



# Globe Solar Energy Inc. Solar Water Heating Systems

A unique cost-effective and affordable solar hot water heating system specifically designed for optimal all-season performance in Canada's cold climate. Heating domestic water using solar heating systems is the most efficient use of solar energy, and Toronto-based Globe Solar Energy's systems are ideal for heating domestic hot water for both residential and commercial use, any place that uses large amounts of hot water on a regular continuous basis.



## PRODUCT BENEFITS

- Effectively produces high temperature hot water all year round even during Canada's long cold winters
- Produces large volumes of domestic hot water with no ongoing energy costs – sunshine is free!
- Can produce hot water at up to +40°C on days as cold as -30°C
- Continues to produce hot water as long as there is sunshine outside
- Ideal for off-grid locations where hot water is produced by combusting expensive diesel in generators
- A key element in allowing off-grid communities, houses and facilities to achieve energy independence
- Environmentally friendly – does not use glycol or any chemicals
- No ongoing maintenance costs - systems normally operate problem free for years
- Renewable energy and energy conservation incentives available in some jurisdictions for some applications
- Designed in Canada for Canadian use
- Designed for 25 years of problem free continuous operation
- Modular design facilitates repairs to damage caused by vandalism or accidents
- Even if one solar heating tube is damaged, the balance of the system will continue to operate problem-free
- Comes with a limited year manufacturer' warranty from Globe Solar Energy Inc.

## PRODUCT APPLICATIONS

Globe Solar Hot Water Systems are installed in many locations across Canada and internationally. The following are some of the applications for this technology:

- Off-Grid Houses and Communities
- National, Provincial and Municipal Parks
- Hunting and Fishing Lodges
- Farms, Fisheries and Food Processing Plants
- New and Existing Single Family Homes
- Apartments, Student Residences, Co-ops and Public Housing Buildings
- Hospitals, Assisted Living and Long Term Care Facilities
- Hotels, Restaurants and Catering Facilities
- Laundry Facilities and Car Washes
- Indoor and Outdoor Swimming Pools, Athletic Centre Shower Facilities
- Mine, Forestry and Other Resource Processing Facilities

## PRODUCT FEATURES

- Achieves 92% thermal transfer energy efficiently – the most effective use of the sun’s energy
- System package includes all components including heating tubes, racking, storage tank and piping
- System uses water pressure from the municipal water system, avoiding the need for separate pump
- Supplied thermostat-controlled heat tracer cable ensures that domestic water never freezes in supply pipe
- Unique design uses distilled water in a partially evacuated copper pipe as the heat transfer medium
- Low pressure distilled water will not freeze even when outside temperatures are very low
- Heat is transferred from the distilled water tube to domestic water in a specially insulated header tank
- Header panel incorporates a 40 gallon storage tank designed for a four-person Canadian household
- Systems can be assembled into large arrays for larger hospital, residential, commercial or industrial projects
- Can be supplied as a kit for contractor installation, or can be supplied and installed by Globe Solar Energy
- Heats water to the 40°C temperature required by some municipal codes and public health standards
- CSA certificate #232467 – The first CSA certified Evacuated Tube Solar Hot Water system in Canada

## PRODUCT MODELS & COMPONENTS

GSE IP-195B	Integrated Solar Water Heating System
GSE IP-195c	Integrated Solar Water Heating System with Heating Cable
GSE IP-25D	Split Solar Water Heating System with Drain Back Installed
GSE IP-25G	Split Solar Water Heating System with Glycol
GSE TC-1	Dual Temperature Controls Plus Heat Trace Cable