



### Our power source is 4.6 billion years old. —— Our expertise is 46+ years old. ——

SAEL group begins with Rice Milling and the Within a short span of time, SAEL 197' 999 entrepreneurial dream to make the best rice witnesses tremendous growth and grain available to homes around the globe becomes a Pvt. Ltd. company SAEL gets incorporated as a limited company, Establishes Rice Mill (50 TPH) & Solvent undertakes its first major diversification by Extraction Plant (500 TPD) in UP and sets up 2004 2006 setting up an integrated processing plant multiple warehousing facilities with and biomass based power plants in UP 15 Lakhs metric ton storage capacity 200+ MW of Ground Mounted & Rooftop As part of experience in Renewable Energy Solar Power Project in IPP & EPC mode has SAEL enters Solar IPP business by setting 2012 2019 been executed till now. Also, SAEL is in the up a 1MWp Solar PV Power Project in process of developing more than 100 MW Haryana under JNNSM Scheme Solar Projects in different states

### About us

Solar power is clean, pure and limitless. In fact, every hour the sun beams enough energy onto Earth to take care of the world's energy needs for a whole year.

Today the world, as well as the nation, is waking up to the huge potential of solar power.

We, at SAEL, are committed to bring you economical and reliable solar power. We have years of experience, the complete knowhow and cutting-edge technology in harnessing solar power. Further we are a diversified group established in 1971, with an annual turnover of approx Rs. 3000 Cr and A- credit rating from CRISIL.

Solapur, Maharashtra Cumulative Capacity : 30 MW



SAEL's expertise in solar energy is technology agnostic. We cover everything, which includes
Ground Mounted, Rooftop, Canal Top, Trackers, Floating and any customised model.
We have a team with a cumulative experience of more than 1 GW.
In fact, SAEL has a pan India presence in sales and service of Solar Energy Solutions.
Needless to say, we employ the latest software for design engineering and maintenance.







### **IPP BUSINESS (Utility/Rooftop/Open-Access)**

As an Independent Power Producer (IPP), we sell electricity to government utilities, commercial and industrial customers. The sun being a renewable energy source, there is no input cost volatility on solar energy tariff.





#### **Our Approach**

supply is never disrupted

#### **Optimized Design Engineering:**

We carefully examine the site conditions, customer requirement and undertake the load analysis

**Centrally Monitored Operation & Maintenance:** We carry out corrective and preventive maintenance so that the solar power

#### **Customized Financial Modelling:**

We have tailor-made payment options that will perfectly suit your requirements





**Cumulative Capacity : 10 MW** 



## **EPC Offerings**

Turnkey Engineering Procurement and Construction Services with Operation & Maintenance support.



# **CORE FOCUS: QUALITY & SAFETY**

As a solar EPC Contractor, our priority is to optimize the project cost, and reduce the lifetime cost of energy, ensuring longer system life and high project performance.

We use only the highest quality components, including tier 1 modules backed by linear degradation warranties, and other components supplies We match the system design with the location requirements, including wind speed, corrosion risks, maintenance requirements and other factors Our in-house engineering, procurement, projects and operation & maintenance teams work together closely on each project design We undertake rigorous shadow analysis to optimize the plant design, taking into account the shadows from nearby objects throughout the year

#### **SAEL Safety Directive:**

- We adhere to safety guidelines above and beyond customer requirements
- We work consistently with contractors who religiously follow safety guidelines
- We have a comprehensive approach to ensure safety, so that installation runs smoothly for years
- We strictly adhere to relevant safety & labour laws



### SOLAR WATER PUMPING SYSTEM

The system runs on the power generated using solar PV (photovoltaic) cells. The solar energy is converted into electricity, which is used for running the motor pump set. The pumping system can draw water from the open well, borewell, stream, pond, canal, etc. The system requires a shadow-free area to install the solar panel.

#### AC & DC Solar Pump Performance Range

Parameters*	Submersible Pump	Surface Pump
Water output @ 5.5 kWhr/sq.m/day solar insolation incident	2,500 to 750,000 litres per day	5,000 to 1,200,000 litres per day
Total Dynamic Pump Head	5 to 200 meter	10 to 150 meter
Solar Modules Wattage	500 to 30,000 Wp	500 to 28,000 Wp

\*Any other customised system can be designed as per the customer requirement

#### **Salient Features:**

- No dependence on erratic grid power, and saving on expensive diesel
- · One time investment and then zero running cost (free sunlight) for many years to come
- The solar modules are warranted for a linear performance guaranteed output of no less than 80% by the end of 25 years
- Protection features like dry run, reverse polarity, low voltage and lightening arrestor
- · Corrosion resistant galvanized iron mounting structure for longer life
- Assistance for paper work to claim government subsidy (if applicable) and best-fit system for maximizing your benefit
- Conforming to MNRE Specification of Government of India
- With the help of our GSM based remote monitoring module, user can monitor and control the system remotely from all over the world just with the help of the internet

### **SMART SOLAR HOME SYSTEM**

Simply connect it to your existing power supply, and cut down your electricity bill. The system converts sunlight falling on your roof into electricity. It also works as a backup system during grid failure.



### **ENERGY STORAGE SYSTEM**



SAEL offers Lithium-ion cell batteries with range starting from 1.5 Ah to 100 Ah in single cell, and packs ranging from 4kWh to 2MWh are designed with higher voltage and backups as per buyer's requirement.

Lithium-ion batteries are designed to meet the advanced requirement of storage industry. Lithium-ion batteries are compact, light-weight with high energy density and its flexible structure allows it to fit in required space. Apart from this, lithium packs have a long life cycle, fast recharging qualities and can be controlled with an advance Battery Management System.

#### **Salient Features:**

- Faster charging rate and low discharging rate
- It is a safe battery type, highly reliable and creates no pollution
- Excellent high temperature performance
- Small in volume and light in weight, reduce 40-50% in size (compared with Lead Acid Battery)
- At 25 Degree Celsius & 50% depth of discharge, the cycle life is more than 5000 cycles
- 20 years of lifetime @ 25 Degree Celsius



## **ELECTRIC VEHICLE (EV) CHARGING INFRASTRUCTURE SOLUTION**

Considering the strong focus and initiative of GOI through various incentive schemes to increase the usage of EVs in the country, it is expected that there will a charging capacity gap for approximately 120 million EVs which are likely to be on road by 2030. As EVs go mainstream, charging will likely shift towards public options with over 70% EVs poised to use public charging stations by 2030.

We provide turnkey solutions for every need with our Electric Vehicle (EV) Charging Infrastructure, and as per Indian Government Standard (Bharat Charging Standard Bharat AC Charger (Bharat AC01) & Bharat DC Charger (Bharat DC01). Apart from that we also have DC Fast Charger with CCS, CHAdeMo & GB/T Standard.

Our services include everything from project feasibility study to development of public charging infrastructure:

- Site Feasibility of Charging stations as per CEA/DISCOM Recommendations
- Electricity Distribution Infrastructure Assessment
- Electricity Source Cost Analysis
- Turnkey Charging Station Solution

- Renewable Power Integration
- IoT Systems for Charger Network
- IoT Systems for EV operators
- Operation and Maintenance

SAEL has already received empanelment from NTPC for development of charging infrastructure with Bharat EV Chargers (DC & AC) and Fast Chargers. We look forward to working with Automotive OEMs, Energy and Infrastructure Providers, Fleet Operators and Smart Cities to accelerate electric vehicle adoption.



# CMS & Mobile App for Electric Vehicle Charging Stations :

SAEL EV APP manages hassle-free ride for EV owners. With amazing features like locate EV charging station, book slot for charging, pay online, earn rewards and current updates on technology etc.









#### Contact us:

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