized Cost of Energy (LCOE) for a fixed capacity factor amongst others help evaluate effectiveness and efficiency of performance, etc. Wave conversion technologies are likely to have minimal interaction with marine ecosystem in terms of discharge of effluents, hardware installation and underwater electricity cables, etc.

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