

**GOVERNMENT OF NATIONAL CAPITAL TERRITORY OF DELHI  
(DEPARTMENT OF POWER)  
DELHI SECRETARIT, 8<sup>TH</sup> LEVEL, B-WING  
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**C I R C U L A R**

**Subject: Public Comments on the draft Delhi Solar Policy, 2022 – Reg.**

With a vision to make solar energy accessible and affordable for all consumers of NCT of Delhi by creating targeted incentives and promoting innovative models for solar adoption and at the same time creation of green jobs in the NCT of Delhi, the draft Delhi Solar Policy, 2022 is being circulated for inviting public comments. The same has been uploaded on Official webpage of Power Department, Govt. of NCT of Delhi, [http://web.delhi.gov.in/wps/wcm/connect/doit\\_power/Power/Home/](http://web.delhi.gov.in/wps/wcm/connect/doit_power/Power/Home/)

In this regard, the Power Department, GNCTD invites any suggestions or objections within thirty days. The comments/ suggestions on the draft Delhi Solar Policy, 2022 may be sent to the following:

- i. **Details of concerned official:** Sh. A.K. Jha, Executive Officer, EE&REM Centre, 2<sup>nd</sup> Floor, E-Wing, Vikas Bhawan-II, Civil Lines, New Delhi- 110054
- ii. **Email id:** [delhisolarpolicy2022@gmail.com](mailto:delhisolarpolicy2022@gmail.com)
- iii. **Phone no:** 011-23815874/ 75
- iv. **Deadline for receiving comments:** 3<sup>rd</sup> February, 2023.

  
(R S Samria)  
Joint Director (Power)

# The draft Delhi Solar Policy, 2022

## Table of Contents

<b>1. INTRODUCTION.....</b>	<b>2</b>
<b>2. ABBREVIATIONS AND DEFINITIONS.....</b>	<b>2</b>
<b>3. POLICY OVERVIEW .....</b>	<b>3</b>
<b>4. DRIVING SOLAR ADOPTION: Policies to promote grid connected rooftop solar system .....</b>	<b>4</b>
<b>4.1. Models for consumers with roof constraints.....</b>	<b>4</b>
4.1.1. Group Net Metering (GNM):.....	4
4.1.2. Community Solar:.....	4
4.1.3. Peer to Peer (P2P) energy trading: .....	5
<b>4.2. Models for consumers with capital constraints.....</b>	<b>5</b>
4.2.1. RESCO model:.....	5
4.2.2. Hybrid RESCO model:.....	6
4.4. Economic Incentives for Consumers .....	7
4.4.1. Generation Based Incentives (GBI):.....	7
4.4.2. Capital subsidy for raised mounting structures.....	8
<b>4.7. Mandates for installation of solar plants.....</b>	<b>10</b>
4.7.1. Existing government buildings: .....	10
4.7.2. New buildings: .....	10
<b>4.8. Agricultural land:.....</b>	<b>10</b>
<b>4.9. Encouraging Energy Storage:.....</b>	<b>10</b>
<b>4.10. Finance vehicle for RESCO entities:.....</b>	<b>10</b>
<b>4.11. Exemption from taxes and duties: .....</b>	<b>10</b>
<b>4.12. Operational Guidelines: .....</b>	<b>10</b>
<b>4.13. Technical standards for solar developers: .....</b>	<b>10</b>
<b>4.14. Employment Generation:.....</b>	<b>10</b>
<b>4.15. Encouragement for reusing and recycling of solar components: .....</b>	<b>11</b>
<b>4.16. Out of state solar procurement .....</b>	<b>11</b>
<b>5. INSTITUTIONAL FRAMEWORK AND ROLES OF STAKEHOLDERS .....</b>	<b>11</b>
<b>5.1. Apex Committee .....</b>	<b>11</b>
<b>5.2. Delhi Solar Cell .....</b>	<b>12</b>
<b>5.3. DISCOMs .....</b>	<b>13</b>
<b>5.4. IPGCL .....</b>	<b>14</b>
<b>Appendix I: Models for solar installation.....</b>	<b>15</b>
<b>Appendix II: Average Power Procurement Costs of DISCOMs for 2021-22.....</b>	<b>17</b>
<b>Appendix III: Minimum area required for installation of solar PV panel.....</b>	<b>18</b>

## 1. INTRODUCTION

The Delhi Solar Policy 2016 set the foundation for solar adoption in the NCT of Delhi. The policy enabled a deployment of over 230 MW of rooftop solar within Delhi and close to 960 megawatts of utility scale solar till date which meets 9% of Delhi's existing annual electricity demand. However, roof top solar adoption in the state has been challenging as consumers face capital and space constraints as well as procedural hurdles.

The vision of Delhi Solar Policy 2022 is to make solar energy accessible and affordable for all consumers in Delhi by creating targeted incentives and promoting innovative models for solar adoption, and at the same time creation of green jobs in the NCT of Delhi. Meeting the commitments under Delhi Solar Policy 2022 shall ensure that, for the first time in Delhi's history, Delhi's installed solar capacity shall be greater than its installed thermal generation capacity.

## 2. ABBREVIATIONS AND DEFINITIONS

<b>Term</b>	<b>Definition</b>
Community Solar	A model wherein consumers who do not have a suitable roof for installing a solar system can be beneficial owners of a part of a community owned solar system installed at a third-party location in the same DISCOM territory
DDA	Delhi Development Authority
DERC	Delhi Electricity Regulatory Commission
GNCTD	Government of National Capital Territory of Delhi
Group Net Metering (GNM)	A metering arrangement wherein surplus energy exported from a consumer's solar plant to the grid can be adjusted in any other (one or more) electricity service connection(s) of the same consumer within the same DISCOM territory within the NCT of Delhi.
Net Metering	Net metering enables solar generation to offset consumers' electricity demand from the grid. This allows consumers to benefit from reduced electricity bills and also provides them an opportunity for income generation if their annual solar generation exceeds their annual electricity demand.
IPGCL	Indraprastha Power Generation Company Ltd.
kWp	Kilowatt peak
MW	Megawatt
NCT	National Capital Territory
O&M	Operations and maintenance
Policy	Delhi Solar Policy 2022
P2P	Peer-to-Peer trading (P2P), would allow consumers to purchase electricity from other consumers who have solar PV systems over a

	digital P2P trading platform in real time.
PPA	Power Purchase Agreement
PV	Photovoltaic
RE	Renewable energy
RESCO	Renewable Energy Service Company
RESCO model	Customer enters a power purchase agreement (PPA) with the solar developer (RESCO) to purchase electricity at a set tariff for a fixed period of time.
Hybrid RESCO model	Under this structure, the RESCO developer leases the rooftop of the consumer, and sells the power directly to the discom via a PPA. The consumer also signs a net-metering agreement with the discom.
RPO	Renewable Purchase Obligation
RTS	Rooftop Solar
Virtual Net Metering	Under this model, consumers with limited or no access to rooftop space can become beneficial owners of a part of a collectively owned solar system deployed in a third-party location. The solar energy generated from a solar PV system is credited across multiple consumers, proportion to their ownership of the respective system.

### 3. POLICY OVERVIEW

#### 3.1. Title of the Policy

This policy shall be known as the “Delhi Solar Policy, 2022” (henceforth “Policy”).

#### 3.2. Scope of Policy

This Policy will be applicable for any solar energy generating system a capacity of 1 KWp or more. It applies to all electricity consumers under all electricity tariff in Delhi and to all entities that setup and operate power plants in Delhi.

#### 3.3. Operative Period

This policy will come into effect on the date of its notification and shall remain valid and in operation for the next three years (“Operative Period”) unless superseded or modified by another policy.

#### 3.4. Objectives

The Delhi Solar Energy Policy, 2022 has the following objectives:

- i. Establish Delhi as a leading state in solar adoption and reduce its reliance on conventional fossil-fuel energy, thereby reducing air pollution and combating climate change

- ii. Minimize average electricity prices while improving energy security by adopting solar to meet Delhi's growing electricity demand and peak loads.
- iii. Provide access to solar across all consumers of Delhi to help save on their electricity bills and create avenues for income generation.
- iv. Generate green jobs within Delhi and promote training of Delhi's youth through skill development programs to support solar deployment in the State.

### 3.5. Target Capacity

The Delhi Solar Policy 2022 envisages achieving the following targets by 2025-26:

- i. A total of 6000 MW of installed solar capacity which shall include 750 MW of rooftop solar within the State and 5250 MW of utility scale solar from outside the State.
- ii. 25% of the annual electricity demand of Delhi shall be met through solar energy.

## 4. DRIVING SOLAR ADOPTION: Policies to promote grid connected rooftop solar system

Over the last five years, the adoption of solar in Delhi by consumers, particularly rooftop solar, has faced challenges such as limited availability of capital for consumers, constrained roof space for deployment of RTS systems, limited awareness and complicated process of net metering application. The Delhi Solar Policy, 2022 is committed to addressing these challenges with the following specific provisions for all consumer categories: residential, government, commercial and industrial:

### 4.1. Models for consumers with roof constraints

Consumers that have limited access to rooftop space for RTS deployment can opt for group net metering and community solar models.

- 4.1.1. **Group Net Metering (GNM):**For consumers with multiple buildings and service connections, constrained roof space in one property or electricity service connection can benefit from any excess solar energy generated on any other property (one or more), provided these connections are in the same DISCOM territory. DISCOMs shall facilitate this via *Group Net Metering (GNM)*. This also helps maximize the utilization of rooftop space for solar energy generation for consumers with multiple properties.

- 4.1.2. **Community Solar:**

- i. Under Community Solar, consumers who do not have a suitable roof for installing a solar system (e.g. residential consumers who live in apartments, consumers with small or shaded rooftops) will be able to benefit from solar energy through the facility of 'Community Solar'. In Community Solar,

individual consumers can be beneficial owners of a part of a larger solar system.

- ii. GNCTD shall facilitate Community Solar for consumers under domestic category, consumers like Hospitals, Colleges, Schools, other Institutions run or managed by Charitable Institutions, non-profit Organisations/Trust, which are not covered under the category of domestic consumers, offices of Government /Local Authorities and Renewable Energy Generators registered under Mukhya Mantri Kisaan Aay Badhotari Yojna by leveraging Virtual Net Metering.
- iii. The energy produced by a collectively owned solar system will be fed into the grid through an energy meter and the exported energy as recorded by that meter will be pro-rata credited in the electricity bill of each participating consumer on the basis of ownership share.
- iv. The state solar portal will aim to host a digital platform to match rooftop owners willing to install solar plants (including RESCO developers with rooftop installation rights) with those who do not have access to a rooftop. Consumers without a rooftop will be able to purchase ownership in RTS plants and receive net metering benefits based on ownership share.

#### 4.1.3. Peer to Peer (P2P) energy trading:

- i. Consumers who are planning to or have already adopted solar will have the opportunity to sell their excess electricity generation from their rooftops in real time via a P2P energy trading platform.
- ii. The platform will serve as an online marketplace and will enable the buying and selling of rooftop solar PV energy between two or more grid-connected parties in the same DISCOM area.
- iii. GNCTD along with DERC will develop the policy framework and regulations needed to support P2P energy markets.

## 4.2. Models for consumers with capital constraints

Customers that do not have sufficient capital to invest in a rooftop solar system can choose to avail of innovative models under Renewable Energy Service Company (RESCO) mode.

#### 4.2.1. RESCO model:

- i. Under a conventional RESCO model, the consumer enters into a power purchase agreement (PPA) with a solar developer for a fixed period of time (usually 25 years.) The developer bears the capital expenditure for installing the solar system at the consumer's premises and charges the consumer a fixed tariff for the duration of the PPA.
- ii. Consumers interested in adopting solar under the RESCO model shall be encouraged to reach out to RESCO developers through the state solar portal and enter into direct contractual arrangements. No empanelment/tendering for RESCO developers shall be done by GNCTD

for non-government buildings. However, RESCO developers will be required to do a one-time registration with concerned DISCOMs.

- iii. Apart from net metering benefits, MNRE capital subsidy for Group housing societies/residential consumers and Delhi's Generation Based Incentives (GBI) shall be available for all eligible consumers who adopt RESCO model.
- iv. To ensure time-bound mandatory installations of solar rooftop systems on all Delhi government buildings/properties with rooftop area of 500 sq.m. or above, IPGCL shall aggregate demand and issue a centralized tender under both the CAPEX and RESCO model, preferably through RESCO. For the CAPEX model, necessary budgetary support shall be provided by GNCTD.

#### 4.2.2. Hybrid RESCO model:

- i. The Hybrid RESCO model shall be introduced for the first time through Delhi Solar Policy 2022 to address the limitations of conventional RESCO model and ensure large-scale adoption of solar systems by consumers facing capital constraints.
- ii. This model aims to combine the net-metering agreement between the consumer and DISCOM with a PPA agreement between a RESCO developer and the DISCOM. The model has significant benefits for consumers, as they can adopt RTS without any upfront cost, receive net-metering benefits under one bill from DISCOM, and also slide to a lower tariff slab. This model is also beneficial for developers as they sign a PPA with the DISCOM with assured off-take and payment security.
- iii. Under this model, the RESCO developer gets paid directly by the DISCOM via the PPA. The DISCOM, in turn, bills the consumer for solar power consumed at the PPA rate, as part of a single unified bill for energy consumed (i.e. for solar energy consumed and for electricity imported from the grid). The PPA tariffs for hybrid RESCO shall be discovered through a competitive bid process, and shall be approved by DERC.
- iv. GNCTD shall work with DERC to issue detailed guidelines for the hybrid RESCO model within 60 days of notification of this policy.

#### 4.3. Summary Table of Models for Consumers (Details in Annexure I)

Category	Specific Provision	Residential	Government	Commercial & Industrial
Models for customers with limited roof space	Group Net Metering	✓	✓	✓
	Community Solar	✓	✓	
Models for customers with capital constraints	RESCO	✓	✓	✓
	Hybrid RESCO	✓		✓



#### 4.4. Economic Incentives for Consumers

Consumers can avail a wide range of economic benefits upon adoption of Rooftop Solar (RTS) systems in Delhi during the Operative period of this Policy as enlisted and further elaborated below:

##### For All Consumers

- i. **Direct income** in the form of generation-based incentives (GBI) for every unit of solar energy generated (applicable for all models except hybrid RESCO model);
- ii. **Net metering benefits** provides electricity bill savings for all consumers including residential, government, commercial and industrial categories based on their RTS system size and electricity demand;
- iii. **Roll-over of excess energy units** exported, after net metering, into subsequent billing cycles for up to 12 months (until close of every financial year)
- iv. **Additional income** through end-of-year net metering credits in case consumers' annual solar generation exceeds their annual electricity demand. Additional income shall be calculated as excess energy units generated multiplied by the Average Power Purchase Cost of the respective DISCOM. (See Appendix II);

##### Additional Benefits for Group Housing Societies/Residential Consumers

- v. Capital subsidy by MNRE of 40% for residential systems up to 3 kW and 20% for residential systems above 3 kW and up to 10kW until 31<sup>st</sup>December, 2022 or as extended/amended by MNRE from time to time.
- vi. Capital subsidy by MNRE of 20% for group housing societies and residential welfare associations with systems up to 500kW (at 10kW per house) until 31<sup>st</sup>December, 2022 or as extended/amended by MNRE from time to time.
- vii. **Reduced upfront cost of mounting structures** for RTS for residential consumers via capital subsidy.

##### 4.4.1. Generation Based Incentives (GBI):

- i. This Policy provides a generation-based incentive (GBI) for five years for domestic, commercial and industrial consumers.
- ii. GBI payments will be valid for five years from the date of commissioning of the system, provided the system is commissioned within the operative period of the Policy.
- iii. The incentive will be determined based on the system size (kW) and gross solar generation (per kWh). In the interest of promoting efficient solar panels and round the year generation, there will be no minimum threshold or maximum cap on solar generation to avail the GBI.
- iv. The GBI will be adjusted against the electricity bill issued by the DISCOM. The excess GBI amount after adjusting against the electricity bill will be



disbursed to the consumer's bank account every month within seven days of completion of the billing cycle (applicable for all models except hybrid RESCO model). This monthly adjustment of GBI against electricity bills shall also apply to existing RTS consumers availing GBI.

- v. Accordingly, the applicable GBI will be as follows:

Type of consumer	Monthly GBI (INR per kWh)
Residential: Maximum up to 3kW	3
Residential: Above 3 kW, and up to 10kW	2
Group housing societies/ Residential Welfare Associations: Upto 500kW (at 10kW per house)	2
Commercial and Industrial (for the first 200 MW deployed)	1

- vi. A higher GBI is provided to smaller systems to ensure that consumers with lower energy consumption also find RTS attractive. Consumers with higher electricity consumption will also receive GBI along with the multiple benefits highlighted in Section 4.4.
- vii. Consumers adopting solar via Community Solar will also be eligible for GBI as per the provision mentioned above. The GBI will be based on the ownership share of the consumer provided the consumer has ownership rights of the RTS.
- viii. In the specific case of hybrid RESCO, the GBI shall be made to the RESCO developer as they would own the solar plant. While adoption of RTS system is inherently cost-effective for commercial and industrial consumers, the uptake has been slow over the last 5 years due to a host of other constraints including capital constraints. Hence, an early-bird GBI shall also be offered for the first time for such consumers for the first 200 MW of deployment.
- ix. The GBI incentive will come into effect from the date of notification of the Policy.
- x. GNCTD shall make streamlined procedures for timely reimbursements to DISCOMs every 3 months for GBI paid to end consumers.

4.4.2. Capital subsidy for raised mounting structures for residential customers: Recognizing the need for residential consumers to have continued access to their roofs, GNCTD will provide a subsidy for raised mounting structures at the rate of Rs 2,000 per kW upto a maximum of Rs. 10,000 per consumer. Raised structures which have a minimum ground clearance of greater than 6 feet will qualify for this subsidy. The subsidy will be passed through their first electricity bill post commissioning of the RTS system.

#### 4.5. Streamlined Procedures and Access to Information

- i. GNCTD will create a new state solar portal which will act as a single window for consumers willing to adopt solar. The portal will provide information on the end-to-end process of installing solar panels including, but not limited to, the benefits of RTS systems, implementation guidelines, regulations, operations and maintenance (O&M) procedures, pricing information, and timelines.
- ii. All new net metering applications across all DISCOMs in Delhi will be made through the new portal. Consumers can track the status of their net-metering applications through this portal.
- iii. To ensure ease of application for rooftop solar, procedures across DISCOMs will be standardized. This includes standardised version of all relevant system level documents including, but not limited to, net-metering application, and all intermediate steps till the commissioning.
- iv. Consumers interested in adopting solar via the CAPEX model (where consumer pays for RTS system upfront) can use the state solar portal as a single window for the deployment of RTS systems by technically qualified developers who will be registered on the portal. GNCTD shall empanel these developers based on offer standardised RTS components, competitive system prices and minimum performance guarantees.
- v. Exemption from inspection of solar plants up to 500 KVA capacities from Electrical Inspector in line with Ministry of Power notification dated 16.05.2016

#### 4.6. Promoting adoption through free rooftop assessment

- i. To catalyse mass-scale awareness of benefits of rooftop solar systems and their potential to reduce electricity bills, GNCTD will enable free of cost and on-demand rooftop assessment within 7 days of a consumer's request via the state solar portal or a helpline.
- ii. Post the assessment, a 'solar report card' will be issued to the consumer detailing the potential solar generation capacity based on the accessible and unshaded rooftop area and annual savings on their electricity bill.
- iii. The solar report card shall also include a 'solar score' that will be estimated based on percentage of electricity consumption that can be met through solar power generated through consumer's rooftop. Solar scores will be reflected in all electricity bills by the DISCOMs along with estimated savings every month.
- iv. Rooftop assessments will also help in the planning and deployment of RTS through the Hybrid RESCO model based on a scientific scoring framework that will determine available rooftop capacity at a consumer level.

#### 4.7. Mandates for installation of solar plants

- 4.7.1. **Existing government buildings:** Deployment of solar plants on all existing State Government properties with rooftop area of 500 sq.m. or above is mandatory. It shall be carried out at a steady pace and in a phased manner, and shall be completed within the Operative Period of this Policy.
- 4.7.2. **New buildings:** As per the amendment to the Unified Building Bye Laws (UBBL) for Delhi, 2016, dated 8<sup>th</sup> March 2019, all new residential, institutional, government, commercial, group housing and industrial buildings are mandated to install RTS systems subject to the minimum area requirement, as mentioned in Appendix III. GNCTD shall work with local bodies to ensure stringent enforcement of this mandate.
- 4.8. **Agricultural land:** The Policy encourages deployment of solar on agricultural land via different models including, but not limited to, group net metering and community solar.
- 4.9. **Encouraging Energy Storage:** Energy storage will play an important role in grid balancing with growing penetration of solar generation on the distribution grid. This policy aims to develop suitable targets for energy storage in Delhi. GNCTD will work with the concerned stake holders to utilise the Power Sector Development fund (PSDF) for deploying energy storage projects.
- 4.10. **Finance vehicle for RESCO entities:** GNCTD will setup a solar rooftop finance vehicle for RESCO developers through IPGCL or any agency that may be appointed through the Power department. The proposed vehicle shall provide low-cost financing to eligible RESCOs operating in Delhi.
- 4.11. **Exemption from taxes and duties:** GNCTD shall ensure that taxes and duties are not levied on generation from RTS, whether for self-consumption or supplied to the grid.
- 4.12. **Operational Guidelines:** Detailed operational guidelines for delivery of incentives and implementation of mandates under this Policy shall be issued from time to time by the Power Department, GNCTD with the approval of Hon'ble Minister (Power).
- 4.13. **Technical standards for solar developers:** GNCTD shall create a clear set of technical standards for developers and equipment to adhere to. This will also include specific provisions, including but not limited to, bank guarantees, and minimum performance guarantees expected from solar developers.
- 4.14. **Employment Generation:** The gradual uptake of solar PV systems in the state presents an opportunity for green job creation, e.g., in rooftop assessment, installation, servicing, repair and other maintenance of the system. GNCTD shall endeavour to promote training and skills development in partnership with solar developers and the Delhi Skills and Entrepreneurship University.

4.15. **Encouragement for reusing and recycling of solar components:** Given the volatility in module prices of solar PV, challenges with payment security and after sales operations and maintenance for developers and customers respectively, the Policy shall encourage the creation of a secondary market for components of rooftop solar PV system to benefit the solar ecosystem in Delhi. The Policy shall also endeavour to create an ecosystem for recycling components of solar PV system at the end of their useful life to prevent negative environmental externalities.

#### 4.16. **Out of state solar procurement**

- i. **Pure Solar purchase:** GNCTD shall work with DISCOMS and other stakeholders such as SECI to ensure timely planning and execution of utility scale solar generation projects outside the NCT of Delhi so as to meet the increasing energy needs of Delhi through solar energy instead of long-term PPAs based on conventional fossil fuel energy. IPGCL shall explore to take up implementation of large-capacity solar plants outside Delhi under the CPSU scheme Ph-II of the Ministry of New and Renewable Energy (MNRE) to avail the benefit of Central Financial Assistance (CFA).
- ii. **Solar RE-RTC purchase:** DISCOMs shall be encouraged to increase the share of solar energy procured from outside the NCT of Delhi through innovative models such as RE-RTC (Renewable Energy – Round the Clock) which combines a host of renewable energy sources (solar, wind etc.) alone with appropriately sized battery storage to provide round-the-clock power as per the demand curve of Delhi. This can play a big role in reducing the reliance of Delhi on conventional fossil fuels without compromising on Delhi's energy needs while at the same time reducing average electricity prices, reducing air pollution and carbon emissions.

## 5. INSTITUTIONAL FRAMEWORK AND ROLES OF STAKEHOLDERS

### 5.1. **Apex Committee**

An Apex Committee will be constituted under the leadership of the Hon'ble Minister of Power, GNCTD which shall monitor the progress on policy implementation on a quarterly basis or as often as necessary. The Committee shall be entitled to issue clarification in response to any matter that may arise concerning the Policy, its interpretation, and its implementation, in consultation with concerned state government departments. The body shall be constituted of the following members:

- i) Vice Chairperson, Dialogue and Development Commission of Delhi, GNCTD – Member
- ii) Addl Chief Secretary/Secretary (Power), GNCTD – Member
- iii) Principal Secretary (Finance), GNCTD – Member
- iv) CEOs of State DISCOMs – Members

- v) Up to four industry experts to be nominated by Hon'ble Minister (Power) – Members
- vi) Spl Secretary (Power), GNCTD – Member Secretary

## 5.2. Delhi Solar Cell

The Energy Efficiency and Renewable Energy Management (EE&REM) Centre, Department of Power, GNCTD, shall continue to be the State Nodal Agency for implementation of Delhi Solar Policy, 2022. A dedicated 'Delhi Solar Cell' will be established within the EE&REM that will support the apex committee in monitoring policy implementation. The key responsibility of the solar cell will be to facilitate, coordinate, and monitor day to day implementation of the solar energy policy in Delhi. It will comprise of staff with relevant technical expertise to exclusively deal with all matters related to solar deployment in the NCT of Delhi.

- i. **Announce solar policy, amendments and related schemes:** The Delhi Solar Cell shall take the lead in launching this Solar Energy Policy to the public through the use of media, PR, billboards, advertisements, and more. It will also communicate amendments to the Policy to major stakeholders via its website and/or other means.
- ii. **Allot solar power capacities:** The Delhi Solar Cell shall, from time to time, undertake the process for allotment of solar power capacities under various schemes of State and Central Government and its identified agencies in a transparent manner to the DISCOMs and other project developers.
- iii. **Facilitate development of solar projects:** The Delhi Solar Cell shall assist solar project developers in obtaining all necessary clearances and approvals from different Government Departments.
- iv. **Support in establishing protocols and procedures for easy adoption of solar power:** The Delhi Solar Cell shall also support the DISCOMs in developing the protocols and procedures for easy adoption of solar plants by consumers. The DISCOMs shall be responsible for managing all transactions and accounting processes relating to net metering, group net metering and virtual net metering.
- v. **Maintain a portal for consumers interested in rooftop solar:** The Delhi Solar Cell shall develop and maintain a portal that will act as a platform for providing information including, but not limited to, educational material, savings calculator and other important resources for potential consumers in Delhi.
- vi. **Monitor and evaluate policy progress:** The Delhi Solar Cell is expected to monitor progress and oversee DISCOMs' implementation of the Solar energy policy.
- vii. **Identification and Aggregation of Sites for Deployment of Rooftop Solar Power Plants:** The Delhi Solar Cell shall work with DISCOMs and other relevant stakeholders in running solar demand aggregation campaigns to identify

consumers interested in adopting solar. The Delhi Solar Cell may also appoint an external commercial party to fulfil the role of the aggregator.

- viii. **Accelerate adoption in government buildings through operational guidelines:** Delhi Solar Cell will create operational guidelines to implement RTS on government buildings.
- ix. **Explore the possibility of establishing a secondary market for solar PV components:** A secondary market can connect consumers who wish to decommission their solar PV systems with consumers with limited access to capital by lowering the capital investment needed

### 5.3. DISCOMs

- i. The State Electricity Distribution Licensees (DISCOMs) are encouraged to establish annual solar deployment targets including rooftop-solar specific targets among all consumer classes. DISCOMs are also advised to build long-term resource adequacy plans including rooftop solar generation and explore the additional benefits RTS presents beyond lowering the cost of power procurement.
- ii. DISCOMs are further encouraged to facilitate various models of solar deployment including but not limited to GNM and Community Solar across relevant consumer categories.
- iii. The DISCOM will pass on any subsidies available through the Central Government (MNRE) or State Government to consumers, integrators, and other solar developers in the State, as applicable.
- iv. DISCOMs and the Solar Cell will consult each other and streamline the net metering process and establish clear guidelines on documentation and timelines. All DISCOMs in the state of Delhi should follow standardized formats and timelines for net metering applications.
- v. DISCOMs will maintain a database of Net Metering application requests, approval status, installation and commissioning data, which will be reflected on the State portal.
- vi. DISCOM shall, at the request of the Delhi Solar Cell from time to time, provide the load status of distribution transformers on its network. DISCOM should update the status of solar capacity installation with respect to distribution transformers on their website to make the process transparent.
- vii. The DISCOM is expected to coordinate on demand aggregation programs conducted by the Delhi Solar Cell and support the deployment of tenders as needed by the Solar Cell.
- viii. DISCOM should submit data around net metering applications to the Delhi Solar Cell on a monthly basis.
- ix. DISCOM shall undertake strengthening of distribution network for deployment of RTS systems, as and when required on case-to-case basis as per extant regulations, without burdening the solar rooftop net-metering system applicant.

#### 5.4. IPGCL

In collaboration with the State Nodal Agency, the Indraprastha Power Generation Co. Ltd (IPGCL) (a Govt. of NCT of Delhi Undertaking) will:

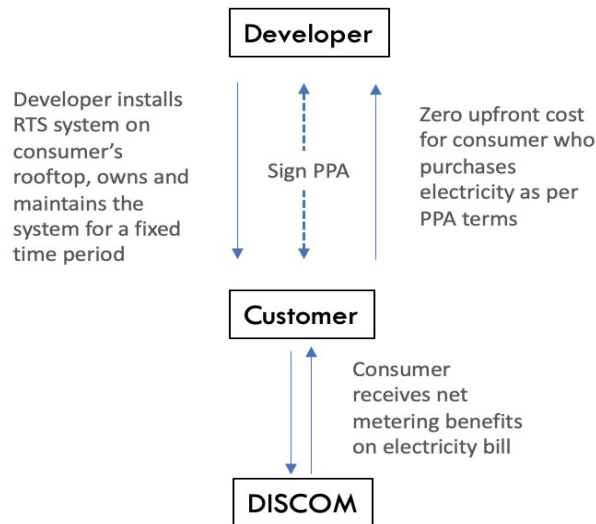
- i. Aggregate capacity on Government building rooftops by inspecting and assessing their solar potential as input for the tender. Implement solar installation in government buildings and sign an agreement with the beneficiaries. Accordingly, bids shall be invited under CAPEX/ RESCO model.
- ii. IPGCL may also explore rooftop solar installation in Government buildings under the Central Public Sector Undertaking (CPSU) scheme Phase-II of MNRE with GNCTD's/other financial support so that advantage of CPSU scheme may be availed.
- iii. Implement solar plants on government buildings within 15 months (6 months for tendering and 9 months for implementation) from the date of notification of this policy
- iv. Train manpower in solar PV system technology and build capacity to maintain solar power plants
- v. GNCTD reserves the right to assign all or some of the above activities to any other agency as deemed fit.



## Appendix I: Models for solar installation

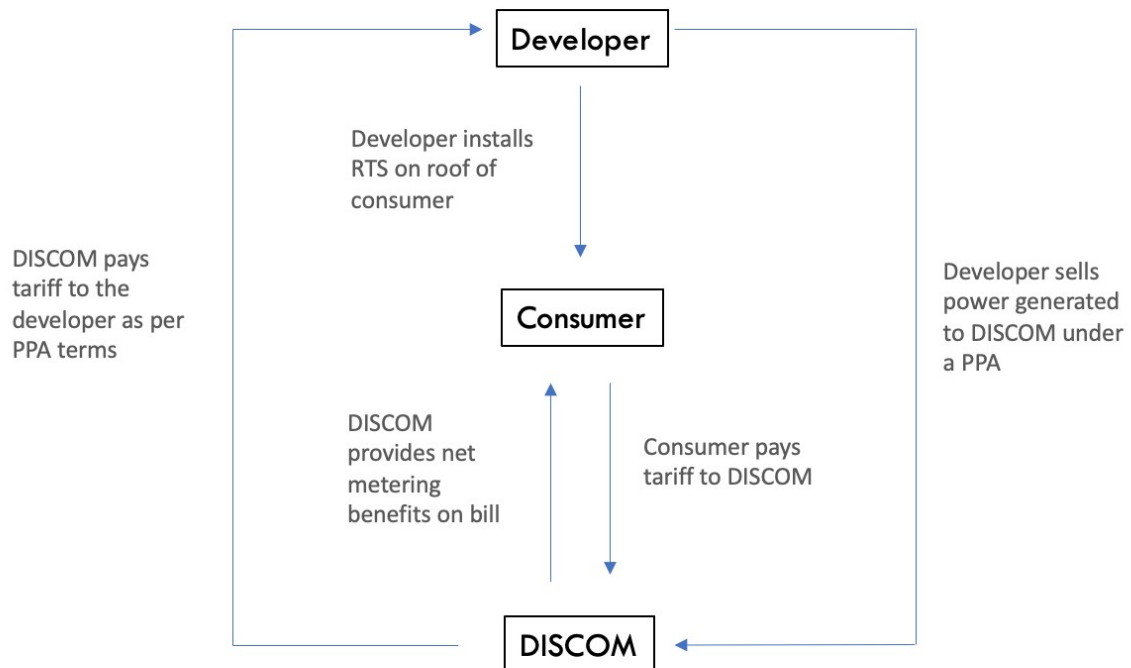
### A. Models for Consumers with Capital Constraints:

#### 1. RESCO Model:



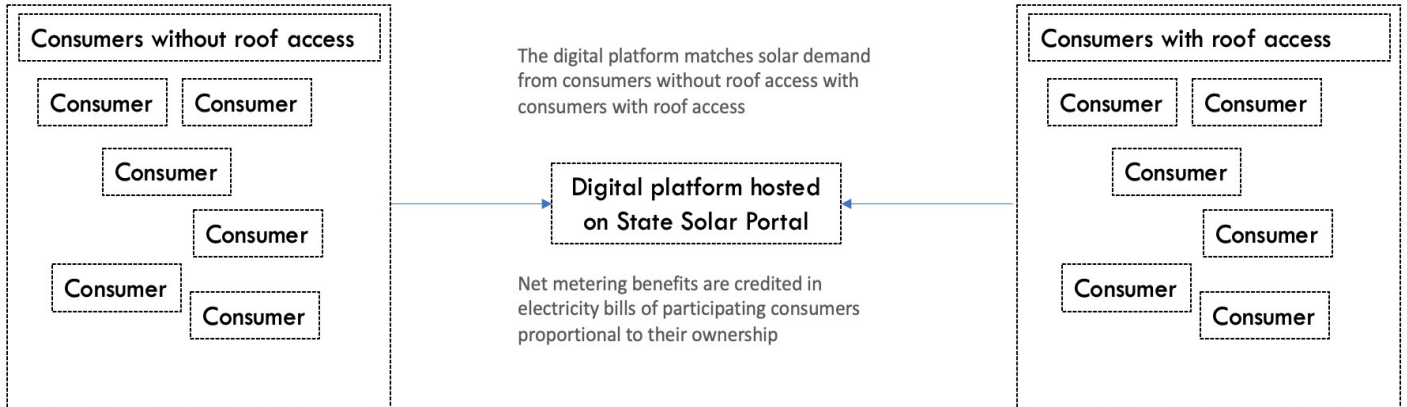
#### 2. Hybrid RESCO Model:

Consumer signs a tripartite agreement with the developer and DISCOM

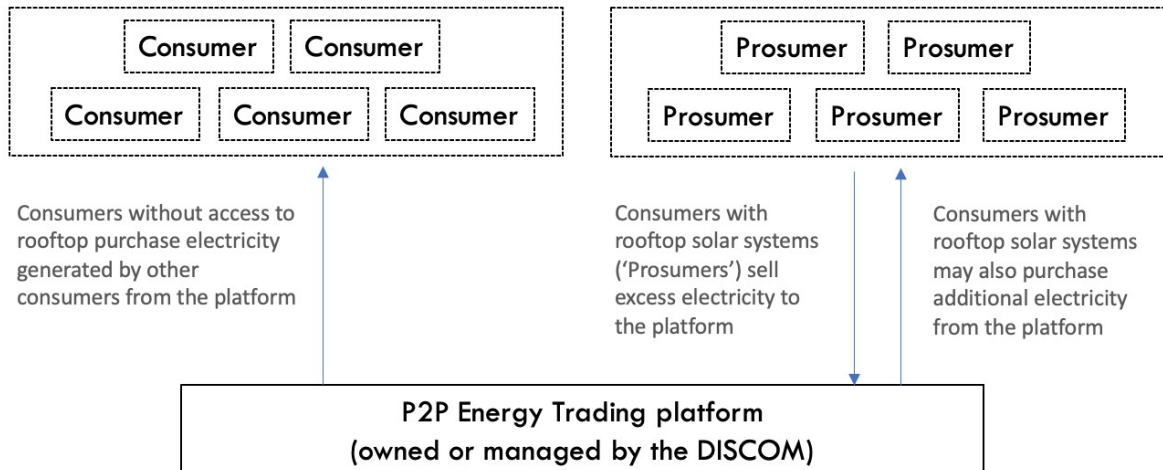


## B. Models for Consumers with Roof Constraints

### 1. Community Solar Model:



### 2. Peer-to-peer trading:



Appendix II: Average Power Procurement Costs of DISCOMs for 2021-22

<b>DISCOMs</b>	<b>APPC (Rs/kWh)</b>
BYPL	5.16
BRPL	5.43
TPDDL	5.55
NDMC	6.26

## Appendix III: Minimum area required for installation of solar PV panel

Table 11: Minimum area required for Installation of Solar Photo Voltaic Panel						
S. No.	Building category	Plot area/ Ground Coverage		Capacity of SPV plant (in kilo watt peak	Area of Terrace required in % & Sqm.	
1.	Residential	105 -250 Sqm.	75%	1 KW p (spv)	20%	15 Sqm.
		250 -500 Sqm.		2 KW p (spv)	20%	30 Sqm.
		500-1000 Sqm.	50%	3 KW p (spv)	20%	45 Sqm.
		1000-3000 Sqm.		5 KW p (spv)	15%	75 Sqm.
		> 3000 Sqm.		10 KW p (spv)	15%	150 Sqm.
2.	Institutional	500-1000 Sqm.	30%	5 KW p (spv)	35%	75 Sqm.
		1000-3000 Sqm.		10 KW p (spv)	35%	150 Sqm.
		>3000 Sqm.		20 KW p (spv)	35%	300 Sqm.
3.	Government Buildings	500-1000 Sqm.	50%	5 KW p (spv)	30%	75 Sqm.
		1000-3000 Sqm.		10 KW p (spv)	15%	150 Sqm.
		>3000 Sqm.		20 KW p (spv)	20%	300 Sqm.
4.	Commercial	500-1000 Sqm.	50%	5 KW p (spv)	40%	150 Sqm
		1000-3000 Sqm.		20 KW p (spv)	30%	300 Sqm
		>3000-5000 Sqm.		30 KW p (spv)	25%	450 Sqm
		> 5000 Sqm.		50 KW p (spv)	30%	750 Sqm.
5.	Group Hosing	2000-5000 Sqm.	33.3 %	10 KW p (spv)	20%	150 Sqm.
		5000-10,000 Sqm.		20 KW p (spv)	15%	300 Sqm.
		10,000-20,000 sqm.		50 KW p (spv)	25%	750 Sqm.
		>20,000 Sqm.		100 KW p (spv)	25%	1500Sqm
6.	Industrial	Up to 400 Sqm.	60%	3 KW p	25%	45 Sqm
		401-2000 Sqm.	50%	5 KW p	30%	75 Sqm
		2000-5000 Sqm		10 KW p	30%	150 Sqm
		>5000 Sqm.		50 KW p +5 KW/1000 Sqm. or part thereof	30%	750 Sqm