



Flagship Programme on Solar Water Heating for NCR Region

ROAD MAP & ACTION PLAN





National Capital Region

Total Area : 33,578 square kilometers

NCT, Delhi : 1,482 square kilometers

Haryana : Seven districts - Gurgaon, Rewari, Faridabad,

Sonepat, Rohtak, Panipat and Jhajjhar, comprising 13,413 square kilometers

 Uttar Pradesh: Four districts - Ghaziabad, Bulandshahr, Meerut and Baghpat, comprising 10,853

square kilometers

Rajasthan : Alwar district, 7,829 square kilometers





Towns in the National Capital Region

State	Delhi Metropolitan Area	Priority town	Sub-regional growth Centre
Haryana	Gurgaon, Faridabad, Kundli, Bahadurgarh	Panipat, Rewari, Palwal, Dharuhera, Rohtak	Sonepat, Bawal, Manesar
Uttar Pradesh	Ghaziabad	Hapur, Meerut, Bulanshahr, Khurja	Greater Noida, Modinagar, Ganaur
Rajasthan		Alwar, Bhiwai	





Time Frame : 2010 – 2011 (2 years)

Target : 10 million liters of hot water; 200,000 sq. m.

of solar collector area;

Peak load shaving: 100 MW

Domestic systems: av. 100 litre capacity – 75,000 installations

- 7.5 million litres

Large systems : av. 10,000 litre capacity — 250 installations

2.5 million litres

Large systems in hotels, hospitals, guest houses, nursing homes, hostels, colleges, schools, restaurants, industrial units etc.





Targets for NCR States/ Towns

NCT Delhi : 5 million litres – 100,000 sq. m.

Haryana

Gurgaon : 2 million litres - 40,000 sq. m.

Faridabad : 1 million litres - 20,000 sq. m.

U.P.

Noida/ Gr. Noida : 1 million litres - 20,000 sq. m.

Ghaziabad / Meerut : 0.5 million litres - 10,000 sq. m.

Other NCR towns : 0.5 million litres - 10,000 sq. m.

Total : 10 million litres — 200,000 sq. m.





Action Plan

- The mandatory provision should prescribe a minimum capacity, say, 40% of hot water requirement to be met by solar water heating in all institutions and commercial establishments
- Guidelines for calculating total hot water requirements should be developed and incorporated into the local building bye laws
- The mandatory requirement should be extended to all Government Buildings (Defence / Railway/ Police / CPWD/ PWD/ Housing Board/ ULB establishments), PSUs, Industrial units etc.
- Solar Water Heating should be made mandatory for plot sizes of 200 sq. yds. and above
- While applying for completion of new construction, architects should certify that necessary plumbing has been done for installation of SWH system
- Occupation certificate should only be given if SWH system has been installed.
 Penalties should be imposed for non-compliance and violations

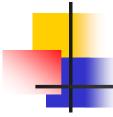




Action Plan

- The SEBs/utilities viz. should play a pro-active role in promotion of Solar Water Heating through their consumer service centers and consider rebate in electricity tariff.
- Urban local bodies should play a pro-active role and ensure compliance of mandatory orders; should consider rebate in property tax.
- Builders and developers should incorporate solar water heater with electrical backup as an amenity in all new building construction.
- Development authorities and Group Housing co-operative societies should mandate roof space to be made available for installation of solar water heaters by individual flat owners
- Best practices guidelines should be evolved for assessment of demand that can be met through solar water heating; space requirement; system sizing; and, installation/ trouble- shooting guidelines for different demand segments such as hi-rise buildings, hotels, hospitals etc.





Action Plan

- ESCO mode of implementation should be encouraged and States should consider creating a Revolving Fund to provide initial capital support for projects implemented in the ESCO mode
- A data base of installations should be developed and random checks carried out on compliance of mandatory orders
- Supply chain and service network needs to be upgraded through promotion of local manufacturing and dealerships for easy availability and quality installations / repair
- Training and capacity building should be taken up at different levels for quality installations and servicing
- A "Helpline" should be established to provide general information/ guidance and record complaints / grievances
- Extensive awareness campaign should be taken up through the media, public information literature and awareness camps in different demand segments including RWAs, architects, builders etc.