

**Government of India**  
Ministry of New & Renewable Energy

**MNRE -** Channel Partner & Registered Company with **MNRE.**

**NSIC**

**NSIC - NSIC** Registered **SSI** Company.



**ISO - ISO-9001-2008** Certified Company.

**Research, Design, Development & Promotion Tie-ups with :**



**SPRERI**  
Striving for Excellence

**SPRERI -** Sardar Patel Renewable Energy Research Institute.



Madanjeet School of Green Technologies  
Pondicherry University.



The Kalgidhar Trust Baru Sahib,  
Himachal Pradesh.



**“Solar Energy holds out the Greatest Promise for the Mankind - It is Free, Healthy, Friendly, Inexhaustible and Non-polluting.”**

**TAYLORMADE SOLAR**  
**SOLUTIONS PVT. LTD.**

[www.tss-india.com](http://www.tss-india.com)



## Company Profile:

Taylormade Solar Solutions Pvt. Ltd. is an ISO - 9001 : 2008 certified company and promoted by First generation entrepreneurs having the World's most experienced team in Solar Thermal technology. The primary objective is to provide Solar Thermal Parabolic Concentrators for various thermal applications using Scheffler technology as a competitive, non-subsidized source of energy. We have leveraged our core competencies in high volume manufacturing of Solar Thermal products. Our strategy is to straddle multiple technology platforms and to drive scale to bring down the costs of the technology and make it affordable to consumers globally. We have offices all over India to provide customer support & after sales service to all parts of India.

## Philosophy:

At Taylormade, to merely state that people are our biggest asset is not enough - We believe they are the drivers of our growth and the real reason for our success. The power of this capital is reflected in everything we do, whether it is improving process efficiencies, re-engineering equipment, lowering costs, enhancing productivity or launching new products.

Our team comprises experienced, highly-motivated and skilled personnel from various disciplines with Solar Thermal diverse backgrounds that blend into a common work ethos that fosters excellence and continuous growth. The team has a history of setting challenging targets (seemingly impossible) and a history of achieving them too.

## Quality:

At Taylormade, quality is of prime importance and has driven our success. We are committed to through team work and timely delivery of Quality Products of International Standards. We have State-of-the-Art manufacturing facilities with cutting-edge technology and latest equipments, which fulfills our commitment of excellence and Total Customer Satisfaction. The company is a Channel partner of MNRE and listed on the MNRE web-site as **Known manufacturers / suppliers involved in installation of Solar concentrating systems for steam applications / direct cooking and List of known manufacturers / suppliers of Dish Solar Cookers for direct / indoor cooking for people ranging from 5 to say 100**. All our design and manufacturing of the Solar Thermal systems are according to MNRE Specifications.

## JNNSM:

India possesses a very large Solar Energy resource which is seen as having the highest potential for the future. The first, recently announced, Jawaharlal Nehru National Solar Mission with a target of 20,000 MW grid Solar power, and 20 million sq.m. Solar Thermal collector area by 2022 is under implementation. Renewable Energy is experiencing new enthusiasm and vibrancy all across, and the foundation of a new economy is being laid that is inclusive, sustainable and aspires for de-carbonization of energy in a definite time frame. MNRE gives a subsidy of 30% to promote Solar Thermal Systems. Some States have a special focus from MNRE and the Subsidy to such States go up to even 90%.

## PRODUCTS:

- Dish Cookers (Paraboloid & Parabolic)
- Parabolic Concentrators with fix focus
- Parabolic Concentrators with moving focus

The Technology is about concentrating solar radiation by tracking the Sun and using the Thermal Energy for different applications in:

- **Steam Generation • Direct Heating • Indirect Heating • Thermic fluid Heating**



### Dish Cookers:

Solar dish concentrator concentrates radiations of Sun on receiver / cooking pot through all the day from 9 a.m. to 6 p.m. It tracks the radiations of Sun manually. Parabolic dish consists of set of high reflective Aluminum Sheets. Normally, dish cookers has an area of  $1\text{m}^2$ ,  $1.4\text{m}^2$ ,  $2.5\text{m}^2$  or of  $4\text{m}^2$  of elliptical or paraboloid shape.

SK 10 Dish Cooker: Cooking capacity up to 5 to 8 person (3 liters)

SK 14 Dish Cooker: Cooking capacity up to 8 to 12 people (5 liters)

SK 25 Dish Cooker: Cooking capacity up to 30 people (15 liters)

SK 40 Dish Cooker: Cooking capacity up to 50 people (35 liters)



### Direct Cooking System:

Solar dish concentrator concentrates radiations of Sun on secondary reflector through all the day from 9 a.m. to 6 p.m. It tracks the radiations of Sun through automated tracking device, which rotates the parabolic dish along axis of rotation of Sun. It enables the User to cook in the comfort of the Kitchen. The systems are very Economical for up to 200 Men cooking and the paybacks are very attractive.



### World's First Hybrid Solar Cooking System for all cooking needs:

Several parabolic concentrators of  $32\text{M}^2$  reflect / concentrate solar rays on one receiver each. The Thermic fluid is heated in receivers due to solar energy goes to the Hot Oil storage tank. The system is connected with Thermic fluid storage tanks and Hot Oil pipelines that in turn are inter-connected with the boiler and cooking vessels for all your cooking needs.





### Steam Cooking System:

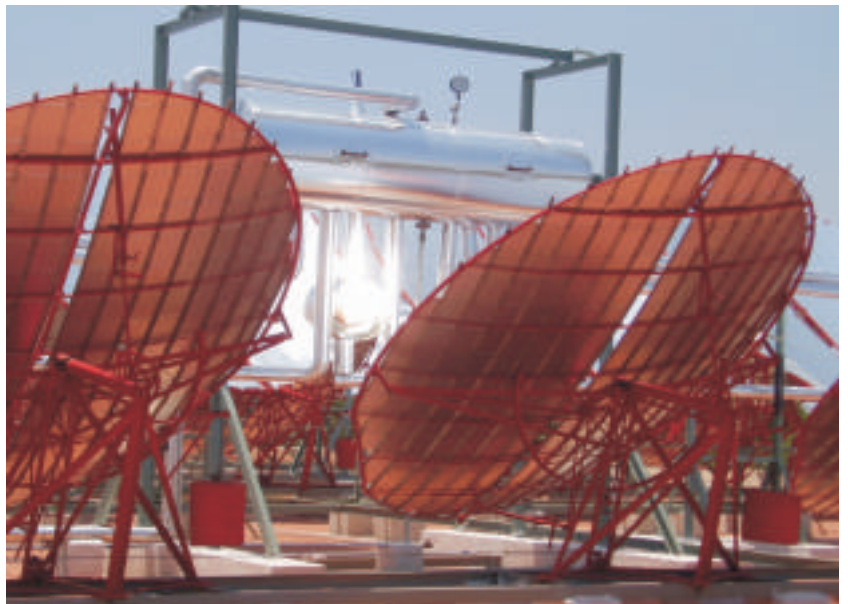
There are several static concentrators reflecting / concentrating solar rays on one receiver each. The steam generated in receivers due to Solar Energy goes to steam header. The system is connected with feed water and steam pipelines that in turn are inter-connected with the boiler and cooking vessels. We have specialized Thermic fluid Cooking systems for higher altitudes.

### Applications of all cooking systems:

Applications in Rural Families who use traditional Mud Stoves, use Fire-wood, Cow-dung and Crop residue etc. Gurudwara serving Langar, Residential Schools, Mid-Day Meal program, Military and Defense teams deployed in remote and urban areas, Hotels, Jails, Institutions, Industries providing Canteen facilities to Employees, Temples and many more **Catering to more than 5 Persons to Several Thousands Persons** daily.

### Industrial Hot Water System:

Worldwide, Solar water heating has been attracting the attention of the policy makers due to its potential to reduce electricity consumption and consequent emission reduction. The Solar system is connected with feed water and hot water pipelines that in turn are inter-connected with the back-up system. The system has specialized TSS coil type receiver which heats the water to desired temperature. The Hot Water generated in receivers due to Solar Energy goes to the boiler or sent to the process, where ever it is required. **We have specialized Thermic fluid heated Hot water systems for higher altitudes.**



Applications in Hotels, Malls, Hostels, Jails, Non-commercial Establishments such as, Orphanages, Educational Institutions, Clubs, Religious places, Military and Paramilitary Forces at high Altitudes, Boiler feed water and Industrial process applications and many more using Hot Water in thousands of Liters daily.

### Incineration System:

Incineration of Hazardous and Non-hazardous liquid and solid waste is the most economical application with Solar Thermal technology. With Advance Solar Concentrated Technology, now it is possible to achieve temperatures up to 1000° C. The parabolas concentrate the solar radiations in the combustion chamber. Air is blown in the chamber, which keeps the temperature uniform through out the chamber. Any kind of Hazardous waste ranging from Bio to Chemical to Municipal can be incinerated in the chamber. It's a great boon to industries.

Applications in Municipal Corporations for Municipal Solid Waste, Remote villages facing Solid waste problems, Hospitals, Military and Paramilitary forces for incinerating Human & Kitchen waste, Common Effluent Treatment Plants, Process plants and all the Industries generating Hazardous Liquid or Solid waste.



### **Crematorium:**

With two huge 32 M<sup>2</sup> Parabolas, the system can achieve temperature up to 1000° C. This temperature is sufficient for burning human or animal body. The Parabola concentrates all the Energy on a chamber where the body is kept on a Plate. Hot

air is blown through the blower in chamber, which helps to acquire uniform temperature across the chamber. Chamber is designed in such a way that the solar radiation gets reflected from its inner wall and concentrates on the plate where dead body is kept, thus making full use of the Solar Energy and increasing the over all efficiency. Back up system is provided by Biogas / Biomass / LPG / CNG fired furnace.

Applications in Remote villages where wood is scarce and no Electricity, Convectional Crematoriums, Gram Panchyats and Municipal Corporations.

### **Air-Condition System:**

Solar Concentrator concentrates radiations of Sun on receiver which converts the water in the receiver to Hot Water or steam and the heat of that steam is used for air conditioning effect through Vapor Absorption Machine. In this system water itself works as a refrigerant and Lithium Bromide salt solution as an absorbent. Our team has the experience of installing World's first and also the World's Biggest Solar Air-Conditioning System. Centralized Solar Air-Conditioning systems can reduce the Energy bills drastically for Government, Domestic and Industrial users.

Applications in Malls, Corporate Houses, Educational Institutions, Hospitals, Dairies, Government Offices, Process application in Industries where cooling is required and Cold Storages.

### **Space Heating System:**

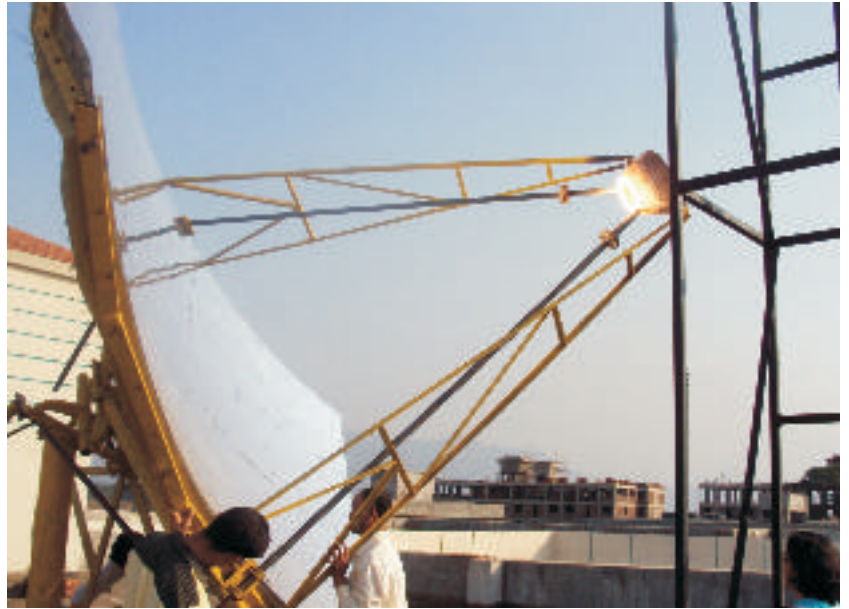
Solar Space Heating is a very useful application for an area with low climate temperature and very good Sun radiation (Ideal for higher altitudes). The concentrators heat up the Thermic fluid or water in the system. Heat exchangers are used to transfer the heat of Thermic fluid / water to the air and heated air is used for the space heating. Even Thermic fluid / water can be directly circulated through radiators. It keeps the room temp. constant in winter in cold areas. It saves huge quantum of fuel for heating.

Applications in High Altitudes or areas with Sub-Zero temperatures for Hotels, Hospitals, Corporate & Government offices, Military & Paramilitary Establishments and Process Heat required in form of Direct or Indirect heating in Industries.

### **Desalination / Waste Water Evaporation:**

Municipal Solid waste, Hazardous Solid and Liquid waste are great nuisance and challenge for all PCB's and Industrial houses. The industries are spending too much money for a solution and the cost of energy spent is too high for incineration. Solar Waste water incineration and Evaporation along with conventional multi effect evaporators is the best effective solution. India has a vast Coastal area and if Solar Desalination is taken up seriously then it can tackle Drinking and Irrigation water problems for ever.

Applications in Remote and Coastal villages, Remote Drinking Water schemes, Irrigation schemes, Process Industries, Common Effluent Treatment plants and for almost all Industries generating hazardous Waste water.



## Dryers:

The conventional techniques of Agricultural and Industrial drying can be replaced by the environmental friendly solar drying techniques. The difference of this technique is that the heat is created by the Sun radiation. The heat is circulated by a ventilator / fan to the crop, fruits or product to be dried. Drying of crops can change by this trend and is useful in most areas of the world, especially those without a high humidity during the harvesting season. If drying of produce is widely implemented, significant savings to farmers can be achieved. These savings could help strengthen the economic situation of numerous developing State Governments as well as change the nutritional condition in these States. The biggest advantages are the product is free from soil & dust, taste and texture is retained so it generates best price and it is the most hygienic way of drying.

Applications in Agricultural Crops, Seasonal Fruits, Dry Fruits, Flowers, Dairy Products, Food Industry, Spray Dryers and Process Industries where drying is required.

## Industrial Applications:

All industries whether small or big, their maximum expenses are of Thermal Energy for any process application. Our most experienced team understands various applications, which requires energy in different forms by different industries, including tourism sector and hence Taylormade solutions can be integrated with the current system. Applications can be in all kind of industries for any thermal application, may it be Hot Air, Thermic Fluid heating, Steam generation or Pressurized hot water etc.

Applications in all Industrial Processes Using Thermal Energy.

## Power Plant:

Our large 32m<sup>2</sup> parabolas convert the water in the receiver to steam. The steam of more than 450° C temperature is achievable. The superheated steam runs the turbine as per the necessity which is connected to the generator through shaft coupling. Generator is connected to the National grid through transformer. In non Sunny days and in night the system can run with a back-up system with Biomass or any cleaner fuel.

Applications in Corporate Houses, Remote Village Electrification Schemes, Malls, Government and Semi-Government Establishments, Hospitals, Military and Paramilitary forces in remote areas etc.

## Moving Focus Technology

**Parabolic dish concentrating systems use parabolic dish shaped mirrors to focus the incoming solar radiation onto a receiver that is positioned at the focal point of the dish.**

The parabolic concentrator continuously remains perpendicular to beam radiation through the use of a tracking system which follows the Sun's path; this keeps the mirrors reflecting the solar radiation onto the heat exchanger all day long. **The biggest advantage of such systems is that they not only require little space, but can also be erected and commissioned in a short period of time.**



### **Advantages of Solar Thermal Systems:**

- No use of traditional and polluting source of energy for thermal application.
- No recurring transportation problems for energy needs.
- No running cost.
- Very Low Maintenance Cost
- Very Clean and Hygienic environment at work place..
- CDM benefits and many more...

### **Benefits to Beneficiary:**

- Implementing solar thermal applications and reducing fuel consumption will help You in maintaining a top CSR and Green solutions to the employees and the environment.
- TSS will help to create value at Your place on all the three dimensions: People, Planet and Profit.
- Help to reduce Green House Gas (GHG) Emissions to great extent over the years.
- Help in increasing Eco-Efficiency, Eco-Effectiveness and Sustainable production.

### **Experience:**

The Team of TSSPL has immense Experience and was involved in Manufacturing, Installing and Commissioning of some of the most prestigious projects all over India.

- World's single largest order for 22 Solar Cooking Systems in various Akal Academies of The Kalgidhar Trust.
- Pressurized Hot water System for VAM system of 20 Ton Air-Conditioning plant.
- World's first steam cooking system at Gurudwara Shri Dhan Dhan Baba Deep Singh Ji Shaheed, Punjab for 6,000 meals per day.
- World's first Thermic Fluid Cooking System at higher altitude, Leh.
- World's first Hybrid Cooking System for all cooking applications.
- Thermic Fluid Heating System for heating water for vulcanization of Sioplas cables.
- Solar hot water system for Boiler feed water in paper industry.

We can also provide you Tailormade Solar Solutions and can design solar thermal applications / systems as per your Energy needs by studying your set-up and Expected paybacks. With use of Solar Energy we will not only bring you a long term solution but even claim CDM (Carbon Credits) benefits over it.

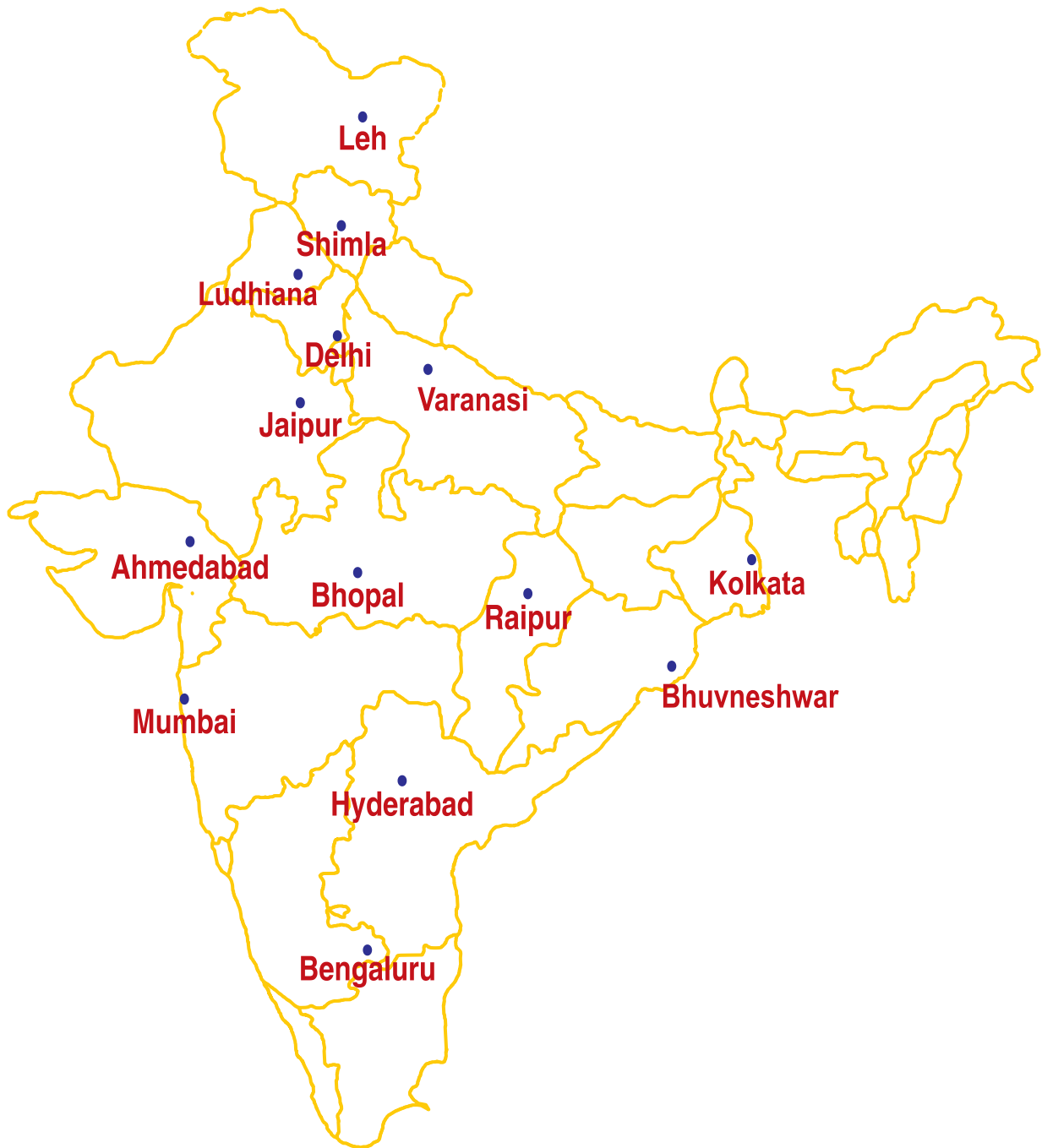
Looking to the system life of 25 years the paybacks on the Capital Expenditure are quiet attractive and if Government Subsidy along with depreciation benefits are claimed it becomes much more attractive.

We also provide systems on BOOT basis for various Industrial Applications.

**“In the scenario of Ever Rising Energy Costs we request you to switch over your dependence on us and to our Ever Lasting GOD - THE SUN”**



Local offices all around India.



## **TAYLORMADE SOLAR** **SOLUTIONS PVT. LTD.**

**Corporate Office:**

705, Shapath II, Opp, Rajpath Club, S. G. Road, Bodakdev, Ahmedabad - 380015, Gujarat, India.

Tele. No.: +91-79-40040888 / 40035875 Fax: +91-79-40040666 Mob.: 097129 33390

E-mail: [info@tss-india.com](mailto:info@tss-india.com) Website: [www.tss-india.com](http://www.tss-india.com)

**Factory:**

C-1/B-51, GIDC Pardi, Taluka - Pardi, District - Valsad- 396125, Gujarat, India.