GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 1240
TO BE ANSWERED ON 08.12.2025

Reduction in Carbon Dioxide Emissions

1240. SHRI DHAIRYASHEEL SAMBHAJIRAO MANE:
SHRI CHAVAN RAVINDRA VASANTRAO:
SHRI SUDHEER GUPTA:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

(a) whether as per a global report published by environment scientists that India has recorded reduction in Carbon Dioxide (CO_2) emissions during recent years;
(b) if so, the major sectors that have contributed to the reduction in CO_2 emissions during the said period;
(c) whether the Government has set any specific targets for further reduction of CO_2 emissions in line with Nationally Determined Contributions (NDCs) under international treaties/agreements;
(d) whether any steps have been taken by the Government to accelerate the transition towards low-carbon technologies, including renewable energy, electric mobility, and green hydrogen and if so, the details thereof; and
(e) the details of further steps/measures taken/being taken by the Government to reduce Carbon Dioxide emissions in the country

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI KIRTI VARDHAN SINGH)

(a) & (b): The net national greenhouse gas (GHG) emissions of India in 2020 were 2,437 million tonnes CO_2 equivalent according to India's Fourth Biennial Update Report (BUR-4) submitted to the United Nations Framework Convention on Climate Change (UNFCCC) in 2024, which were 7.93 per cent lower than the emissions in the year 2019. The decrease is mainly attributed to sectors of energy, where emissions decreased by 5.7%, and Industrial Process and Product use, where emissions decreased by 9.5% from 2019 to 2020.

(c) to (e): India submitted its Nationally Determined Contribution (NDC) under the Paris Agreement in 2015 and updated it in August 2022, setting enhanced targets i.e, reducing emissions intensity of GDP by 45% by 2030 from 2005 levels, achieving 50% cumulative electric power installed capacity from non-fossil fuel sources by 2030, and creating an additional carbon sink of 2.5 to 3 billion tonnes of CO_2 equivalent through increased forest and tree cover.

As per BUR-4, between 2005 and 2020, India's emission intensity of Gross Domestic Product (GDP) reduced by 36%. India has achieved its NDC goal of the share of non-fossil fuel-based power generation capacity of more than 50% five years ahead of the deadline. India has created an additional carbon sink of 2.29 billion tonnes CO_2 equivalent from forest and tree cover.

India's Long-Term Low-Carbon Development Strategy (LT-LEDS), submitted to the UNFCCC in November 2022, provides a framework with seven key strategic transitions in electricity, transport, urban, industry, carbon dioxide removal technologies, forest and financial resources for achieving net-zero emissions by 2070 based on the principles of Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC), equity, and climate justice.

The Ministry of New & Renewable Energy (MNRE), Government of India has undertaken several steps and initiatives to promote and accelerate renewable energy (RE) capacity in the country. Key measures include standard tariff-based competitive bidding guidelines, Renewable Purchase Obligations (RPO) and Renewable Consumption Obligations (RCO), 100% Foreign Direct Investment (FDI) under the automatic route, and major national schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), PM Surya Ghar Muft Bijli Yojana, National Programme on High Efficiency Solar PV Modules, New Solar Power Scheme under Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN), Dharti Aabha Janjatiya Gram Utkarsh Abhiyan (DA JGUA), National Green Hydrogen Mission, Viability Gap Funding (VGF) Scheme for Offshore Wind Energy Projects, and Solar park development. Transmission expansion through Green Energy Corridors, Inter State Transmission System (ISTS) charge waivers, and a long-term transmission plan up to 2030 have been implemented to support large-scale renewable integration. Standard & Labelling (S&L) programs for Solar Photovoltaic modules and Grid-connected Solar Inverters have also been launched. Reforms also include Green Energy Open Access, Green Term Ahead Market (GTAM) to facilitate sale of Renewable Power through exchanges.

The Government of India is implementing the National Green Hydrogen Mission, with an objective to make India a global hub of production, usage and export of green hydrogen and its derivative. Strategic Interventions for Green Hydrogen Transition (SIGHT) is a key component of the Mission which provides financial incentives for production of green hydrogen and electrolyser manufacturing. The Government of India has also sanctioned four Hydrogen Valley Innovation Clusters (HVIC) and Research and Development (R&D) projects are also being supported under the National Green Hydrogen Mission, with 23 projects sanctioned under the R&D scheme of the Mission so far.

The National Electric Mobility Mission Plan (NEMMP) 2020 is a National Mission document providing the vision and the roadmap for the faster adoption of electric vehicles and

their manufacturing in the country. In order to encourage electric vehicles (EV) adoption and manufacturing of EVs in the country Faster Adoption and Manufacturing of Hybrid and Electric Vehicles in India (FAME), Production Linked Incentive (PLI) Scheme for Automobile and Auto Component Industry and 'National Programme on Advanced Chemistry Cells (ACC) Battery Storage are implemented in the country. Further, following initiatives have been taken up by the Government of India to increase the use of electric vehicles in the country:

i. GST on electric vehicles and chargers/ charging stations for electric vehicles has been reduced to 5%.
ii. Ministry of Road Transport & Highways (MoRTH) has announced that battery-operated vehicles will be given green license plates and be exempted from permit requirements.
iii. MoRTH has also issued notification advising States to waive road tax on EVs, which in turn will help reduce the initial cost of EVs.
iv. Further, Ministry of Power has taken several initiatives to accelerate deployment of public EV charging infrastructure in the country.

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