Solar Thermal Solutions in Smart System Integration in Greece

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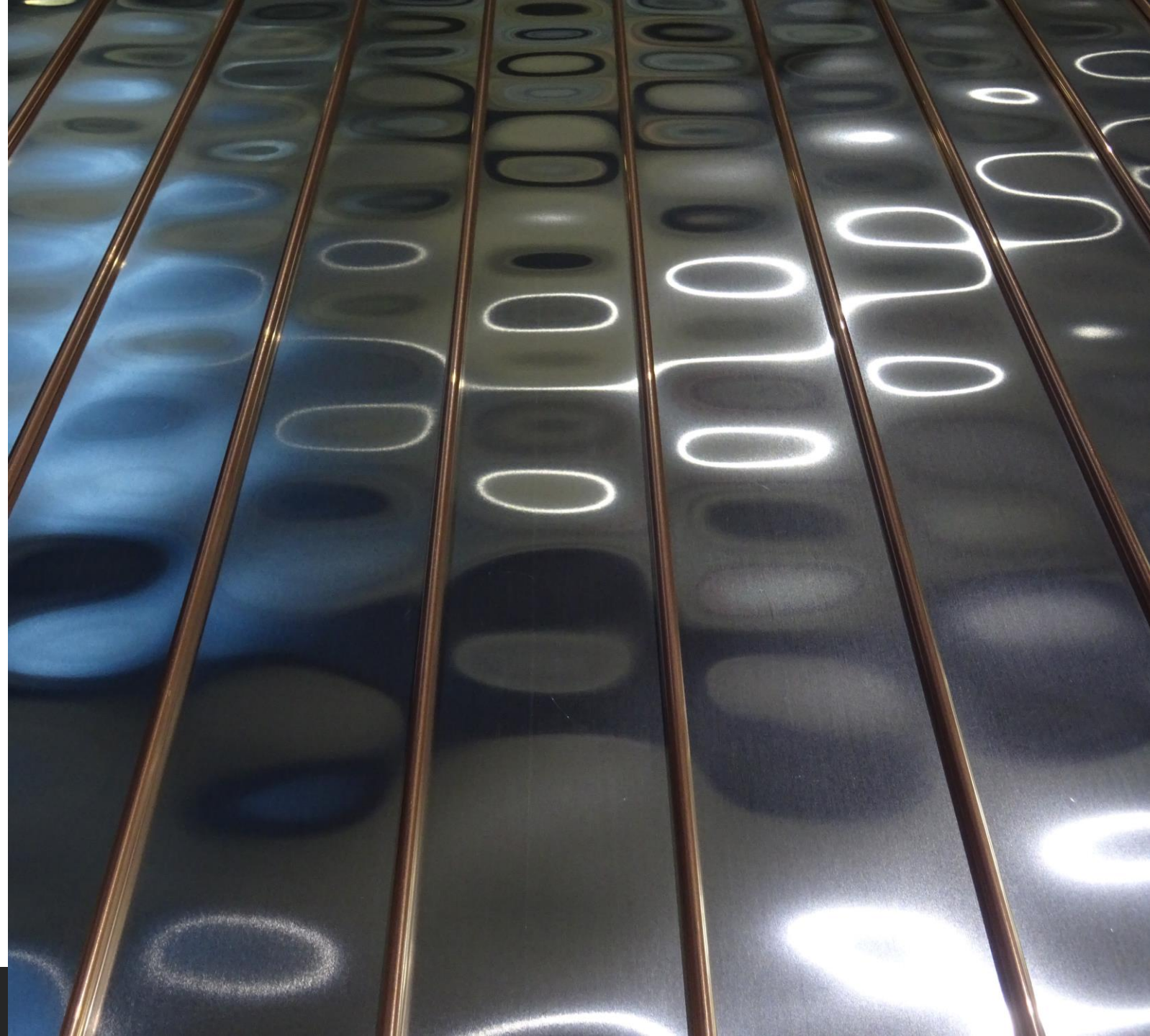
PRIME LASER TECHNOLOGY

Prime
Laser Tech

Develop and manufacture
exclusively
Solar Thermal Absorbers
for
Solar Collector Producers
Worldwide



Average Solar System

Storage tank 150L

Collector area 2,5 m^2

Back up immersion heater, 4kW

Covers >80% Hot water demand

Easy installation, low cost

Contribution of Thermosiphon

Thermosiphon is a large energy saving device.

Functions as a Demand Side Management (DSM) measure:

1. avoid investments in peak capacity
2. Postpone decisions for installing new generating units and expanding the network.

Digitalization

Offers huge opportunities.

Through Smart Meters thermosiphons can participate in reserve and ancillary services

Maximizes the benefit for all: Public interest, Network operator, supplier and consumer

Challenges and difficulties

- Wild electrification, Replacing Solar Thermal by heavily supported electric technologies
- Non transparent total cost of energy
- Lack of research and Innovation funds for Solar Thermal integration
- Need for demonstration projects

Summing Up

Decentralized solar thermal for hot water and space heating, as energy saving, should have priority in planning sector integration solutions.