artic solar

The Cool Side of Solar Thermal

Solar Thermal ORC

Organic Rankine Cycle Electricity

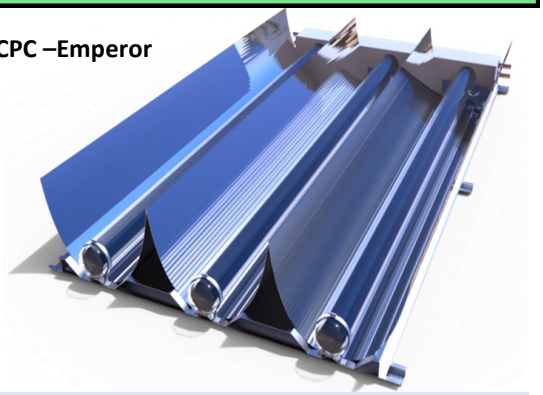
Artic Solar provides the greatest available fuel savings to a growing market: the $5 billion (worldwide) electric power generation industry, which currently relies on fossil fuels for 60% of its production.

Our XCPC reaches up to 400°F/200°C, higher than any other roof-top system, allowing ORC engines (see below) to operate at maximum efficiency. Load is permanently removed from the electrical grid, substantially reducing green house gas emissions (see chart below).

The XCPC collects both direct and indirect sunlight (40% more sunlight than current state of the art systems), allowing usage across the globe. No moving parts and a dust-repellent coating mean minimal maintenance costs. Our low-profile roof-mounted systems blend in any environment.

Complete project design, engineering services & financing available.

XCPC –Emperor



ORC technology transfers heat to a fluid with a low boiling point which is then vaporized, not unlike water powering a steam turbine. The ORC (organic Rankine cycle) engine allows power generation at lower capacities than the usual steam turbine or fossil-fueled generator. Combined with Artic Solar's XCPC it delivers low-cost, small scale, decentralized electricity generation.

Benefits

- Extends system life
- Lowest levelized cost of energy of any solar technology
- Utilizes renewable energy
- 30% federal tax credit including all components, materials and installation labor*
- Grants & incentives in some areas*
- Non-tracking lowers O&M costs

* Applies to USA customers only

Savings & Green House Gas Reductions

Example: 100Kw System (100 XCPC's)

Natural Gas = 14,800 therms saved /yr

174,000 lbs. of CO_2 and 220 lbs. No_x

Electric = 300,000kWh saved per year

410,000 of CO_2 and 1,498 lbs. No_x

HIGHEST REDUCTIONS OF ANY SOLAR TECHNOLOGY ON THE MARKET!

CALL TODAY FOR A QUOTE

U.S. Patent # 9,383,120 B1

Solar Thermal Concentrator Apparatus, System and Method