

Ministry of New and Renewable Energy
(Grid Connected SPV Rooftop, Solar Cities & Green Buildings Division)

Development of Solar City Programme
Status Note on Solar Cities (As on 15.09.2015)

1. Background

The Ministry has launched a Scheme on “Development of Solar Cities”: under which a total of 60 cities/towns are proposed to be supported for development as “Solar/ Green Cities”. At least one city in each State to a maximum of five cities in a State may be supported by the Ministry. The cities may have population between 0.5 to 50 lakh. Relaxation could be considered for special category states including North-Eastern States. Financial support up to of Rs. 50 lakh for each city may be provided for preparation of the Master Plan alongwith few DPR (up to Rs. 10 lakh), oversight of its implementation (up to Rs. 10 lakh), setting up and functioning of Solar City Cell in the city (up to Rs. 10 lakh) and organizing promotional activities (up to Rs. 20 lakh).

2. Status of Proposals

- Sanctions have been issued for 50 Cities namely Agra, Moradabad, Allahabad, Rajkot, Gandhinagar, Surat, Nagpur, Kalyan-Dombiwali, Thane, Aurangabad, Nanded, Gwalior, Rewa, Imphal, Kohima, Dimapur, Dehradun, Haridwar-Rishikesh, Chamoli-Gopeshwar, Chandigarh, Gurgaon, Faridabad, Coimbatore, Vijayawada, Bilaspur, Raipur, Agartala, Guwahati, Jorhat, Hubli-Dharwad, Mysore, Amritsar, Ludhiana, Mohali, Jodhpur, Bhubaneswar, Aizawl, Panaji City & Environs, Itanagar, Hamirpur, Shimla Shirdi, Ajmer, New Town Kolkata , Howrah, Madhyamgram, New Delhi, Puducherry, Kochi and Bhopal.
- Master Plans have been prepared for 48 cities namely Agra, Moradabad, Gandhinagar, Rajkot, Surat, Kalyan-Dombiwali, Thane, Shirdi, Nagpur, Aurangabad, Nanded, Indore, Bhopal, Rewa, Gwalior, Imphal, Kohima, Dimapur, Chandigarh, Gurgaon, Faridabad, Bilaspur, Raipur, Agartala, Guwahati, Jorhat, Hubli-Dharwad, Mysore, Aizawl, Itanagar, Coimbatore, Shimla, Hamirpur, Jodhpur, Vijayawada, Ludhiana, Amritsar, Chamoli-Gopeshwar, Dehradun, Haridwar-Rishikesh, New Town Kolkata, Madhyamgram, Panaji, Puducherry, New Delhi (NDMC area), Allahabad, Kochi , Bhubaneswar, Indore and Thiruvananthapuram.
- Further, “In-Principle” approvals have been given to 6 Cities namely Thiruvananthapuram, Jaipur, Indore, Leh, Mahbubnagar and Narsapur Town (West Godavari District). Master Plan of Indore and Thiruvananthapuram have been prepared and the other Corporations/State Nodal Agencies are in the process of engaging Consultants for preparation of the Master Plans.

3. Empanelment of Consultants

The Ministry has empanelled 26 consultants in June 2009 for preparation of the Master Plans. The list is available in the Website of MNRE.

4. Model Solar Cities.

Eight Cities are to be developed as ‘Model Solar Cities’. So far, **Nagpur, Chandigarh, Gandhinagar and Mysore** have been identified/ sanctioned. The financial support upto Rs. 9.50 core is provided for each Model Solar City provided the equal amount of Rs. 9.50 crore is given by the Municipal Corporation/City Administration/State or any other resources including public private partnership for installation of renewable energy projects/system.

5. Pilot Solar Cities

Fifteen Cities to be developed as 'Pilot Solar Cities'. So far 13 cities namely **Agartala, Coimbatore, Rajkot, Shimla, Faridabad, Thane, Raipur, Shirdi, Leh, Aizawl, Puducherry, Vijaywada and Amritsar** are being developed as Pilot Solar City. The financial support upto Rs. 2.50 crore will be provided for each Pilot Solar City provided the equal amount of Rs. 2.50 crore is given by the Municipal Corporation/City Administration/State or any other resources including public private partnership for installation of renewable energy projects/systems.

6. Solar City Cells and Stakeholders Committees:

The Stakeholders committees have been constituted in all 50 solar cities while the solar city cells have been created in 26 solar cities.

7. RE Projects:

RE projects with an aggregate capacity of 8.16 MWp eq. Solar PV Projects and 505100 lpd (7894.5 m²) SWH systems have been sanctioned in Chandigarh, Mysore, Rajkot, Agartala, Faridabad, Thane, Aizwal, Puducherry, Nagpur, Surat ,Vijaywada & Shimla solar cities.

8. Green Campus:

So far sanctions has been given for 14 campuses namely Silver Jubilee Campus of Pondicherry University; Auroville Campus (Puducherry); Dayalbagh Nagar Panchayat; School of Planning & Architecture (New Delhi); Malkapur Nagar Panchayat; KIIT University; Tezpur University; Indian Institute of Engineering, Science & Technology (BESU); Jadhavpur University; Writers Building (Kolkata); Madan Mohan Malaviya University of Technology (Gorakhpur); Orissa University of Agriculture and Technology (Bhubaneswar); Shri Hanuman Vyayam Prasarak Mandal (Amravati); and National Institute of Technology (Hamirpur) to be developed as Green Campus.

9. Financial Status

- The sanctions have been issued for **50 Cities** at a total cost of **Rs. 2369.15 lakh/-** for Master Plans, Solar City Cells and Promotional Activities of which **Rs. 610.97** lakh has been released.
- An amount of **Rs. 4281.18 lakh** has been sanctioned for installation of renewable energy projects in 12 Solar Cities of which **Rs. 1783.76 lakh** has been released.
- An amount of **Rs. 70.00 lakh** have been sanctioned and an amount of **Rs. 12.85 lakh** have been released for Green Campuses.

**State-wise list of Solar Cities for which Sanctions/In-Principle approvals have been given
(Sanctions accorded for Master Plans, Solar City Cells and Promotional Activities).**

Sr. No	State	Cities for which in-principle approval given	Amount Sanctioned in (Rs. Lakh)	Amount Released in (Rs. Lakh)
1.	Andhra Pradesh	1. Vijaywada	46.40	15.40
2.	Telangana	2. Mahbubnagar*	-	-
3.	Assam	3. Guwahati	45.45	7.72
		4. Jorhat	49.18	24.18
4.	Arunachal Pradesh	5. Itanagar	47.49	16.49
5.	Chandigarh	6. Chandigarh	49.75	39.75
6.	Chhattisgarh	7. Bilaspur	43.43	12.43
		8. Raipur	43.43	12.43
7.	Gujarat	9. Rajkot	47.45	12.72
		10. Gandhinagar	50.00	14.00
		11. Surat	43.46	8.46
8.	Goa	12. Panji City	43.30	1.65
9.	Haryana	13. Gurgaon	47.45	7.45
		14. Faridabad	48.75	17.75
10.	Himachal Pradesh	15. Shimla	42.95	26.94
		16. Hamirpur	42.80	26.80
11.	Karnataka	17. Mysore	43.25	5.62
		18. Hubli-Dharwad	43.00	1.50
12.	Kerala	19. Thiruvananthapuram*	-	-
		20. Kochi	48.84	19.42
13.	Maharashtra	21. Nagpur	48.93	4.46
		22. Thane	49.84	18.84
		23. Kalyan-Dombivli	49.57	24.57
		24. Aurangabad	50.00	7.86
		25. Nanded	50.00	3.74
		26. Shirdi	43.48	1.74
14.	Madhya Pradesh	27. Indore*	-	-
		28. Gwalior	49.55	9.78
		29. Bhopal	48.00	19.00
		30. Rewa	50.00	13.55
15.	Manipur	31. Imphal	48.56	4.28
16.	Mizoram	32. Aizawl	48.09	17.09
17.	Nagaland	33. Kohima	46.98	20.47
		34. Dimapur	48.95	4.47
18.	Delhi	35. New Delhi (NDMC area)	50.00	2.25
19.	Orissa	36. Bhubaneswar	47.37	3.68
20.	Punjab	37. Amritsar	45.00	11.50
		38. Ludhiana	45.00	11.50
		39. SAS Nagar (Mohali)	50.00	2.24
21.	Rajasthan	40. Ajmer	50.00	1.35
		41. Jaipur*	-	-
		42. Jodhpur	43.50	1.75

Sr. No	State	Cities for which in-principle approval given	Amount Sanctioned in (Rs. Lakh)	Amount Released in (Rs. Lakh)
22.	Tamil Nadu	43. Coimbatore	49.00	24.00
23.	Tripura	44. Agartala	45.49	14.44
24.	Uttarakhand	45. Dehradun 46. Haridwar & Rishikesh 47. Chamoli –Gopeshwar	47.40 45.00 44.95	12.70 5.00 13.94
25.	Uttar Pradesh	48. Agra 49. Moradabad 50. Allahabad	48.89 50.00 49.82	38.89 25.00 2.45
26.	West Bengal	51. Howrah 52. Madhyamgram 53. New Town Kolkata	50.00 50.00 50.00	4.31 4.15 11.26
27.	Jammu & Kashmir	54. Leh*	-	-
28.	Puducherry	55. Puducherry	49.40	-
	Total		2369.15	610.97

***Only In-principal approval given.**

RE Projects in Solar Cities
[A] SPV Projects Sanctioned under Model/Pilot Solar Cities

Sl. No.	Solar City	RE Project	Capacity (kWp)	Sanctioned (₹ in lakh)	Released (₹ in lakh)	Remarks
1.	Chandigarh Model Solar City	(i) SPV Plant at Model Central Jail, Burail, Sector-45, Chandigarh	100 kWp	95.00		Completed
		(ii) Govt. Sr. Sec. School, Sector-46, Chandigarh	50kWp	47.50		Completed
		(iii) Judges House, Sector 19, Chandigarh	10kWp	13.50		Completed
		(iv) Paryawaran Bhawan Building, Sector-19, Chandigarh	50kWp	47.50		Completed
		Sub Total [A1]	210kWp	203.50	101.75	
		(i) Solar PV Power Plants at Govt. College for Girls <ul style="list-style-type: none"> • Admn. And Library Dept. 50 kWp 37.50 • Physics and Zoology Dept. 100 kWp 75.00 • Class Room Old Block 100 kWp 75.00 • BCA Block 80 kWp 60.00 				Completed
		(ii) Solar PV Power Plants Govt. College for Men <ul style="list-style-type: none"> • Auditorium 30kWp 22.50 • Botany Block 30kWp 22.50 • Chemistry Block 30kWp 22.50 • Physics Block 30kWp 22.50 • Pyscology Block 25kWp 18.75 • Library 40kWp 30.00 • Geography Block 25kWp 18.85 • Music Block 25kWp 18.75 • Gymnasium 10kWp 7.50 • Hostel (Main) 80kWp 60.00 • Hostel (New) 70kWp 52.50 • Hostel (General) 40kWp 30.00 				Completed
		Sub Total [A2]	765kWp	573.75	75.00	
	Chandigarh Model Solar City Date.14.08.2012 (In continuation)	(i) Physics lab and class room 39,40 (Govt. college for Girls, Sector-11, Chandigarh)	35kW	26.25		Completed
		(ii) Botany and Geography Lab (Govt. college for Girls, Sector-11, Chandigarh)	33Kw	22.50		Completed
		(iii) Home Science Block Class room (Govt. college for Girls, Sector-11, Chandigarh)	100kW	75.00		Completed
		Sub Total [A3]	165kW	123.75	61.87	
	Chandigarh Model Solar City Date.25.02.2013 (In continuation)	IRB complex, Chandigarh police	200kW	150.00	75.00	Under Installation
		Sub Total [A4]	200kW	150.00	75.00	
	Chandigarh Model Solar City Date.05.03.2013	Installation of 495kWp SPV System in Govt. College for Girls and 435 kWp SPV System in Govt. College for men	0	0	112.66	
		Sub Total [A5]	0	0	112.66	

Sl. No.	Solar City	RE Project	Capacity (kWp)	Sanctioned (₹ in lakh)	Released (₹ in lakh)	Remarks
	Chandigarh Model Solar City Date.25.03.2013	Installation of SPV Plants of total aggregate capacity of 1000 kWp to CREST to be installed at Punjab Engineering College	1000kW	390.00	-	Under Installation
		Sub Total [A6]	1000kW	390.00	-	
	Chandigarh Model Solar City Date 25.04.2014	Release of 2 nd installment of CFA to CREST for Model Central Jail 100 kWp, Govt. Sr. Sec. School 50 kWp, Paryavaran Bhawan 50 kWp	---	---	62.44	---
		Sub Total [A7]	--	--	62.44	
	Chandigarh Model Solar City (under JNNSM Scheme) Date 31.12.2013	Sanction for installation of grid connected rooftop SPV plants of total aggregate capacity of 810 kWp	810kW	243.00	0	Under Installation
	Chandigarh Model Solar City (under JNNSM Scheme) Date 31.12.2013	Sanction for installation of grid connected rooftop SPV plants of total aggregate capacity of 2 MWp	2000kW	600.00	0	Under Installation
	Chandigarh Model Solar City (under JNNSM Scheme) Date 04.12.2014	Settlement of project of 1.13 MWp plant as mentioned in A2,A3 & A4 above	-	-	282.03	
		Sub Total [A8]	2810kW	843.00	0	
	Chandigarh Model Solar City Dated 31.03.2014	Sanction of 580 kWp grid connected SPV rooftop	580 kWp	141.98	0	
	Chandigarh Model Solar City Dated 31.03.2014	Sanction of 166 kWp grid connected SPV rooftop	166 kWp	40.63	0	
		Sub Total [A9]	746 kWp	182.61	0	
		Sub Total A1+A2+A3+A4+A5+A6+A7+A8 +A9	5896kW	2466.61	488.72	
2.	Mysore Model Solar City	(i) SPV Plant at Mysore City Corporation on building, Mysore	60 kWp	48.60	24.30	
		(ii) Kupanna Park, Mysore	8kWp	6.45	3.22	
		(iii) Cheluvamba Park, Mysore	8kWp	6.45	3.23	
		(iv) Mysore Urban Develop	75kWp	60.75	30.38	
		(v) Zonal Office Building, Mysore	45kWp	36.45	18.22	
		Sub Total [B]	196kWp	158.70	79.35	
3.	Rajkot Pilot Solar City	(i) SPV Plant at RMC West Zone office, 150' Ring Road, behind Big Bazar, Rajkot	60kWp	24.75	12.375	
		(ii) RMC East Zone Office, Zaverchand Meghani, Bhawan, Rajkot	50kWp	20.40	10.20	
		Sub Total [C]	110kWp	45.15	22.575	
4.	Agartala Pilot Solar City	SPV Plant at City Centre Building, Agartala	45kWp	93.17	46.58	
	Agartala Pilot Solar City (In Continuation) (28.03.2013)	Installation of two Solar Photovoltaic Power Plants	30kW	54.90	-	

Sl. No.	Solar City	RE Project	Capacity (kWp)	Sanctioned (₹ in lakh)	Released (₹ in lakh)	Remarks
	Agartala Pilot Solar City (In Continuation)	40 kWp SPV Rooftop plant at 8 location in Agartala	40 kWp	59.20		
		Settlement of 45 kWp SPV Plant	---	--	46.58	
		Release of funds for 40 kWp SPV Rooftop plant at 8 location in Agartala	---	--	29.60	
		Total	115 kWp	207.27	122.76	
5.	Faridabad Pilot Solar City	(i) 61 nos. of Solar Hybrid inverters comprising of 225 W PV Module	13.725kWp	9.05	4.52	
		(ii) Solar Streetlight of 342 nos.		11.41	5.70	
		Sub Total [E]	13.725 kW	20.46	10.22	
6.	Thane Solar city (12.02.2013)	(i) 11 nos. of solar power pack systems	136kW	63.54	31.77	
		Sub Total [F]	136kW	63.54	31.77	
7	Aizawl Pilot Solar City (26.03.2013)	Solar Photovoltaic Power Plant of aggregate capacity 90kWp and Solar Water Heating System of aggregate capacity of 364 sq.m	90 kW	163.80	81.91	
		Sub Total [G]	90 kW	163.80	81.91	
8	Pondicherry Pilot Solar City (28.03.2013)	REAP Office, Office Complex, Forest Department, Pondicherry and Branch Press Mettupalayam	18kW	11.88	-	
		Sub Total [H]	18kW	11.88	-	
9	Nagpur Model Solar City (29.03.2013)	Solar Photovoltaic Power Plants of aggregate capacity of 125kWp capacity at New Administrative Building of NMC	125kW	87.50	0	
		Sub Total [I 1]	125kW	87.50	0	
	Nagpur Model Solar City	Solar Photovoltaic Power Plants of aggregate capacity of 50kWp capacity at Remote Sensing Application Centre, Nagpur	50 kWp	6.00	3.00	
		Sub Total [I 2]	50 kWp	6.00	3.00	
		Total [I 1+ I 2]=I	175 kWp	93.50	3.00	
10	Surat Solar City (under JNNSM Scheme) (31.12.2013)	Sanction for installation of 14 nos. grid connected rooftop SPV plant of aggregate capacity 750 kWp to Surat Municipal Corporation	750kW	225.00	0	
11	Surat Solar City (under JNNSM Scheme) (24.03.2014)	Sanction and Release of CFA for installation of grid connected rooftop SPV plant of aggregate capacity 750 kWp to Surat Municipal Corporation	---	---	102.81	
		Sub Total [K]	750kW	225.00	102.81	
12	Faridabad Solar City	4 nos. of 10 kWp SPV Power Plants	40kWp	19.278	0	
13	Vijaywada Solar City	5x100 nos. of Grid Connected Rooftop SPV Power plants	500 kWp	150.00	75.00	
14	Shimla Solar city	3 SPV plant of Aggregate capacity 55 kWp and 1790 nos. of Home lighting system (aggregate 64.44kWp)	119.44	249.99	125.00	
		Grand Total	8159.165kW p	3866.12	1502.52	

RE Projects in Solar Cities
[A1] SWH Projects Sanctioned under Model/Pilot Solar Cities

Sl. No	Solar City	RE Project	Capacity M² (LPD)	Sanctioned (₹ in lakh)	Released (₹ in lakh)	Remarks
1	Aizwl Pilot City	Solar Water Heating System of aggregate capacity of 364 sq.m	364 M ² (18200lpd)	24.02	12.01	
	Aizwl Pilot City	Solar Water Heating System of aggregate capacity of 908 sq.m	908 M ² (45400 lpd)	59.92	59.92	
	Sub total		1272 M2	83.94	<u>71.93</u>	
2	Nagpur Model Solar City	Solar Water Heating System of aggregate capacity of 6622.50 M ² (441500 lp.d)	6622.50 M ² (441500 lpd)	331.12	209.31	
	Total		7894.50 M² (505100)	415.06	<u>281.24</u>	