GOVERNMENT OF INDIA
MINISTRY OF CIVIL AVIATION
LOK SABHA
UNSTARRED QUESTION NO. : 2048
(To be answered on the 22nd September 2020)

REDUCTION OF CARBON EMISSION

2048. DR. SUKANTA MAJUMDAR
SHRIMATI SANGEETA KUMARI SINGH DEO
SHRI VINOD KUMAR SONKAR
DR. JAYANTA KUMAR ROY
SHRI RAJA AMARESHWARA NAIK
SHRI BHOLA SINGH

Will the Minister of CIVIL AVIATION
नागर विमानन मंत्री be pleased to state:-

(a) whether the Government has taken any steps to reduce the Carbon emission by placing solar panels at the airports and if so, the details thereof, airport-wise;

(b) whether the Government is planning to sign an agreement with International Civil Aviation Organisation (ICAO) to reduce Carbon dioxide (CO2) emission from international flights in the wake of Paris Agreement;

(c) if so, the details thereof;

(d) whether the Government has agreed with the condition of ICAO for a new Global Market Based Measures (GMBM) to reduce CO2 emission and proposed Carbon emission tax; and

(e) if so, the steps taken by the Government in this regard?

ANSWER

Minister of State (IC) in the Ministry of CIVIL AVIATION
नागर विमानन मंत्रालय में राज्य मंत्री (स्वतंत्र प्रभार) (Shri Hardeep Singh Puri)

(a): In order to reduce the financial burden towards electricity requirements at airports, airports are using solar panels at airports. It also helps in reducing the carbon emissions from power generation source. The airport wise details of JV airports are as follows:

Airport	Solar power capacity in MW
Delhi	7.8
Bangalore	6.8
Mumbai	4.5
Hyderabad	5.0
Cochin	42.0

In addition, airports operated by Airports Authority of India have a combined capacity of 43 MWp as in June 2020.(Airport wise data in Annexure).

(b) to (e): ICAO had adopted the aspirational goal of achieving carbon neutral growth from 2020 onwards, to ensure that emissions from international aviation do not exceed the 2020 emissions levels. In order to achieve it, ICAO has developed a global market based measure, in the form of Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) wherein year-wise increase in total global emissions from international flights when compared to the baseline emissions value, will require to be offset by the airlines. CORSIA will be implemented in a phased manner i.e., Pilot phase (2021 to 2023), First phase (2024 to 2026) and Second phase (2027 to 2035). Though Pilot and First phases are voluntary, the Second phase is mandatory for all countries who are covered under the scheme.

Being a member of International Civil Aviation Organization (ICAO), India like other member countries, is bound to follow the directions issued by ICAO. However, India has decided not to join CORSIA in the voluntary phases. Hence, CORSIA will be applicable for the Indian carriers from 2027 onwards. India has raised its voice at the ICAO Assembly Session against the design elements of CORSIA stating that they are not fair to the airlines of developing countries who have potential to grow much more after 2020 compared to the airlines of developed countries. India has also filed reservations with ICAO in this regard, both in 2016 and 2019.

*****

ANNEXURE TO LS USQ 2048

Annexure-I

STATUS OF SOLAR POWER PROJECTS(Ground Mounted & RoofTop) -Completed AS ON 20.06.2020

Sr.No	State	Name of Airport	Solar Plant Capacity (KWp)	Type of Plant	Mode of Comissioning
1	Assam	Guwahati - I	50	Roof top	CAPEX
		Guwahati - II	250	Ground mounted	CAPEX
2	Bihar	Patna	219	Roof top	CAPEX
3	Chattisgarh	Raipur	100	Roof Top	RESCO
4	Delhi	Rajiv Gandhi Bhavan	250	Roof Top	RESCO
5	Delhi	IAA Vasant Kunj	200	Roof Top	RESCO
6	Gujrat	Ahmedabad-I	700	Roof Top	CAPEX
		Ahmedabad-II	700	Roof Top	CAPEX
7	Gujrat	Bhuj	230	Roof top	CAPEX
8	Gujrat	Rajkot	150	Roof top	CAPEX
9	J&K	Leh	27	Roof Top	CAPEX
10	Jharkand	Ranchi	250	Roof top	CAPEX
11	Kerala	Calicut	750	Roof top	CAPEX
12	Kerala	Trivandrum	500	Roof Top	
13	Madhya Pardesh	Bhopal-I	100	Ground Mounted	RESCO
		Bhopal-II	1000	Ground Mounted	CAPEX
14	Madhya Pardesh	Indore-I	100	Roof Top	RESCO
		Indore-II	900	Ground mounted	CAPEX
15	Maharastra	RED Office & ATS Complex - Mumbai	103	Roof top	CAPEX
16	Maharastra	Pune	300	Roof Top	CAPEX
17	Orissa	Bhubaneswar	100	Roof top	RESCO
18	Orissa	Jharsuguda	90	Roof Top	CAPEX
19	Portblair	Port-Blair	158	Roof Top	CAPEX
		Port-Blair II	442	Ground Mounted	RESCO
20	Punjab	Amritsar	400	Roof top	CAPEX
21	Punjab	Chandigarh	3000	Ground Mounted	RESCO
22	Rajasthan	Jaipur	100	Roof top	CAPEX
		Jaipur II	1800	Ground Mounted	CAPEX
23	Rajasthan	Jodhpur	100	Roof Top	CAPEX
24	Rajasthan	Jaisalmer	100	Ground mounted	CAPEX
25	Rajasthan	Kishangarh	40	Roof Top	CAPEX
26	Tamil Nadu	Chennai	1500	Roof top	CAPEX

ANNEXURE TO LS USQ 2048

27	Tamil Nadu	New Operational Office RED - Chennai	100	Roof top	CAPEX
28	Tamil Nadu	Madurai-I	100	Roof top	CAPEX
		Madurai-II	70	Roof top	CAPEX
		Madurai-III	730	Ground mounted	CAPEX
29	Tamil Nadu	Trichy-I	140	Roof Top	CAPEX
		Trichy-II	1000	Ground Mounted	CAPEX
30	Telangana	Hyderabad	500	Roof top	CAPEX
31	Uttar Pradesh	Varanasi-I	600	Roof top	CAPEX
	UttarPradesh	Varanasi-II	1200	Ground Mounted	CAPEX
32	Uttar Pradesh	Allahabad-I	300	Roof top	CAPEX
33	UttarPradesh	Lucknow-I	500	Roof top	CAPEX
		Lucknow-II	15	Roof top	CAPEX
34	UttarPradesh	IGRUA, Fursatgunj	60	Roof Top	CAPEX
35	West Bengal	Kolkata	2000	Roof top	CAPEX
		Kolkata - II	15000	Ground mounted	CAPEX
36	West Bengal	Bagdogra	50	Roof Top	CAPEX
37	Maharastra	Aurangabad	120	Roof Top	CAPEX
38	Assom	Jorhat	75	Rooftop	RESCO
39	Tripura	Agartala	250	Roof top	RESCO
40	Manipur	Imphal	130	Rooftop	RESCO
41	Assom	Silchar	100	Rooftop	RESCO
42	Andhra Pardesh	Tirupati	1000	Ground Mounted	RESCO
43	Gujrat	Vododara	675	Ground Mounted	CAPEX
44	Maharastra	Gondia (For NIATAM - National Institute of Aviation Training and Management)	160	Ground Mounted	CAPEX
	Maharastra	Gondia (For Birsi Airport)	220	Ground Mounted	CAPEX
45	Delhi	Safdarjung	100	Rooftop	CAPEX
46	Andhra Pardesh	Vijayawada	1000	Ground Mounted	CAPEX
47	Kerala	Calicut	873	Roof top	CAPEX
48	Maharastra	Juhu	150	Roof top	CAPEX
49	Assam	Dibrugarh	725	Roof top	CAPEX
		Total	**42652**		
		Say	**42.65MWp**		