



kWatt Solutions Pvt. Ltd.

economising renewables

Founder



Dr. Chetan Singh Solanki

Professor, Department of
Energy Science and
Engineering, IIT Bombay



**11+ Patents, 7 PV
focused books & 100+
Publications**

- **PhD** in Solar Cell Fabrication, IMEC Belgium; MTech, IIT-Bombay.
- **Principle Consultant, 150+ MWp (INR 1500 Crore)** Solar Power Plant
- Principal Investigator, National Centre for Photovoltaic Research and Education (**NCPRE**), **INR 47.5 Crore**, sponsored by MNRE
- Principal Investigator, Million Solar Urja Lamp project, **INR 500 Crore**, sponsored by National Clean Energy Fund, MNRE, Govt. of India.
- **Brand Ambassador** of Solar Energy of Madhya Pradesh Government.
- Chairman of Solar committee at All India Council for Technical Education (**AICTE**)
- Prime Minister's innovation award for SoULS project, first prize in Solar Chulha Design Challenge by ONGC, **three Guinness World Record**, two Young Scientist awards, CSIR Science and Tech. award, Excellence in RE Skilling, "**Outstanding Green Activist**", and many more.



महाराष्ट्र शासन



Director and Advisory Board



Mr. Pranav Pachori

- B.E in Civil , M.E in Structural Engineering from RGPV, Bhopal.
- Multi Entrepreneur
- 19 years of experience in various Industry such as Construction, Solar, Telecom, Education etc.
- Expert in Government Policy and Legal Frameworks
- Oversaw Execution of 50+ MW Solar Power Plant



Mr. G J Girase

- B.Tech, IIT Bombay; M.Tech, IISc; M. Info. Sc. UNSW, Sydney
- 40 years of experience in Design and integration of electronics and embedded systems in India and Australia
- Design, monitoring & characterization equipment for solar cells & modules at UNSW, Sydney
- 10 years in Solar Equipment Designing



Mr. Bikash Kumar

- M. Tech – IIT Madras
- Ex-Vice President, Lanco / Moser- Baer
- More than 25+ years of experience in Solar Industry
- Execution of 200+ MW Solar Power Plant
- Setup first Module manufacturing line for TATA-BP Solar

Introduction to kWatt Solutions

kWatt Solutions Private Limited is a company graduated from Society for Innovation and Entrepreneurship (SINE), IIT Bombay, founded by Prof. Chetan S. Solanki, renowned PV scientist.

Pioneered in Solar trainings at various levels, providing specialized Solar laboratory training tools, also consulting in PV Power Plants design and installations

An **ISO 9001-2015** certified company

www.kwattsolutions.com



Our Offerings



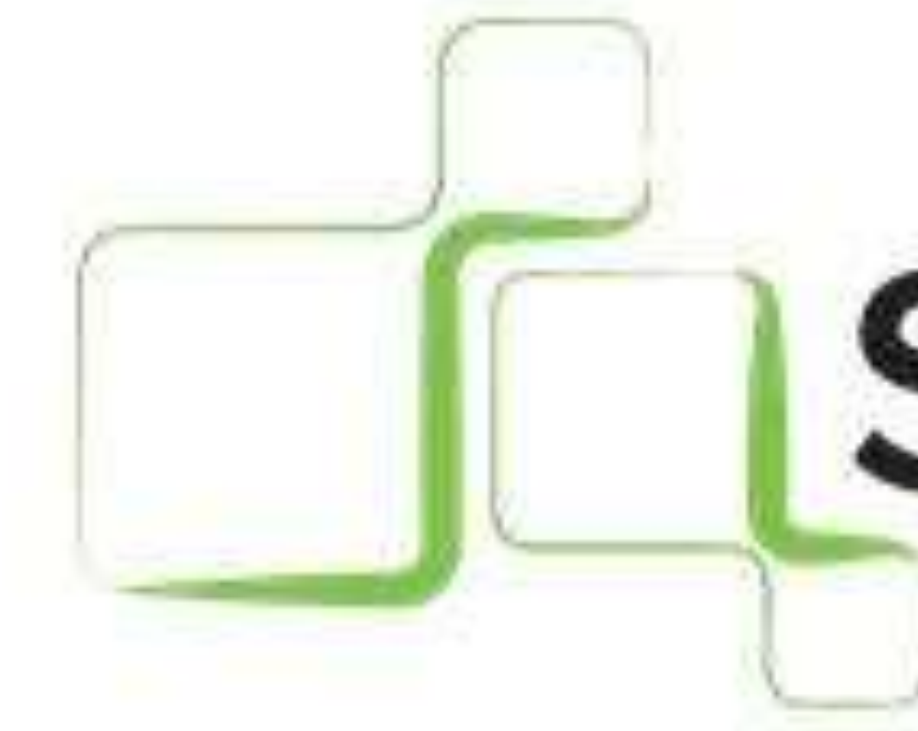
S-Rooftop

Clean and green energy by solarizing the rooftops in an efficient, cost-effective and technologically advanced manner



S-SparQ

Training in the field of Solar Energy from basics to advanced levels for students, professionals and organizations alike



S-Lab

Empowering people with Solar through practical hands on training using the state-of-the-art laboratory setups developed by kWatt

Achievements



S-Rooftop

Industry experience of over **5.5 MW** solar power plant installations & **150+ MW** consultancy.

Ongoing consultancy, installation for total **20+ MW** capacity plants



S-SparQ

Trained **6,500+** students, **1200+** faculties and **150+** professionals

Presence in more than 5 states & covered **100+ colleges. 16 training centers affiliated** by Skill Council for Green Jobs(SCGJ). **40 trainers certified by Ministry of Skill Development and Entrepreneurship(MSDE), GOI**



S-Lab

Provided complete Solar lab setups for **25 + institutions & universities PAN India**

Setting up center of excellence in different **locations, facilitating** experiential learning



Spotted Achievements

- ❑ We are **one of the top 10 empaneled training partner** with **National Institute of Solar Energy (NISE)**, and **Ministry of New and Renewable Energy (MNRE)**
- ❑ Has **16 affiliated training centers** and **40+ certified trainers** by **Skill Council for Green Jobs (SCGJ)**, **Ministry of Skill Development and Entrepreneurship (MSDE)**, **Government of India (GOI)**.
- ❑ Trained over **9000+ professionals** in market mode and Government of India sponsored programs.
- ❑ **First Solar PV training provider in Asia** to get affiliation from **NABCEP** (North American Board For Certified Energy Practitioners).
- ❑ We are one of the **top 10 partners in World Bank** funded scheme 'Suprabha', which aims to train SBI professionals, Utility Engineers and Prospect Rooftop Entrepreneurs.
- ❑ Ongoing **5+ years of partnership with TATA CSR** while becoming only one partner in India to impart Solar PV training.
- ❑ kWatt Solutions has installed about **5.5 MW of Solar PV plants PAN India**, they are currently executing a **440 kWp for L&T Group**.



Associations and Affiliation of kWatt

- **Ministry of Skill Development and Entrepreneurship**



- **Skill Council For Green Jobs**



- **National Institute of Solar Energy**



- **NABCEP (North American Board For Certified Energy Practitioners)**



- **Tata CSR**



Awards and Recognitions

- ❑ **Nationally Awarded** under “*Outstanding Contribution in Solar Training Domain, 2017*” by Skill Council for Green Jobs (SCGJ) at **Inter Solar** in December 2017
- ❑ *Runner Up* at RE Awards in the category “**Excellence in RE Skilling**” for consecutive years 2018 and 2019.
- ❑ *Empaneled Channel Partner* with Ministry of New and Renewable Energy (**MNRE**)



First Largest Rooftop Solar Power Plant in Indore, Madhya Pradesh at Index Medical College was executed by kWatt

- *kWatt Solutions have installed and commissioned the **first largest Solar Rooftop Solar Power Plant** in Index Medical College, Indore, Madhya Pradesh.*
- *The total capacity of this plant is **421 kWp***
- *The Project was completed with **3 months duration**.*



Executed a 50 kWp Off- Grid Solar PV Plant at Sikkim China Border for Indian Army

- *kWatt Solutions have installed and commissioned the ground mounted Solar Power Plant in Sikkim at the altitude of 14,000 ft.*
- *The plant is giving electricity supply to the bunkers of Indian Army at the Sikkim China Border*
- *The Project was a battery based system under IIT Bombay*



Installed Solar Plant for builders such as L&T Realty, Lodha and JP North

- *kWatt Solutions have installed and commissioned the Rooftop Solar Projects for Residential and Commercial towers of **L&T Realty** in Mumbai, Ongoing **500 kWp** For **L&T Group***
- *kWatt Solutions has Installed a 2000 LPD Solar Water Heater for a **70 Floor High rise Tower** in Mumbai for **Lodha Group***
- *The Solar Power Plants Installed for **JP North** is a Ground mount **120 kWp** Solar Plant for Sales office utility*



Rooftop Solutions for various Institutions and Schools

- *kWatt Solutions have installed and commissioned many Rooftop Solar Projects for Schools, Engineering Colleges, Medical Colleges and various group of Institutions.*
- *Some of the top institutions are IIT Bombay, KJ Somaiya, Mumbai Public School, Index Medical College, Medi-caps, Guru Nanak Group of Institutions, etc*



Consultancy work for MW level projects

- *kWatt Solutions have done consultancy for Solar Parks and Rooftop Solar Projects for Government organizations, Colleges and various group of Institutions.*
- *Some of the top clients are **Municipal Corporation of Greater Mumbai, Ministry of New and Renewable Energy (MNRE), Government of India, IIT Bombay, etc***



World Bank Funded Suprabha Training Program



- ❑ *Shortlisted in Top 10 for Funding from **World Bank***
- ❑ *Entrepreneur Development Program- Trained more than **40 Entrepreneurs***
- ❑ *Grid Engineers Training- Trained 40 Utility Officers from **Jodhpur DISCOM, Government of Rajasthan***



TATA STRIVE CSR Funded Training Program



- Established TATA STRIVE extension center in **Bangalore, Indore and Mumbai**
- Trained **350+** ITI candidates under Solar PV Installer QP
- **Placed 80%** students at major Solar recruiters such as Adani, Tata, Waaree, Sunedison etc
- Group of students were shortlisted for Installation Competition held by SCGJ at Hyderabad



MNRE Funded Suryamitra Skill Development



सत्यमेव जयते
Ministry of New and Renewable Energy
Government of India



- In top 10 Empaneled Training Partner with NISE for execution of Suryamitra Skill Development
- Conducted **75+** batches PAN India
- **2500+** ITI/ Diploma beneficiaries
- **Above 60%** placement achieved in top Solar Industries.
- **16 Affiliated centers across 6 major states**



SOLBIZZ AND SOLARINSTALL



- ❑ *Solbizz- Understanding Solar Business Program*
- ❑ *Trained 200+ aspiring entrepreneurs in solar business*
- ❑ *60+ have already started their own firms*
- ❑ *40+ collaborated with kWatt as a Channel Partner*
- ❑ *SolarInstall- Solar PV Hands-On Installation and Design Course*
- ❑ *Trained 400+ working Professional from various industries*
- ❑ *Affiliated with North American Board of Certified Energy Practitioners (NABCEP) for International Certification*



Solar Energy Centre (S-Lab)

- ❑ *Objective of setting up the solar Lab is to help students get the practical knowledge parallel to the theoretical training*
- ❑ *More than 12 Lab setups allow students to perform 30+ experiments after the theoretical skills development*
- ❑ *Research & Development and Faculty Development Training*
- ❑ *Installed the Solar Lab at IIT Bombay, JNTU, Nalanda, BSDU, Pt. Shankar Shukla University etc.*



Scale Of Opportunities in Solar PV

Solar Potential in India

- ❑ Government of India target of 100 GW of Solar Power Plant by 2022, **only 57 GW** as of 1st June 2022
- ❑ 40 GW of the 100 GW is Rooftop Solar Power Plant.
- ❑ Today the total installed capacity of Rooftop Solar Plants is less than 2 GW total in India.

Supply

- ❑ There are only 2-3 value added players in this specific sector for supply of Solar panels.
- ❑ Lack of knowledge in the market leading to poor installation
This creates great opportunity for kWatt which has Quality as its USP

Demand driving force:

- ❑ Government introduced benefits for investors such as **Accelerated Depreciation benefit of 80%**,
- ❑ **Income Tax benefits.**
- ❑ **Government pushing for Renewable Purchase Obligations**
- ❑ Increasing scale has made solar electricity **cheaper** than utility electricity leading to large scale adoption

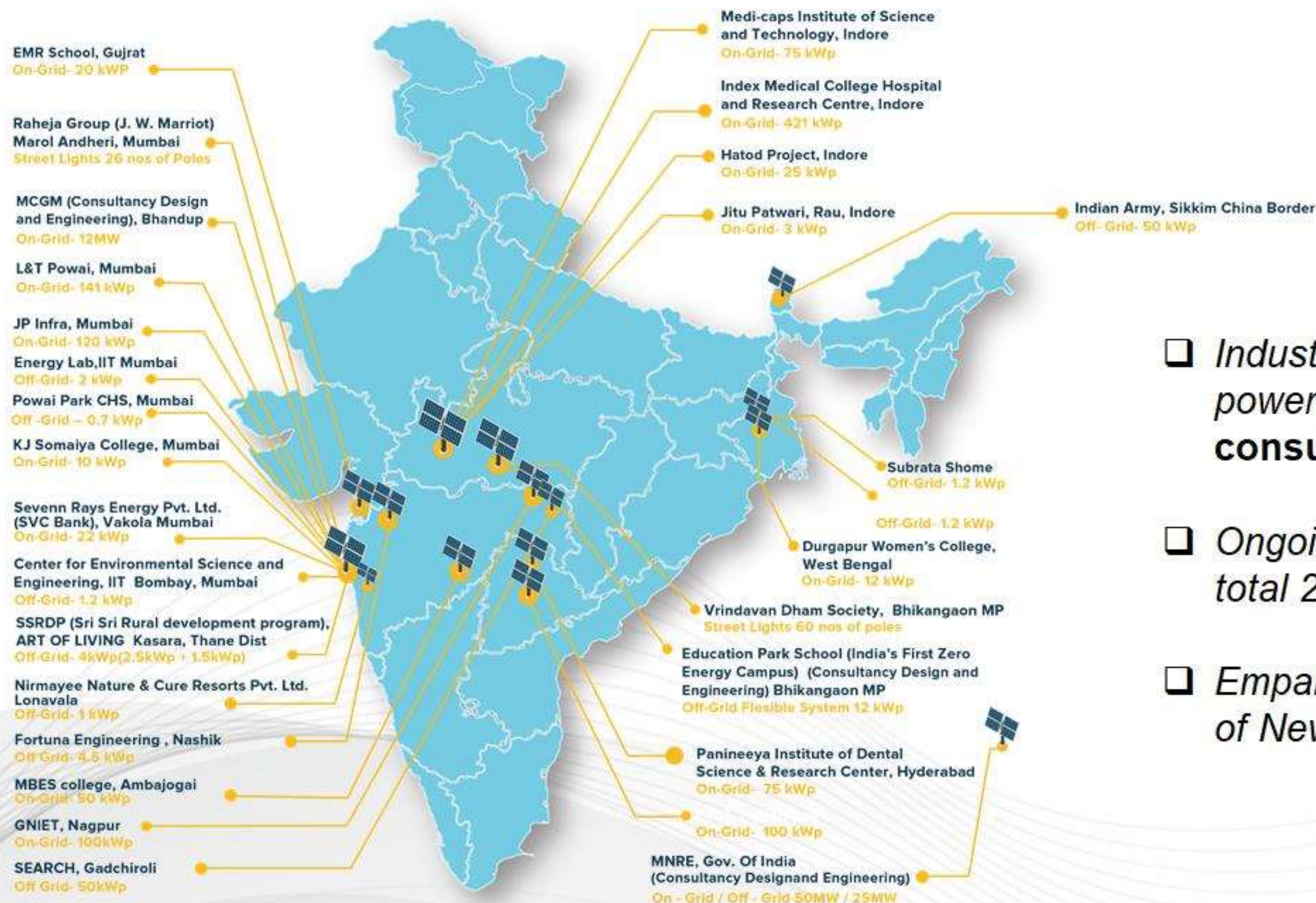
Year Cumulative Capacity (in MW)

2010	161
2011	461
2012	1,205
2013	2,319
2014	2,632
2015	3,744
2016	6,763
2017	12,289
2018	21,651
2019	28,181
2020	34,627
2021	40,085
2022	56,951

kWatt Solution's Unique Selling Points

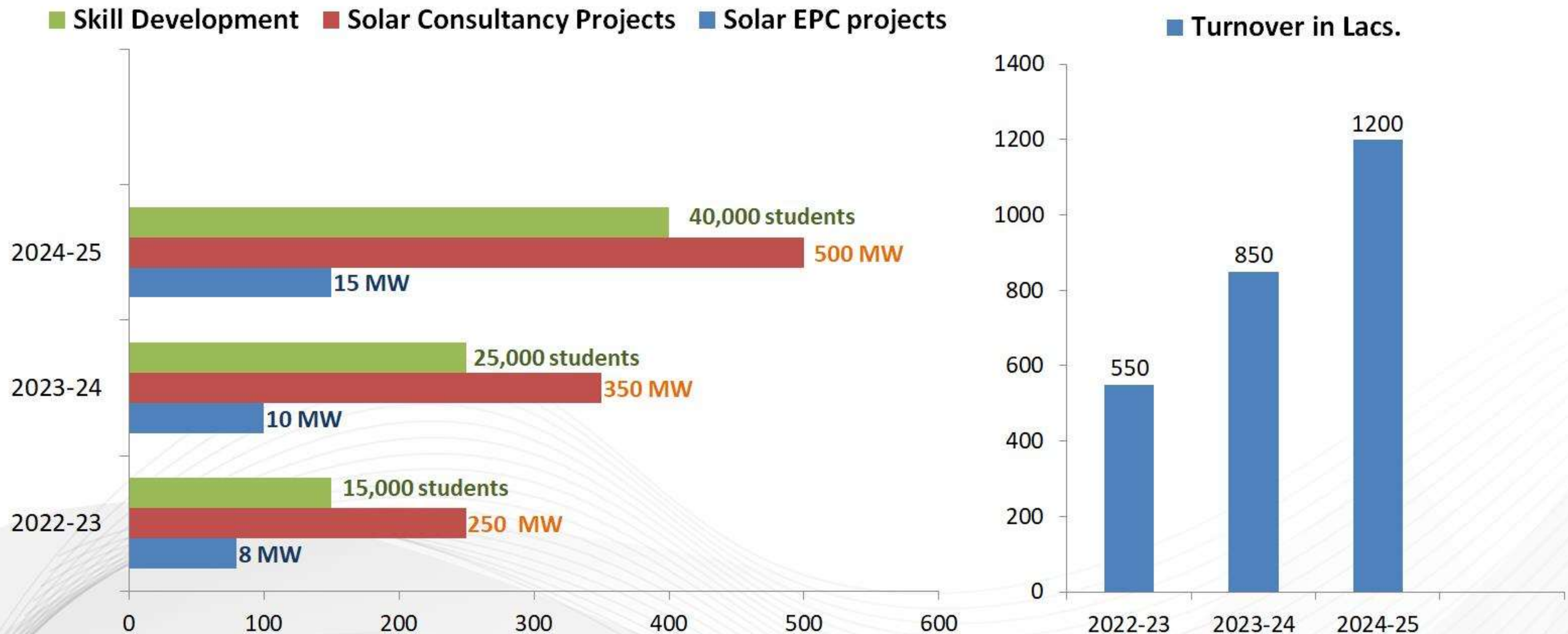
Parameters	kWatt Solutions
Installed Capacity	kWatt Solutions has a vast experience of installing and consulting over 155 MW of solar projects
In-House design and Engineering	The in-house capability of kWatt is to customize the plant design and anchoring system with much ease that can suit specific site conditions and meet the challenges of local environmental forces
Exeriented team of IIT'ians and industry experts	The core team of kWatt Solutions has vast cumulative experience of over 80 years. It helps to assess any big scale project from the perspective of sturctural requirement of wind and generation of the plant
Quality Assurance	kWatt's USP is no compromization in the quality we offer. We support our optimized design with engineering concepts and software simulations.
Cost Effective	I house design capability ensures that kWatt solutions designs are optimized to suit the project specific requirements. This allows us to be cost efficient
After sales services	kWatt Solutions offers one year free O&M services of the installed project and lifetime technical guidance.

kWatt Solutions Solar Projects Across India & Beyond



- ❑ Industry experience of over **5.5 MW** solar power plant installations & **150+ MW** consultancy
- ❑ Ongoing consultancy & installation for total **20+ MW** capacity plants
- ❑ Empaneled Channel Partner with Ministry of New and Renewable Energy (MNRE).

Growth plan till the year 2025



Solar PV Consultancy and EPC projects list

No	Location	Project	M Wp / k Wp	Organisation	Status
1	Andaman and Nicobar Islands	Consultants for Solar Power Project	50 MW + 25 MW	Andaman and Nicobar Islands, Government of India	Completed
2	Andaman and Nicobar Islands	Consultants for Solar Power Project	12 MW	Municipal Corporation of Greater Mumbai (Government of Maharashtra)	Completed
3	Mumbai, Maharashtra	Consultants for Solar Rooftop PV Project	1 MW	IIT-Bombay	Completed
4	Indore, Madhya Pradesh	Rooftop Solar PV Plant	421 kWp	Index hospital	Completed
5	Mumbai, Maharashtra	Rooftop Solar PV Plant	141 kWp	L&T Realty	Completed
6	Mumbai, Maharashtra	Ground Mount Solar PV Plant	120 kWp	JP Infra Constructions	Completed
7	Hyderabad, Telangana	Rooftop Solar PV Plant	100 kWp	GNIT	Completed
8	Mumbai, Maharashtra	Consultants for Solar Rooftop PV Project	95 kWp	Residential Society	Completed
9	Indore, Madhya Pradesh	Rooftop Solar PV Plant	75 kWp	Medicaps Institute	Completed
10	Hyderabad, Telangana	Rooftop Solar PV Plant	75 kWp	Panineeya Mahavidhyalaya Institute of Dental S R centre	Completed
11	Mumbai, Maharashtra	Rooftop Solar PV Plant	56.8 kWp	L&T CSR	Completed
12	Ambejogai, Maharashtra	Rooftop Solar PV Plant	50kWp	MBES COE, Ambajogai	Completed
13	Gadchiroli, Maharashtra	Rooftop Solar PV Plant	50 kWp	SEARCH Foundation	Completed
14	Sikkim China Border	Ground Mount Solar PV Project	50 kWp	IIT Bombay and Indian Army	Completed

Solar PV Consultancy and EPC projects list

No	Location	Project	M Wp / k Wp	Organisation	Status
15	Mumbai , Maharashtra	Rooftop Solar PV Plant with innovative super structure	22.5 kWp	Shamrao Vitthal Rao Cooperative Bank	Completed
16	Ahwa, Gujarat	Rooftop Solar PV Plant	20 kWp	EMR School	Completed
17	Durgapur, West Bengal	Rooftop Solar PV Plant	12 kWp	Women's College	Completed
18	Khargone, Madhya Pradesh	Rooftop Solar PV Plant	12 kWp	Education Park	Completed
19	Mumbai, Maharashtra	Rooftop Solar PV Plant	10 kWp	KJ Somaiya Polytechnic	Completed
20	Mumbai, Maharashtra	Rooftop Solar PV Plant	10 kWp	Industrial Estate	Completed
21	Nashik, Maharashtra	Rooftop Solar PV Plant	4.5 kWp	Residential	Completed
22	Kasara, Maharashtra	Rooftop Solar PV Plant	4 kWp	Art of Living	Completed
23	Mumbai, Maharashtra	Rooftop Solar PV Plant	0.7 kWp	Residential	Completed

Projects Under Execution

No	Location	Project	M Wp / k Wp	Organisation	Status
1	Bhinmal, Rajasthan	Consultants for Solar Ground mount project	18 MWp	Rajasthan DISCOM	On-Going
2	Bhubaneswar, Odhisha	Consultants for Solar Rooftop PV Plant	2.2 MWp	Commercial	On-Going
3	Mahad, Maharashtra	Rooftop Solar PV Plant	700 kWp	Industrial	On-Going
4	Indore, Madhya Pradesh	Ground Mount Solar PV Plant	500 kWp	Industrial	On-Going
5	Thane, Maharashtra	Rooftop Solar PV Plant	440 kWp	L&T Infotech	On-Going
6	Hyderabad, Telangana	Rooftop Solar PV Plant	385 kWp	Commercial	On-Going
7	Vapi, Gujarat	Rooftop Solar PV Plant	350 kWp	Industrial	On-Going
8	Mumbai, Maharashtra	Rooftop Solar PV Plant	19 kWp	L&T Realty	On-Going
9	Mumbai, Maharashtra	Rooftop Solar PV Plant	12 kWp	L&T Realty	On-Going

kWatt Turnover over the years



Government of India Skill Development Schemes kWatt has Executed



National Urban Livelihoods Mission
Ministry of Housing & Urban Poverty Alleviation



THANK YOU!



+91 7718897038/ 7718897036
www.kwattsolutions.com



How do you help the environment:

for every 100 kW of Solar on your roof , you reduce emissions equivalent to

- 3741 Tons of CO₂ every year
- Planting 5985 mature trees