

**Address by Shri Dharmendra Pradhan, Hon'ble Minister of State
(Independent Charge), Petroleum and Natural Gas**

At

Expert Workshop being held in association with WPC

on

**‘Carbon Emission Management: Upstream & Downstream Best Practices
and Opportunities’**

- President of the World Petroleum Council, Dr. Jozsef Toth;
- The Director General, World Petroleum Council, Dr. Pierce Riemer;
- Leaders of the Oil & Gas Industry;
- Eminent Session Chairpersons and Speakers;
- Distinguished guests;
- Members of the Media;

I am very happy to be present here today at this Expert Workshop organised by PetroFed in association with the World Petroleum Council. I am not an expert on the subject of carbon emission management but climate change is a subject which is of great importance to all of us and its impact is felt in our daily lives.

In India, from ancient times we have been worshipping nature and it is believed that the well-being of mother earth depended on the preservation and sustenance of the environment. Sustainable living is, therefore, part of our philosophy.

Industrialization, new technologies and changing aspirations of people have brought dramatic changes. These changes cannot be wished away. However, we

must remember the wise words of Mahatma Gandhi : ‘Earth provides enough to satisfy every man’s needs, but not every man’s greed.’

India is a fast growing economy. Estimates by international agencies, including IMF, suggest that India is expected to overtake China in terms of GDP growth rate this year. India is also the second most populous nation in the world. It is, therefore, natural that the carbon footprint of India would be high. Yet, we should remember that an Indian emits merely one-tenth as much carbon dioxide as a person from the developed countries.

We have nevertheless voluntarily accepted responsibilities towards carbon emission management. We feel that the most adversely affected by climate change are the poor people of developing countries like India. They suffer the most during floods, earthquakes, droughts and even during spells of extreme heat and cold. This is why our PM Shri Narendra Modi mentioned last month that the discourse must shift focus from “Climate Change” to “Climate Justice”.

The new Government has gone global seeking investments in India’s oil and gas sector. We have decided to increase domestic production and reduce import dependence. We have announced many new measures to attract companies to invest in the entire value chain of oil and gas sector. Hence we will be more energy intensive in coming years.

However, we are decided to reduce carbon emissions across the entire value chain. We will try to increase efficiency and reduce flaring and venting in the upstream segment. International Energy Agency in its “Redrawing the Energy Climate Map” report in 2013 has highlighted that to meet the target of limiting the long-term rise in the average global temperature to 2 degrees Celsius, about 18% of the

emissions can be reduced by minimizing methane emissions from upstream oil & gas production.

Enhancing process safety is also important to avoid environmental impact of accidents and spills. In this area, Oil Industry Safety Directorate has signed MOU with American Petroleum Institute which aims at bilateral cooperation in the field of standardization, certification and training in the Oil & Gas Industry. Use of technology to improve Health, Safety and Environment (HSE) is a priority and I want this to be institutionalized and ingrained in every stakeholder of this industry.

Recently, for the first time we organized a Strategic Workshop of top executives of the Public sector oil and gas companies in India. Improving environmental standards, disaster management and plan to communicate with local communities were discussed. I have asked our companies to emulate some of the global best practices in upstream sector.

Government has taken a number of initiatives during the past 1½ years which will directly affect and reduce carbon emissions. Diesel is the largest single fuel consumed in our country; the diesel price deregulation last year resulted in a shift from diesel vehicles to less polluting vehicles. At the same time, we have progressively improved auto fuel specifications for both petrol and diesel. We already have BS-III, which is equivalent to Euro-III specifications, across the country and BS-IV, in major cities which will shortly be extended to the entire country. A revised Auto Fuel Policy is in the offing which will lead to introduction of BS-VI fuels by 2020.

To reduce pollution and GHG emissions, we took the initiative to convert the entire public transport fleet in New Delhi to CNG. Its use is being expanded progressively despite the constraint of inadequate gas availability. We have also increased the priority of domestic gas allocation to City Gas Distribution companies which will help penetration of gas in cities and reduce use of liquid hydrocarbons. It is our vision to move towards PNG/CNG system for all the large cities and newly coming Smart Cities in India. This would help reduce local air-pollution as well as overall emission levels. We are taking initiatives for converting National highways to Green Highways where CNG vehicles can have inter-city movement. We are also studying the feasibility of using LNG as a transportation fuel for inter-city movement of heavy vehicles.

Our Direct Benefit Transfer scheme for domestic LPG cooking gas subsidy has been recognized as the largest such scheme in the world by the Guinness Book of World Records. Another 3.7 million domestic consumers have responded to our appeal for giving up their LPG subsidy voluntarily. We are using this money to connect poor households with LPG connections and relieve them from cooking with firewood or biomass which leads to not only increased carbon emissions but adversely impacts on their health. We plan to progressively increase the reach of LPG to 75% of the households over next four years.

India has introduced Energy Efficiency Standards for not only consumer products but also industries. More industries are being added to the list in a phased manner and will also include oil refineries. The scheme which has been introduced rewards those who meet the stringent standards and punishes those who don't.

Realizing that cities accommodate nearly 31% of India's population and contribute 63% of GDP, our Government has launched a Smart Cities Mission. The Mission will cover 100 cities over 5-year duration. The objective is to promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of smart solutions. The smart cities in India would include better public transport, access to PNG and CNG, energy efficient buildings and would reduce carbon dioxide emissions substantially.

The attention of the world is focused on the 2015 UN Climate Change Conference to be held in Paris from November 30, 2015. About 85% of countries have submitted their Intended Nationally Determined Contribution. India has pledged to improve the carbon emission intensity of its GDP by 33 to 35% by 2030 from 2005 level and to create an additional carbon sink of 2.5 to 3 billion tonnes of carbon dioxide equivalent through additional forest and tree cover by 2030.

The INDC centers around the country's policies and programmes on promotion of clean energy, especially renewable energy, enhancement of energy efficiency, development of less carbon intensive and resilient urban centres, promotion of waste to wealth, safe, smart and sustainable green transportation network, abatement of pollution and India's efforts to enhance carbon sink through creation of forest and tree cover. It takes forward the Prime Minister's vision of a sustainable lifestyle and Climate Justice to protect the poor and vulnerable from adverse impacts of climate change.

India's share of non-fossil fuel in the total installed power generation capacity is projected to change from 30% in 2015 to about 40% by 2030. India is running one of the largest renewable capacity expansion programmes in the world. Between

2002 and 2015, the share of renewable grid capacity has increased over six times, from 2% to around 13% from a mix of sources including wind power, small hydro power, biomass power and cogeneration, waste to power and solar power. We have scaled up our targets for renewable energy capacity addition from 30 Gigawatts by 2016-17 to 175 Gigawatts by 2021-22 which will result in abatement of over 326 million tonnes of carbon dioxide equivalent per year. In Ministry of Petroleum we are making efforts to have industry scale waste to fuel projects. In addition we have launched ethanol blending of upto 10% in Petrol and bio-diesel blending of 5% in diesel. All these efforts will reduce dependence on crude oil.

I can assure the audience that the Indian oil companies would play a pioneering role in reducing the carbon emissions in the entire value chain and contribute towards making the World cleaner and greener.

With these words I inaugurate this Expert Workshop and wish the deliberations a resounding success.

Jai Hind!