



Senergy Innovations

Developing a breakthrough in renewable energy




The Problem



A detailed cross-section diagram of a flat-plate solar collector. The diagram shows a blue solar safety glass cover on top, followed by a dark absorber plate. Below the absorber plate is a network of meander piping. The entire assembly is supported by a GRP (Glass Reinforced Plastic) frame. The bottom of the collector is insulated with mineral wool insulation and a rear panel. Labels with red arrows point to various components: Sensor well, Solar safety glass, Absorber plate, Meander piping, Mineral wool insulation, GRP frame, Rear panel, End cap, Return connection, and Supply connection.

High Manufacturing Cost

High Installation Cost



A photograph showing a large building with a flat roof covered in rows of flat-plate solar collectors. The collectors are arranged in a grid pattern. In the background, there are several multi-story buildings, suggesting an urban or institutional setting. The sky is blue with some clouds.

Not Attractive

Not Adaptable

SENERGY

DELIVERING THE POWER OF NATURE

Invented Designed Built

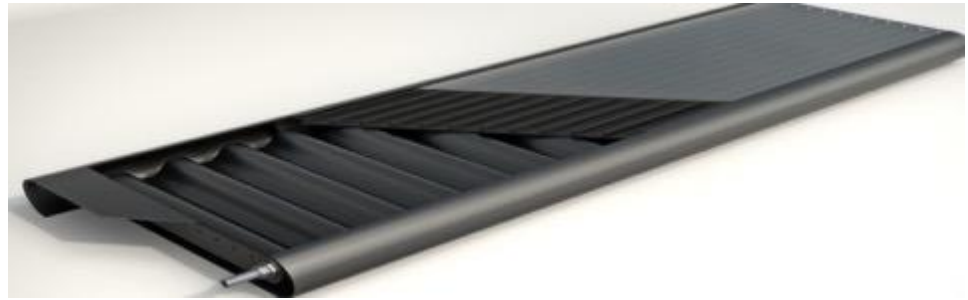
Patented Revolutionary New Solar Panels

based on Advanced Nano/Polymer Technology .

Senergy Panels can be mass manufactured and installed at a 50% lower cost than existing metallic solar thermal panels

Can be retro fitted into current solar panel sites





Compared to traditional panels

- ✓ **Maximise Collection:** The light weight low cost panels make installation easier, faster and cheaper allowing greater numbers to be deployed on roof.
- ✓ **Optimise Supply:** Up to 80% more efficient allowing excess energy to be stored and released at more convenient times.
- ✓ **Architecturally Adaptable:** Lightweight modular design enables panels to fit on to the sides of buildings and window frames.
- ✓ **More Efficient Technology :** the reduction in up front costs lowers the cost of delivering a k/wh of heat to a price point that will compete with gas and oil.
- ✓ **More durable:** Expected lifetime up to 25years

Senergy Solutions – Team and Partners



Christine Boyle MBE
Senergy CEO



Prof. Tony McNally
Warwick Manufacturing Group



Willie Donaghy MBE
Senergy CTO



Dr A. Zacharopoulos
University of Ulster

Senergy's Collaborators



Senergy's Value Proposition



Performance

↓ 50% cost of solar value chain



Cost

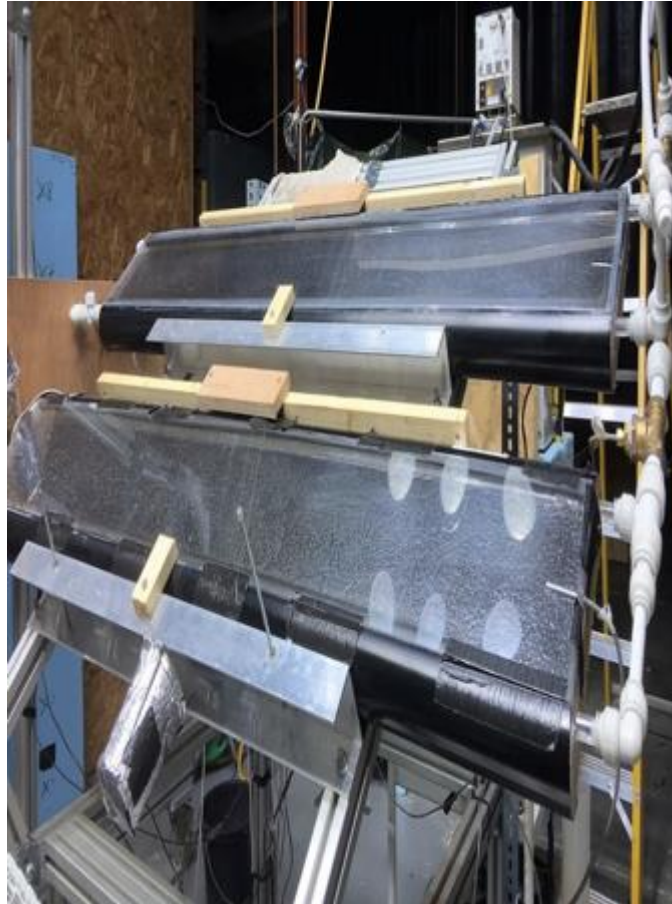
Payback 3-4 years



**Aesthetics, Durability,
Integration**

25 year guaranteed life
Preferred by Architects
Digital Integration

Setup Tested Under Solar Simulator



Senergy selected for Innovator Support Platform

Sunamp

iPower

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logicor™
heating

ventive

CATAPULT
Energy Systems



Early Customers



Residential

Housing
Executive

CATAPULT
Energy Systems



MODULOR



Industrial

mavoy
Smart Offsite

space4...

northern ireland
water



Commercial

GLOBAL
CityFutures

GREENTOWNLABS

isle

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SENERGY
DELIVERING THE POWER OF NATURE

**AFFORDABLE
ADAPTABLE
ARCHITECTURALLY ATTRACTIVE**



**QUEEN'S
UNIVERSITY
BELFAST**



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