SOLARUS

SUNPOWER FOR THE PEOPLE

FOSSIL FUELS ARE RUNNING OUT

AND THEY ARE HARMING OUR PLANET

The need to transition to a low carbon, and largely renewable energy system comes at a time when 1.3 billion people, or 18% of the global population, live without access to electricity and 40% of the world's population rely on solid biomass fuels for cooking.

One half of energy consumed globally is for heating and cooling purposes, currently provided for by fossil fuels.

GREENHOUSE GASSES

HELLO WE ARE SOLARUS. WE ARE A NEW KIND OF COMPANY

We have an important story. In fact, we have two stories to tell.
One about our values and one about the PowerCollector™.

We are an innovative renewable energy company. We develop and market the PowerCollector™. A hybrid concentrated photovoltaic and thermal (C-PVT) collector. Our PowerCollector™ supplies clean and affordable heat and electrical energy for residential and industrial customers.

Solarus' PowerCollectors™ are capable of harnessing up to four times more of the available solar energy compared to conventional photovoltaic products on the market.
This increased efficiency allows Solarus to displace more fossil fuel based energy.

AFFORDABLE ENERGY WHILE DOING GOOD FOR THE WORLD

Our promise is to create general public benefit by alleviating energy poverty.
We want to leave a material positive impact on society and the environment.

GREENHOUSE GASSES

The sun offers more energy in four hours than the human race consumes in all forms in an entire year.

We do good by being good. We want to leave a material positive impact on society Our vision is ‘sunpower for the people’. Solarus is a certified B Corp member and embodies the commitment to social and environmental performance, accountability, and transparency that this certification represents. Solarus seeks to deliver on the following social and environmental objectives:

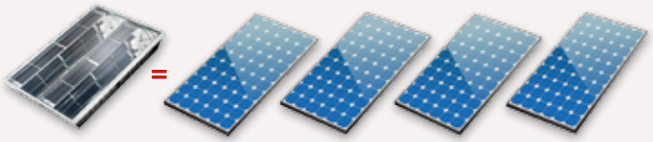
SUNPOWER FOR THE PEOPLE

- Reducing energy poverty by providing access to low cost and environmentally sustainable electric and thermal energy.
- Addressing climate change by reducing global dependency on fossil fuel based energy technologies and increasing the use of low-carbon C-PVT technology.
- Reducing exposure to local air pollution in developing countries by displacing common water heating practices that rely on the burning of coal and biomass.
- Creating local employment opportunities in developing countries in sales, distribution and installation.

Certified B Corporation™

The POWER COLLECTOR™

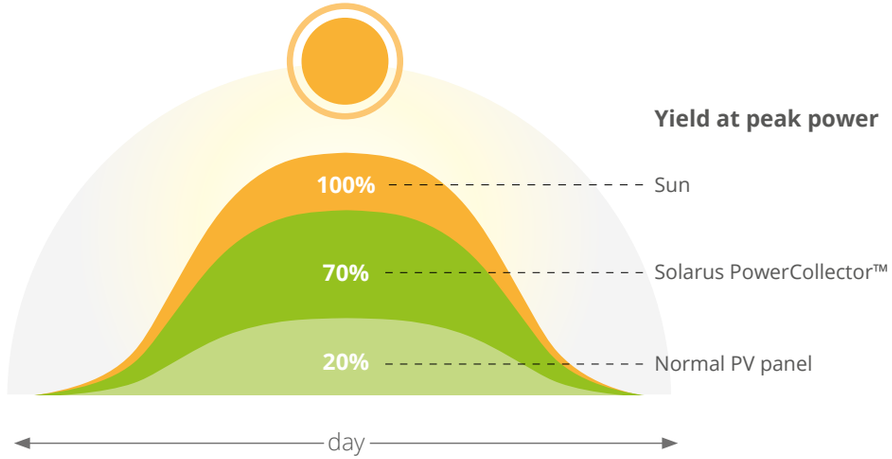
1 PowerCollector™ Generates more power than 4 X conventional solar panels



The Solarus PowerCollector™ is a concentrating, hybrid solar photovoltaic and solar thermal panel. Concentrating means that it has a curved mirror to collect and reflect more sunlight throughout the day. Hybrid means that it combines solar photovoltaic (PV) generation of electricity with solar thermal (T) generation heat.

Solarus offers, as the only company in the world, both Active Cell Cooling (ACC) and MaReCo (Maximum Reflector Collector) technologies, which makes the PowerCollector™ the absolute highest performing thermal collector on the planet.

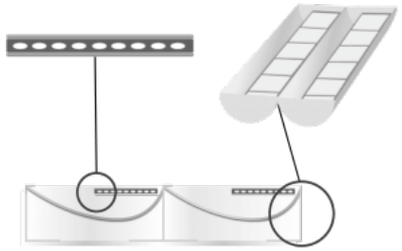
SOLARUS POWERCOLLECTORS™ HAVE THE HIGHEST YIELD EVER MEASURED



The use of the reflector, plus the use of concentrated solar power on the backside of the solar cells, combined with collected heat from the water/fluid cooling system of the receivers, ensures a yield which has been defined by the TÜV testing facility in Arizona as one of the highest they had ever measured.

OUR THREE CORE TECHNOLOGIES

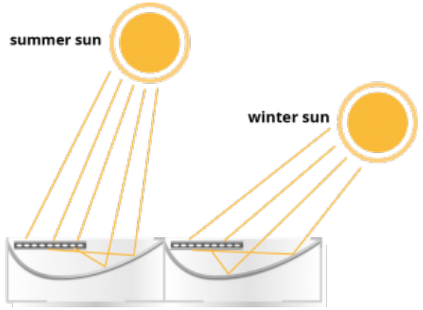
Active Cell Cooling™



Solar PV cells become less efficient as they heat up. We want to ensure that our PV efficiency remains stable by reducing the cell temperature.

Active Cell Cooling™ (ACC™) means we use water to draw heat away from the solar PV cells. The result: improved electrical performance of up to 40% and extended cell longevity.

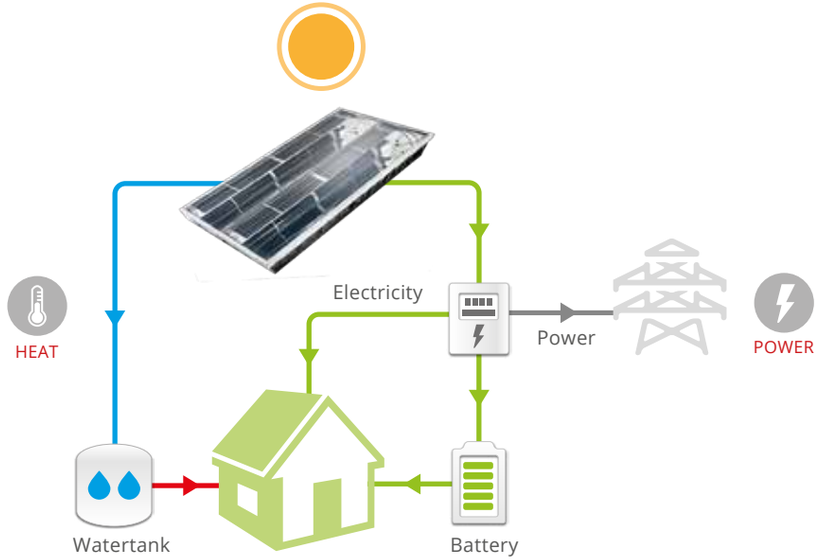
Maximum Reflector Concentration™ and Winter Boost Technology™



The sun traverses the sky throughout the day and provides less energy during winter. We want to maximize the amount of power collected and ensure that annual coverage is as even as possible – without the need for complicated tracking systems.

Maximum Reflector Concentration™ (MaReCo™) technology is our solution: a curved mirror – technically an asymmetrical parabolic trough – reflects as much concentrated sunlight onto the receiver as possible, no matter the sun's angle. Winter Boost Technology™ (WBT™) enables us to customize our system according to local needs. It doubles the outcome during winter. Our thermal output during winter is the highest in the world.

WHAT IT OFFERS



The PowerCollector™ provides seven solutions for various applications. Today our focus is on heat and electricity. For these two solutions are currently various applications available. We are currently working on the first prototype applications in the field of cooling. One of our flagship projects in Sweden is a hospital where we for an operating room using PowerCollectors™ to generate in one application electricity, heat generation and cooling. At a later stage there are also applications in the pipeline for steam, desalination and purification.

SPECIFICATIONS

General specifications

Dimension (L x W x H) :	2374 x 1027 x 231 mm
Weight :	55 KG
Aperture area :	2.2 M²
Gross area :	2.4 M²
Cover :	4 mm anti reflective coated glass, super transparent, hailstone safe

Electrical properties per side

Number of Cells :	152
Cell dimension :	52 x 148 x 240 mm
Peak Electrical Power :	250 W (e) ±5%

Thermal properties

Heat Loss Coefficient :	4,8 W/m².°K
Peak Power :	1250 W (t)
Capacity antifreeze :	1,4 L/module
Max working pressure :	6 bar
Stagnation Temperature :	175°C

THE GLOBAL GOALS
For Sustainable Development

Solarus exists within a global context. By aligning Our Promise with the United Nations Sustainable Development Goals, we are sure to succeed. There are 17 goals, here are the six we hope to directly address.

Goal one: end poverty in all its forms everywhere	Fundamental to Solarus' market approach is the objective of promoting local employment opportunities in developing countries for those who need it most.
Goal seven: ensure access to affordable, reliable, sustainable and modern energy for all	With a conversion efficiency of 70% (combined heat and electricity), Solarus stands out as a clear industry leader in support of this goal.
Goal eight: promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all	Renewable energy is a global growth industry with immense untapped potential. Through our training, low- or unskilled individuals will become sought-after professionals.
Goal nine: Build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation	The renewable energy products Solarus markets are the result of extensive research and development. This is sustainable innovation in its truest sense.
Goal ten: reduce inequality within and among countries	Energy poverty remains an intrinsic component of inequality – both material and social. By providing affordable, grid-independent energy and employment opportunities, we hope to uplift individuals and communities.
Goal thirteen: take urgent action to combat climate change and its impacts	The global trend of populations transitioning from rural to urban lifestyles is most pronounced in the developing world. By providing a clean, renewable alternative energy source Solarus is actively diverting their burgeoning energy demand from mature, typically greenhouse gas-intensive, sources and thereby helping to combat climate change.


In South Africa,
the sun bakes his bread


In Sweden,
the sun heats the university's classrooms


In Sweden,
the sun provides heating, cooling and electricity
for the hospital's operating rooms


In the Netherlands,
the sun heats their swimming pool

AT SOLARUS THE FUTURE HAS ARRIVED

Normal PV panels

PowerCollectors™

The red boxes above show what area in the Sahara would need to be covered with normal PV panels, or with PowerCollectors™ to fuel Europe (EU-25) and the entire world.

So what the hell are we waiting for?
Let's start getting more PowerCollectors™ on rooftops and stop killing our planet.

THE NEW POWER TO
FUEL OUR FUTURE

The POWER COLLECTOR™

4 TIMES MORE POWER THAN
CONVENTIONAL PV SOLAR PANELS

COMPETITIVE ADVANTAGE

- Four times more power (heat & electricity)
- Cost-Effective proprietary C-PVT Technology
- Established partnerships
- Customized decentralized solutions
- Patented technology

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