

**LOK SABHA**  
**UNSTARRED QUESTION NO. 4593**  
**TO BE ANSWERED ON 27<sup>th</sup> MARCH, 2025**

**ENERGY TRANSITION IN PETROLEUM SECTOR**

4593: Shri Rao Rajendra Singh

पेट्रोलियम और प्राकृतिक गैस मंत्री

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

- (a) the percentage reduction in carbon emissions achieved by the oil and gas PSUs during the last three years (2022-25) and the current year, year and company-wise;
- (b) the financial allocation made by the oil and gas PSUs for renewable energy projects during the last three years (2022-25) and the current year, year and company-wise;
- (c) the installed capacity of renewable energy projects operated by the oil and gas PSUs technology-wise, including solar and wind; and
- (d) the current status of green hydrogen projects undertaken by the oil and gas PSUs and the projected production capacity by 2030?

**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) Total emissions and percentage change in emission as reported by the major oil and gas PSUs during the last three years (2022-25) and the current year

Carbon emissions (in Million tCO <sub>2</sub> e)							
PSU	2021-22	2022-23	% change w.r.t (2021-22)	2023-24	% change w.r.t (2022-23)	2024- 25(as on Feb 2025)	% change w.r.t (2023-24)
BPCL	10.37	10.4	-1.2	10.53	1.2	9.39	-10.8
GAIL	4.56	3.97	12.9	3.86	2.7	NA	NA
ONGC	9.14	8.89	-2.7	9.36	5.2	8.21	-12.2
IOCL	21.54	20.84	-3.25	22.76	9.21	NA	NA
HPCL	3.979	5.080	27.67	5.777	13.72	6.044	4.62
OIL	1.375	1.457	5.9	1.432	-1.69	1.36	-5

Note : (-) signifies reduction in emission and (+) signifies increase in emission , NA: Not available

(b) The financial allocation made by the major oil and gas PSUs as reported by them, for Renewable energy projects during last three years is as mentioned below:

<b>Financial Allocation for Renewable Energy projects (inRs crores)</b>				
<b>PSU</b>	<b>2022-23</b>	<b>2023-24</b>	<b>2024-25</b>	<b>Total</b>
ONGC	95	-	4479	<b>4574</b>
GAIL	35.83	158	111.5	<b>305.33</b>
BPCL	195	1008	308	<b>1511</b>
HPCL	0.25	802.15	241.86	<b>1044.26</b>
IOCL	5.76	37.02	20.86	<b>63.64</b>
OIL	-	57	-	<b>57</b>

(c) The details of installed capacity of renewable energy projects operated by the major oil and gas PSUs technology-wise, including solar and wind are mentioned in the below table:

<b>Installed Capacity of Renewable energy (In MW)</b>			
<b>PSU</b>	<b>Solar</b>	<b>Wind</b>	<b>Total</b>
ONGC	39.9	441.8	481.7
GAIL	17.0	117.95	134.95
IOCL	83.99	167.7	251.59
HPCL	120.05	100.9	220.95
OIL	14	174.1	188.1
BPCL	83.09	11.8	94.89

(d) The Ministry of New and Renewable Energy is implementing the National Green Hydrogen Mission, with an objective of make India a global hub of production, usage, and export of Green Hydrogen and its derivatives. Government have launched several initiatives under the Mission, including scheme guidelines for incentive schemes for production of Green Hydrogen and electrolyzer manufacturing under the Strategic Interventions for Green Hydrogen Transition (SIGHT) Programme. A production capacity of 412,000 tonnes per annum of Green Hydrogen has been allocated. In addition, electrolyzer manufacturing capacity of 1,500 MW per annum has been assigned under Tranche I. For Tranche II, 11 companies have been shortlisted for an additional allocation of 1,500 MW per annum capacity. Scheme guidelines have been issued for implementing Green Hydrogen-based pilot projects in the steel, shipping, and road transport sectors, as well as for establishing hydrogen hubs. Under Strategic Interventions for Green Hydrogen Transition – Mode-2B (SIGHT-2B) scheme Tranche-I, 200 KTA of Green Hydrogen capacities have been allocated to Indian refineries. Oil and Gas PSUs have committed Green Hydrogen Capacity of 900 KTA by 2030.

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