LOK SABHA UNSTARRED QUESTION NO. 513 ANSWERED ON 6th February, 2025

Workforce Demand in the Hydrocarbon Sector

513. Shri G M Harish Balayogi:

पेट्रोलियम और प्राकृतिक गैस मंत्री

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

- (a) whether there is a shortage of skilled workforce in the hydrocarbon sector and if so, the details of the current demand, organization and location-wise along with specific areas of expertise;
- (b) the steps taken/being taken to address these skill gaps in the hydrocarbon sector;
- (c) the number of people especially women, trained in the institutes operated under the Hydrocarbon Sector Skill Council during the last five years and the current year, institute-wise;
- (d) the details of the courses under which skill development training is provided, institute-wise, including the current strength of trainees, course-wise;
- (e) the number of individuals employed by industry partners on completion of these courses, institute-wise;
- (f) the amount of funds allocated, released, and utilized for skill development initiatives in the Hydrocarbon sector, institute and location-wise; and
- (g) whether the adoption of advanced technologies, such as AI, automation and digitalization has affected the demand for specific skills in the Hydrocarbon sector and if so, the details thereof?

ANSWER

पेट्रोलियम और प्राकृतिक गैस मंत्रालय में राज्य मंत्री (श्री सुरेश गोपी)

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

(a) & (b) A skill gap assessment in the country's Oil and Gas sector was carried out in September, 2022 by Hydrocarbon Sector Skill Council (HSSC). HSSC was set up in 2016 under the aegis of Ministry of Petroleum and Natural Gas. Based on findings of the assessment, HSSC drew up a detailed action plan to bridge the identified gaps. As a part of this, HSSC in association with six Skill Development Institutes (SDIs), set up by Oil and Gas PSUs at Bhubaneshwar, Vishakhapatnam, Raebareli, Ahmedabad, Guwahati & Kochi, and on its own has conducted several skilling programmes including re-skilling and up-skilling in order to bridge

the demand of skilled manpower in refineries, Petrochemicals Complexes, and other oil and gas installations across up-stream, mid-stream and downstream oil and gas subsectors.

HSSC along with SDIs has been regularly reviewing the skill gaps in the sector and based on industry requirement addresses the gap by broadening the scope of ongoing skilling programmes which inter alia include offering skilling programs in trades such as industrial welder, industrial electrician, Pipe Fitter- City Gas Distribution (CGD), process instrumentation operator, technicians-drilling & production, fire and safety technician etc. HSSC has also developed various course curriculum & training content to conduct skilling program in energy transition area such as Green Hydrogen, Compressed-Bio-Gas, 2G Ethanol, Electric Vehicle (Battery charging and swapping), Retail Outlet Rooftop Solar Installer etc. to fulfill the skill gap in emerging areas.

(c) The number of persons trained in the institutes operated under the Hydrocarbon Sector Skill Council during the last five years and the current year, institute-wise is as below:

	Name of SDI	Total people trained		Total Women trained	
No		Number of people trained in last 5-year (FY 2019-20 to FY 2023- 24)	Number of people trained in current FY 2024-25 (as on Dec-24)	Number of Women trained in last 5-years (FY 2019-20 to FY 2023-24)	Number of women trained in current FY 2024-25 (as on Dec-24)
1	SDI-Bhubaneswar	3428	943	607	209
2	SDI- Visakhapatnam	15375	2315	3428	870
3	SDI-Kochi	800	195	71	21
4	SDI-Raebareli	1655	369	263	115
5	SDI-Guwahati	4033	90	1334	-
6	SDI-Ahmedabad	3326	1514	431	561
Total 286		28617	5426	6134	1776

(d) The Six Skill Development Institutes (SDIs) offer skill programs in trades such as industrial welder, electrician, pipe fitter- City Gas Distribution, process instrumentation operator, technicians-drilling & production, fire and safety technician, LPG Delivery Personnel, Retail Outlet Attendant etc. The institute-wise and course-wise details of the courses under which skill development training is being provided including the current strength of trainees is as under:

No	Name of SDI	No. of courses	Current Strength of trainees
1	SDI-Bhubaneswar	31 courses	974
2	SDI-Visakhapatnam	18 courses	1071

No	Name of SDI	No. of courses	Current Strength of trainees
3	SDI-Kochi	4 courses	195
4	SDI-Raebareli	4 courses	150
5	SDI-Guwahati	8 courses	260
6	SDI-Ahmedabad	9 courses	374

(e) The institute-wise number of individuals employed by industry partners on completion of these courses is given below:

No	Name of SDI	Number of individuals employed (Since inception)
1	SDI-Bhubaneswar	3705
2	SDI-Visakhapatnam	17215
3	SDI-Kochi	894
4	SDI-Raebareli	2067
5	SDI-Guwahati	3950
6	SDI-Ahmedabad	4384

(f) The funding to SDIs is provided by oil and gas PSUs. The institute and location-wise amount of funds allocated, released, and utilized for skill development initiatives in the Hydrocarbon sector is as under:

				Rs in crore
No	Name of SDI	funds allocated	Released	Utilised
1	SDI-Bhubaneswar	30.00	28.50	28.50
2	SDI-Visakhapatnam	62.50	61.75	61.75
3	SDI-Kochi	30.00	25.75	18.90
4	SDI-Raebareli	30.00	27.07	26.54
5	SDI-Guwahati	45.00	40.55	38.33
6	SDI-Ahmedabad	30.00	22.74	22.74

(g) New & advance technologies such as digitalization, AI & automation have been incorporated progressively in the qualification packs and training contents for hydrocarbon sector by HSSC. The adoption of these technologies has positively reshaped skill requirements in the hydrocarbon sector.
