

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 31stDecember, 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 31stDecember, 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.