

GOVERNMENT OF INDIA  
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY  
**LOK SABHA**  
**UNSTARRED QUESTION NO. 2990**  
TO BE ANSWERED ON: 05.08.2026

**ENVIRONMENTALLY SUSTAINABLE EXPANSION  
OF AI INFRASTRUCTURE AND DATA CENTRES**

†2990. **SHRI KANWAR SINGH TANWAR:**

Will the Minister of ELECTRONICS AND INFORMATION TECHNOLOGY be pleased to state:

- (a) the schemes of the Government to ensure the environmentally sustainable expansion of Artificial Intelligence (AI) infrastructure and data centres in view of the growing demand for electricity, water and computing resources;
- (b) the details of incentives, technical assistance and other facilities available for use in renewable energy, advanced cooling technologies, water recycling systems and resource efficient data centre infrastructure;
- (c) the details of standards, guidelines and provisions available to monitor electricity consumption, water usage, carbon emissions and environmental performance of AI based data centres;
- (d) the measures adopted by the Government in coordination with the concerned Ministries to encourage resource efficient Artificial Intelligence infrastructure while conserving local water resources and strengthening energy security; and
- (e) the details of outcome likely to be made by these initiatives in maintaining a balance between the rapid expansion of Artificial Intelligence and environmental sustainability?

**ANSWER**

MINISTER OF STATE FOR ELECTRONICS AND INFORMATION TECHNOLOGY  
(SHRI JITIN PRASADA)

(a) to (e): India's AI Mission is anchored in Hon'ble Prime Minister Narendra Modi's vision for the democratization of technology. Under the IndiaAI Mission, the Government is constructing a sovereign AI stack encompassing compute capacity, foundational models, and indigenous applications.

Data centres are an important & integral component of overall Digital India Infrastructure ecosystem. Data Centre industry in India has been growing at a steady pace and has grown from 375 MW in 2020 to current capacity of about 1575 MW. The rapid growth of AI and high-performance computing is driving increasing demand for data centre capacity in the country.

**Energy Efficiency & Water Conservation**

- Government of India is promoting renewable energy through measures such as Green Energy Open Access Rules, Green Energy Corridor Scheme, Green Term Ahead Market (GTAM), National Green Hydrogen Mission, National Programme on High Efficiency Solar PV Modules, Offshore Wind VGF Scheme and Solar Park Scheme.
- Sustainable Harnessing and Advancement of Nuclear Energy for Transforming India (SHANTI) Act has been enacted to strengthen reliable clean power for emerging sectors

such as AI and data centres, including future deployment of Small Modular and Micro Nuclear Reactors.

- Bureau of Indian Standards (BIS), through technical committee LITD 31 (Cloud Computing, IT & Data Centres), has published a series of Indian Standards on Power Usage Effectiveness, Carbon Usage Effectiveness (CUE), Cooling Efficiency Ratio (CER), Water Usage Effectiveness (WUE) related to data centres.
- Bureau of Energy Efficiency (BEE) has notified Energy Conservation Building Code (ECBC 2017) and Energy Conservation & Sustainable Building Code (ECSBC 2024) prescribing energy efficiency and water conservation norms for buildings, including provisions relevant to data centres.
- The water requirement of data centres depends on the type of cooling technologies deployed. Regulation and control of groundwater extraction, including for industrial purposes, is governed by the guidelines issued by the Ministry of Jal Shakti.

With the evolution of AI infrastructure, cooling technologies are also moving towards advanced cooling technologies such as direct-to-chip liquid cooling, adiabatic cooling and immersion cooling, closed-loop liquid cooling systems.

Industry is also deploying high density racks to efficiently support high-performance computing & AI workloads for further reduction of power and water consumption.

These initiatives collectively provide a framework for electricity consumption and energy efficiency, renewable energy use, energy reuse, cooling efficiency, carbon emissions and water usage.

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