Arka **(sanskrit) symbolises the energy of Sun - the Fire.**
It is this essence that guides the development of the world.

ARKA power

About Us

At ARKA, we envision a future of economically viable clean energy to meet the growing energy demands of the developing world.

Through indigenous technology development, we pioneer the field of Solar Thermal Power Technology in India and offer services across the value chain – ranging from turnkey implementation expertise to financial syndication.

Value Chain

Project Design and Flow Analysis

a. Feasibility consultancy
b. Site selection
c. Regulatory requirements and legalities
d. Assembly blueprinting and optimization
e. Compatibility customization
f. Financial planning

Engineering and Construction

a. Turnkey solutions
b. EPC
c. Construction management

Operational Services

a. Regular Maintenance
b. Troubleshooting
c. Planning for future growth
d. Technological improvement

What We Do

The Linear Fresnel Reflector, Solar Collector and Steam Generation System are the flagship products of ARKA's research and development team, for which multiple patents have been filed.

- Achieve superior throughput and target greater cost efficiency for our clients.
- Implement all systems with high degree of compatibility.
- Provide customized, scalable and robust solutions in the range of 1 MW to 50 MW.

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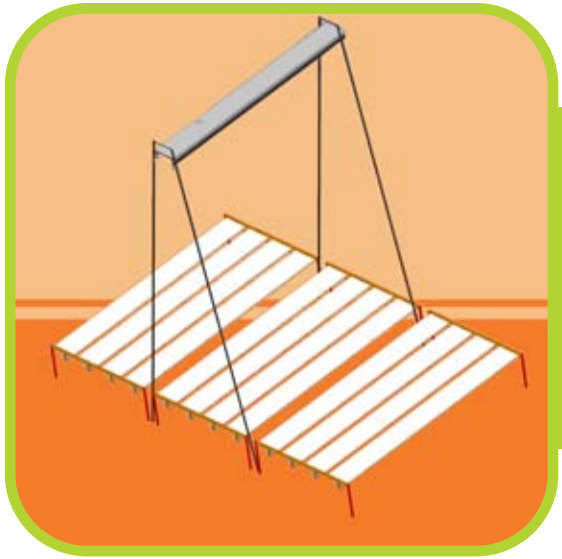
Typical Layout

- **Configuration:** Solar Thermal
- **Power Rating Methodology:** Rated for peak power
- **Bio Fuel Boiler:** Optional (25% of solar installed capacity)
- **Power Plant:** Turbine and Generator set
- **Space required**: 4.2 to 5 Acres / MW *



*4.2 - 5 Acres depending on shape of land, purpose of plant, and solar irradiation.

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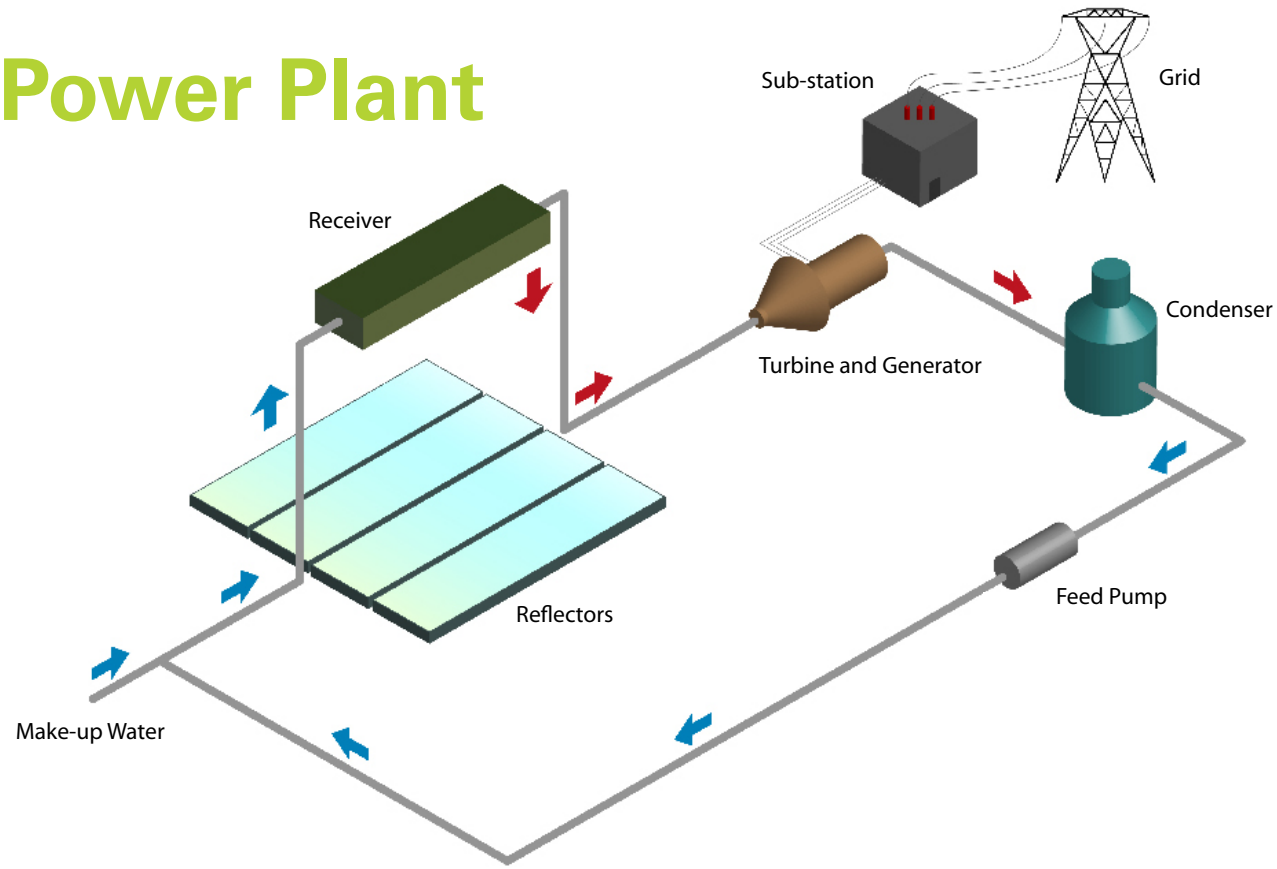
Pilot Plant

We believe that our technology, based on Linear Fresnel Reflector, is the future of renewable energy. Our belief has been further strengthened by the successful implementation of a 20 KW pilot plant to produce the steam of desired quality consistently.

Scalable Solar Power Plant

Scalable Solar
Power Plant



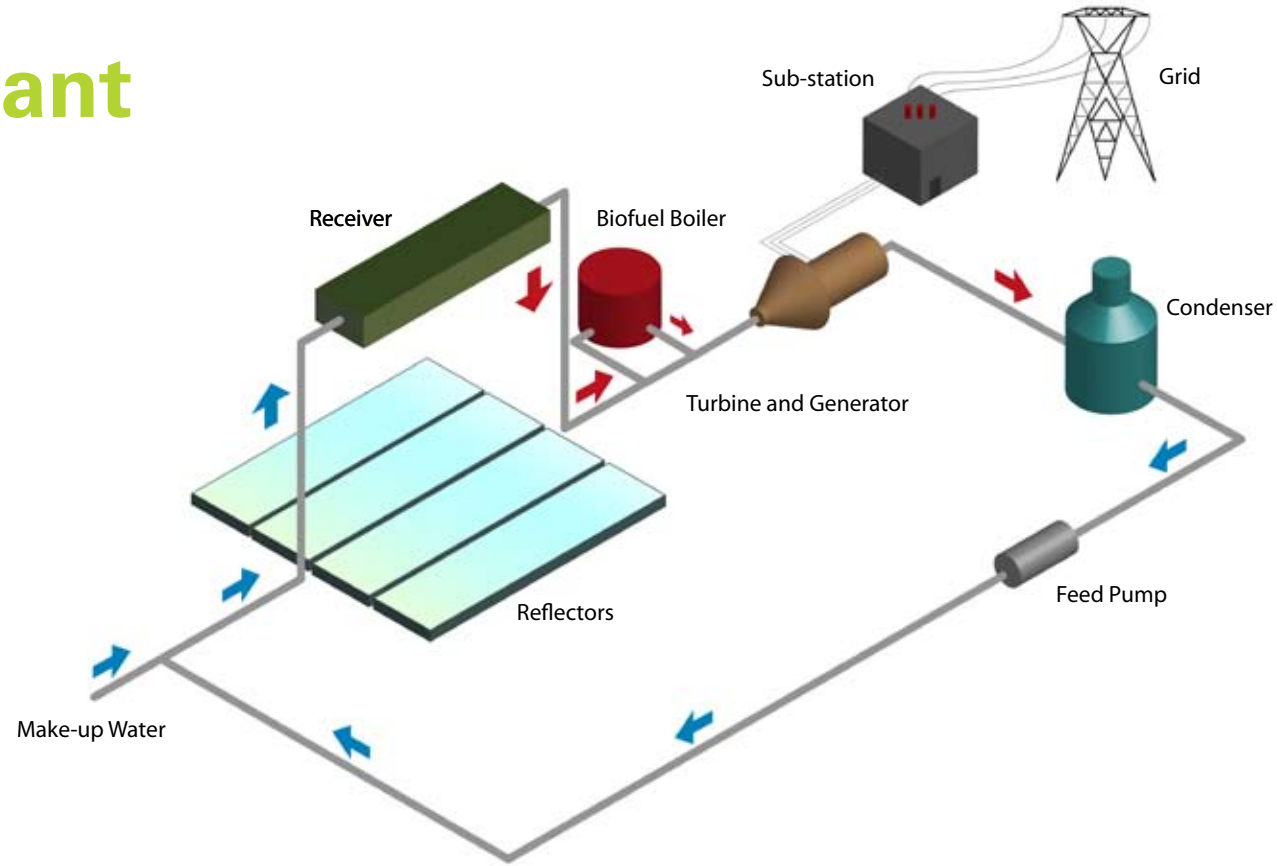
ARKA's Scalable Solar Power Plant uses indigenously designed technology to achieve unprecedented cost efficiency and embedded grid compatibility.
The Linear Fresnel Reflectors give Concentrated Solar Thermal a dynamic scalability which is at the core of ARKA's revolutionary product.

Advantages:

- Low-Cost Solar Power generation
- Standard and readily available equipment
- All systems and components can be handled, maintained by conventional engineering work force.
- Economically profitable small plants starting from 1 MW

Hybrid Solar Plant

Hybrid Solar Plant
with Bio-fuel/
Gas- fired Boiler



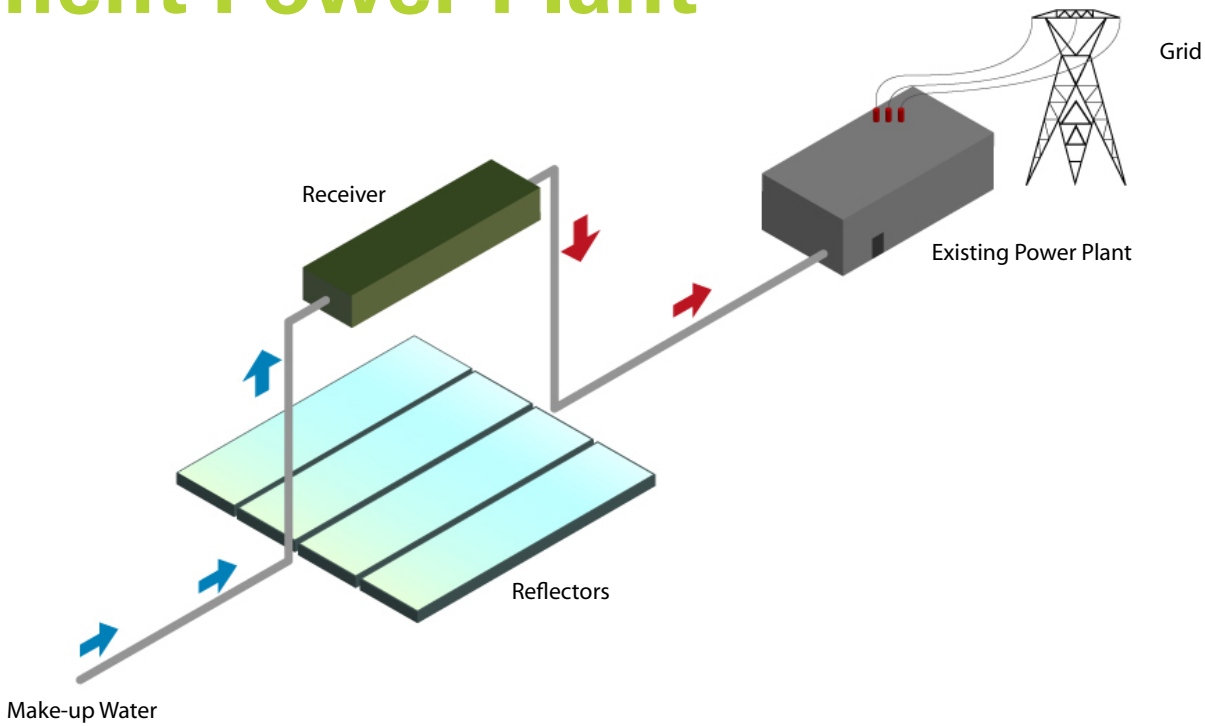
ARKA's Hybrid Solar Plant is a unique product that combines complementary energy sources to produce round-the-clock energy. Solar thermal power is used during daylight hours and an alternate source such as bio-fuel fills in for low-light and night hours. This translates into higher revenues and profits for our clients.

Advantages:

- 24 x 7 power supply to the grid
- 100% indigenous know how, process and designs
- Rapid Deployment and Installation
- Default grid connectivity
- Economically profitable small plants starting from 1 MW.

Steam Enhancement Power Plant

Steam Enhancement
Power Plant



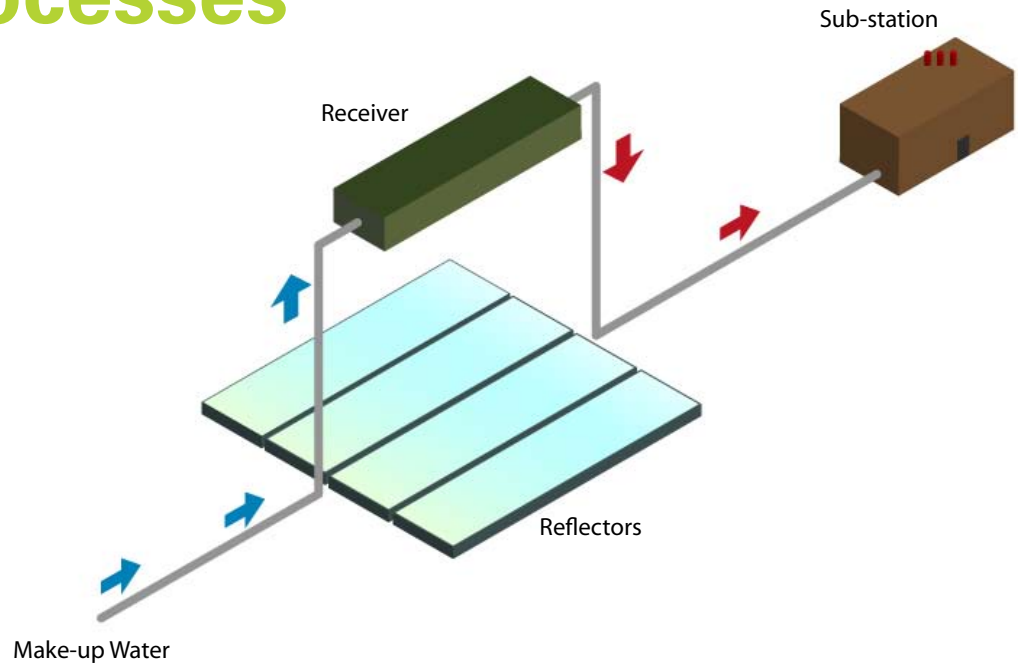
Existing coal or gas based thermal power plants can be further boosted with ARKA's Steam Augmentation systems. Delivering more steam to the turbines, these solar powered solutions are a cost-effective approach to increasing the output of the plant while also reducing the carbon emissions. Moreover, such steam augmentation increases the longevity of the plant.

Advantages:

- Increase output of existing capital equipment
- Match peak electricity demand
- Reduce fuel consumption
- Reduce carbon emissions and waste footprint
- Economically profitable small plants starting from 200 KW

Industrial Steam Processes

Industrial Steam Processes



Several industrial processes require the transfer of heat, for which steam or other thermic fluids are used. Typically, these are heated using fossil fuel boilers or grid electricity. ARKA offers a novel and cost-effective alternative based on the bountiful energy of the sun. Using concentrated solar thermal power, our Industrial Steam Process equipment can generate enough energy to heat up the steam or thermic fluid to the required temperatures.

Possible Industries:

- Enhanced oil recovery & refining
- Chemical processing & refining
- Pulp and paper
- Textile
- Food processing
- Desalination

Advantages:

- Economically profitable small plants starting from 200 KW
- Low-Cost Solar Power generation
- 100% indigenous know-how, process and designs
- Modular, robust, scalable and customizable
- Standard and readily available input equipment
- All systems and components can be handled, maintained by conventional engineering work force.
- Rapid Deployment and Installation

ARKA Advantage

- Low-cost solar power generation
- 100% indigenous know-how, process and designs
- Modular, robust, scalable and customizable
- All systems and components can be handled, maintained by conventional engineering work force.
- Rapid deployment and Installation
- Ready grid connectivity
- Economically feasible small plants starting from 200 KW

The Way Forward

- Strategic tie-ups with potential business partners to offer a wider range of products to clients
- Further research and development on in-house technologies – sterling engine, reflective and optical materials, solar cells, glass mirrors
- Dedicated plant for mirror/reflecting film manufacturing
- Enhance presence in national policy development for solar energy

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Business Enquiry

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Thank You