



Policy, Regulatory and Market Innovation to support Rooftop Solar Deployment in Cities

Case Study from India

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Impacting sustainable development at scale with data, integrated analysis, and strategic outreach

TRANSFORMATIONS

Low-carbon Economy

Energy Transitions

Power Markets

Industrial Sustainability

Sustainable Livelihoods

QUALITY OF LIFE

Clean Air

Sustainable Water

Sustainable Food Systems

Sustainable Cooling

Sustainable Mobility

ENABLERS

Sustainable Finance

Technology Futures

Circular Economy

Climate Resilience

International Cooperation

200+

Multidisciplinary team

320+

Peer-reviewed publications

160+

Instances of increased data transparency

460+

Roundtables & conferences

22

Indian states engaged

110+

Bilateral & multilateral initiatives promoted

SPECIAL INITIATIVES

CEEW Centre for Energy
Finance

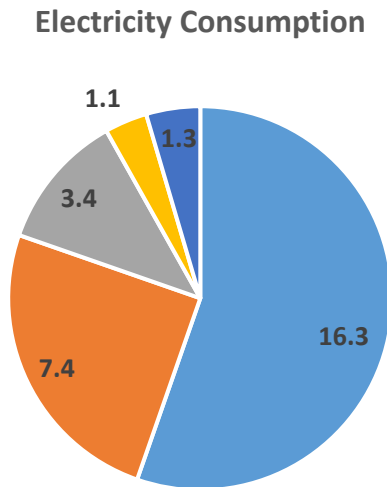
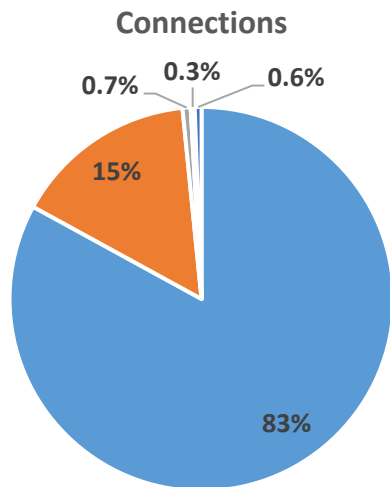
Powering
Livelihoods

Emerging Economies

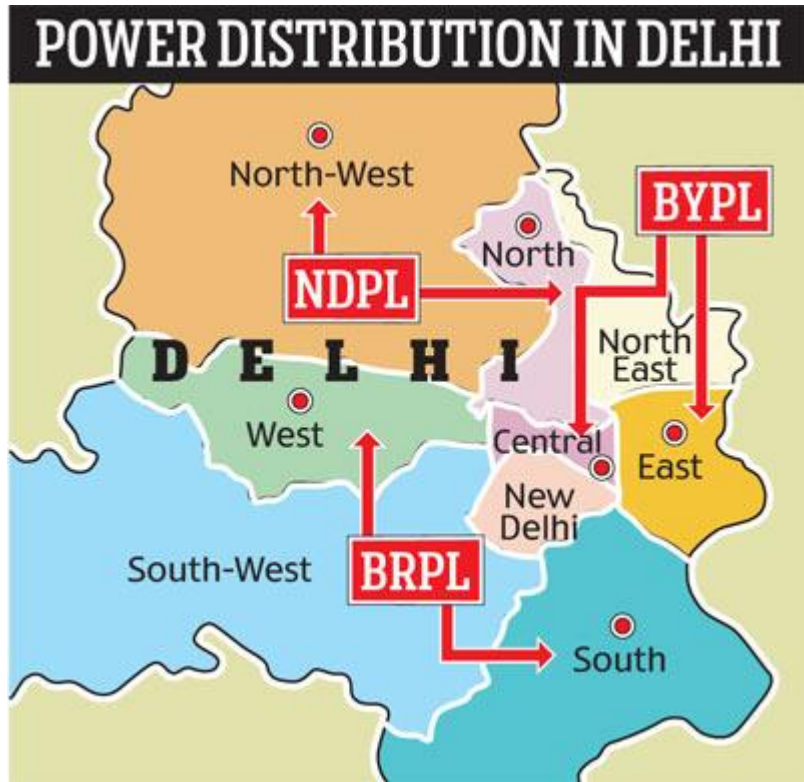
UP State Office

Introduction

- **32 million people with 6.4 million electricity connections**
- Peak demand: 7600 MW; Consumption: 30 BUs

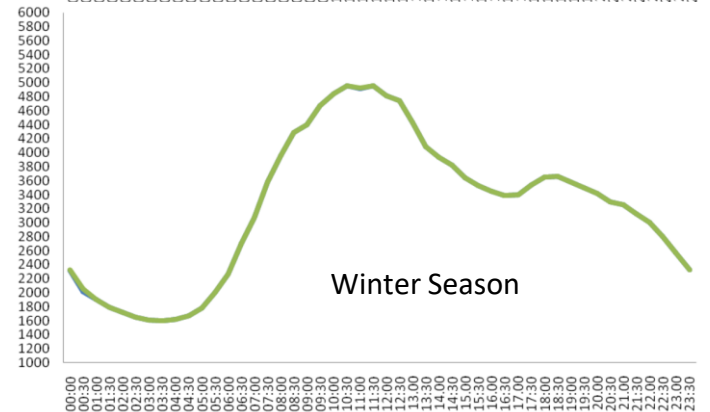
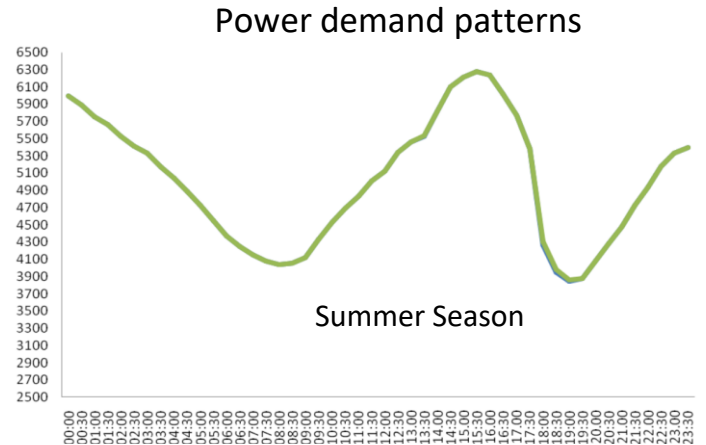


■ Domestic ■ Commercial ■ Industrial ■ Street light and PWW ■ Others

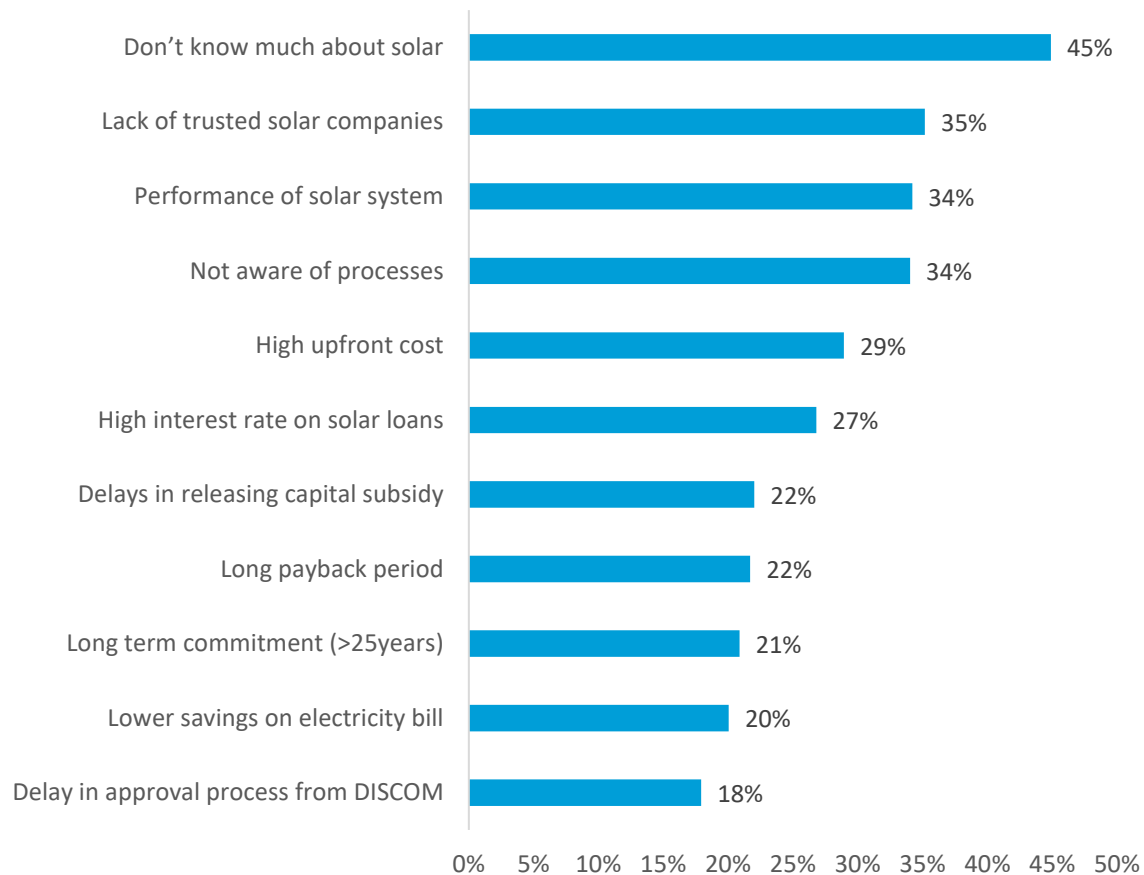


Why rooftop solar – Prospect for Delhi

- Increasing power demand
 - Increasing gap between peak and base demand (Load factor of 0.47)
 - Investment required for distribution network upgradation
 - New substations constrained by availability of land and land prices
- Land Availability
 - Mostly urban dwellings
 - No land for solar parks
 - Rooftops can be harnessed to meet clean energy targets
- More than 200 MW of Rooftop solar capacity

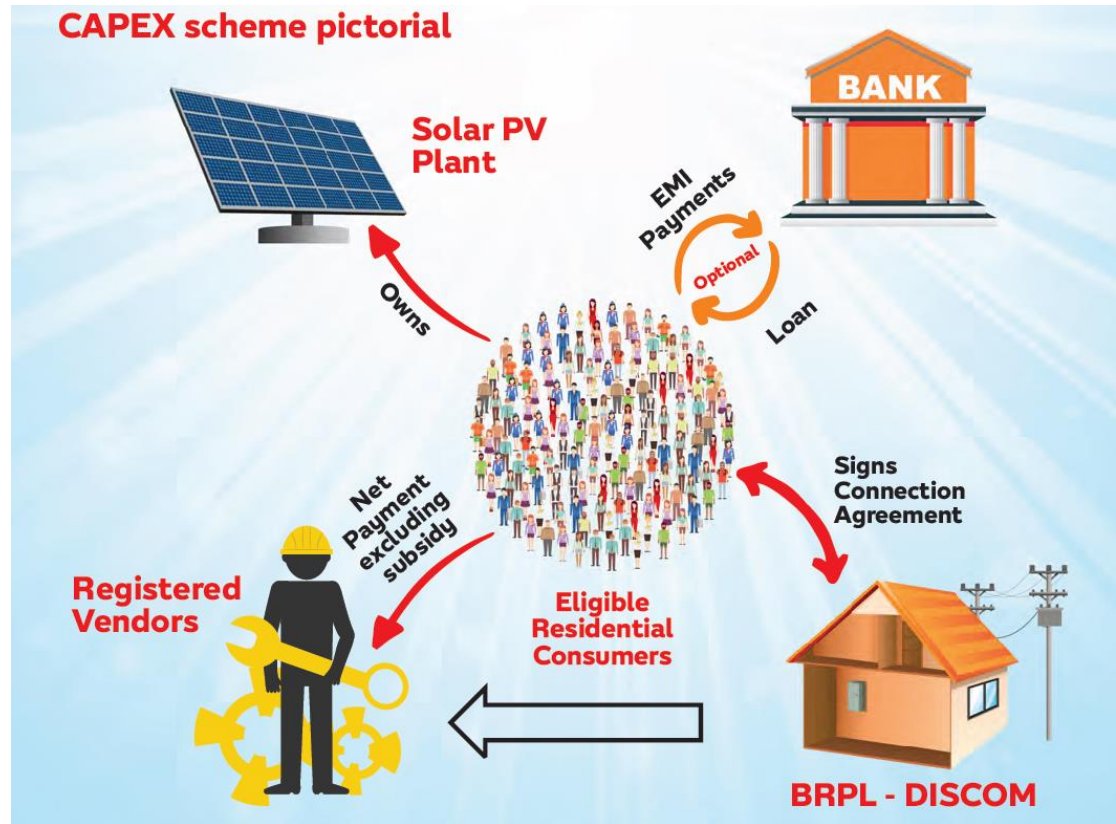


Many challenges to solar adoption



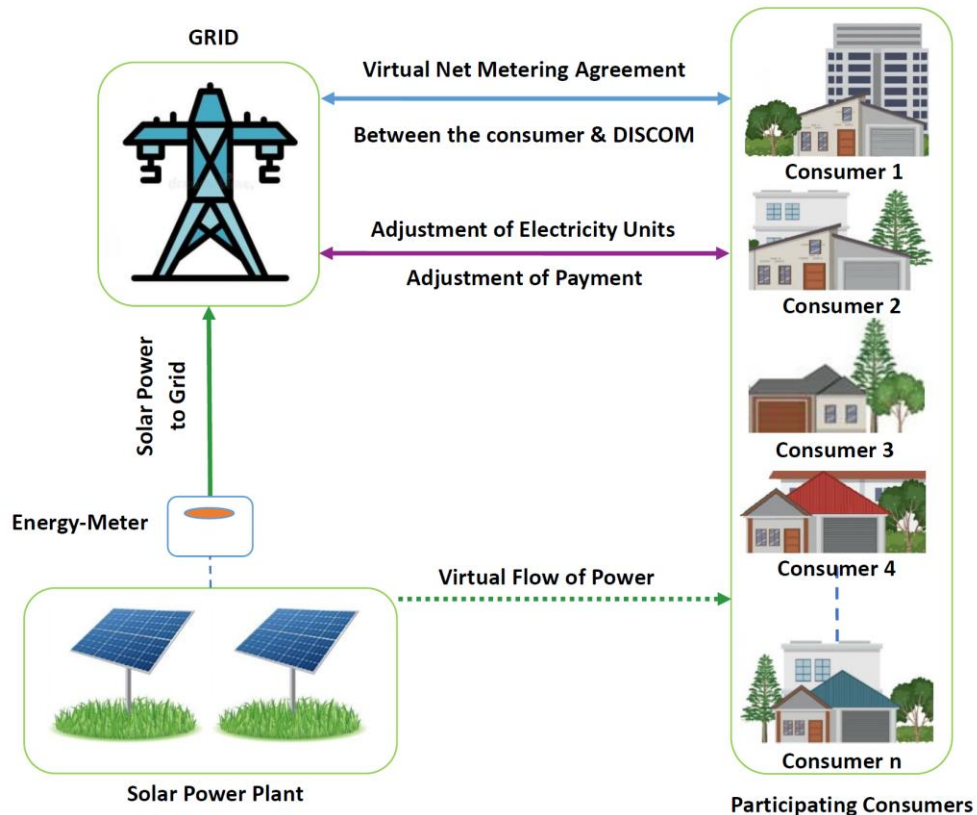
Solar City Initiative – Utility anchored rooftop solar programme

- Targeted approach
- Demand aggregation with extensive consumer outreach
- Empanelment of vendors
- Access to finance
- Online application process (Central Monitoring System)



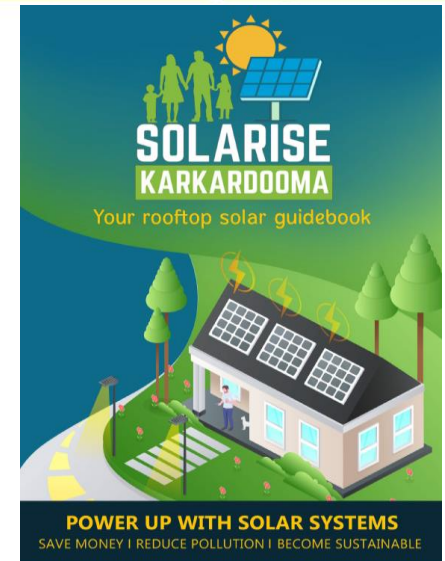
Regulatory Innovation – Virtual and Group Net-metering

- Consumer without rooftops
- A single larger solar power plant for all participating consumers
- Power injected into the grid and compensated against the electricity consumption
- Overcome market barriers and offers additional operational benefits



Solarise Campaigns – a grassroots outreach model

- Community-based campaigns with localised messaging and content
- Continued nudging
- Community influence
- Actionable information
- One-stop solution for solar adoption
 - A dedicated web-portal
 - Dedicated helpline number



Thank you

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