

The vision of Hon. Prime Minister

- Net zero by 2070
- 50% Energy through Renewable sources by 2030

The Largest Distributed Solar Deployment Program (16GW)

Under PM-KUSUM

(Mukhyamantri Saur Krushi Vahini Yojana – 2.0)

Presentation by -

Lokesh Chandra (IAS)

Chairman & Managing Director, MSEDCL



Government of
Maharashtra



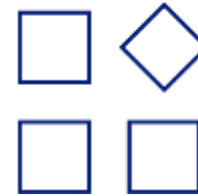
Maharashtra is home to more than **1 Crore farmers**, who contribute to **30%** of the state's electricity consumption



1 Crore
Farmers



45 Lakh
Agri. Electricity Connections



12 %
Contribution GSDP

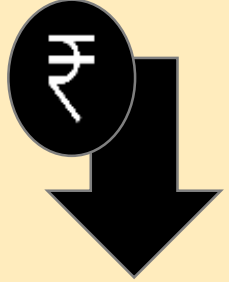


16,000 MW
Connected load

Maharashtra has the **highest Agriculture demand** in India (39,000 Mus)

Agriculture sector **highly subsidized** & the Major cause of **Revenue losses** to Discom

Mission 2026 for Solarisation of 30% Ag. Feeders and commissioning of 16,000 MW Solar Capacity



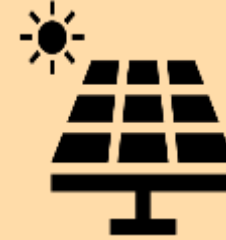
Reduction in cost of supply to agricultural and **cross-subsidy burden** on Industries



Investment of ~ **Rs. 65,000** Crore across various districts in Maharashtra



Daytime Electricity supply to farmers and agriculture



Over **70,000** rural jobs and development of solar ecosystem and skills



Contribution to national and state solar targets, **CO2 emission saving**

5 Major Challenges addressed through **Design Reengineering**

| Small Project Size | Land Availability | Delay in Permissions / NoCs | No Data Availability to Developers | Delay in Payments to SPDs |
|---|--|---|---|--|
| Cluster based approach (200-250 MW - 50 MW) | Identification of Govt. land within 5-10 km radius from of 33/11 KV Sub-Station. | <ul style="list-style-type: none">• Advance Clearance• Advance Grid Connectivity | Data Room With GIS Layered details of each land parcel | <ul style="list-style-type: none">• Creation of revolving fund mechanism• Provision for Deemed Generation• Nodal Agency to extend payment security |
| Economics of Scale for Solar Power Developer | 40,000 Acres Govt. Land identified in 3 months. Extensive use of PM GATI SHAKTI & other IT Portals. | More than 6,000 NoCs and Grid Connectivity Permissions issued. | Geo Tagged Substations & land parcel details | Provision of Rs.100 Cr / 1000MW from Green Cess Fund |

Reengineering of Processes in 4 Major Steps

New Transactional Structure

- Formation of Maha Agro Solar Company
- 22 SPVs Created

Ease of Doing Business

- Exclusive single window portal & access to data room to SPDs
- From award of work to real time monitoring of Generation through SCADA will be from single window portal.

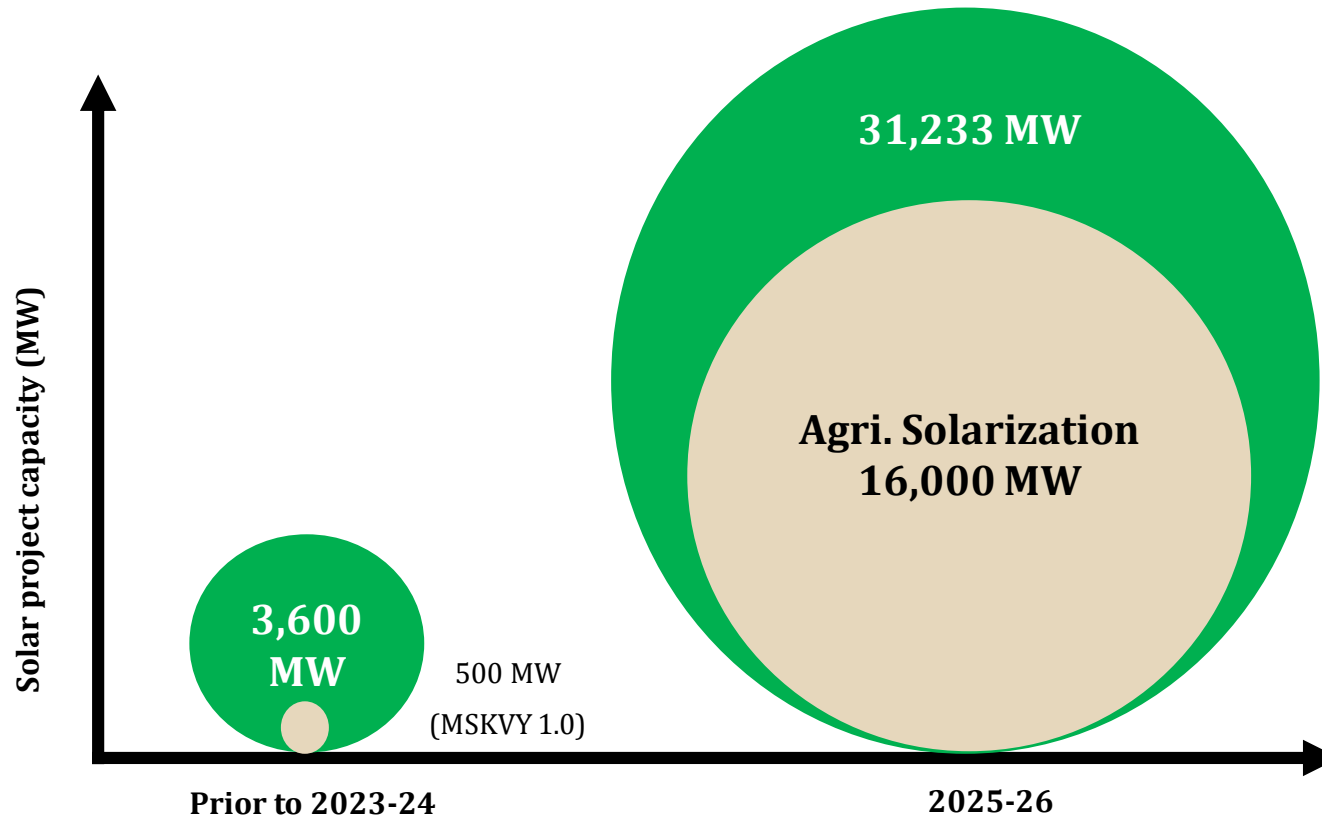
Tagging of Projects with PM - KUSUM C

- In order to avail 30% CFA (Central Finance Assistance)
- Rs. 3500 Cr CFA approved, Rs. 3800 Cr in Process

State Incentives

- Land Lease rent fixed @ Rs. 125000/ Hectare with 3% increase per year (For Private Land)
- Social Development Grant to Gram Panchayat @Rs.5Lakh per year for 3 years
- System Strengthening Grant @ Rs. 25 Lakhs per Substation (One Time)
- Production Incentive for early commissioning @ 25 Paisa/ Unit at 11 KV and @ 15 paisa per unit at 33 KV (for 3 years)

16,000 MW Solar Capacity awarded in 10 months and work started



- Transparent **e-bidding** process.
- Cater to **100%** of agriculture demand across **27 districts** in the state
- **100%** Capacity i.e. **16,000 MW** has been awarded, **2921** sub-stations, **40 lakh** pumps
- Avg. tariff discovered **Rs.3.06/kWh**
- All **regulatory approvals** in place alongwith tariff adoption.
- Capacity commissioned **1,625MW**, Sub-stations **309**, feeders **1034**, **4.04 Lacs** pumps
- Balance capacity will be commissioned upto **September 2026** in phased manner.

Solar energy capacity of Maharashtra will be **>8 times** of the present solar capacity in next 15 months

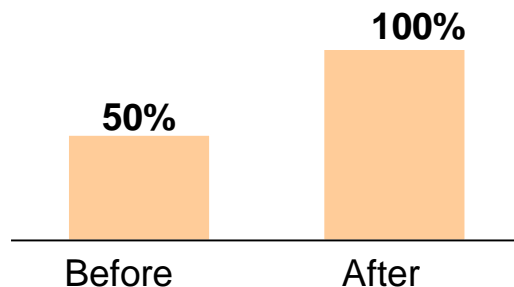
PM-KUSUM C / MSKVY 2.0 : **Game Changer** for all stakeholders



Reliable power supply

at desired voltage level

Day time supply of electricity



Additional income

1.25L per Ha per annum
from leasing of non-fertile land

Lower electricity tariff



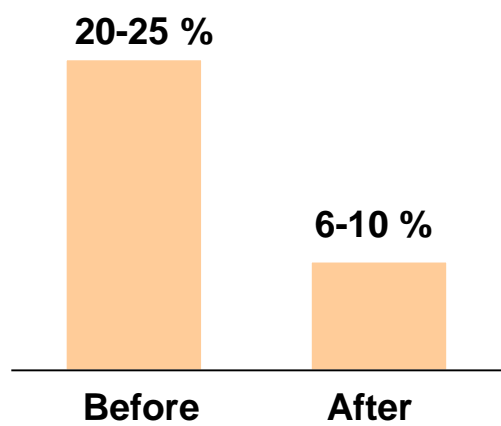
Increased Participation of women workforce

Due to day-time availability of power

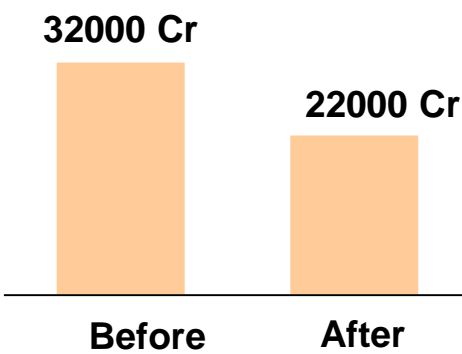
>20 Lakhs women benefitted

PM-KUSUM C / MSKVY 2.0 : **Game Changer** for all stakeholders

Reduction in **AT&C losses**



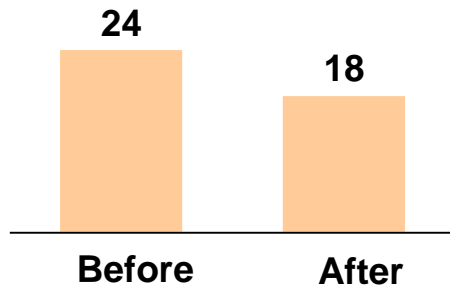
Savings of **Rs.10,000 Cr.** In Power Purchase Cost



Reduction in annual **Govt. subsidy** to the tune of **Rs.4500 Cr.**

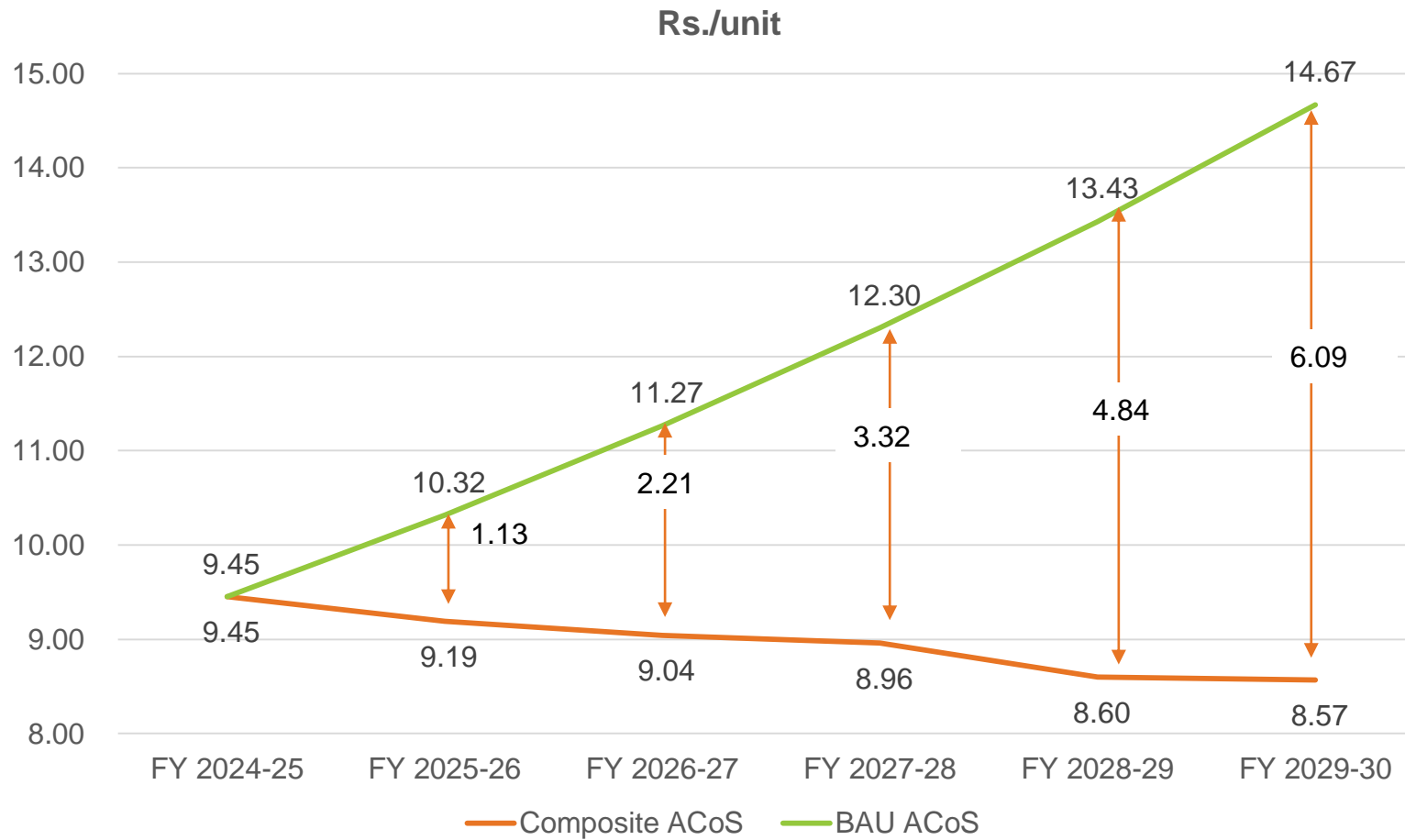


25% reduction in **Green House Gas** emissions (*MtCO2e*)



Cross-subsidy reduction on account of **Rs. 1-1.5/kWh tariff reduction** for commercial and Industrial consumers

Impact on Tariff : First time in the history of MSEDCL Average cost of supply is going down



1. MSKVY 2.0 and high RE integration in total power purchase reduces total power purchase cost.
2. In case of BAU, ACoS increases by CAGR of 9.19 % while actual **CAGR is -1.94%**
3. This also includes recovery of past period gap of **Rs 33,689 Cr** as tariff increase was not allowed in FY 2023-24
4. Overall saving due to RE power is **Rs 66,000 Cr** in next 5 years

Several Projects commissioned in record time

MSKVY- 2.0



Capacity: - 3 MW
Pangra, Tq- Patur, Dist : Akola



Capacity: - 4 MW
Dhondalgaon ,Tq- Vaijapur , Dist : Ch. Sambhajinagar



Capacity: - 7 MW
Renapur ,Tq- Renapur, Dist : Latur



Capacity: - 5 MW
Bamni ,Tq- Biloli, Dist : Nanded



Capacity: - 6 MW
Warkhedi ,Tq- Phulambri, Dist : Ch. Sambhajinagar



Capacity: - 8 MW
Umra,Tq- Loha, Dist : Nanded



Capacity: - 4 MW
Hissai,Tq- Mangrulpir, Dist : Washim



Capacity: - 4 MW
Umbarda Bazar,Tq- Karanja, Dist : Washim



Capacity: - 5 MW
Palshi Bk,Tq- Khamgaon, Dist : Buldhana



Capacity: - 3 MW
Bardapur ,Tq- Ambejogai, Dist : Beed



Capacity: - 4 MW
Shahapur ,Tq- Tulajapur, Dist : Dharashiv



Capacity: - 3 MW
Jalalabad,Tq- Barshitakali, Dist : Akola



Capacity: - 6 MW
Hiwardi ,Tq- Jalna, Dist : Jalna

Vidharbha & Marathwada Region



Several Projects commissioned in record time

MSKVY- 2.0



Capacity: - 3 MW
Murum, Tq- Baramati, Dist: Pune



Capacity: - 4 MW
Basaragi, Tq- Jat, Dist : Sangli



Capacity: - 5 MW
Lasgaon, Tq- Pachora, Dist : Jalgaon



Capacity: - 3 MW
Haroli, Tq- Shirol, Dist : Kolhapur



Capacity: - 4 MW
Kini, Tq- Hatkanangle, Dist : Kolhapur



Capacity: - 4 MW
Wawade, Tq- Amalner, Dist : Jalgaon



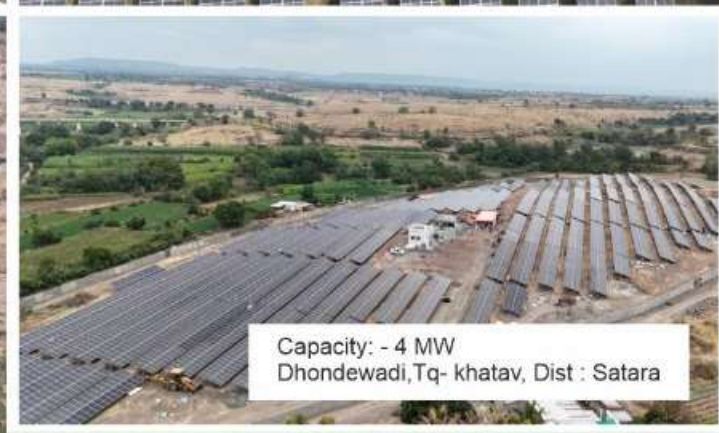
Capacity: - 5 MW
Samangaon, Tq : , Dist : Nashik



Capacity: - 4 MW
Mungsare, Tq. Dist : Nashik



Capacity: - 5 MW
Bijawadi, Tq- Mann, Dist : Satara



Capacity: - 4 MW
Dhondewadi, Tq- khatav, Dist : Satara



Capacity: - 3 MW
Sawkarwadi, Tq: Malegaon, Dist : Nashik

Capacity: - 4 MW
Pingalwade, Tq- Satana, Dist : Nashik

Pune & Kokan Region

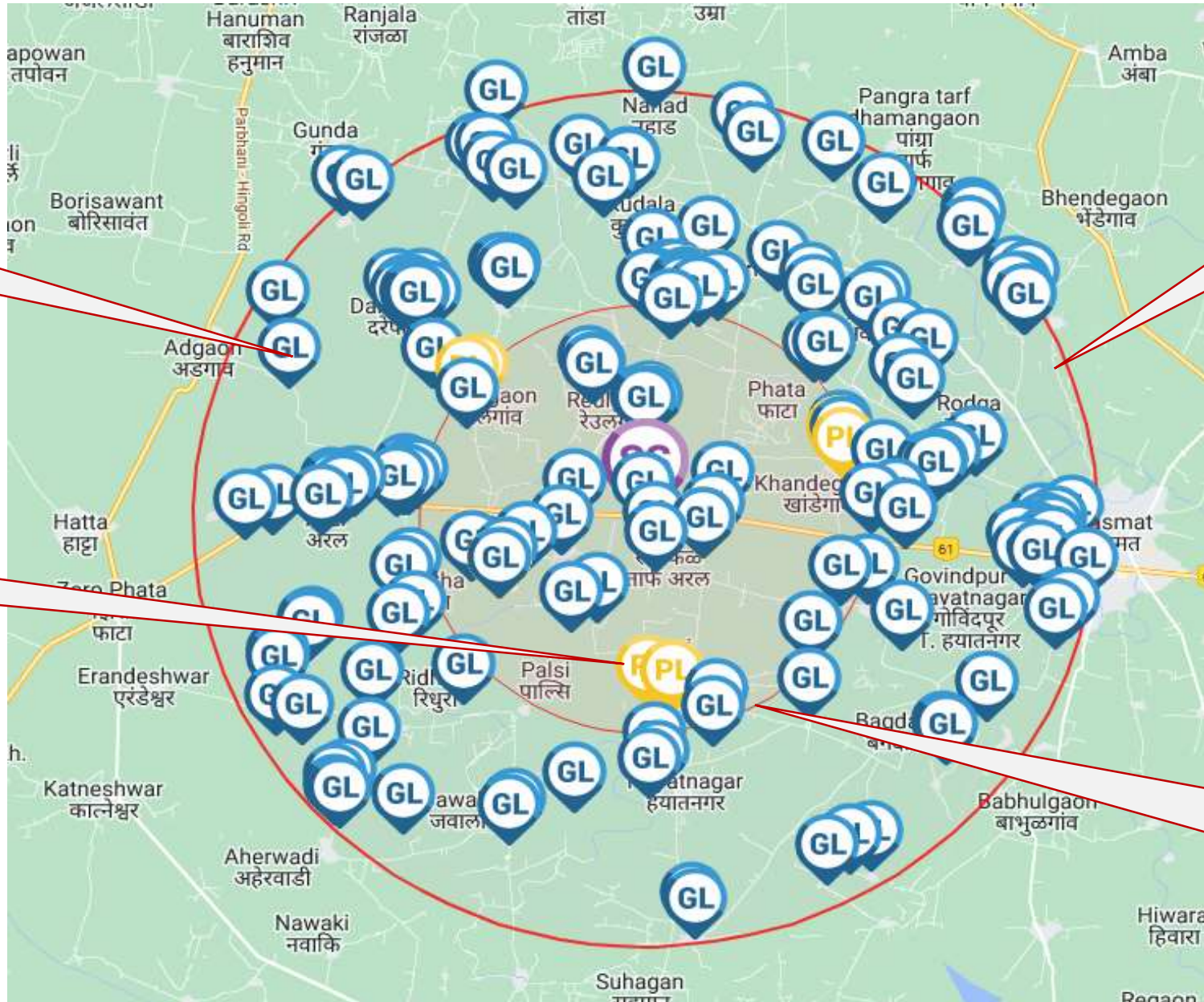


Government of
Maharashtra

Thank You



View on Map - Govt & Private Lands



Government
Land

Private Land

Govt. lands
within 10 km
radius from
substation

Private & Govt.
lands within 5
km radius from
substation



View on Map - Govt & Private Lands

Govt Land
details

| जमिनीची माहिती | |
|--------------------|--------------------|
| जिल्हा | HINGOLI |
| तालुका | AUNDHA (NAGNATH) |
| गाव | Rameshwar |
| मुख्य सर्वे नंबर | 18 |
| सब सर्वे नंबर | 18 |
| खाता क्रमांक | 230 |
| खात्याचे वर्णन | गायसान सरकारी |
| भोगवटादार वर्ग | भोगवटादार वर्ग - 2 |
| जमिनीचे मालक | सरकारी ... |
| क्षेत्र (एकरमध्ये) | 0.03 एकर |
| सबस्टेशनपासून अंतर | 8.75 कि.मी. |

Private Land
details

| जमिनीची माहिती | |
|--------------------|----------------------|
| जिल्हा | HINGOLI |
| तालुका | AUNDHA (NAGNATH) |
| गाव | Matha |
| मुख्य सर्वे नंबर | 53 |
| सब सर्वे नंबर | 53 |
| खाता क्रमांक | 61 |
| खात्याचे वर्णन | सामाईक खाते |
| भोगवटादार वर्ग | भोगवटादार वर्ग - 2 |
| जमिनीचे मालक | कौसाबाई खंडुजी बिनगे |
| क्षेत्र (एकरमध्ये) | 3.00 एकर |
| सबस्टेशनपासून अंतर | 4.50 कि.मी. |



Capacity addition is planned meticulously considering **Cost Optimization** (From 36 GW to 81 GW)



16.60 GW of distributed Agri-solar (MSKVY 2.0) at average tariff Rs. 3.07/kWh



28 GWh of PSP storage at average tariff Rs. 3.2/kWh



11.45 GW of utility-scale solar at average tariff Rs. 2.7/kWh
Solar (5 GW) + Thermal (1.6 GW) at average tariff Rs. 4.08/kwh



1.5 GWh of battery storage at average tariff of Rs. 2.19 Lakh/month/MW



4.3 GW of solar-wind hybrid at average tariff Rs. 3.6/kWh

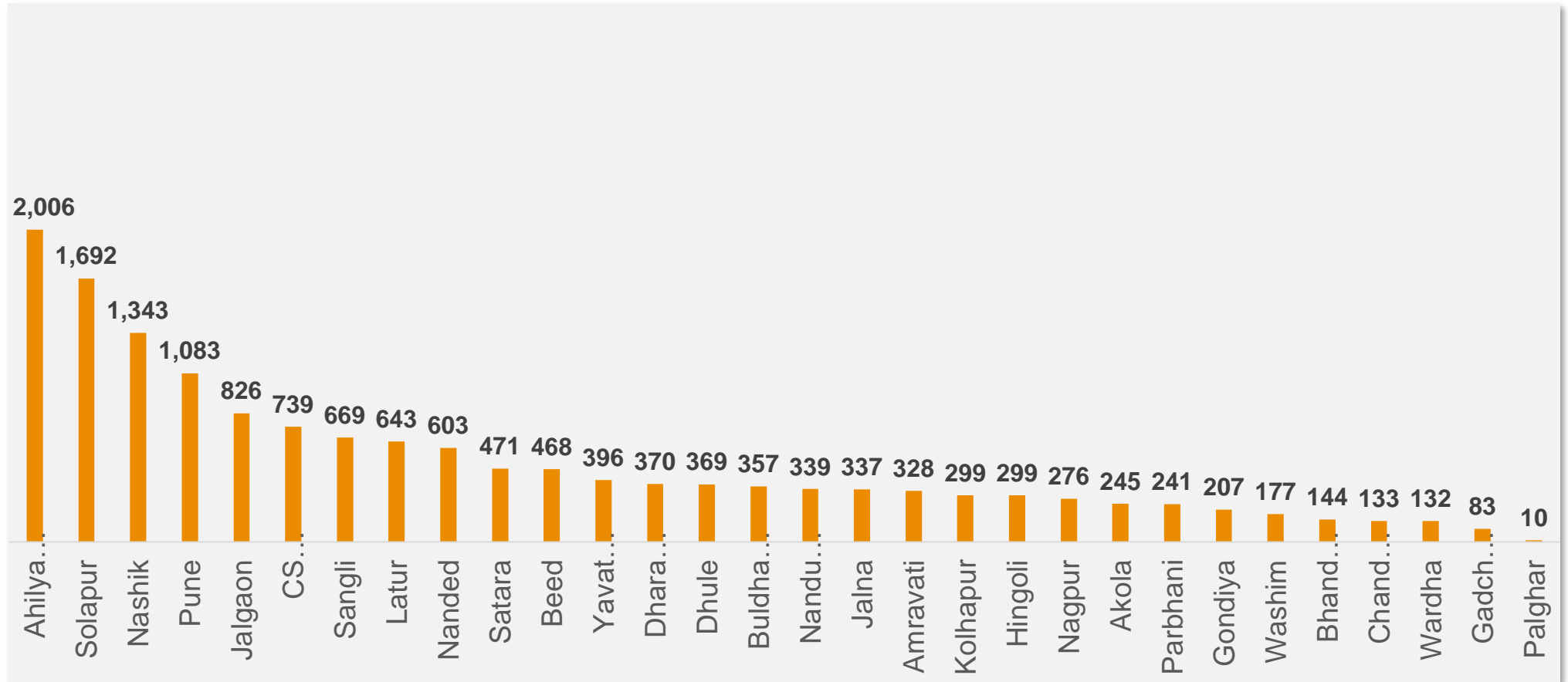


1.5 GW of round-the-clock FDRE at average tariff Rs. 4.6/kWh

Renewable Energy procurement share in installed capacity (MW) increases from **29%** to **61%** and in terms of energy (MUs) from **13%** to **49%**.

Maharashtra has pioneered the largest distributed solar deployment in India with huge success of **PM KUSUM C** (Mukhyamantri Saur Krushi Vahini Yojana 2.0)

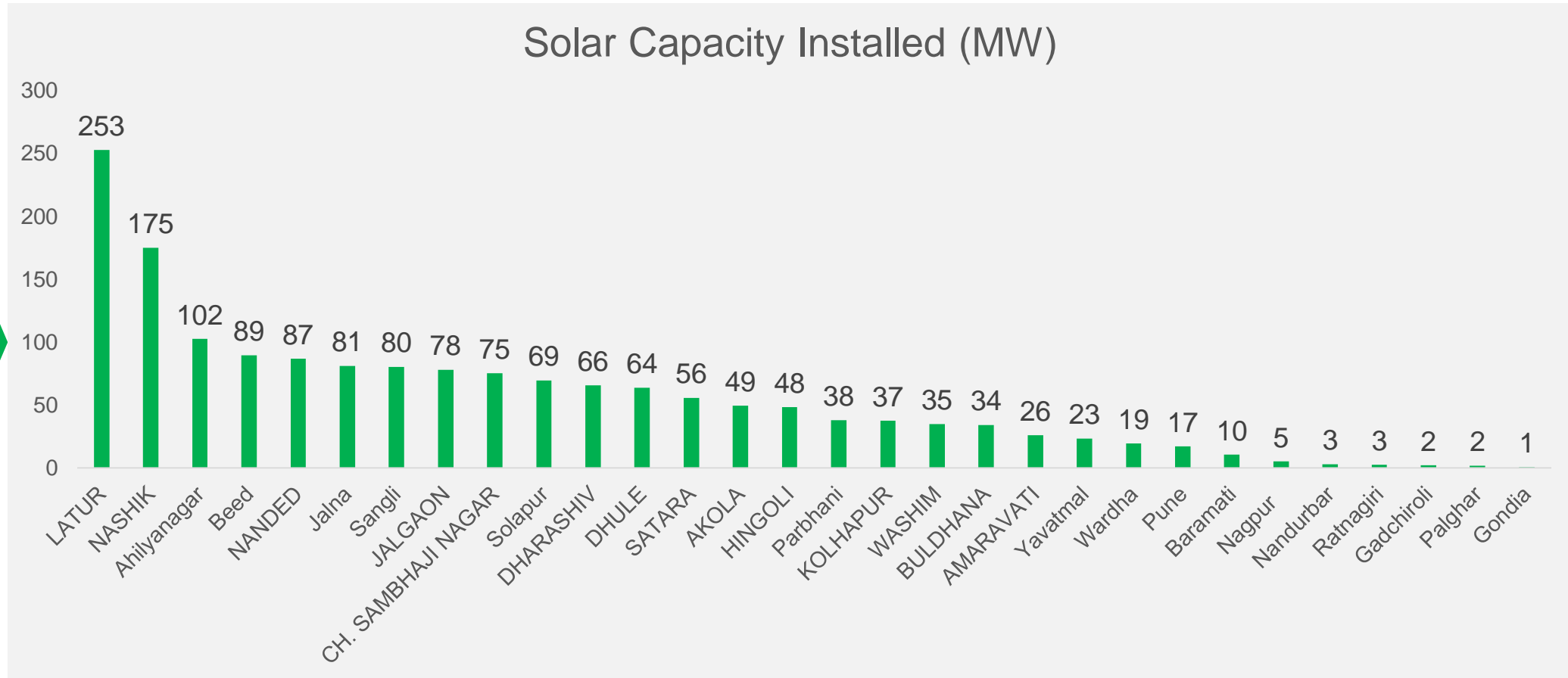
District
Wise
LoA's
issued
(MW)



16,000 MW of agri-solar capacity will cater to **100%** of Maharashtra's agriculture load

Maharashtra has pioneered the largest distributed solar deployment in India with huge success of **PM KUSUM C** (Mukhyamantri Saur Krushi Vahini Yojana 2.0)

District
Wise
Installed
Capacity
(MW)



1625 MW of agri-solar capacity installed till date