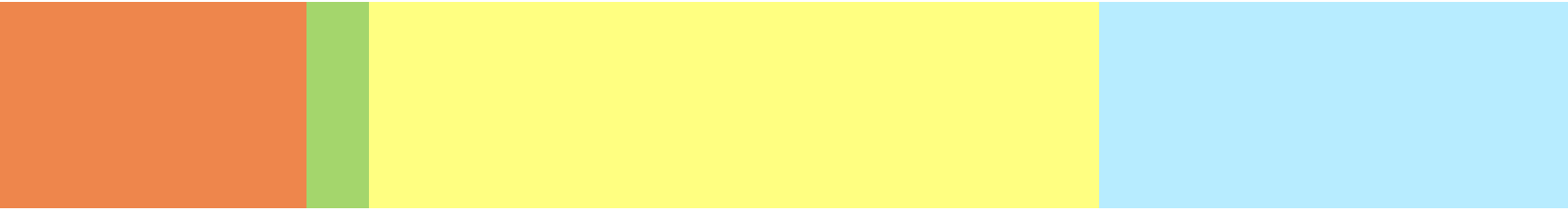




**kWatt Solutions Pvt. Ltd.**  
economising renewables

## [Corporate Profile]





## VISION AND MISSION

*"kSPL is a technology driven company focusing on energy optimization and technology customization to provide economic renewable energy solutions by developing and nurturing network of entrepreneurs"*

## ABOUT US

kWatt Solutions Private Limited (kSPL) is a company incubated in Society for Innovation and Entrepreneurship or SINE at renowned institute, Indian Institute of Technology (IIT) Bombay.

kSPL is a technology driven company with a vision to “solarize” the future of India and economize renewables. With the expertise of a strong technical team comprising of IIT Bombay graduates having domain expertise, kSPL offers customised comprehensive end to end solar energy solutions right from design and engineering to installation and maintenance with in-house training for newbies in the solar industry. kSPL was initiated with the idea to cater to the huge open market of the power consumers in the kiloWatt range, which also resonates with the company's name. Today, kSPL has also tapped into the megawatt scale power generation providing turnkey solar energy solutions by redefining the concept of “Solar Park”.

kWatt Solutions is engaged in providing inimitable products and services to congregate the needs of nation in bridging the electricity deficit. The company provides solutions to electricity supply based on solar photovoltaic (PV) technology.

The initiative is to work towards ‘PV system on demand’ in which the company resolute to provide kilowatt range PV systems anywhere across the country with immediate delivery on demand, with surety of local service to the customer with focusing on energy optimization and

technology customization to endow with economic renewable energy solutions by creating and nurturing network of entrepreneurs.



**Dr. Chetan Singh Solanki**

Department of Energy Science and Engineering, IIT Bombay,  
Principle Investigator, National Center for Photovoltaic Research  
and Education & Chairman, kSPL

## MESSAGE FROM CHAIRMAN

*"India is not rich in conventional fuels like oil, gas and nuclear. Our dependence on import of these fuels and ever increasing prices makes the electricity unreliable and expensive. There is need to demonstrate and practice alternative electricity solutions which are environment friendly, and, more importantly, cost-effective. With advancement in solar Photovoltaic technologies and significant reduction in the prices, solar electricity, even today in many sectors, is an economically viable alternative to grid electricity.*

*Due to lack on appropriate and accurate information, many people are not aware about the fact that solar electricity is cheaper for them than the grid electricity. Lets earn money by generating solar electricity. Lets solarize our future ”*



## CORE TEAM OF KSPL: BACKGROUND AND EXPERTISE

### BOARD OF DIRECTORS:

- Prof. Chetan Singh Solanki
  - Prof., IIT Bombay (Ph.D, IMEC Belgium)
  - 11+ Patents, 40+ International Publication, 4 Books
- Mr. Gaurav Tare
  - Research experience in NCPRE, IIT Bombay
  - 1 MW Grid Connected PV Plant at IIT Bombay
- Mr. Sumit Chhazed
  - Interviewed under NIC, PMO, India (IIT-Bombay Graduate)
- Mr. Nikhil Jain
  - Interviewed under NIC, PMO, India (IIT-Bombay Graduate),
  - Techfest Core Team 2009-10

### SENIOR MANAGEMENT TEAM:

- Mr. Atul Kumar Jain
  - Ex- R&D Engineer, Solar SemiConductor (IIT-Bombay Graduate)
- Mr. Pranav Pachori
  - Entrepreneur
- Mr. Shreyans Gandhi
  - PhD from IIT Bombay, 4+ Yrs of Exp. in Electronic & electrical Engineering

### ADVISORS BOARD:

Mr. G J Girase  
Ex-Finance Director Mahagenco

Mr. Bikash Kumar  
Ex-VP, Lanco/MoserBaer

Mr. Vaman Kuber  
Consultant NCPRE, Founder Sol2Sys

Mr. Surendra Sardesai  
Founder, Varsha Switchgears



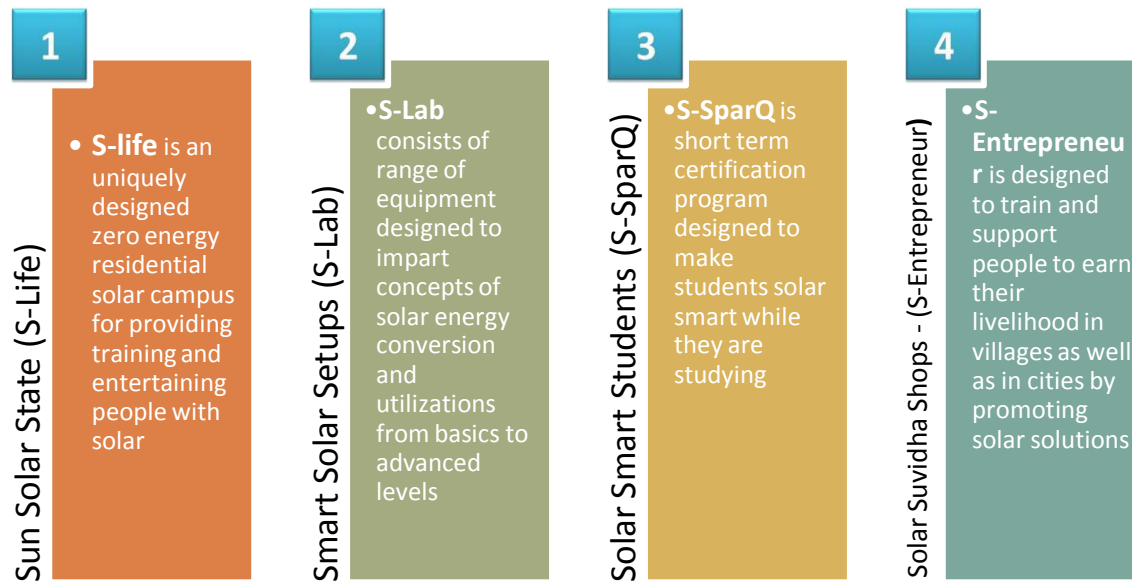
## TECHNICAL EXPERTISE: PATENTS

Sr. No.	Description
IP#1	360 degress Sun tracking and Self-cleaning of Solar PV panels (1838/MUM/2010), C.S. Solanki and R.G.Tejwani filed June 2010
IP#2	Integrated Apparatus for education of Solar Cells (3719/MUM/2011 dated 30/12/2011) B.M. Arora et al.
IP#3	LED based solar cell spectral response meter (2869/MUM/2012 dated 28/09/2012), B.M. Arora et al.

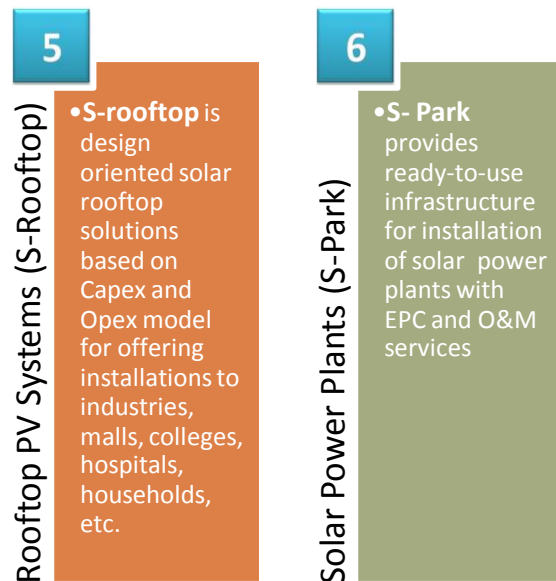
**Note:** More than 15 patents and know hows owened by Dr. Chetan Singh Solanki are considered under technological edge for kSPL

## VERTICALS OF KSPL

### EMPOWERING PEOPLE WITH SOLAR



### SCALING UP SOLAR





## SUN SOLAR STATE (S-LIFE)

A uniquely designed zero energy residential solar campus for providing training and entertaining people with solar.

*Let's get sun-kissed...*



The applications are run with the help of devices which are energised by solar power.

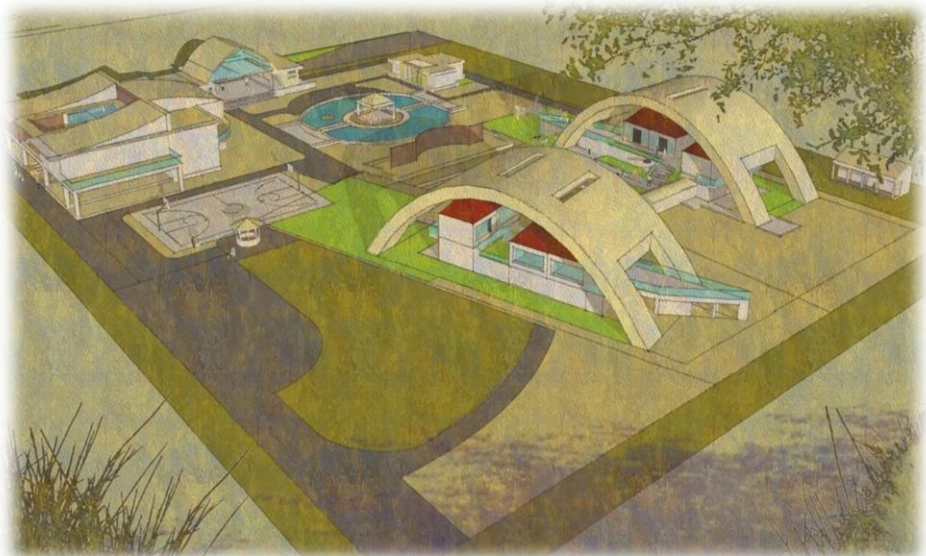
Typical daily activities like bathing, washing clothes, cooking, commuting, travelling, heating or cooling are all supported by solar power, either through activities or appliances.

A concept designed for providing training on solar energy conversion technologies to school and college students, technicians, engineers, entrepreneurs and professionals from industry.

*Harnessing the power of Sun...*

### CONCEPT

Designed on the principle of 'first avoid', then 'minimize' and then 'generate' with a vision to give an interactive hands-on training about solar energy technologies, this training center cum recreational resort is powered by solar energy.



## SMART SOLAR SETUPS (S-LAB)

kSPL powered S-Lab offers a comprehensive range of laboratory equipment designed to impart the concepts of solar energy conversion technology and utilization from basic to advanced levels. S-Lab aims to fulfill the gap of the required skilled engineers in the solar industry.



S-Lab comprises of a range of nine state-of-the-art laboratory setups developed by the inhouse kSPL team and manufactured with precision. Excel in the solar field with S-Lab

### Unique features of S-Lab

- Automation for mundane tasks
- Cost effective modular laboratory equipment
- Single setup for range of experiments
- Ecosystem to replicate real life situations
- Ease of access
- Excellent customer support

*Experience hands-on solar training...*

For the first time in India, kSPL introduces **Solar Cell Fabrication** Laboratory Setup as a part of S-Lab.

S-Lab aims to be a brand in itself bringing value to the college/university and students.

[www.kwattsolutions.com](http://www.kwattsolutions.com)





## Solar Smart Students (S-SparQ)

A short term certification program designed to make students solar smart while they are studying. kSPL powered S-SparQ aims to train people in the solar energy field to meet the requirements of the National Solar Mission and make the students 'Solar Smart' while they explore the concepts of solar energy conversion technologies.



### S-SparQ features:

- 2 day Basic Course and 4-to 6 days Advanced Course with focus on fundamentals
- Customised training modules
- Hands-on practical sessions and demonstrations
- Group Discussions and Site Visits
- Assignments and thorough evaluation
- Range of solar product available for learning

*Light the SparQ within you...*

With S-SparQ, students have an opportunity to get corporate internships in the solar energy sector and embark on a successful career ahead. S-SparQ is the right launchpad for students interested in the solar energy sector.

[www.kwattsolutions.com](http://www.kwattsolutions.com)



## SOLAR SUVIDHA SHOPS (S-ENTREPRENEUR)

An initiative to establish and utilize the solar market in rural and urban India by creating a network of local Solar Entrepreneurs. It aims to create a wave of solar awareness by reaching out to remote locations and generate employment for people by providing technical training.



### Why become an S-Entrepreneur with kSPL?

- Technical & Practical Training to every selected S-Entrepreneur
- No Investment Required Stock Provided on Credit
- Marketing Support from kSPL
- 0% Risk
- Inventory managed at RM level
- Branded & cost effective range of Solar Products
- Already established market & solar awareness
- A dedicated network will ensure you are up-to-date with the latest happenings

*Enlighten and be the change...*

From supplying solar lanterns in a remote location in Ladakh to installing solar water heaters in a village in Rajasthan, our S-Entrepreneurs will be equipped with the right expertise and acumen. Join us and develop your business acumen with us.



## ROOFTOP PV SYSTEMS (S-ROOFTOP)

A unique design oriented solar rooftop solutions based on Capex and Opex models for offering installations to industries, malls, colleges, hospitals, households, etc.



With guaranteed Solar Plant Performance and huge monetary benefits, S-Rooftop is the right step towards the solar revolution.

kSPL powered S-Rooftop is a unique initiative which enables the consumer to pay a monthly electricity bill at a reduced tariff compared to the conventional electricity.

*Embrace the sun and utilize your rooftop wisely...*

### **How do YOU help the Environment?**

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

- 126 tons of CO<sub>2</sub> every year
- Planting 6,000 mature trees

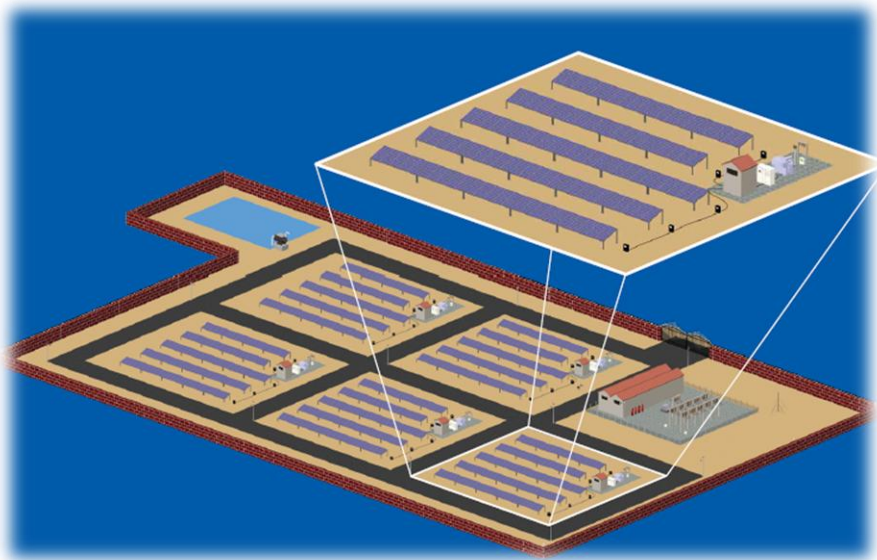
[www.kwattsolutions.com](http://www.kwattsolutions.com)





## Solar Power Plants (S-Park)

Now, you can "invest" in the sun and own your solar power plant. kSPL powered S-Park provides ready-to-use infrastructure for installation of solar power plants with EPC and O&M services. From Site Selection to Commissioning & maintaining the plant upto 25 years, kSPL is hand-holding the customer throughout the process



### Why invest in Solar Power?

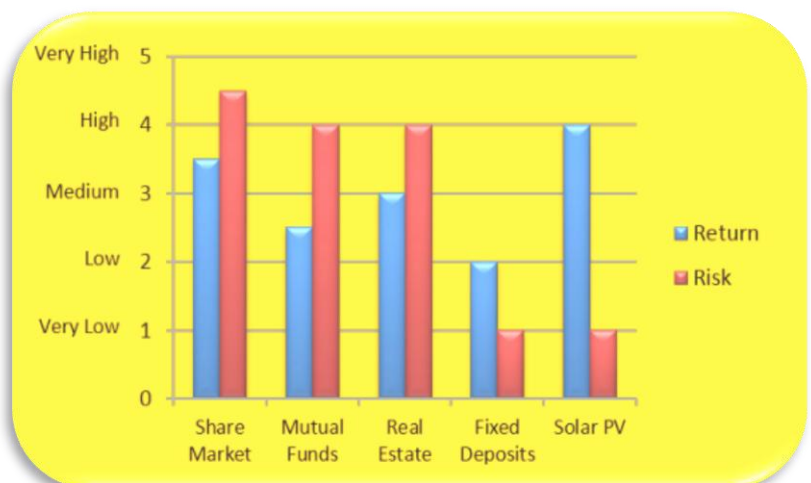
- Gain high returns with no risk
- The solar tariff is fixed for 10-25 years while conventional electricity rates are increasing at the rate of min. 5-10% per year
- Various Government Policies & Higher Cost of Generation of Power Making Solar Affordable

*"The Stone Age did not end for lack of stone, and the Oil Age will end long before the world runs out of oil."* - **Sheikh Zaki Yamani**, Oil Minister, Saudi Arabia

### kSPL solar park has the technical edge -

- Better PV module: Higher generation
- Inverters for lower cost of operation
- Most optimal design for highest gain
- Power evacuation with high reliability
- Regular Operation and Maintenance

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## Experience of kSPL: Projects executed

### SOLAR POWER PLANT INSTALLATIONS AND CONSULTANCY PROJECTS:

- **Principle Consultant, PMC, 125 MW Solar PV Project: INR 1500+ Crore**
- 1 MW PV Project, IIT-Bombay: INR 8+ Crore
- Education Park, (India's First Zero Energy Campus): INR 5+ Crore
- Consultation for Solar project of more than 10 MWp
- Consultation for Hybrid Solar+Hydro System for Moksha Project at Karjat, Maharashtra
- 100 kWp Grid Connected Rooftop Solar PV Plant at GNIT college at Hyderabad, Andhra Pradesh
- 100 kWp Grid Connected Rooftop Solar PV Plant at GNIET college at Nagpur, Maharashtra
- 75 kWp Grid Connected Rooftop Solar PV Plant at Panineeya Mahavidhyalaya Institute of Dental S R centre at Hyderabad, Andhra Pradesh
- 22.8 kWp Rooftop Grid Connected Solar PV Plant with innovative super structure at Shamrao Vitthal Rao Cooperative Bank, Mumbai
- 5 kWp Grid Connected Solar PV Plant at Dr. Batra Hospital, Sonpath, Haryana
- Off-Grid Solar PV System along with centralized Solar Streetlight Solution, Nirmayee Nature Cure Resorts Pvt. Ltd., Lonavala, Maharashtra
- Off-Grid Solar PV System Centralised LED lighting System for apartment illumination at Mumbai
- Innovative Centralized Solar PV System for street lighting solution at Vrindavan Dham Society, Bhikangaon, Madhya Pradesh
- Stand alone Solar PV Street lighting solution at Hotel J.W. Marriott, Mumbai
- And many more Grid Connected, Off-Grid, Solar Streetlights and solar water heaters supplied for residential and commercial applications



#### SOLAR ENTREPRENEURS:

- Leading Million Light Project : INR 50+ Crore
- Rural Solar Entrepreneurship network in Madhya Pradesh, Maharashtra and Rajasthan with more than 84 entrepreneurial centres

#### SOLAR LABS AND EDUCATION:

- Designed and Installed the state-of-the-art Solar Laboratory setup at IIT Bombay : INR 60+ Lacs
- S-SparQ solar training programmes for various reputed Engineering Institutes like GNIT Hyderabad, VNR VJIEET Hyderabad, Somaiya College Mumbai and others.
- DC-DC conversion set up and MPPT Tracking System for GNIT college at Hyderabad, Andhra Pradesh
- Spectral Response Set up for VNR VJIEET college at Hyderabad, Andhra Pradesh
- In house designed 12 Lab set ups for complete training for undergraduate and post graduate students on Solar Photovoltaic concepts and fundamentals.
- Innovative structure designs for single and double axis tracking systems and system in box for plug and play Solar PV systems for training concepts

#### OTHER SOLAR PRODUCTS:

- Solar charger for various battery charging applications like mobile, tablets, laptops etc.
- Multi purpose charger with inbuilt study lamp, torch and mobile charging
- Mini Solar home system with multiple LED lights and fans
- Solar bicycle with pedal assist mode
- Solar fountain for aesthetics of institutes, residential societies, commercial centres etc.
- Solar dustbin to reduce resource allocation for garbage collection
- Solar water pumps for agricultural, residential and industrial applications

## GROWTH OF KSPL AND FUTURE PLANS:

In the 1.5 years since its conception, kSPL has successfully established the business and lit up the lives of as many as 50 households and industries and successfully executed many projects in the kW range with the latest being a 100 kWp Grid connected solar plant at Gurunanak Institutions in Hyderabad. kSPL has grown rapidly from a small team of 3 in 2013 to a diverse multifunctional team of 30 in 2015 comprising of design, engineering and marketing domains. Currently kSPL has a turnover of over INR 2.5 Cr, which, Prof. Solanki believes will grow exponentially owing to the ever increasing demand of solar power projects in India in the kW and MW scale. About future plans, Prof. Solanki expressed the idea to identify the relation between the current six verticals and capitalize on it by developing a network of entrepreneurs through intensive training which would help fulfill the gap of required skilled personnel to achieve the ambitious 100GW installed capacity of solar power by 2022 as envisioned by MNRE.

## KSPL REACH ACROSS THE COUNTRY:

Having set its base in IIT Bombay, Mumbai, kSPL plans to expand rapidly to other cities too owing to the increased demand of solar power throughout the country. A branch office in Indore is currently operational. The reach of kSPL across the country will ensure its stronghold in the solar energy space and ease the operations and maintenance of the system installations

For enquiries and other details, please check our website <http://www.kwattsolutions.com/>

#### CORPORATE OFFICE

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