GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA UNSTARRED QUESTION NO. 188 TO BE ANSWERED ON 21.07.2025

High Carbon Dioxide Emissions

188. SHRI DILIP SAIKIA:

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

- (a) whether India is currently included in the list of countries emitting high carbon dioxide;
- (b) if so, the details of the steps taken/being taken by the Government to prevent high emissions of carbon dioxide;
- (c) whether any roadmap has been prepared by the Government for high carbon dioxide emitting industries; and
- (d) if so, the targets set for their assessment?

ANSWER

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

(a) to (d) India is an emerging economy where greenhouse gas (GHG) emissions are set to increase, albeit from a low base, in pursuit of its development and poverty eradication goals. India's share of historical cumulative emissions from 1850 to 2019 amounts to less than 4 percent of global cumulative carbon dioxide emissions, despite being home to more than 17 percent of the world's population. India's responsibility for global warming thus has been minimal; even today, its annual per capita emissions are only about one-third of the global average. Despite this, India is committed to addressing climate change with firm adherence to multilateralism and based on the principles of equity and common but differentiated responsibilities and respective capabilities (CBDR-RC), as enshrined in the United Nations Framework Convention on Climate Change (UNFCCC).

The Government is combating climate change through several programs and schemes. This includes implementation of the National Action Plan on Climate Change (NAPCC), which comprises missions in specific areas of solar energy, energy efficiency, water, agriculture, the Himalayan ecosystem, sustainable habitat, green India, strategic knowledge on climate change, and human health. The NAPCC provides an overarching framework for all climate actions. Thirty-four States/Union Territories (UTs) have prepared their State Action Plan on Climate Change (SAPCC) in line with NAPCC, considering the state-specific issues relating to climate change.

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, and creating an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through increased forest and tree cover. The NDC also promotes sustainable lifestyles under the 'LIFE' initiative, cleaner development, climate adaptation, and capacity building.

India has achieved its NDC goal of the share of non-fossil fuel-based power generation capacity, which stands at 50.07% as of June 30, 2025. From 2005 to 2020, the emission intensity of the GDP declined by 36%, and between 2005 and 2021, India created an additional carbon sink of 2.29 billion tonnes CO₂ equivalent from forests and tree cover, reaffirming its commitment to equitable climate action.

In addition, 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 for achieving net-zero emissions by 2070 based on the principles of CBDR-RC, equity, and climate justice. These include (i) low-carbon development of electricity systems consistent with development, (ii) develop an integrated, efficient and inclusive transport system, (iii) promote adaptation in urban design, energy and material efficiency in buildings, and sustainable urbanisation, (iv) promoting economy-wide decoupling of growth from emissions and development of an efficient, innovative low emission industrial system, (v) development of carbon dioxide removal and related engineering solutions, (vi) enhancing forest and vegetation cover consistent with socio-economic and ecological considerations, and (vii) economic and financial needs of low-carbon development.

The industrial system strategies in India's LT-LEDS, inter alia, includes promotion of energy efficient/low carbon technologies; process and fuel switching, and electrification in manufacturing, based on availability and access to technology and the provision of climate finance; sector-specific material efficiency technologies and strategies enhanced through value chains; R&D in technology and infrastructure for green hydrogen to be given a boost, ramping up electrolyser manufacturing capacity; explore low carbon options in hard-to-abate sectors such as steel and cement; and strengthen financial support, knowledge sharing, and awareness of low carbon options and sustainable technologies.

The Ministry of Steel has released the Taxonomy for Green Steel to provide standards for defining and categorizing the low emission steel. Further, Ministry of Steel has released a report titled "Greening the Steel Sector in India: Roadmap and Action Plan" to provide roadmap for green steel and sustainability towards net-zero emissions by 2070.
