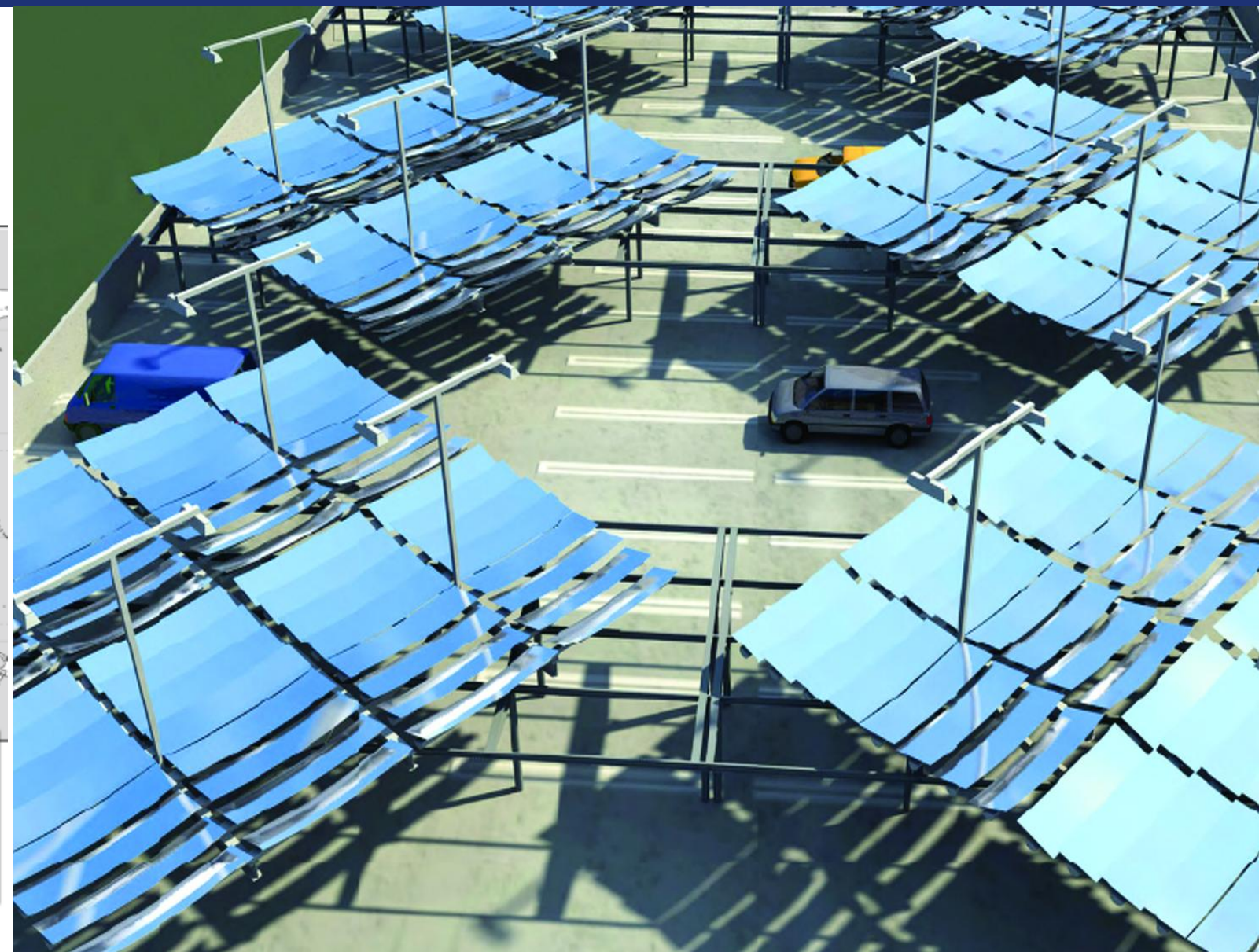
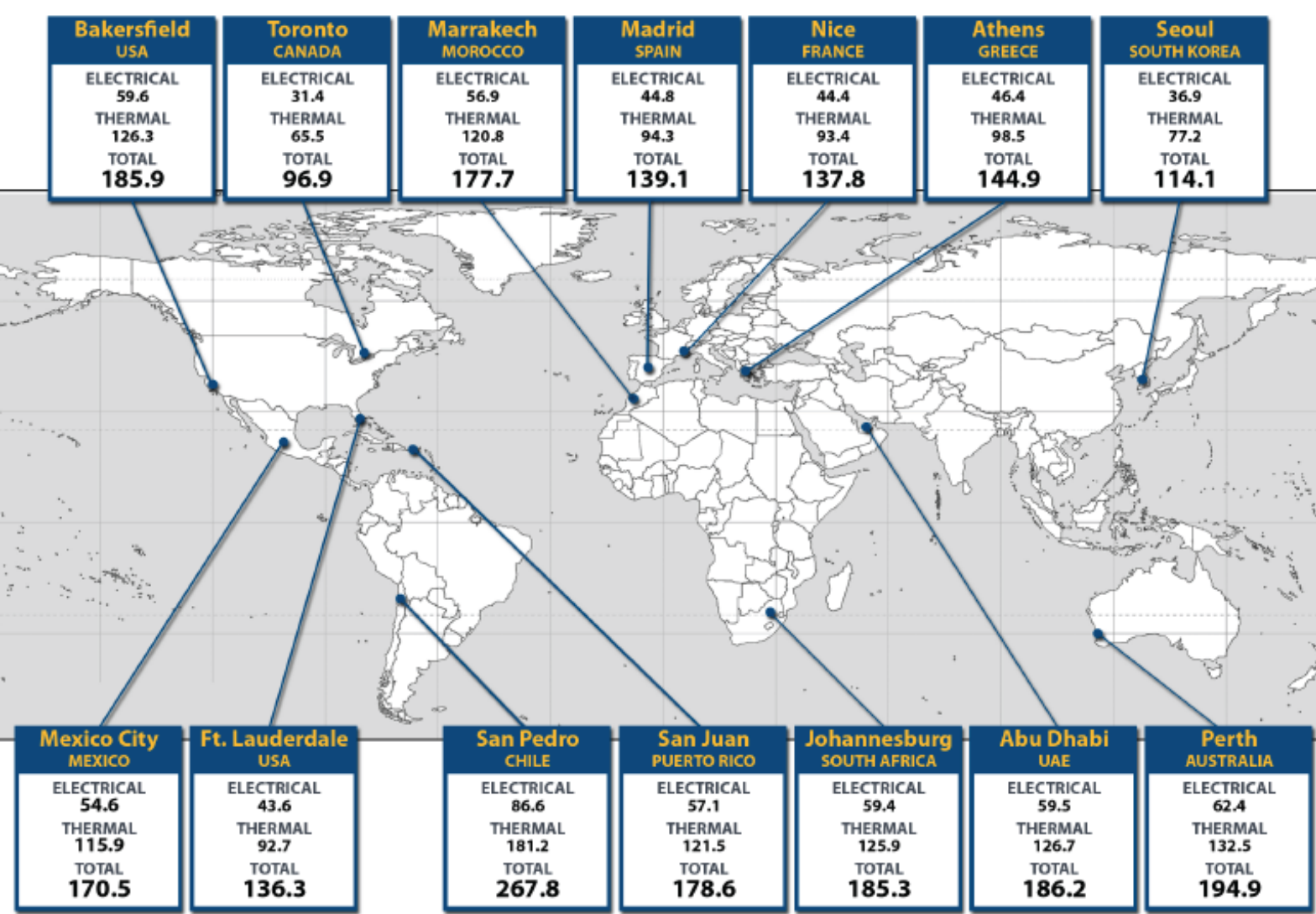




Energy Production (MWh/year)

for a single Power-Spar 140 system

Modular Solar Concentrator



Call +1 613 599-6232 or 1 888 636-6821 for a site specific performance simulation

power-spar.com

Efficient - Versatile – Scalable

Electrical, Thermal or Co-Generation

Building Integrated, Infrastructure & Utility Scale Solar Power

Standards: UL 62108, UL8703, UL 1703, CSA F378, CSA F379.1
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 Printed in Canada

Modular – Versatile - Upgradeable

The modular Power-Spar design enables a choice of energy outputs – PV Electricity – Heat – Co-generated Electricity & Heat or Heat and Light, all from a common manufacturing platform.

The versatility in mounting systems provides cost-effective roof, ground or raised parking lot mounts, all engineered to local codes and regulations.

The dense packaging of the solar cells in the Power Spar's central receivers, enables cost-effective upgrading to new higher efficiency solar cells providing enhancing financial performance with only a small future investment.



Module	Solar Concentrator Platform				
Generation	Electricity	Heating & Air Conditioning	Process Steam	Light	Photo Bio-Reactor
Conversion	III-V PV cells	Thermal Receiver		Optical Receiver, Transmitter & Diffuser	
Mounting	Ground, Parking lot or Roof				

Building Integrated & Infrastructure

The Power-Spar Co-generation solution can supply up to three times more energy in building integrated solutions where solar capture area is limited. A single Power-Spar can supply hot water, space heat, solar thermal cooling and electricity.

Infrastructure solutions include water treatment, desalination and waste water treatment facilities. Using solar heat for anaerobic digesters rather than methane frees up the methane for on-demand power generation. Power-Spar's thermal energy can be used for sludge drying at sewage treatment facilities. Water treatment facilities warm their water to add chemicals, so using the Power-Spar that heat can now be solar!

Higher Returns-Reduced Risk

Power-Spar installations generate exceptional financial returns while substantially reducing risk, even in the largest utility scale projects. The modular design allows projects to be financed, built and commissioned in small repeatable blocks. This produces incremental revenue streams very early in the construction project, much sooner when compared to large CSP projects.

Operation and maintenance costs are substantially lower than conventional CSP plants since there are fewer moving parts, and the system is self monitored, self cleaning and includes a web-based maintenance data-base and ticketing system.

Efficient Solar Co-Generation

Power-Spar's excellent cost efficiency is due to a high 1400x concentration ratio, ultra high efficiency - multi-sun III-V solar cells and patented high efficiency optical design.

Power Spar's active cooling in the Concentrated Photovoltaic + Thermal (CPVT) system enhances electrical efficiency since solar cells run cooler than air cooled configurations, while at the same time providing useful thermal energy and an unprecedented 450 watt AC/m² total power density!

Power-Spar has the highest power density of any solar technology available since it uses a low profile design that minimizes shading, enabling close unit to unit placement.

