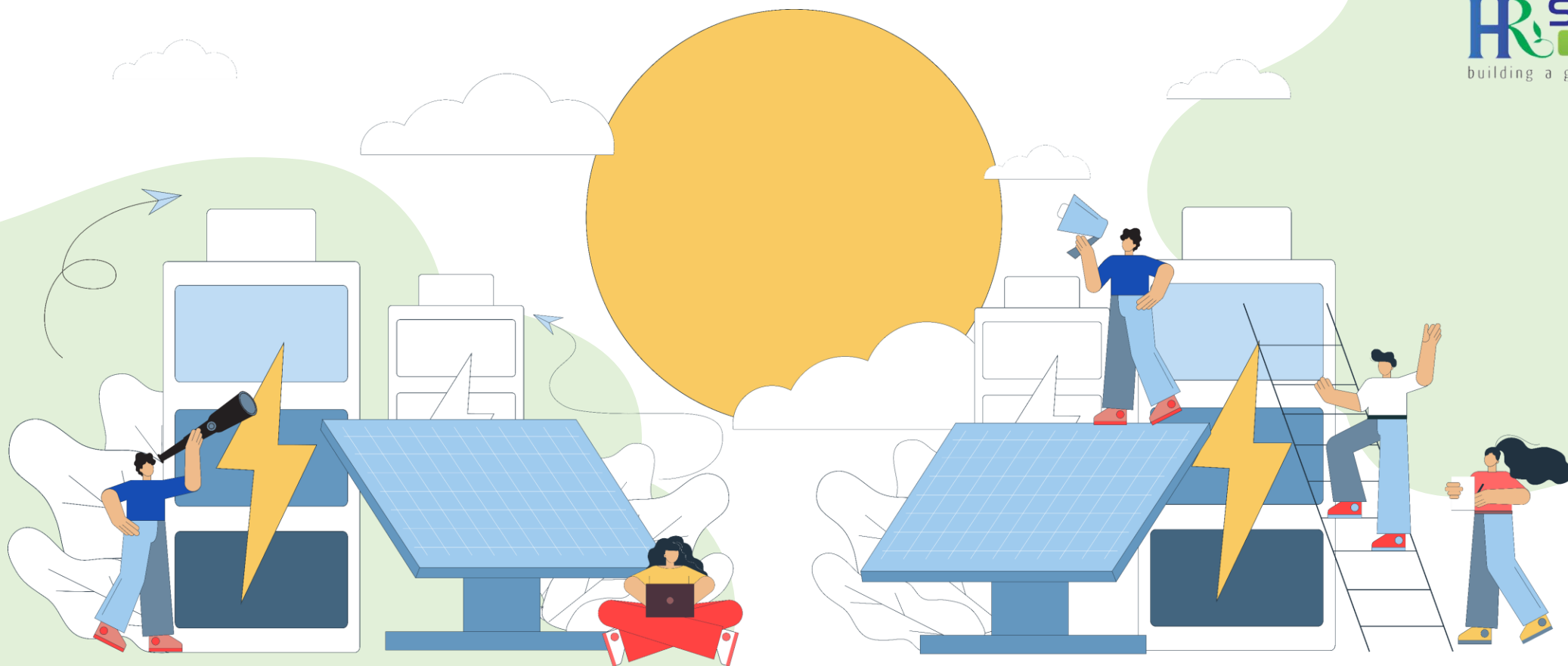




Rising from the East!



POISED FOR LEAP

HR Solar Solution Private Limited

Powering Forward



INDIA – A FRONTIER GROWTH MARKET



Sustained GDP growth of **6-7%** over the past few years



Third-largest producer and consumer of electricity globally

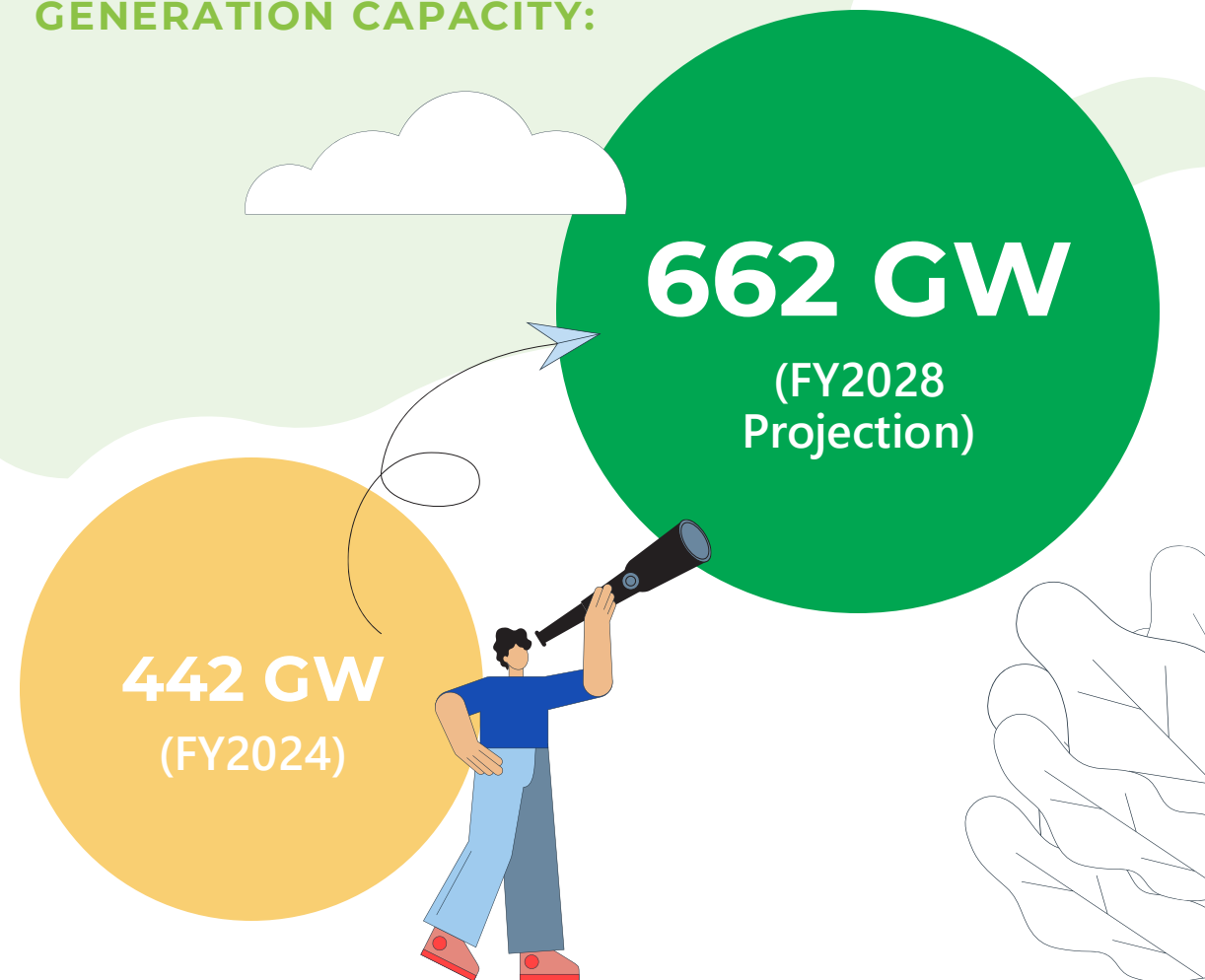


100x growth in domestic power generation capacity since independence



Electricity demand growth even higher due to **expanding economic activity**

INSTALLED POWER GENERATION CAPACITY:



Blessed by the Sun



Favorably
placed
with vast
**solar
potential**

01

India bestowed with **748 GWp** of solar energy potential, with most states receiving sunshine for **300+ days** a year

02

5,000 trillion kWh energy is incident over India's land area annually, with most parts receiving **4-7 kWh** per sqm per day

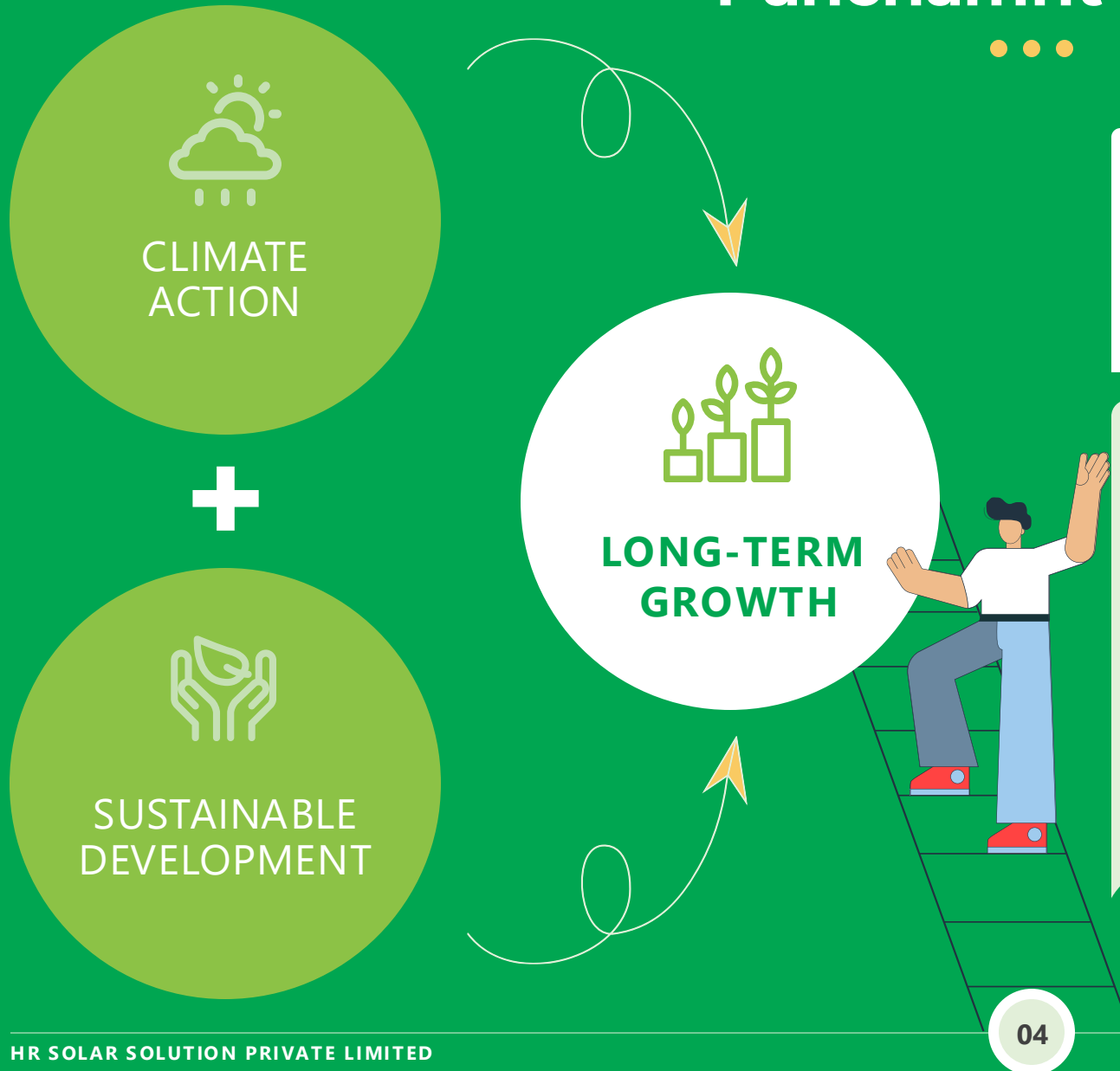
03

Solar **PV-based** power can be harnessed at scale, ensuring widespread energy access

04

India achieved a remarkable increase in installed solar capacity, which has grown nearly **4x** in the past six years – from 22 GW in FY2018 to **82 GW** in **FY2024**

Panchamrit Pledge



India aspires to become carbon neutral by CY2070, banking on low-carbon energy systems as a major contributor to this journey



Building on the PM's Panchamrit Pledge at COP26, India updated its Nationally Determined Contributions (NDCs) in August 2022:

- Meet 50% of cumulative electric power installed capacity from non-fossil sources by CY2030
- Reduce emission intensity of GDP by 45% below CY2005 levels by CY2030
- Publicize a sustainable lifestyle based on the traditions of conservation and moderation

Glow of Opportunity



A BIG SHIFT UNDERWAY TOWARDS RENEWABLES, PRIMARILY SOLAR

01

Solar energy is a core pillar of India's low carbon development strategy, a key enabler for net-zero, and a major part of the Panchamrit Pledge

02

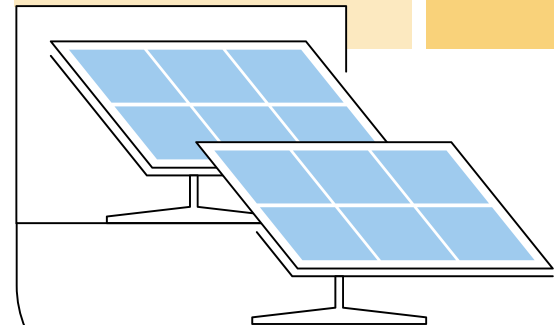
300 GW out of 500 GW renewable capacity by CY2030 is expected from solar, enabled through policy and financial incentives (solar park development, accelerated investment depreciation, transmission charges and capital subsidy waiver, etc.)

03

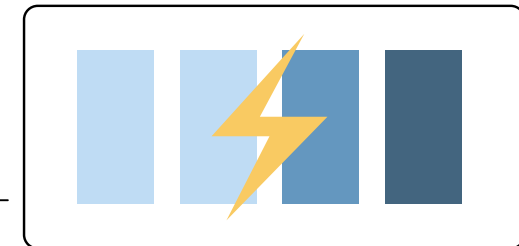
Other initiatives include imposition of customs duty on solar cells and modules to protect domestic industry, inclusion of only local manufacturers in the ALMM list, BIS listing (Indian certification), etc.

04

Government has also envisioned 10 mn solar-powered households under PM Surya Ghar (solar rooftop program)



Based on recent government announcements, **India's annual solar capacity** additions will likely double over the next 2-3 years

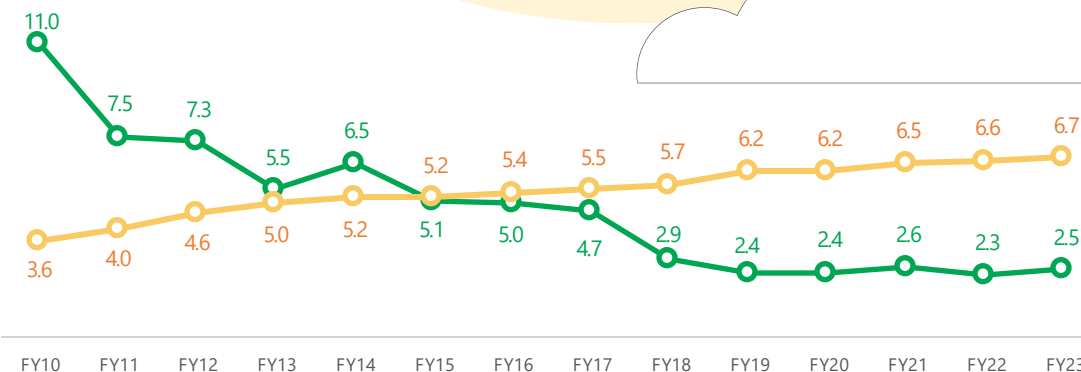
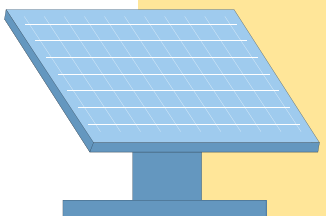


A Bright Future



The energy transition opportunity:

- 'Make in India' and related schemes like PLI and Aatmanirbhar Bharat Abhiyaan are driving industrialization and urbanization - the key drivers of energy demand
- Committed to widespread adoption of electric vehicles (EVs), India is likely to require 2 mn charging stations by CY2030 that will create additional electricity demand of 4-5 bn units
- The National Hydrogen Mission aims to produce 5 MMT of green hydrogen by CY2030; around 125 GW of renewable energy will be required to produce 5 MMT of green hydrogen
- Solar has the lowest tariff rates across fuel sources in India (see chart alongside), indicating largescale viability



KEYS:



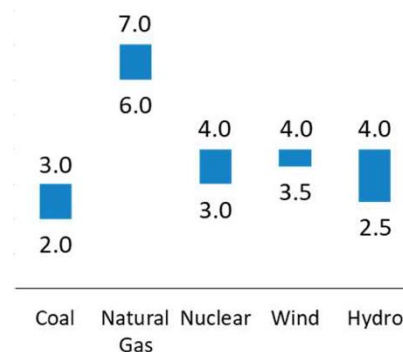
Average cost of electricity supply in INR/kWh



Average solar tariff in INR/kWh

AVERAGE TARIFF FROM OTHER FUEL SOURCES

(IN INR/KWH)



While ACS (avg cost of electricity) has steadily increased from ₹ 3.6 / kWh in FY2010 to ₹ 6.7 / kWh in FY2023, avg solar tariff during this period has shown an exactly opposite trend, with tariff steadily declining and stabilizing, triggered by higher adoption.

Source: Statista, Mercom, Frost & Sullivan Analysis

Success Story from the East



HR Solar:

A premier solar energy company

Vision

Bring a new dawn of a sustainable future through the use of solar power by navigating the profound scope of renewable resources through our exemplary products.

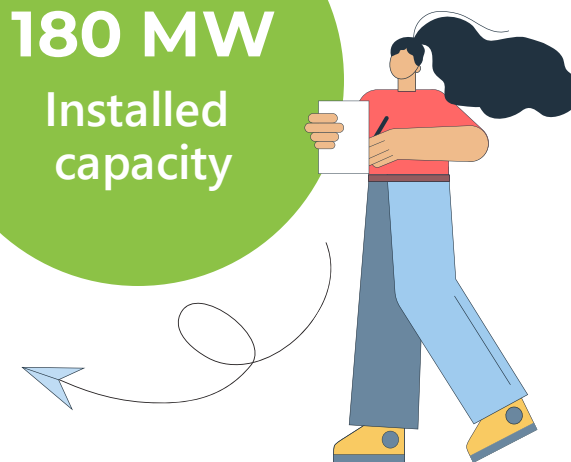
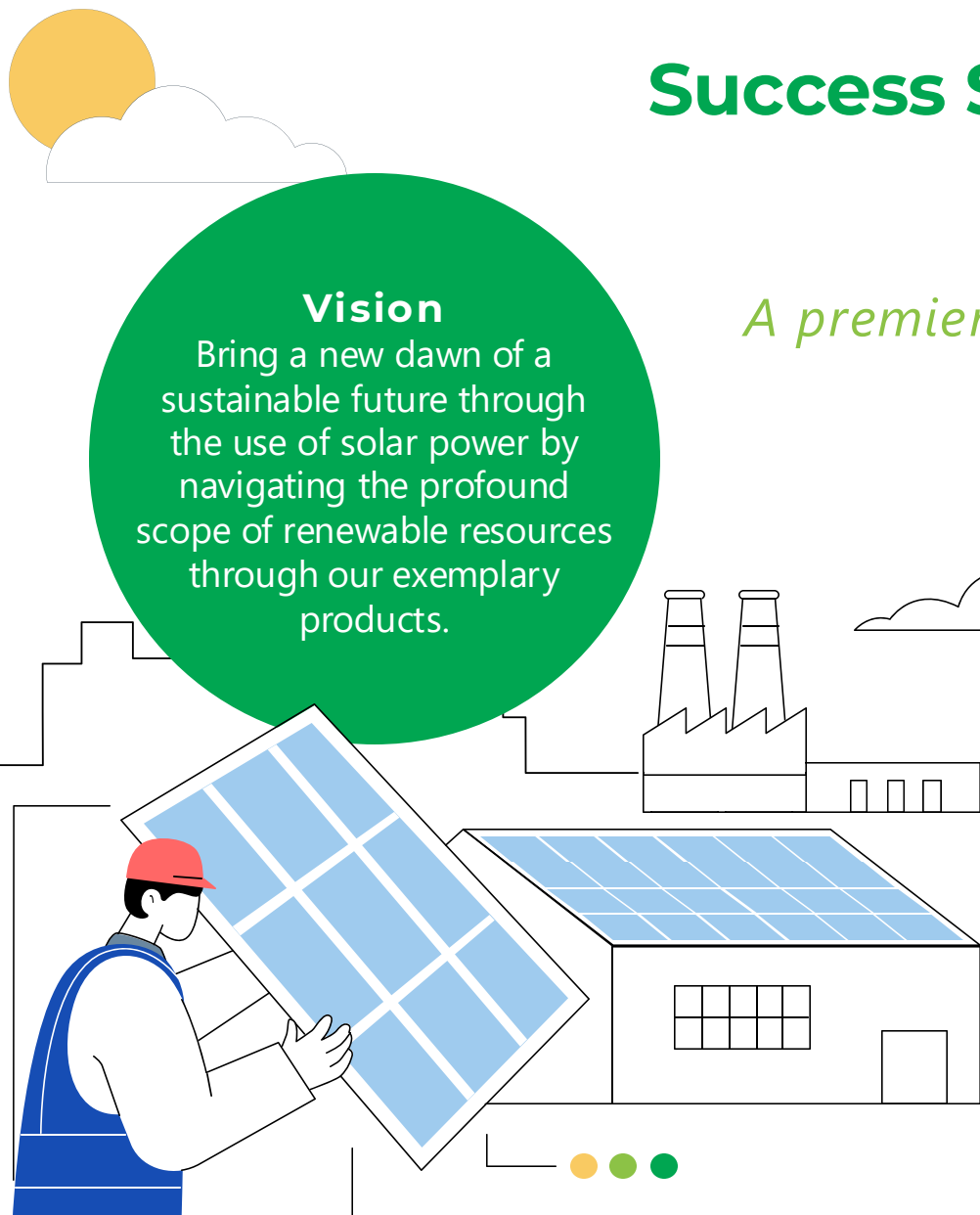
HR Solar contributes to India's clean energy transition, helping reduce import dependence in the solar sector and building domestic manufacturing, thus supporting the country's rapidly expanding clean energy infrastructure.

Driven by the vision to provide high-quality and cost-effective sustainable green energy solutions, the company is passionate about delivering energy security, reducing carbon footprint, helping organisations achieve ESG goals and optimising energy costs for industries and household customers.

Among the
Top-5

Solar PV module
manufacturers of
East India

180 MW
Installed
capacity



Product Portfolio



Committed to innovation and customer relevance

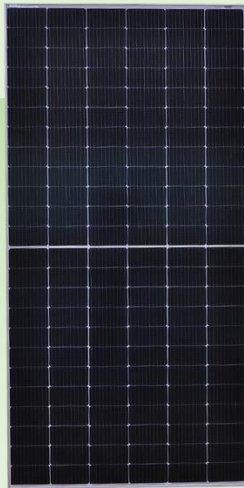
40–545W

Production range

ALMM and BIS certifications

Mono PVRC solar PV modules

Products engineered to provide EPC companies and installers the performance and reliability required to meet the needs of residential, commercial and utility customers. With 21%+ efficiency, our modules perform better in low light conditions, resulting in higher electricity generation and improved ROI for end users.



21%+ efficiency

Polycrystalline solar PV modules

Engineered and cost-effective products with output ranging from 40–335Wp. With efficiency of 17%+, our modules are ideal for off-grid applications such as solar street lighting, water pumping, residential rooftops, etc.



17%+ efficiency

Key Product Features:

Power output positive tolerance of **4.8 Wp**

10-year
Product warranty (limited)

100%
EL tested

25-year
Performance assurance

Sustains
heavy snow and wind load

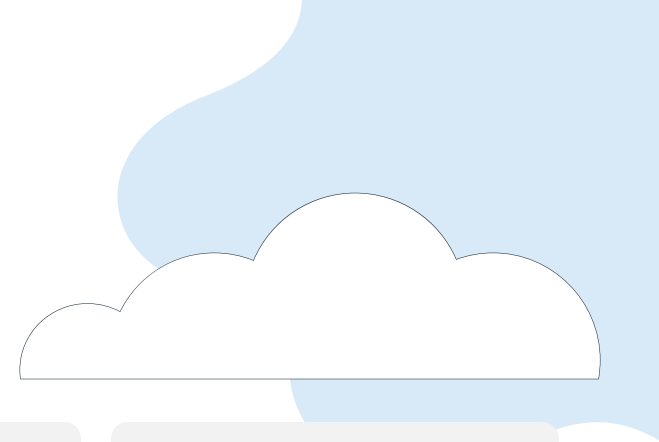
PID
Resistant



Our Customers



Optimum customer mix in both the retail and institutional segments in India and overseas



WBREDA	BREDA	OREDA	TREDA	APDCL
RBI	Indian Oil	Kolkata Port Trust	Indian Railways	PHE
DW&S	Exide	Kirloskar Solar	Solartive	KLK Ventures

KEYS:

■ Govt bodies

■ Private customers

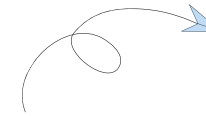


Leveraging Growth Opportunities



OUR COMPETITIVE EDGE

HR Solar has perfected the production of high-quality solar panels at competitive costs. A solid foothold in solar panel manufacturing as well as widespread customer footprint in Eastern India gives it a front row seat to industry growth.



Among the few manufacturers in Eastern India catering to the retail market - both in the off-grid and on-grid segment



Organic capacity growth aligned to market demand, ensuring protection against industry volatility



Production range from 40–545W with all necessary certifications that ensure prequalification for most tenders



Single-stop solution for all contractor requirements for small modules



Mid-size scale that allows pricing benefits, enabling effective servicing of retail market requirements



Capability to produce both poly crystalline and mono PERC modules

Ushering our Next Chapter of Growth



To cater to the rising demand and growth opportunities, HR Solar is establishing a new solar panel manufacturing facility adjacent to its existing establishment near Kolkata.



NEW MANUFACTURING FACILITY

530 MW

Total Projected Capacity



Cumulative production capacity will expand to **530 MW**
(180 MW existing + 350 MW new)

Built over **70,000 sft** with complete automation

Enlistment of new customers in **new markets**; also enabling servicing higher demand share from existing customers

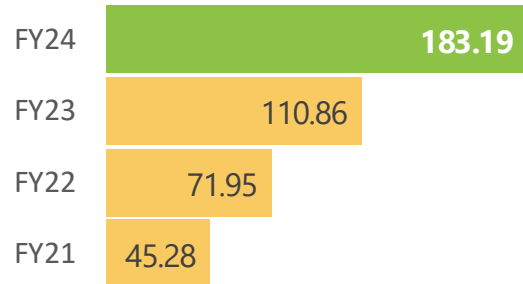


Key Statistics

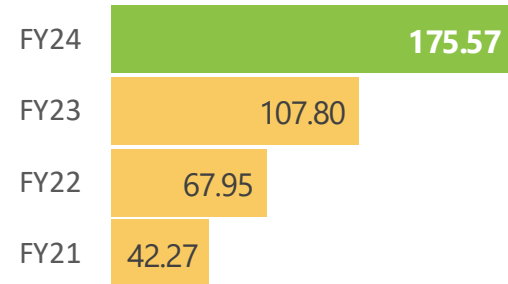


FINANCIAL DATA

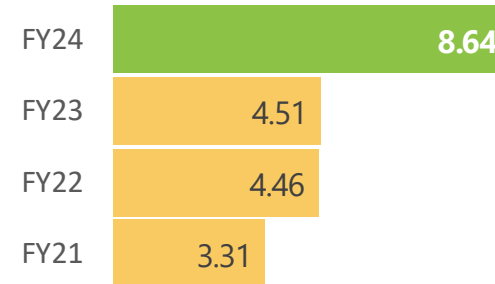
Revenue from Operations (₹ In Cr)



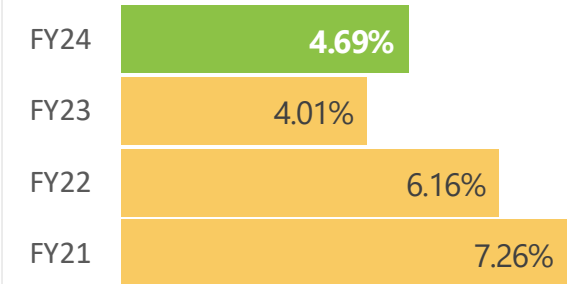
Total Cost of Production (₹ In Cr)



EBIDTA (₹ In Cr)

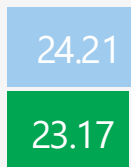


EBIDTA % (In %)

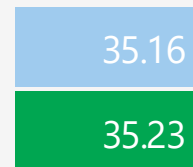


OPERATIONAL DATA

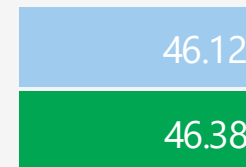
FY2021 (In MW)



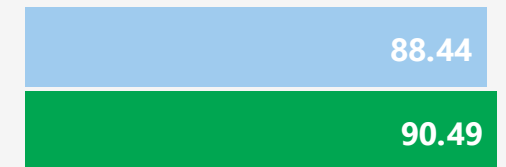
FY2022 (In MW)



FY2023 (In MW)

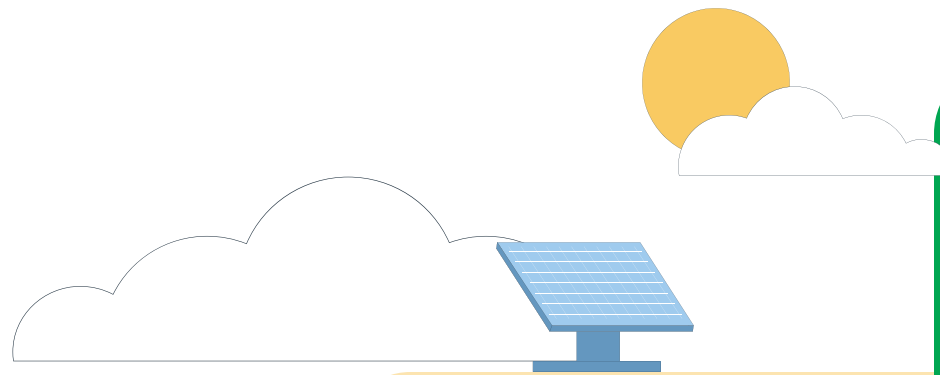


FY2024 (In MW)



KEYS: ■ Production (MW) ■ Sales (MW)

Future Roadmap



Introduce **Glass-Glass module** in the product profile, thus enriching products through marginal investment

Migrate to **topcon technology** from the existing mono PERC technology aligned with the broader technology shift through replacement of only one set of machines, ensuring minimal disruption

Unlock possibility to scale up to **750–800 MW** in the existing factory shed, thus capturing market opportunity at minimal lead time

Ramp-up capacity utilisation

01

02

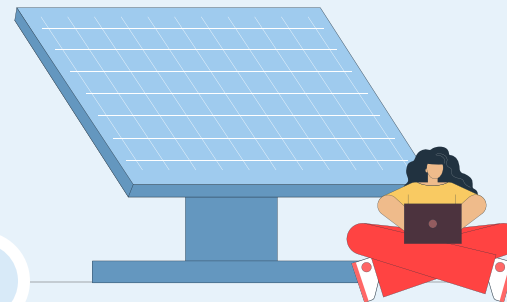
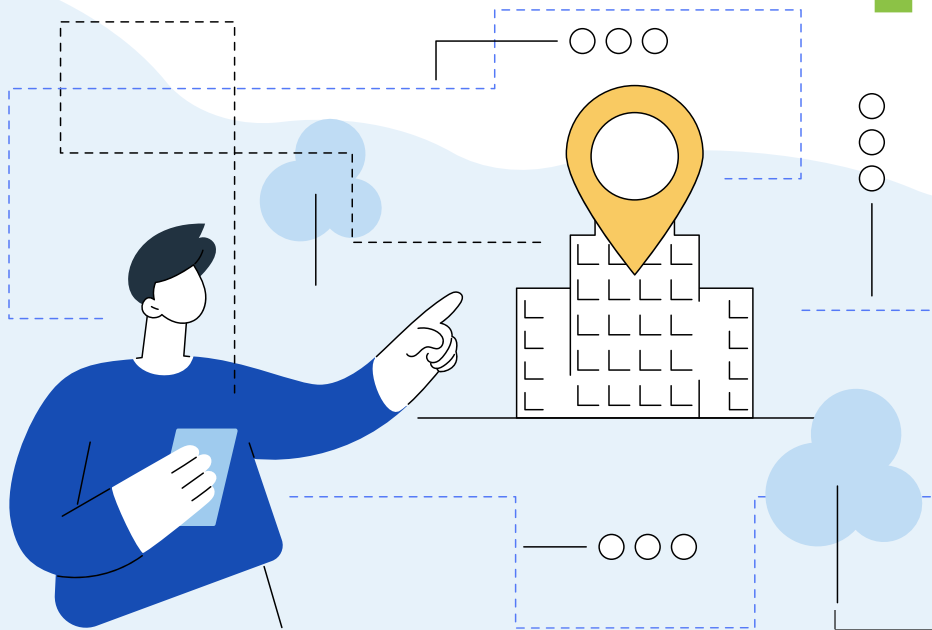
03

04



Poised for Leap

HR Solar has big plans to expand its current manufacturing capacity, *thus further augmenting its product portfolio.*



Through a new manufacturing facility, the company aims to expand production and achieve higher cost efficiency and scale, thus ensuring a stronger market presence and more effective customer service.



Thank You!



Contact Us

HR SOLAR SOLUTION PRIVATE LIMITED

Registered Office

14 Netaji Subhash Road,
1st floor, Suite no. 102
Kolkata – 700 001

Factory Locations

Fortune Industrial Park
Raghudevpur
NH – 6, Block – Uluberia II
Howrah – 711 322

Fab 2: Mouza: Khalisani
P.S. Uluberia & P.O. Khalisani
JL No. 96, Khalisani Gram Panchayat
Howrah - 711 307