

**GOVERNMENT OF INDIA
ENVIRONMENT AND FORESTS
LOK SABHA**

UNSTARRED QUESTION NO:2463
ANSWERED ON:24.11.2010
GLOBAL WARMING
Acharia Shri Basudeb

Will the Minister of ENVIRONMENT AND FORESTS be pleased to state:

- (a) whether energy consumption is closely associated with responsible for substantial part of green house gas emissions;
- (b) if so, the emission of carbon dioxide and over all green house gases caused by each form of energy including electricity in percentage terms;
- (c) the data of per capita electricity consumption and emission of carbon di-oxide in tonne per annum in India vis-a-vis other countries; and
- (d) the concrete steps taken by the Government in this regard?

Answer

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT AND FORESTS (SHRI JAIRAM RAMESH)

(a)& (b) Energy is consumed in various sectors of society and is a source of greenhouse emissions. As per the latest Assessment Report published by Indian Network for Climate Change Assessment (INCCA), with reference to year 2007, greenhouse gas emissions in million tons of carbon dioxide equivalent from various sectors are as follows:

Sectors Year 2007
(in million tons
of CO2 equivalent)

Electricity 719.30

Transport 142.04

Residential 137.84

Other Energy 100.87

Cement 129.92

Iron & Steel 117.32

Other Industry 165.31

(c) United Nations Framework Convention on Climate Change (UNFCCC) does not maintain official data in respect of electricity consumption per capita and respective greenhouse gas emissions. However, on the basis of information available from the World Bank and International Energy Agency, the Comparative position for a few major countries is shown as under:

Country Electricity consumption Annual CO2 emissions
(Kilo Watt hour/capita) (in thousands of metric tons)
(Source: World Bank, 2007) (Source: International
Energy Agency Report, 2008)

USA 13,652 5,838,381

Germany 7,184 787,936

China 2,332 6,538,367

Brazil 2,171 3,68,317

Mexico 2,036 4,71,459

India	542	1,612,362
Bangladesh	144	43,751
World (Average)	2,846	29,321,302

(d) Steps taken by Government of India to reduce emissions from energy use include, inter alia, introduction of clean coal technology; renovation and modernization of old thermal power stations; retirement of old and small size generating units; high priority to setting up of hydro and nuclear power plant; promotion of renewable energy sources; and launch of a National Mission on Energy Efficiency Enhancement under the National Action Plan on Climate Change.