

## Solar Thermal Steam Industrial Process Heat

**Process Heat**— Over 500,000 commercial buildings use natural gas, LPG or electric boilers for the generation of heat or service hot water. Over half of those boilers are beyond the end of their use-ful lives. **Artic Solar's** high temperature KING Collector that operates up to 400°F will preheat any boiler and significantly reduce fuel consumption. In addition, it provides the lowest cost of solar energy available today, **permanently** removes the load from the electrical grid, as well as, a substantial reduction in green house gas emissions (see chart below).

Unlike standard solar systems, the KING collects both direct and indirect sunlight, allowing for usage across the globe. No moving parts and a dust-repellent coating mean minimal O&M costs. Our low-profile roof-mounted systems blend into any environment.

Using our technology, industries as diverse as manufacturing, food processing (e.g., meat, dairy, processed food and beverages), municipal waste water treatment and oil & gas extraction will be able **shift peak load off the grid** or **reduce fuel consumption up to 70%**.

Complete project design, engineering services & financing available.





## Benefits

- a Extends system life
- a Lowest levelized cost of energy of any solar energy technology
- a Hybrid Solar/Gas Boilers
- a 26% Federal Tax Credit including all components materials and installation labor (USA)\*
- a Designs for steam boiler integration
- a Non-tracking lowers O&M costs
- $a\,$  Collects both direct and indirect sunlight

## 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<sub>2</sub> and 1,498 lbs. No<sub>x</sub>

HIGHEST REDUCTIONS OF ANY SOLAR TECHNOLOGY ON THE MARKET!



