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**NDMC**

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NEW DELHI  
MUNICIPAL  
COUNCIL's  
Initiatives  
on  
Solar Power

# SOLAR PROFILE - DELHI

Delhi blessed ~300 sunny days

Estimated solar roof-top space is 31 sq.km (potential of 2.5 GW-annually approx. 3500 million units)

20% potential with government/ public sector, 25% in commercial / industrial & 49% in domestic sector

Peak power demand in Delhi was almost 6.25 GW in 2016

Delhi's peak demand curve broadly matches the generation curve of solar systems, which can therefore help reduce peak demands

100 GW solar energy generation by 2022 (GoI target), of which 40 GW is from roof-top

Delhi has established solar generation targets of 1 GW by 2020 (4.2% of energy consumed) and 2.0 GW by 2025 (6.6% of energy consumed)

Delhi has a solar RPO set by DERC. For the FY 2013-14, this stands at 0.20% and increases to 0.35% by 2016-17

# NDMC Renewable Power Obligation

Solar RPO prescribed for NDMC for the year 2015-16 is 0.30% of total energy consumption

Total energy consumption of 1366.19 MU for NDMC (FY 2015-16)

Solar RPO for NDMC for (FY 2015-16) is calculated at 2.2 MW (considering solar radiation available in Delhi as 6 hours per day for 300 days of year)

Solar RPO for NDMC for FY 2015-16 is 4.10 MU

# Net Metering Policy

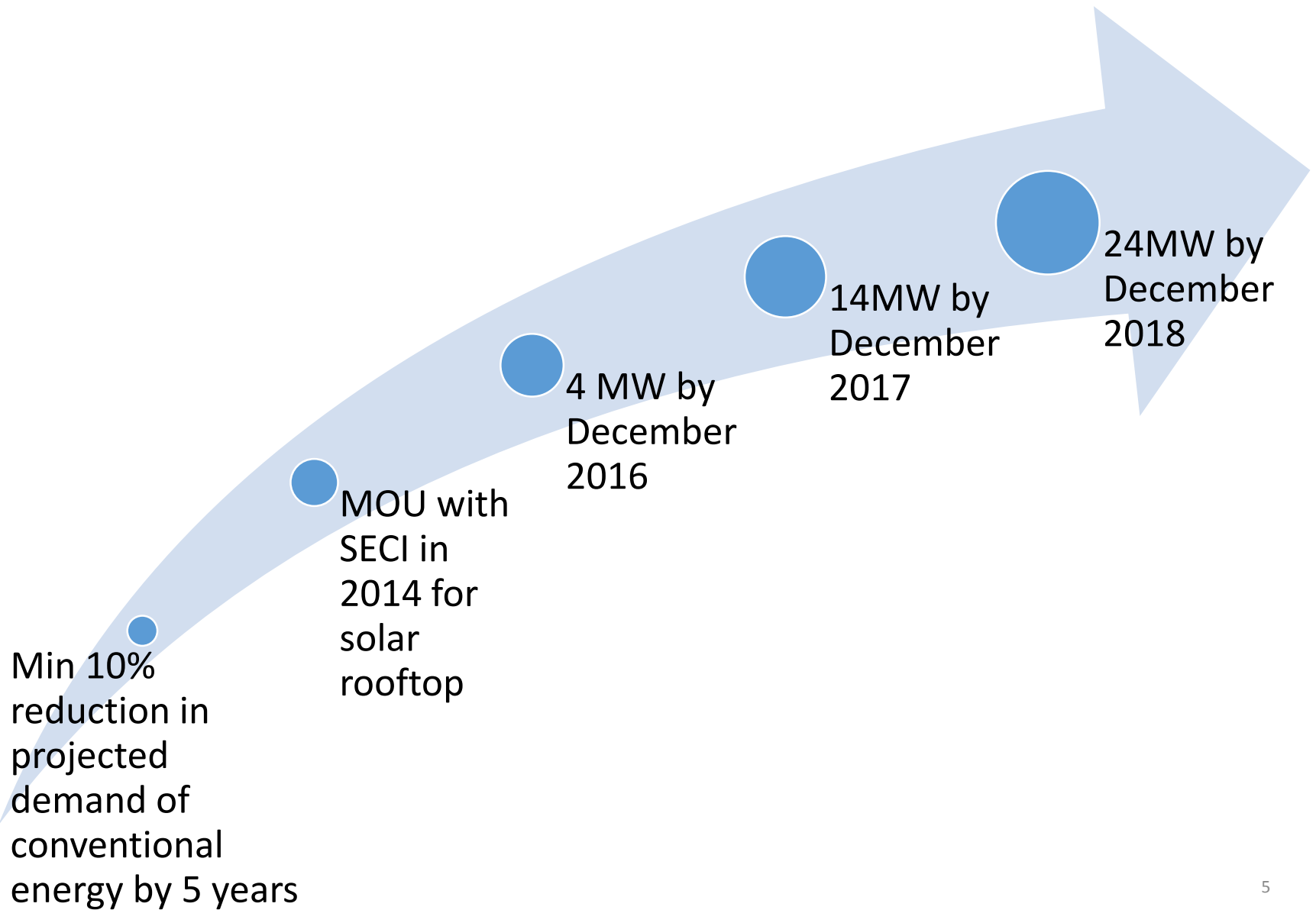
## Net Metering Policy

Net Metering for Renewable Energy Regulations, 2014 issued by DERC to promote use of renewable energy regulation for self consumption

For set off against other time blocks, same shall be moderated as per relevant rebate/surcharge percentage of ToD tariff applicable for that year

Net energy credits, unadjusted at end of FY at rate of Average Power Purchase Cost of Distribution Licensee, be paid to consumer

# Solar City: NDMC's Action Plan



# NDMC - Achievements & Targets

Phase I: 23 NDMC Schools covered for installation of Solar Power (1.816 MW) on RESCO mode. Project commissioned. PPA signed @Rs.6.35 per unit.

Phase II: 36 NDMC Buildings covered (1.5495 MW).

Work under execution in CAPEX model and likely to be commissioned by Sept. 2016.

Phase III: Survey of another 30 NDMC Buildings undertaken.

Likely potential of 1MW.

Work to be awarded shortly under CAPEX model. Likely to be commissioned by Dec. 2016.

Drain-top Solar Plant of 20 MW capacity at planning stage.

# Roof-Top Solar Plants - Private

SECI tender of 500 MW capacity for Solar Roof Top Plants in India including Delhi which inter-alia covers private domestic & private institutions sector (30% government subsidy)

NDMC aims to cover all private domestic & private institutions for providing Solar Power Plants through the SECI tender

Solar Plants up to 5 MW can be installed in this category, and increased to 10 MW depending upon the response received from citizens

# Installation within NDMC (1/2)



**NP Sec School, Sarojini Nagar**

Capacity: 32.40 KWp



**NP Primary School, Sarojini Nagar**

Capacity: 19.50 KWp



**NP Boarding School, Hanuman Road**

Capacity: 30.5 KWp



**Navyug School, Mandir Marg**

Capacity: 42 KWp



# Installation within NDMC (2/2)

NP Boys Sr Sec School, Mandir Marg



Capacity: 162 KWp

Barat Ghar, Bapu Dham.



Capacity: 63 KWp

N.P. Sr. Sec. School, Ansari Nagar



Capacity: 43.80 KW

# Drain-top Solar Power Plant

Drain-top is not affected by the high land prices in Delhi

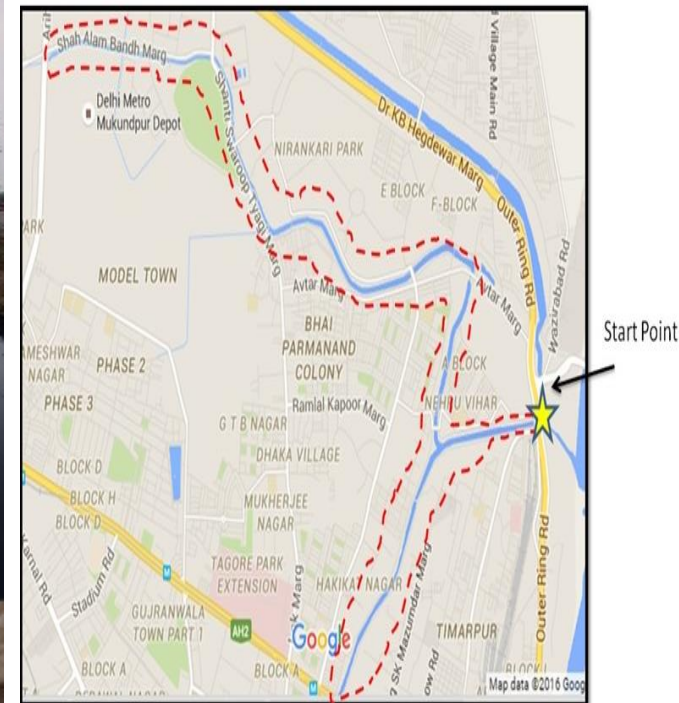
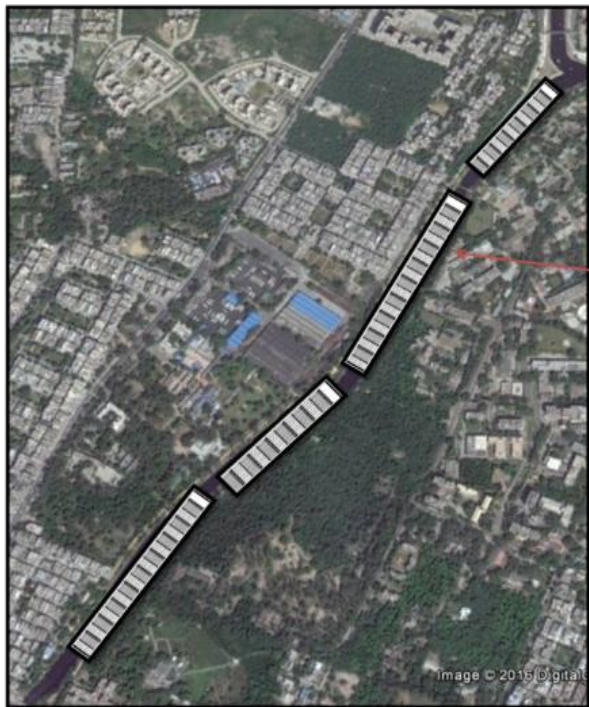
Eco friendly & aesthetic appeal

Sideways development into green area would make it lively

# Site Location for Drain-top Solar Plant

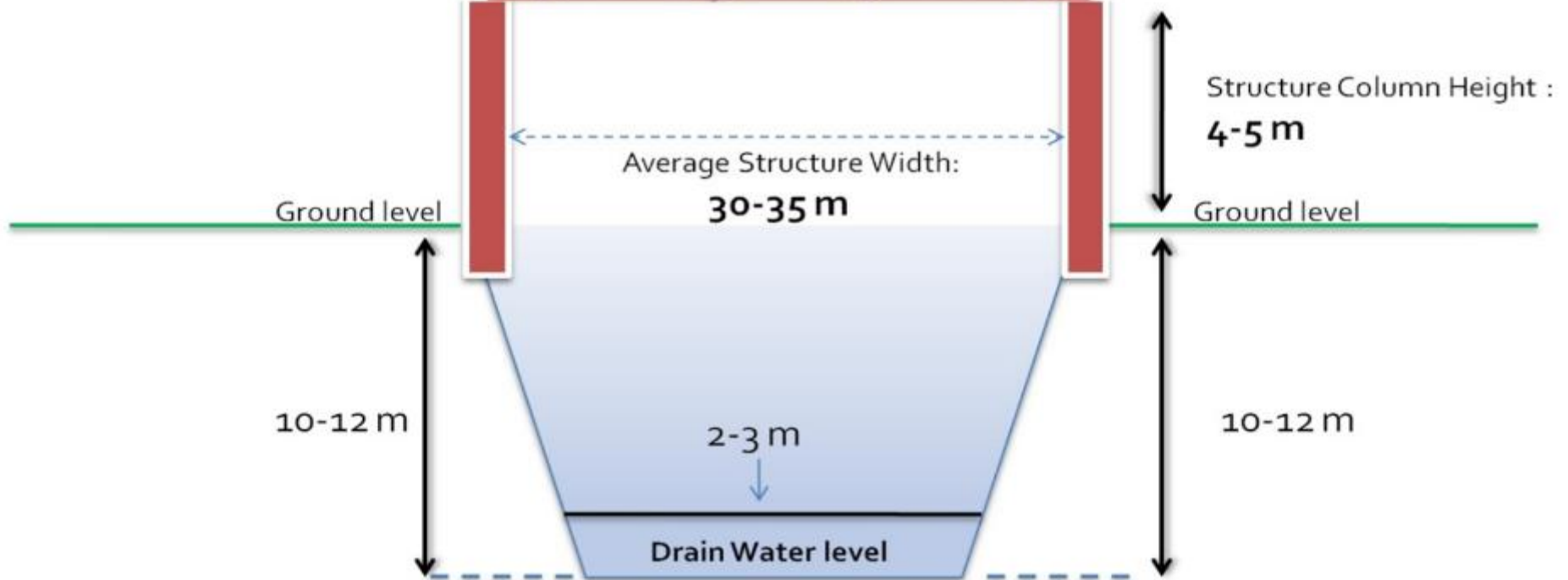
Cumulative capacity of 20 MW is divided into two phases across the drain

8 kms of Najafgarh Drain (Jahangir Puri & Gopalpur / Mukherjee Nagar) earmarked



# CONCEPT DESIGN

Solar Irradiance  
from the Sun



# External Clearances for Drain-top Solar Plant

Clearance from Flood & Irrigation Department, GNCTD

Clearance from PWD, GNCTD

Clearance from National Green Tribunals (NGT)

Clearance from Delhi Electricity Regulatory Commission (DERC)

Stake Holder GNCTD - NDMC - TPDDL (Tata Power Delhi Distribution Ltd. for grid connectivity)

**THANKS**