GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY

LOK SABHA

UNSTARRED QUESTION NO. 27 TO BE ANSWERED ON 02.02.2017

INTERNATIONAL SOLAR ALLIANCE

27. SHRIMATI JAYSHREEBEN PATEL:

Will the Minister of NEW & RENEWABLE ENERGY be pleased to state:

- (a) the present status of achievement of goals set by International Solar Alliance which was launched during the sidelines of Paris Convention, 2015;
- (b) the salient features of the solar policy of the Government;
- (c) the places where mega solar projects have been installed and details of their production and capacity, State-wise; and
- (d) the progress made under the canal solar project and the funds sanctioned for this purpose, State-wise?

ANSWER

MINISTER OF STATE FOR POWER, COAL, NEW & RENEWABLE ENERGY AND MINES (INDEPENDENT CHARGE) (SHRI PIYUSH GOYAL)

(a): The International Solar Alliance (ISA) was launched on 30 November 2015 in Paris, France on the side-lines of the 21st Conference of Parties to the United Nations Framework Convention on Climate Change with broad goals of bringing clean, affordable, and renewable energy within the reach of all and undertake innovative and concerted efforts for reducing the cost of finance and cost of technology for immediate deployment of competitive solar generation in the member countries of the ISA.

The Framework Agreement for setting up of the ISA was opened for signature on 15 November 2016 in Marrakech, Morocco on the side-lines of 22nd meeting of the Conference of Parties to the United Nations Framework Convention on Climate Change. So far, 25 countries have signed the Agreement. With ratification of the Framework Agreement by a minimum of 15 countries, the ISA will become an international body.

(b) & **(c)**: Salient features of the solar policy include: a) provision of Renewable Purchase Obligation (RPO) for solar under the National Tariff Policy; b) notification of the long term growth trajectory of RPO for solar and non-solar energy for next 3 years from

2016-17, 2017-18 and 2018-19; c) development of Solar Parks and Ultra Mega Solar Power Projects; d) support for developing Solar PV Power Plants on Canal Banks/ Canal Tops; e) schemes of grid connected Solar PV Power Projects by Defense Establishments, Central Public Sector Undertakings (CPSUs) and Solar Energy Corporation of India (SECI) with viability Gap Funding; f) roof-top Solar PV systems made eligible for home loans; g) concessional import duty/excise duty exemption for setting up of solar power plants, accelerated depreciation and tax holiday; h) creation of Payment Security Mechanism; i) setting up of Green Energy Corridors for evacuation of renewable power; j) waiver of wheeling charges on Inter-State Transmission System network; and k) subsidy for setting up off-grid and decentralized solar systems.

State-wise status of grid connected solar power projects as on 31 December 2016 is enclosed at Annexure-I.

(d): State wise details of canal solar projects, as on 31 December 2016, is enclosed at Annexure II.

Annexure-I referred to in reply to the Lok Sabha Unstarred Question No. 27 for reply on 02.02.2017

Commissioning Status of Grid Connected Solar Power Projects as on 31-12-2016

1 Andman & Nicobar 5.40 2 Andhra Pradesh 979.65 3 Arunachal Pradesh 0.27 4 Assam 11.18 5 Bihar 95.91 6 Chandigarh 16.20 7 Chhattisgarh 135.19 8 D&N 0.60 9 Daman & Diu 4.00 10 Delhi 38.78 11 Goa 0.05 12 Gujarat 1158.50 13 Haryana 53.27 14 Himachal Pradesh 0.33 15 J&K 1.00 16 Jharkhand 17.51 17 Karnataka 327.53 18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01	Sr. No.	State/UT	Cumulative Capacity (MW)		
3 Arunachal Pradesh 0.27 4 Assam 11.18 5 Bihar 95.91 6 Chandigarh 16.20 7 Chhattisgarh 135.19 8 D&N 0.60 9 Daman & Diu 4.00 10 Delhi 38.78 11 Goa 0.05 12 Gujarat 1158.50 13 Haryana 53.27 14 Himachal Pradesh 0.33 15 J&K 1.00 16 Jharkhand 17.51 17 Karnataka 327.53 18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26	1	Andaman & Nicobar	5.40		
Assam	2	Andhra Pradesh	979.65		
5 Bihar 95.91 6 Chandigarh 16.20 7 Chhattisgarh 135.19 8 D&N 0.60 9 Daman & Diu 4.00 10 Delhi 38.78 11 Goa 0.05 12 Gujarat 1158.50 13 Haryana 53.27 14 Himachal Pradesh 0.33 15 J&K 1.00 16 Jharkhand 17.51 17 Karnataka 327.53 18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 <td>3</td> <td>Arunachal Pradesh</td> <td>0.27</td>	3	Arunachal Pradesh	0.27		
6 Chandigarh 16.20 7 Chhattisgarh 135.19 8 D&N 0.60 9 Daman & Diu 4.00 10 Delhi 38.78 11 Goa 0.05 12 Gujarat 1158.50 13 Haryana 53.27 14 Himachal Pradesh 0.33 15 J&K 1.00 16 Jharkhand 17.51 17 Karnataka 327.53 18 Kerala 15.60 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29<	4	Assam	11.18		
7 Chhattisgarh 135.19 8 D&N 0.60 9 Daman & Diu 4.00 10 Delhi 38.78 11 Goa 0.05 12 Gujarat 1158.50 13 Haryana 53.27 14 Himachal Pradesh 0.33 15 J&K 1.00 16 Jharkhand 17.51 17 Karnataka 327.53 18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 3	5	Bihar	95.91		
8 D&N 0.60 9 Daman & Diu 4.00 10 Delhi 38.78 11 Goa 0.05 12 Gujarat 1158.50 13 Haryana 53.27 14 Himachal Pradesh 0.33 15 J&K 1.00 16 Jharkhand 17.51 17 Karnataka 327.53 18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31	6	Chandigarh	16.20		
9 Daman & Diu 4.00 10 Delhi 38.78 11 Goa 0.05 12 Gujarat 1158.50 13 Haryana 53.27 14 Himachal Pradesh 0.33 15 J&K 1.00 16 Jharkhand 17.51 17 Karnataka 327.53 18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 29 Rajasthan 1317.64 29 Rajasthan 1317.64	7	Chhattisgarh	135.19		
10 Delhi 38.78 11 Goa 0.05 12 Gujarat 1158.50 13 Haryana 53.27 14 Himachal Pradesh 0.33 15 J&K 1.00 16 Jharkhand 17.51 17 Karnataka 327.53 18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41	8	D&N	0.60		
11 Goa 0.05 12 Gujarat 1158.50 13 Haryana 53.27 14 Himachal Pradesh 0.33 15 J&K 1.00 16 Jharkhand 17.51 17 Karnataka 327.53 18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand	9	Daman & Diu	4.00		
12 Gujarat 1158.50 13 Haryana 53.27 14 Himachal Pradesh 0.33 15 J&K 1.00 16 Jharkhand 17.51 17 Karnataka 327.53 18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Benga	10	Delhi	38.78		
13 Haryana 53.27 14 Himachal Pradesh 0.33 15 J&K 1.00 16 Jharkhand 17.51 17 Karnataka 327.53 18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others*<	11	Goa	0.05		
14 Himachal Pradesh 0.33 15 J&K 1.00 16 Jharkhand 17.51 17 Karnataka 327.53 18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarkhand 45.10 36 West Bengal 23.07 37 Others* 61.70	12	Gujarat	1158.50		
15 J&K 1.00 16 Jharkhand 17.51 17 Karnataka 327.53 18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	13	Haryana	53.27		
16 Jharkhand 17.51 17 Karnataka 327.53 18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	14	Himachal Pradesh	0.33		
17 Karnataka 327.53 18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	15	J&K	1.00		
18 Kerala 15.86 19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	16	Jharkhand	17.51		
19 Lakshadweep 0.75 20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	17	Karnataka	327.53		
20 Madhya Pradesh 840.35 21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarkhand 45.10 36 West Bengal 23.07 37 Others* 61.70	18	Kerala	15.86		
21 Maharashtra 430.46 22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	19	Lakshadweep	0.75		
22 Manipur 0.01 23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	20	Madhya Pradesh	840.35		
23 Meghlya 0.01 24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	21	Maharashtra	430.46		
24 Mizoram 0.10 25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	22	Manipur	0.01		
25 Nagaland 0.50 26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	23	Meghlya	0.01		
26 Odisha 77.64 27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	24	Mizoram	0.10		
27 Puducherry 0.03 28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	25	Nagaland	0.50		
28 Punjab 545.43 29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	26	Odisha	77.64		
29 Rajasthan 1317.64 30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	27	Puducherry	0.03		
30 Sikkim 0.01 31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	28	Punjab	545.43		
31 Tamil Nadu 1590.97 32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	29	Rajasthan	1317.64		
32 Telangana 973.41 33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	30	Sikkim	0.01		
33 Tripura 5.02 34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	31	Tamil Nadu	1590.97		
34 Uttar Pradesh 239.26 35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	32	Telangana	973.41		
35 Uttarakhand 45.10 36 West Bengal 23.07 37 Others* 61.70	33	Tripura	5.02		
36 West Bengal 23.07 37 Others* 61.70	34	Uttar Pradesh	239.26		
37 Others* 61.70	35	Uttarakhand	45.10		
37 Others* 61.70	36	West Bengal	23.07		
	37	_	61.70		
	TOTAL 9012.				

^{*}Ministry of Railways, Public Sector Undertakings etc

Annexure-II referred to in reply to the Lok Sabha Unstarred Question No. 27 for reply on 02.02.2017

State-wise Allocation of Canal Solar Projects and Projects Commissioned as on 31.12.2016

Sl. No.	State	Capacity allocated (MW)	Central Financial Assistance released (Rs in crore)	Capacity Commissioned (MW)
1	Andhra Pradesh	6	3.900	6
2	Gujarat	25	20.8152	-
3	Karnataka	10	8.20918	-
4	Kerala	3	2.711247	-
5	Punjab	20	15.000	-
6	Uttar Pradesh	6	2.8272	-
7	Uttarakhand	20	12.600	-
8	West Bengal	10	7.800	10
	Total	100	73.862827	16