

# Powering India's Clean Energy Future

Solar Products · Lithium Storage · Electric Mobility

TROMOLOM ENERGIES LLP is your trusted partner for high-performance solar installations, advanced lithium battery and inverter solutions, and next-generation electric mobility — all designed to help Indian homes, businesses, and industries achieve energy independence.

[Explore Our Solutions](#)

[Check Government Subsidy](#)

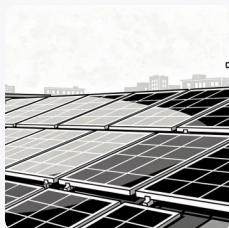


# Who We Are — TROMOLOM ENERGIES LLP

TROMOLOM ENERGIES LLP is a vertically integrated clean energy company focused on three transformative pillars: **solar products and installation services, advanced lithium-based energy storage and power solutions, and electric mobility.** Our mission is simple yet ambitious — to empower every Indian household, small business, and commercial establishment with affordable, reliable, and sustainable energy.

We partner with India's most respected solar panel manufacturers — including **Tata Solar, Adani Solar, Waaree, Shakti Solar, and Vikram Solar** — to procure and install only the highest-quality photovoltaic systems. Whether you need a compact 1 kW rooftop setup for your home or a multi-megawatt commercial installation, our engineering and procurement teams deliver end-to-end EPC (Engineering, Procurement, and Construction) execution with precision and transparency.

Under our proprietary **TROMOLOM** brand, we design and supply lithium inverters, lithium battery systems (BESS/ESS), and lithium generators — purpose-engineered for the Indian climate and power landscape. Our electric mobility division operates under the **STATIX ELECTRIC** brand, offering electric bikes and scooters, while motors and controllers are developed in association with **SHAKTI EV**, a subsidiary of Shakti Pumps. Together, these verticals position TROMOLOM ENERGIES as a one-stop destination for India's energy transition.



## Solar Products

Panels, rooftop systems, mounting structures, and full EPC execution from top-tier brands like Tata, Adani, Waaree, Shakti, and Vikram Solar.



## TROMOLOM Lithium Storage

Our branded lithium inverters, batteries (BESS/ESS), and generators deliver efficient, long-lasting, and safe energy backup for every need.



## STATIX ELECTRIC Mobility

Eco-friendly electric bikes, scooters, high-performance motors, and controllers developed with SHAKTI EV technology.



# Our Vision & Mission

## Our Vision

To become a trusted leader in solar energy solutions, empowering homes, businesses, and industries with clean, affordable, and sustainable power — while contributing meaningfully to India's transition towards a **greener and energy-independent future**.

We envision an India where every rooftop generates clean electricity, every battery stores green energy, and every vehicle on the road runs emission-free. TROMOLOM ENERGIES is building toward that tomorrow, today.

## Our Mission

01

### Quality & Reliability

Deliver high-quality, reliable, and cost-effective solar power solutions tailored precisely to customer needs — from compact residential setups to large commercial arrays.

02

### Innovation & Expertise

Promote renewable energy adoption through innovative lithium technology, intelligent system design, and expert EPC execution.

03

### Government Initiatives

Actively support national programs like the **PM Surya Ghar Yojana** and accelerate rooftop solar installations across India.

04

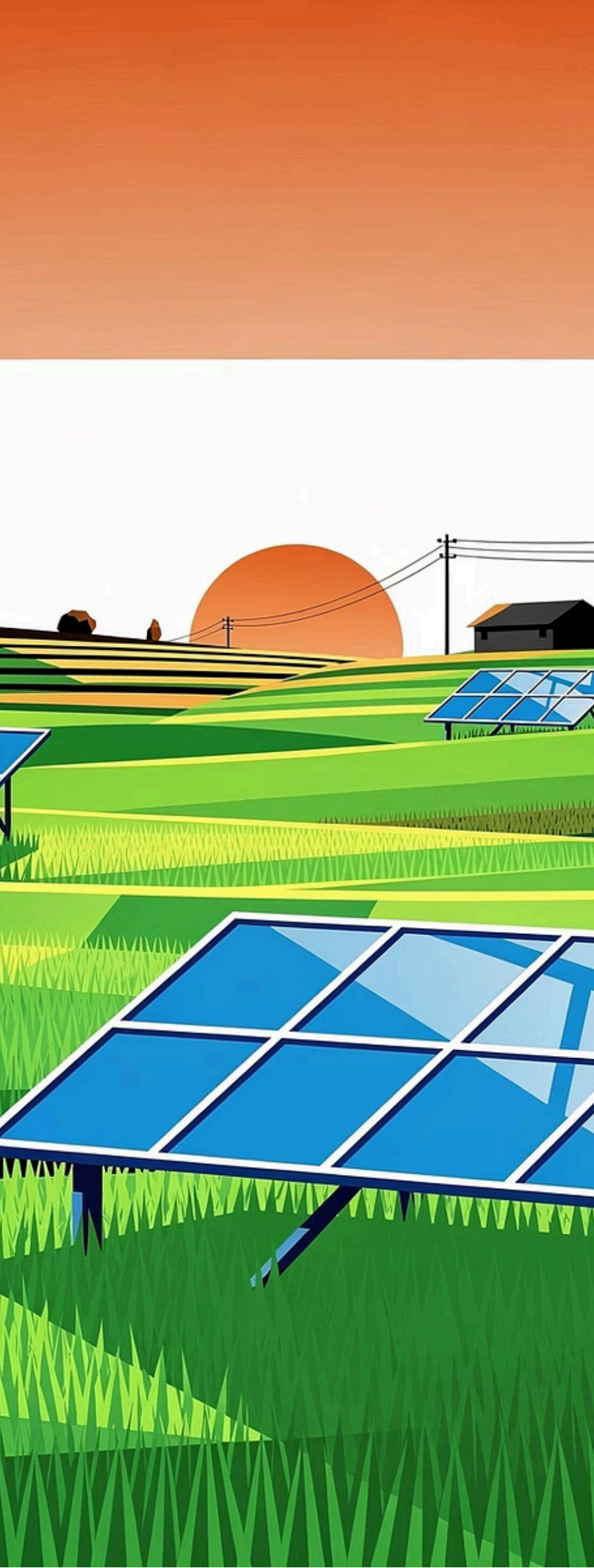
### Customer Satisfaction

Ensure complete transparency, timely delivery, and dedicated after-sales support at every stage of the customer journey.

05

### Environmental Impact

Reduce India's carbon footprint and contribute to environmental sustainability for present and future generations.



# Solar Products & Comprehensive Solutions

TROMOLOM ENERGIES LLP offers a broad range of solar products and services, including procurement, design, and installation of solar systems for residential, commercial, and industrial applications. We partner with India's top manufacturers to ensure high performance, long-term reliability, and optimal return on your investment — whether you choose an off-grid, on-grid, or hybrid configuration.



## Solar Panels & Modules

Premium monocrystalline and polycrystalline panels from Tata, Adani, Waaree, Shakti, and Vikram Solar — engineered for the Indian climate with efficiency ratings between 15% and 22%. Every panel is backed by a 25-year performance warranty, giving you decades of clean, cost-free electricity.



## Solar Rooftop Systems

Custom-designed rooftop installations for homes, offices, factories, and commercial buildings. Our team assesses your rooftop space, energy consumption patterns, and budget to recommend the optimal system size — typically between 1 kW and 10 kW for residential customers and much larger for commercial clients.



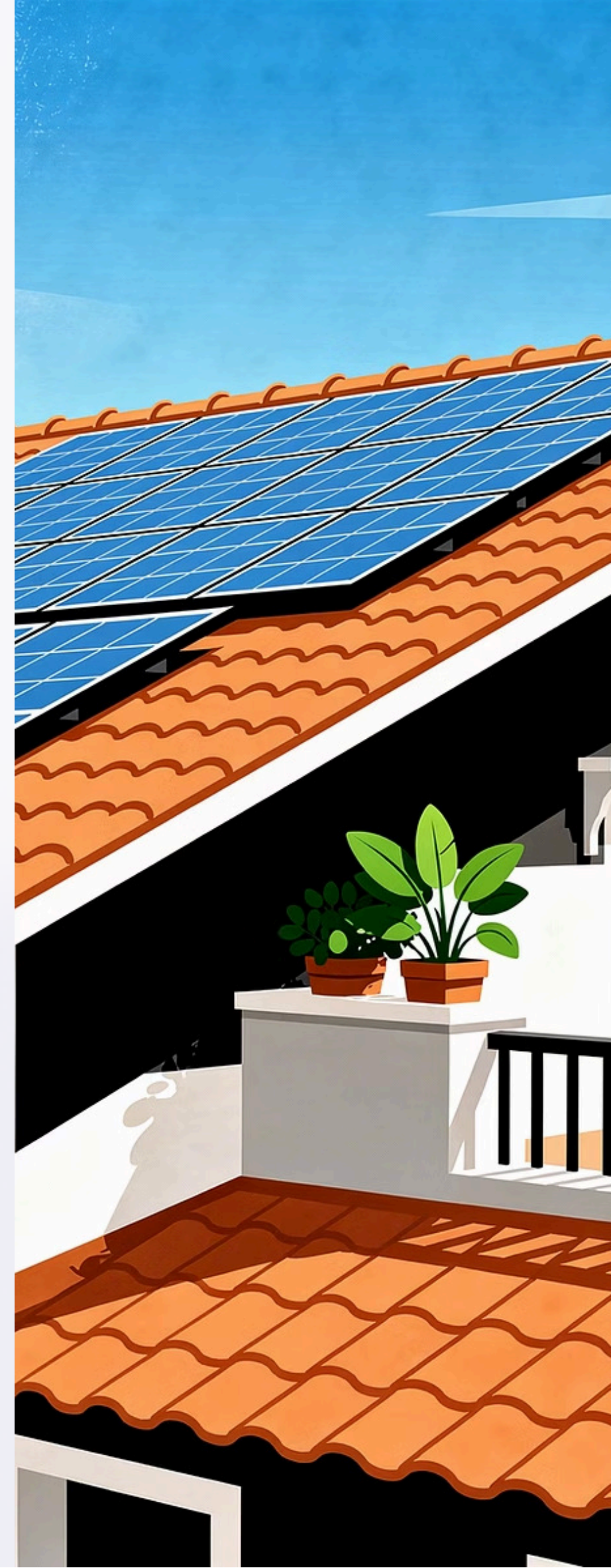
## Mounting Structures

Durable, corrosion-resistant mounting frameworks fabricated from high-grade galvanized steel and aluminum. Available in fixed-tilt, adjustable, and tracking configurations to maximize sunlight capture throughout the day and across seasons.



## End-to-End Solar EPC

Complete Engineering, Procurement, and Construction execution — from initial site survey and system design through panel procurement, structural installation, electrical wiring, inverter commissioning, net metering application, and final DISCOM inspection. One partner, zero hassle.



☑ This suite of solar products enables clients to harness renewable energy, reduce electricity costs by up to 90%, and support India's sustainability goals. Visit [www.tromolom.com](http://www.tromolom.com) to request a free site assessment.

# Comprehensive Solar Product Portfolio

TROMOLOM ENERGIES offers a curated selection of high-quality solar products, ensuring efficient and reliable energy generation for every application. We partner with India's leading manufacturers and supply our own cutting-edge lithium solutions.



## Solar Panels

High-efficiency monocrystalline and polycrystalline panels from trusted brands like Tata, Adani, Waaree, and Vikram Solar, built for durability and maximum energy capture in diverse Indian climates.



## Solar Inverters

Advanced string and hybrid inverters from leading global and domestic manufacturers, converting DC power to usable AC electricity with optimal efficiency and seamless grid synchronization or battery integration.



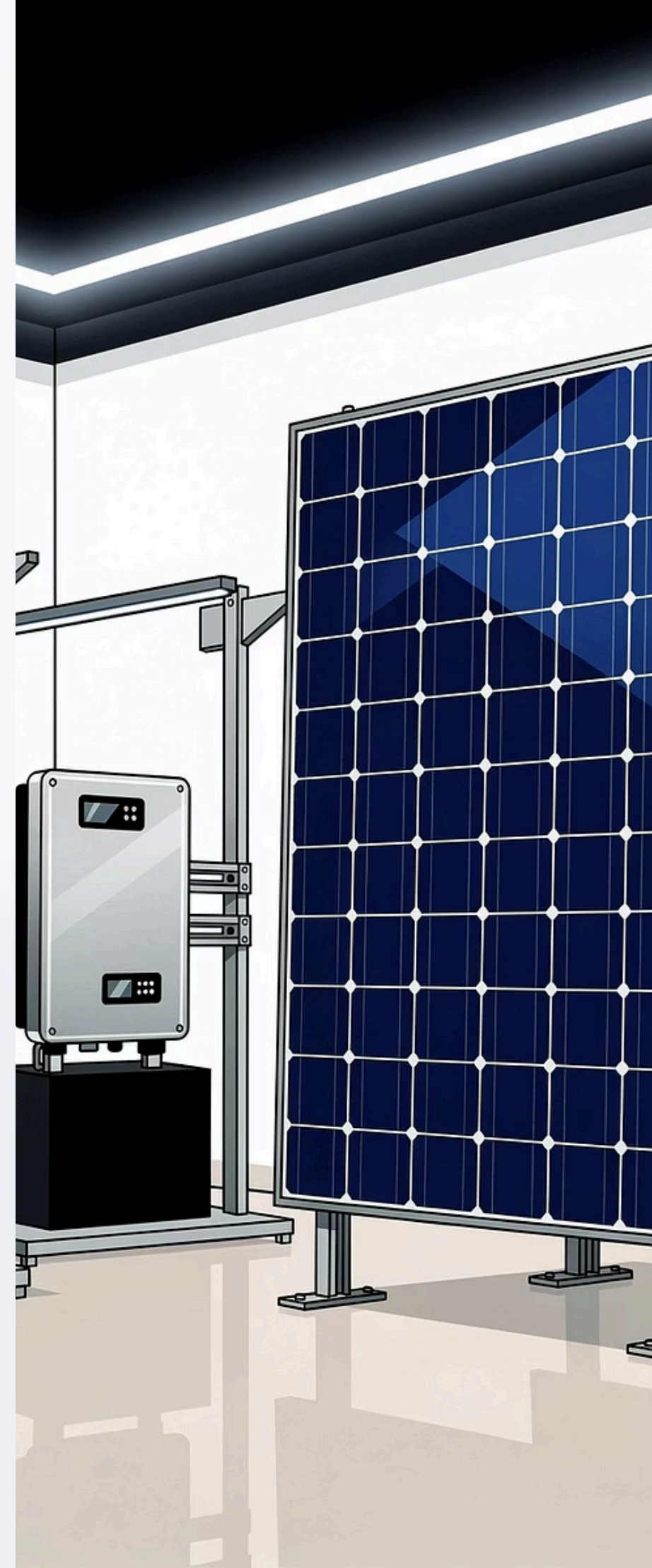
## Mounting Structures

Robust and corrosion-resistant mounting systems, crafted from galvanized steel and aluminum, designed for various roof types and ground installations to ensure secure, long-lasting panel support.



## Cables & Accessories

High-grade DC and AC solar cables, connectors, junction boxes, and safety devices, all essential components ensuring the safe, efficient, and long-term operation of your entire solar system.



# Advanced Lithium Storage & Electric Mobility

The future of energy is lithium. TROMOLOM ENERGIES LLP's proprietary lithium product line and electric mobility brand are engineered for the demands of modern Indian users — offering longer life cycles, superior depth of discharge, enhanced safety, and dramatically better performance compared to traditional lead-acid alternatives.

## TROMOLOM Lithium Power Products

1

### Lithium Inverters

High-efficiency inverters that integrate seamlessly with lithium battery systems for reliable power conversion and uninterrupted backup. Designed for both residential and commercial deployments, these inverters offer intelligent load management, remote monitoring, and silent operation — making them ideal for homes, shops, clinics, and offices.

2

### Lithium Batteries (BESS/ESS)

Advanced lithium battery packs engineered for homes, commercial setups, telecom towers, and industrial energy storage systems. Compared to traditional lead-acid, TROMOLOM lithium batteries deliver 3–5× longer life cycles, deeper discharge capability (up to 95% DoD), faster charging, lighter weight, and zero maintenance — all with enhanced BMS (Battery Management System) safety.

3

### Lithium Generators

Portable and silent power generation systems leveraging lithium technology for clean, instant backup power. Perfect for outdoor events, construction sites, remote locations, and emergency preparedness — these generators produce zero emissions, zero noise, and require no fuel, making them the sustainable alternative to diesel gensets.

## STATIX ELECTRIC — Electric Mobility



### Electric Bikes & Scooters

Under the **STATIX ELECTRIC** brand, TROMOLOM ENERGIES is entering the electric two-wheeler market with efficient, eco-friendly vehicles that combine performance, style, and sustainability. Designed for Indian roads and commuting patterns, these electric bikes and scooters offer low running costs, zero tailpipe emissions, and a smooth, silent ride.

### Motors & Controllers

Developed in collaboration with **SHAKTI EV** (a subsidiary of Shakti Pumps), our motors and controllers deliver optimized drive performance, regenerative braking, exceptional energy efficiency, and proven reliability — forming the technological backbone of our electric mobility platform.



# Why Choose TROMOLOM?

Selecting TROMOLOM means choosing a partner committed to excellence, innovation, and your long-term energy independence. Discover the distinct advantages that make us the preferred choice for solar and lithium solutions.



## Decades of Expertise

With over 15 years in the solar and lithium energy sectors, TROMOLOM brings unparalleled knowledge and proven success to every project, ensuring optimal performance and reliability.



## Seamless End-to-End Solutions

From initial consultation and custom design to expert installation, commissioning, and ongoing maintenance, we manage your entire energy journey with single-point accountability.



## Uncompromising Product Quality

We source and manufacture only the highest-grade solar panels, lithium batteries, and components, ensuring maximum efficiency, longevity, and superior performance for your investment.



## Certified Installation Professionals

Our highly trained and certified technicians guarantee precise, safe, and efficient installation of all systems, adhering to the strictest industry standards and best practices.



## Dedicated After-Sales Support

Our commitment extends beyond installation. Benefit from comprehensive maintenance plans, rapid response to service requests, and readily available technical assistance to keep your system running flawlessly.



## Cost-Effective Energy Solutions

Leveraging direct sourcing and efficient operations, TROMOLOM offers highly competitive pricing without compromising on quality, ensuring exceptional value and faster ROI for our clients.



# Essential Solar Terminology — Your Complete Guide

Understanding solar terminology empowers you to make the best decisions for your home or business. Whether you're comparing quotes, evaluating system types, or applying for a government subsidy, this glossary covers every term you'll encounter on your solar journey.

## Power Infrastructure & The Grid

### Utility Grid

The network of power lines, poles, and transformers owned by your electricity department (Tata Power, Adani, State Boards).

### On-Grid

A solar system connected to the utility grid. It exports excess power and relies on the grid when solar isn't generating.

### Off-Grid

Complete grid independence via heavy battery storage. Powers your home without any utility connection.

### DISCOM

Your local Distribution Company — the utility that provides electricity and manages your solar net metering connection.

## Basics of Solar Power & Measurement

### Solar Technology

- **PV (Photovoltaic)** — Technology converting sunlight directly into electricity
- **Solar Cell** — The smallest individual unit of a solar panel
- **Solar Array** — Multiple panels connected together forming a complete power plant
- **Efficiency** — Percentage of sunlight converted to electricity (modern panels: 15–22%)

### Units of Measurement

- **Watt (W)** — Basic unit of power measurement
- **Kilowatt (kW)** — 1,000 Watts; most homes need 1–10 kW systems
- **Kilowatt-hour (kWh)** — 1 Unit on your electricity bill (1 kW used for 1 hour)
- **kWp (Kilowatt Peak)** — Maximum power output under ideal sunny conditions

## Electrical Currents, Components & Financial Terms

### DC (Direct Current)

Electricity produced by solar panels and stored in batteries. Flows in one direction.

### AC (Alternating Current)

Electricity used by your home appliances — TV, fridge, air conditioner, washing machine.

### Inverter

The "brain" of the system — converts DC from panels into AC so your appliances can use it.

### Net Metering

A two-way meter tracking electricity sent to and taken from the grid. You pay only the net difference.

### Payback Period

Time for monthly bill savings to equal initial cost — typically 3–5 years in India.

### DCR Panels

Domestic Content Requirement panels manufactured entirely in India — mandatory for government subsidy.



# Benefits of Going Solar

Switching to solar power offers a multitude of advantages, both for your finances and the planet. Discover how TROMOLOM ENERGIES can help you harness the sun's power.



## Reduce Electricity Bills

Lower your monthly electricity expenses by 70-90%, turning sunlight into significant, consistent savings for your household or business.



## Protect Against Rising Costs

Gain long-term financial stability by locking in your energy costs, insulating yourself from unpredictable and escalating utility prices.



## Increase Property Value

Enhance your home's market appeal and resale value, as properties with owned solar systems are highly desirable to modern buyers.



## Low Maintenance & Warranty

Enjoy peace of mind with robust systems requiring minimal upkeep and backed by industry-leading 25-year performance warranties.



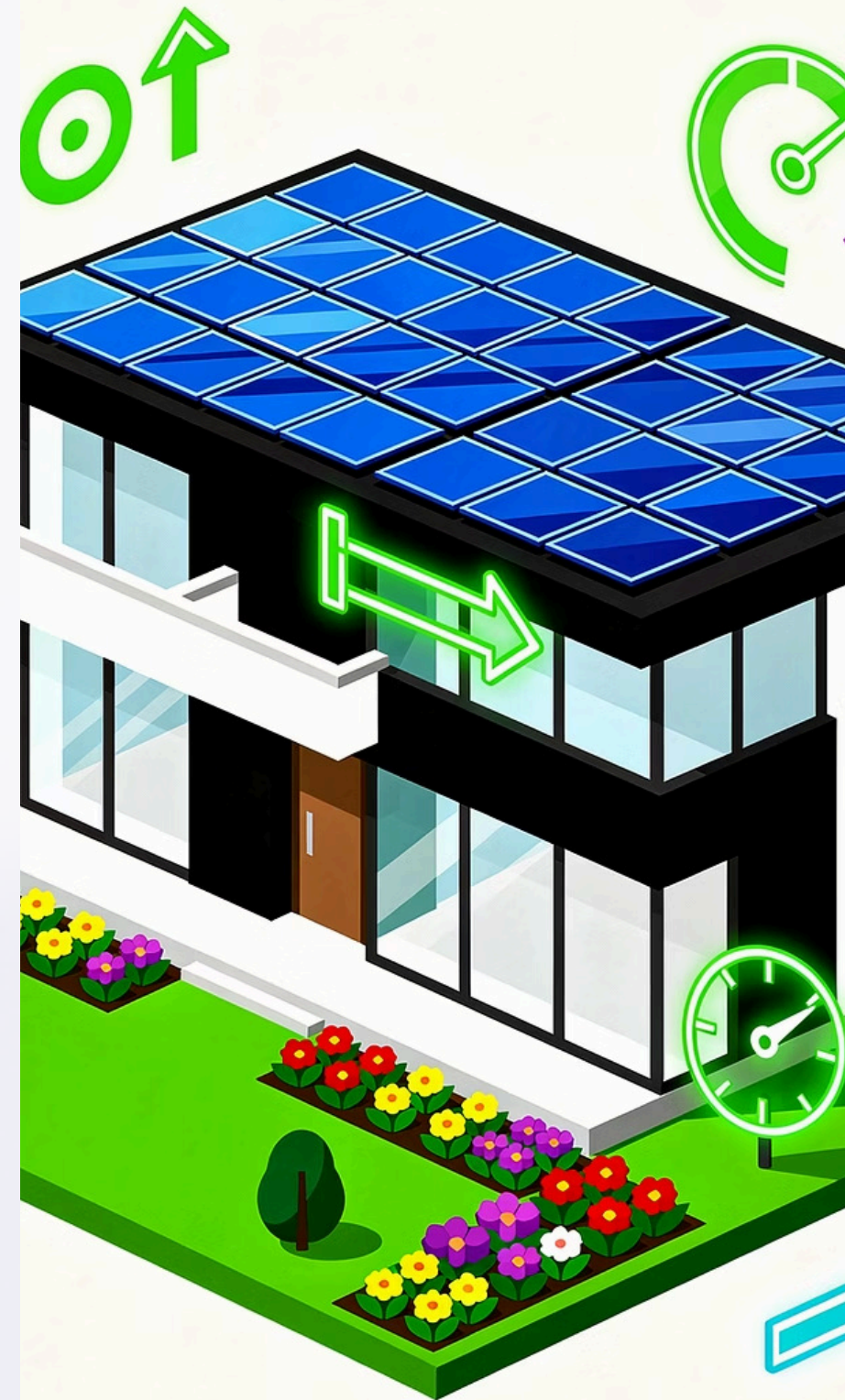
## Reduce Carbon Footprint

Contribute to a healthier planet by significantly decreasing your reliance on fossil fuels and lowering your environmental impact.



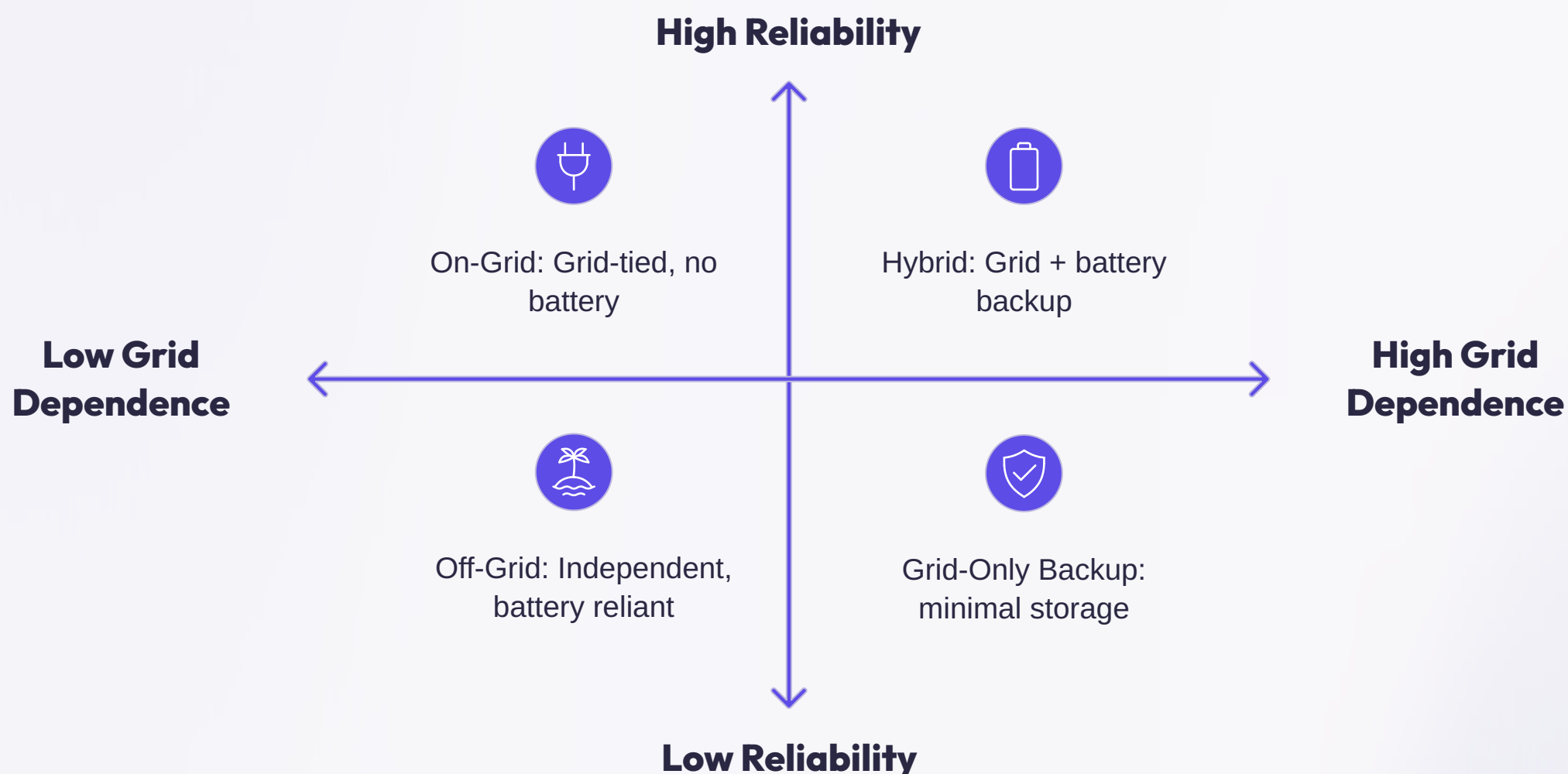
## Achieve Energy Independence

Generate your own clean electricity, reducing dependence on the grid and fostering greater control over your energy supply.



# Types of Solar Power Systems — Which One Is Right for You?

Choosing the right solar system depends on your energy consumption, budget, backup requirements, and whether you want to stay connected to the utility grid. TROMOLOM ENERGIES installs all three major configurations — on-grid, off-grid, and hybrid. Here's how each one works, with real-world Indian examples to help you decide.

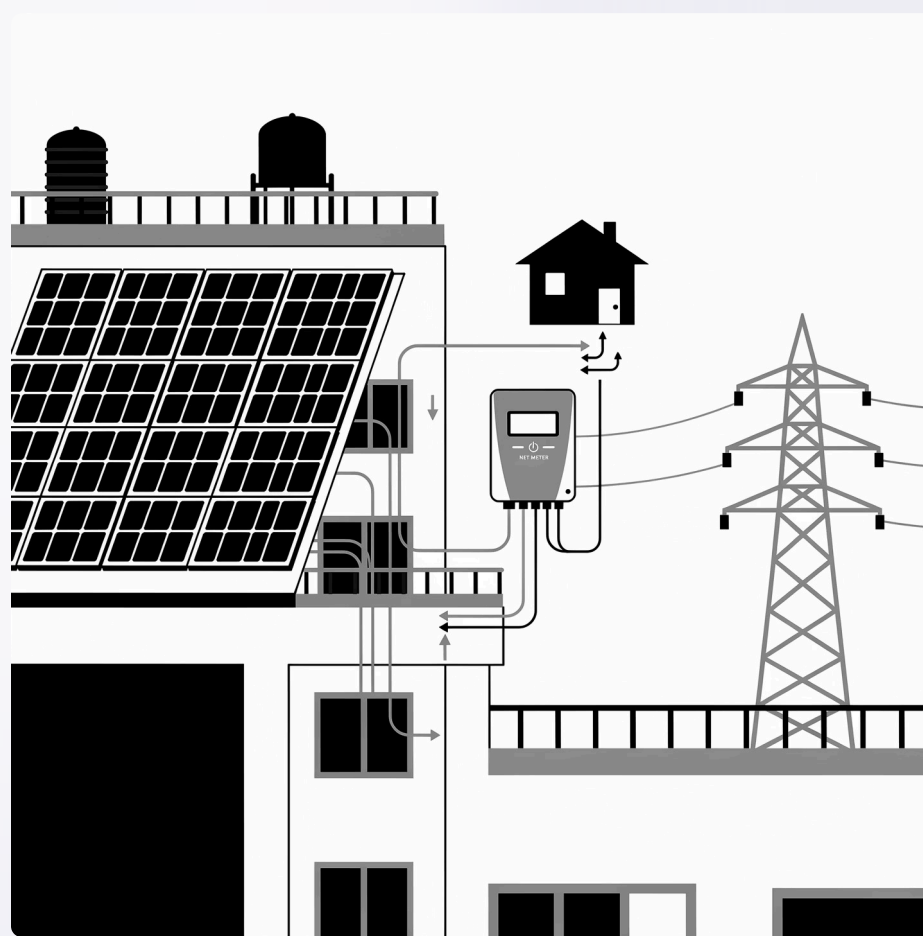


<p><b>On-Grid</b></p> <p>Connected to grid, no batteries, net metering exports excess power</p>	<p><b>Off-Grid</b></p> <p>Standalone with battery storage, zero grid dependency</p>	<p><b>Hybrid</b></p> <p>Best of both — grid connection plus battery backup</p>
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## 1. On-Grid Solar System

An On-Grid Solar System is directly connected to the government electricity grid (DISCOM) and does **not use batteries**. During daytime, solar panels generate DC electricity, the inverter converts it to AC, your home uses what it needs, and excess power is exported to the grid via a net meter. At night, electricity is automatically imported from the grid and recorded by the meter.

**Real Example:** Mr. Sharma installs a **5 kW on-grid system**. Monthly generation: ~650 units. Daytime consumption: 450 units. Exported to grid: 200 units. Imported at night: 150 units. Since exports (200) exceed imports (150), his **electricity bill is ₹0**, and the extra 50 units carry forward to the next month. However, during a power cut, the system does not work — no battery backup.



## 2. Off-Grid Solar System



An Off-Grid Solar System operates independently of the electricity grid, using **batteries to store excess solar energy** for night-time use and power cuts. It includes solar panels, an off-grid inverter, a battery bank, and a charge controller.

**Real Example:** Mr. Ramesh installs a **3 kW off-grid system** with 4 batteries (150 Ah each). Daily consumption: ~10 units. Daily generation: 12–14 units. Daytime use: 8 units, stored in batteries: 4–6 units. At night, batteries supply ~6 units for **6–8 hours of backup**. No net metering or carry-forward — but **continuous power even during long outages**.

## 3. Hybrid Solar System

A Hybrid Solar System combines the benefits of on-grid and off-grid configurations. It connects to the grid, supports net metering, **and** includes battery backup. Solar power is used first, excess charges batteries, additional surplus is exported to the grid, and during power cuts, batteries provide seamless backup.

**Real Example:** Mrs. Verma installs a **5 kW hybrid system** with a 5 kWh lithium battery. Monthly consumption: ~650 units. Solar generation: ~700 units. Daytime use: 400 units. Stored in battery: 150 units. Exported: 150 units. The battery provides **4–6 hours of backup** during outages for lights, fans, fridge, Wi-Fi, and TV. Excess exported units reduce the bill, and surplus carries forward per DISCOM policy.

# Government Subsidies — PM Surya Ghar: Muft Bijli Yojana & State Programs

The Indian government offers substantial financial assistance to make rooftop solar affordable for every household. The **PM Surya Ghar: Muft Bijli Yojana** is the central scheme for residential rooftop solar, while several states offer additional top-up subsidies. Understanding the slab structure and state-specific policies can save you lakhs of rupees on your installation.


## Central Subsidy (CFA) — Slab Structure

The central subsidy is **not a flat amount**. It uses a slab-based calculation where different portions of system capacity receive different subsidy rates. The **maximum subsidy is capped at ₹78,000** for a 3 kW system — any capacity beyond 3 kW is at your own cost.

System Size	Subsidy Rate	Calculation	Total CFA
1 kW	₹30,000/kW	1 × ₹30,000	₹30,000
2 kW	₹30,000/kW	2 × ₹30,000	₹60,000
3 kW	Slab-based	2 × ₹30,000 + 1 × ₹18,000	₹78,000 (Max)
4–10 kW	Capped	No additional subsidy beyond 3 kW	₹78,000 (Max)

The subsidy amount is **directly credited to your bank account** after successful installation, DISCOM inspection, and approval. A 3 kW system typically generates **360–400 units per month**, sufficient for households consuming 250–300 units monthly. This scheme applies **only to residential consumers** and **only to on-grid rooftop solar systems**.

## State-Wise Additional Subsidies (SFA)




**Haryana — Income-Based**

Subsidies tied to household income via **Parivar Pehchan Patra**. Category I (income up to ₹1.80 lakh): ₹25,000/kW, max ₹50,000. Category II (₹1.80–3.00 lakh): ₹10,000/kW, max ₹20,000. General (above ₹3 lakh): No state subsidy. **Example: 2 kW system, Cat I — CFA ₹60,000 + SFA ₹50,000 = ₹1,10,000 total savings.**



**Uttar Pradesh — Flat Top-Up**

Simple, income-independent state top-up via **UPNEDA**. 1 kW: ₹15,000 SFA. 2 kW: ₹30,000 SFA. 3 kW: ₹30,000 SFA (capped). **Example: 3 kW system — CFA ₹78,000 + SFA ₹30,000 = ₹1,08,000 total subsidy.** No income documentation required.



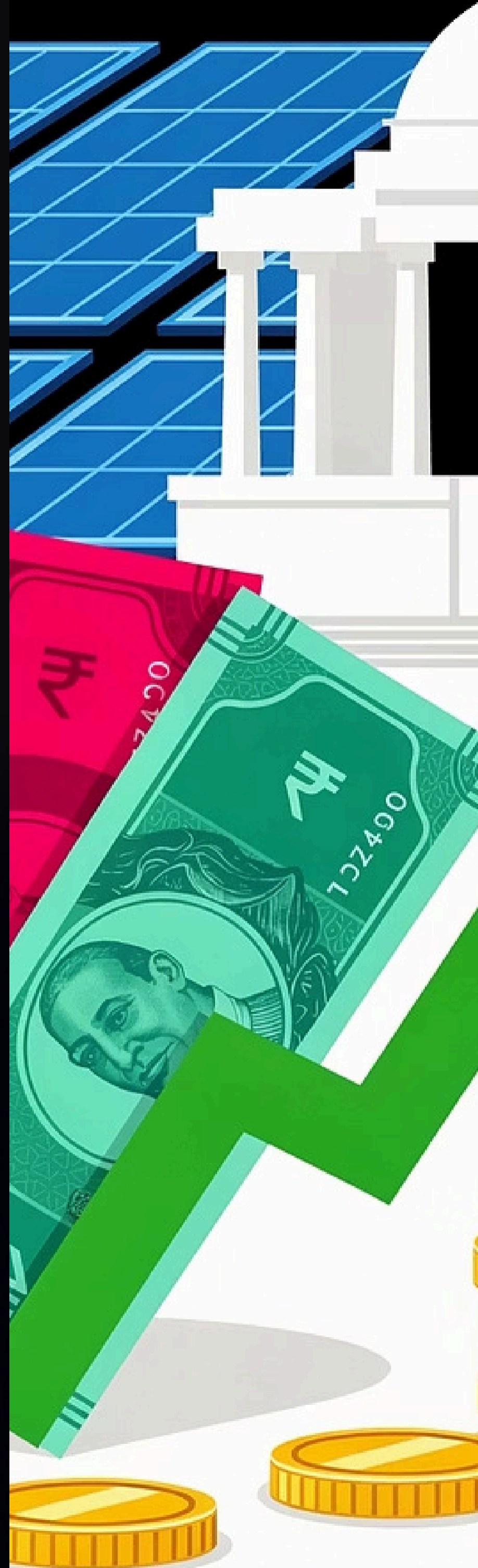
**Delhi — Upfront + Generation Incentive**

Both capital subsidy and a **Generation-Based Incentive (GBI)**. 3 kW system: CFA ₹78,000 + SFA ₹30,000 = ₹1,08,000 upfront. **Plus GBI of ₹3/unit for 5 years** — a 3 kW system generating 360 units/month earns ₹1,080/month extra, totaling **₹64,800 over 5 years.**

**Important:** Subsidies and policies are subject to change. Always verify current rates with your DISCOM or the official portals before applying. Subsidy is credited only after successful installation and inspection.

### Important Links

- [Central Subsidy Portal](#)
- [Delhi Solar Subsidy](#)
- [UP Solar Portal](#)
- [Haryana Solar Portal](#)



# Our Process - Simple & Transparent

Embark on your solar journey with confidence. Our streamlined six-step process ensures a smooth transition to clean energy, from initial consultation to continuous support.

01

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## Free Site Assessment & Consultation

Our experts visit your property to evaluate solar potential, assess energy needs, and discuss your goals, providing a personalized overview.

02

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## Custom System Design & Proposal

Based on the assessment, we create a tailored solar system design and a detailed proposal outlining costs, savings, and projected performance.

03

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## Documentation & Subsidy Application

We handle all necessary paperwork, including permits and central/state subsidy applications, to maximize your financial benefits and ensure compliance.

04

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## Professional Installation

Our certified technicians install your solar panels and equipment efficiently and safely, adhering to the highest industry standards.

05

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## Grid Connection & Commissioning

After installation, we facilitate the final inspection, secure grid connection approval, and commission your system, making it fully operational.

06

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## Ongoing Monitoring & Support

We provide post-installation support and optional monitoring services to ensure your system performs optimally, year after year.



# Solar Installation Components — What Goes Into Your System

A solar power system works by capturing sunlight, converting it to electricity, storing it (if needed), and supplying it to your home or business safely. Understanding each component helps you evaluate quotes, compare quality, and ensure your installer is using the right equipment. Here's a complete breakdown of every key component in a TROMOLOM solar installation.



## Solar Panels (PV Modules)

Capture sunlight and generate Direct Current (DC) electricity. Available in monocrystalline, polycrystalline, and thin-film types. Panel selection determines your total generation capacity (kW) and long-term performance. TROMOLOM sources only DCR-compliant panels for subsidy eligibility.



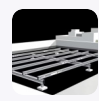
## Solar Inverters

Convert DC from panels into AC for household use. String inverters connect all panels in series (economical). Micro-inverters give each panel its own conversion (best for shaded rooftops). Hybrid inverters combine grid connection with battery backup. Flow: Panels → DC → Inverter → AC → Home/Grid.



## Batteries & Charge Controller

Batteries store excess DC electricity for night-time use or power outages. Lithium-ion batteries offer 3–5× longer life than lead-acid. The charge controller regulates electricity flow from panels to batteries, preventing overcharging or deep discharge. MPPT controllers deliver highest efficiency.



## Mounting Structure & Wiring

Durable galvanized steel or aluminum frameworks hold panels at the correct tilt and orientation. DC cabling connects panels to inverter and battery; AC cabling carries power to appliances and grid. AC/DC breakers and distribution boxes (ACDB/DCDB) protect your system from overload and surges.



## Net Meter & Monitoring

For on-grid systems, the bi-directional net meter measures electricity exported and imported from the grid — so excess units reduce your bill. Optional monitoring systems (mobile app or web-based) track real-time generation, consumption, battery status, and inverter performance.

## How Electricity Flows in Each System Type

### Off-Grid

Solar DC → Charge controller → Battery  
DC → Inverter → AC load.

### On-Grid

Solar DC → Inverter → AC load; excess exports to grid.

### Hybrid

Solar DC → Hybrid inverter → AC load with battery backup and optional grid export.

Whether you choose on-grid simplicity, off-grid independence, or hybrid flexibility, every TROMOLOM installation is engineered for maximum generation, safety, and longevity. Optional accessories like surge protectors, lightning arrestors, MC4 connectors, and junction boxes ensure your system is protected against every eventuality.

# Success Stories & Impact

Our commitment to sustainable energy translates into tangible results, benefiting both our clients and the planet. Here's a snapshot of TROMOLOM's achievements across India.

## 500+

### Happy Customers

Our growing family of satisfied clients across India.

## 10MW+

### Solar Capacity

Installed and powering homes and businesses nationwide.

## 15,00...

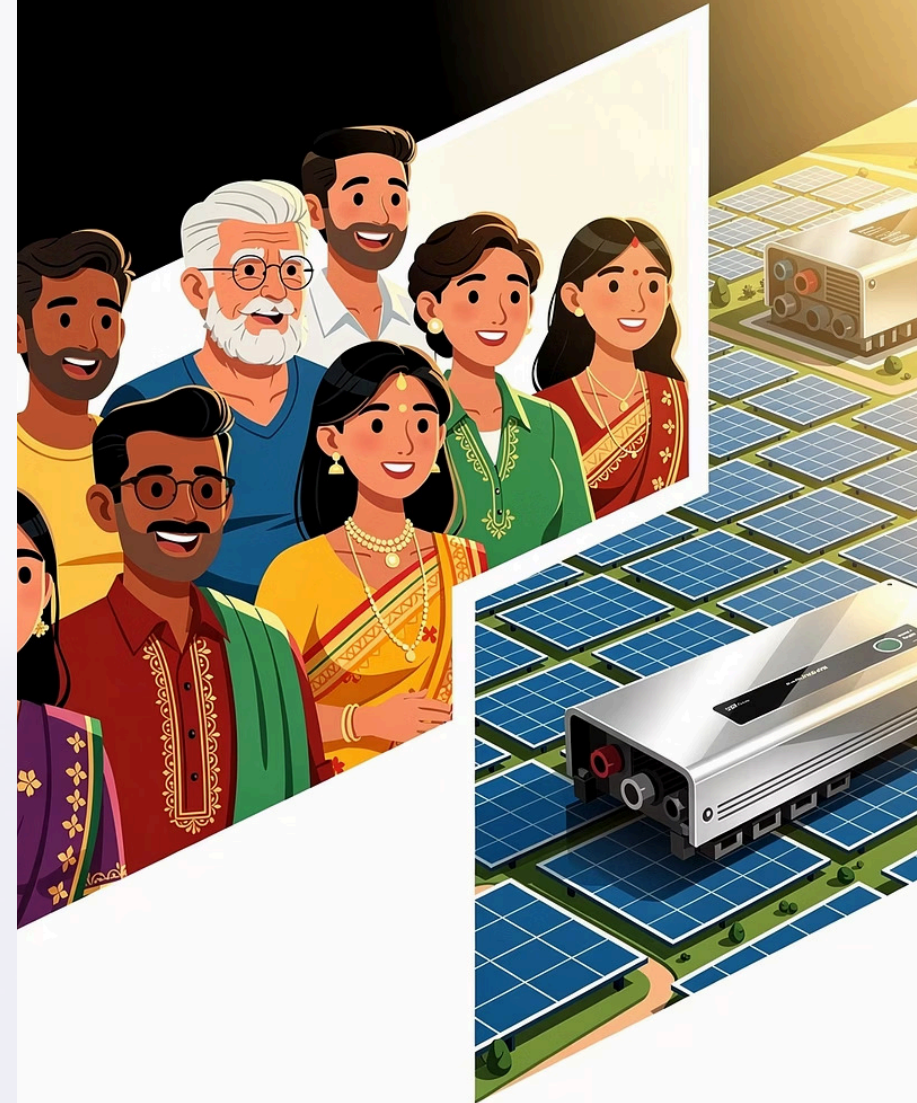
### CO2 Prevented

Making a significant environmental difference together.

## ₹50Cr+

### Customer Savings

Delivering substantial financial benefits for our clients.



# Start Your Clean Energy Journey with TROMOLOM

India's clean energy revolution is here, and TROMOLOM ENERGIES LLP is ready to be your trusted partner every step of the way. Whether you're a homeowner looking to slash your electricity bills, a small business aiming for energy independence, or a commercial client seeking large-scale solar and storage solutions — we have the products, expertise, and after-sales commitment to deliver results.

## ₹78K

### Max Central Subsidy

Available under PM Surya Ghar Yojana for 3 kW residential on-grid systems

## 25yr

### Panel Lifespan

Premium solar panels from top brands with decades of reliable power generation

## 3-5yr

### Payback Period

Typical ROI timeline for residential solar installations in India

## 90%

### Bill Reduction

Potential electricity cost savings with a properly sized solar system

From premium solar panels and TROMOLOM-branded lithium inverters and batteries to STATIX ELECTRIC bikes and scooters — our integrated ecosystem of products is designed to power your life cleaner, smarter, and more affordably. Our end-to-end EPC execution means you get a single point of contact from site survey through commissioning and subsidy disbursement.

**Don't wait for energy prices to rise further.** Every day without solar is money spent on electricity you could be generating for free. Take the first step today — request a free site assessment, get a customized quote, and discover how much you can save with TROMOLOM.

[Get a Free Quote at tromolom.com](https://www.tromolom.com)

[Check Your Subsidy Eligibility](#)

