



- O NEW sales to HONDA motor Co. Ltd. JAPAN waste heat recovery in spray paint process
- **Second sales in Japan** sales cycle of 35 weeks
- **♦** Joint effort with our Distributor in Japan







PROBLEM

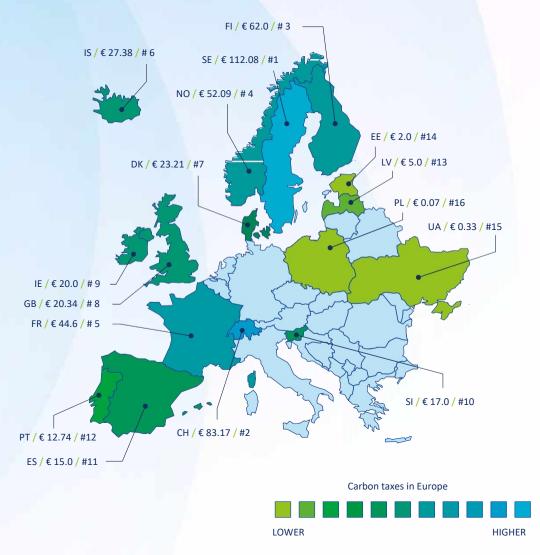
- Rising energy co sts is a major challenge
 and energy efficiency is a crucial
 s u c c e s s factor
- Demand for cooling worldwide increases due to global warming
- Unexploited waste heat goes up in smoke



CARBONTAXES AREUPTO€112/TON

- Reduction of carbon will be taxed globally
- Worldwide 2030 climate goals
- China, the leader of the world's biggest polluter of greenhouse gases has pledged to go carbon neutral by 2060, carbon pricing introduced; Xi Jinping

CARBONTAXESINEUROPECarbonTax RatesperTonofCO2easof2019



PATENTED SOLUTION Use w a s t e heat for cooling w i t h high ROI



Transform waste heat in cooling with high ROI



Save energy and costs on cooling



Reach Industries highest sustainable goals with our patented technology

MARKETVALIDATION \$120+ MILLION

- ♦ 2020 Industrial Cooling System market will be \$16+ Billion
- 2025 Industrial Cooling System market is expected \$25+ Billion
- 78% of manufacturing plants have sufficient w a s t e heat
- 26% of manufacturing plants have large capacity cooling n e e d s
- \$3+ Billion cooling market
- \$120+ million; SoundEnergy aims at 4% marketshare



PATENTED PRODUCT Easy fit coolingsystem

SoundEnergy developed the thermo acoustic energy converter **THEAC-25**. The Silent One. The product is designed specifically for locations or plants with a need for cooling at any cold temperature, and with solar or waste heat (> 180°C) available at the same time.

The **TH EAC-25** is easy to fit into the available space in stationary application, due to a flat construction. For example integrated in an array of solar collectors, or on the roof near a w a s t e heat or flue ga s exhaust.

Types of Waste Heat Streams

Thermal Process

Energy recovered from a fumace, oven, or kiln, and subsequently used in a combined heat and p o wer (CHP) bottoming cycle.

Mechanical Drive

Energy recovered from a natural gas pipeline compressor station.

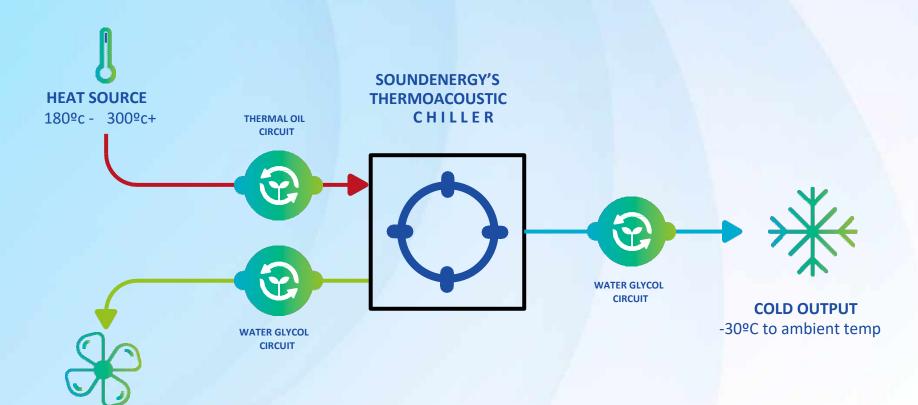
Other

Waste heat recovered from industrial or other processes that generate heat as a byproduct, such as exothermic reactions, incineration, and pressure reduction.



DRY OR W E T COOLING

COLLECT HEAT AND USE THAT ENERGY TO COOL



COMPETITIVE ADVANTAGE



The only product in the market to transform waste heat into cooling with high ROI



L o w maintenance



Longlifespan.
No we ar and tear.
No moving parts.



Patented technology
by Sound Energy.
No greenhouse gases and
additional chemicals

MARKET INTRODUCTION/LAUCHING CUSTO



"After searching for years,
I found a perfect solution for
using our residual heat with the
THEAC-25 produced by S o u n d E n e rg y and achieved our C o r p o rate Social Responsibility objective. As a reward for this search
I have a relevant saving on my
electric power bill for cooling."

Wouter Jansen van Velsen CEO and ow n er of Mocca D'Or coffee roasters





- FIRST COMMERCIAL SALES - December 2018 Mocca d'Or Zwolle

APPLICATION - Waste heat converted to Office space cooling

INSTALLED - March 2020

Revenu - first

Model - THEAC -23/UC

INSTALLED BASE 2020



"SoundEnergy is an innovation that contributes to a better and more sustainable indoor environment for our future schools. The machine is operational and we are analyzing the first data at IKC Magenta."

Gert-Jan ten Hoor Executive director CNB-climate Neutral Building





Cool Container installation in Japan for SintoKogio LTD. Demonstrating the T HEAC to the Japanese market.

Sintokogio is exclusive distributor for the geography JAPAN and sold the first THEAC-23UC to a major Japanese car manufacturer SintoKog io LTD



2019 2020

The MasterMind Company, Mali

IKC MAGENTA, Delden

SIRIUS Energy Systems, Dubai

- **SINTOKOGIO**, Japan

REVENU – second and third

MARKET FEEDBACK

♦ Efficiency

Improve efficiency to 0.8 e.g. 40kW cooling output at 6

οС

Reliability & Cost down

Improve the durability and the production cost down program

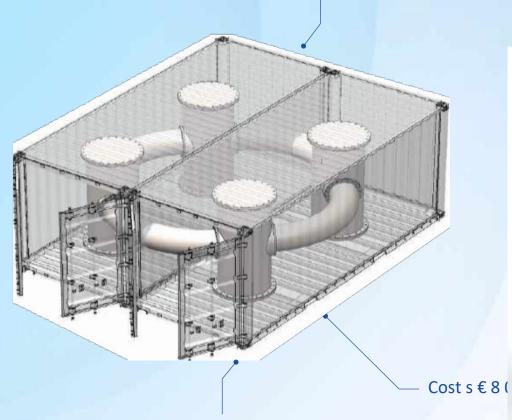
Capacity

Scale capacity towards 200kW - 1 MW - 4MW cooling units



TECHNOLOGY ROADMAP

Development of 2 0 0 kW version T H E A C - 2 0 0 / O C



€800,000 revenue for a 1 MW T HEAC cooling unit @ 40% gross margin - 5 T H EAC 2 0 0 devices can be serial installed to a 1 MW version (THEAC1000).



NEW STRATEGY: THIRD PARTY R&D PARTN

Third party R&D partner is able to help SoundEnergy with their technology roadmap:

THEAC-40

(improved 25kW)

THEAC-200

(200kW)

THEAC-1000

(1MW)

Proven Technology

installed base 3 units in the field for 2 years

Oustomers

7 units sold worldwide – attractive business cases after redevelopment and scaling

♦ Large market

market research shows a large potential

♦ Knowledge available

Technology is easily scalable for higher capacities



Solution: 1st sustainable commercial grade cooling

economical and ecological space- and process cooling





ZERO CARBON FOOTPRINT

ZERO ELECTRICITY CONSUMED

A unique and patented platform:

2

1) Clean: 0 emissions & -carbon footprint, -hazardous gases

2) Easy:

grid independent



3) Low Heat: low temperature solar or process heat

4) Reliable:

no moving parts, no maintenance, long life



5) Economical: electricity free, high efficiency, no consumables

6) Scalable:

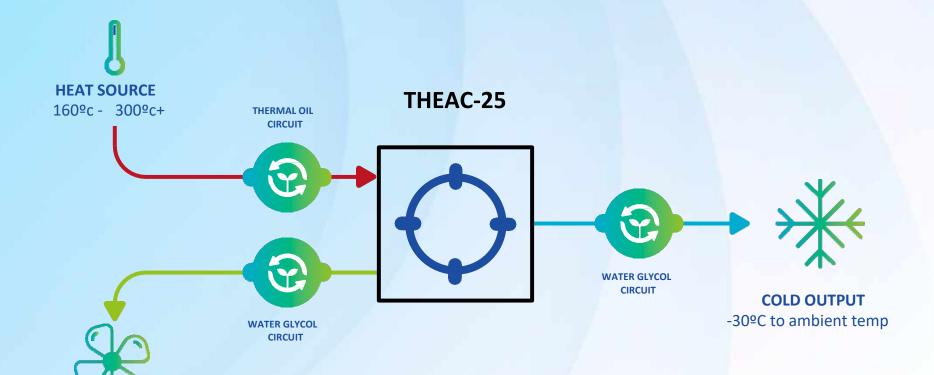
high temperature range, from kW to MW





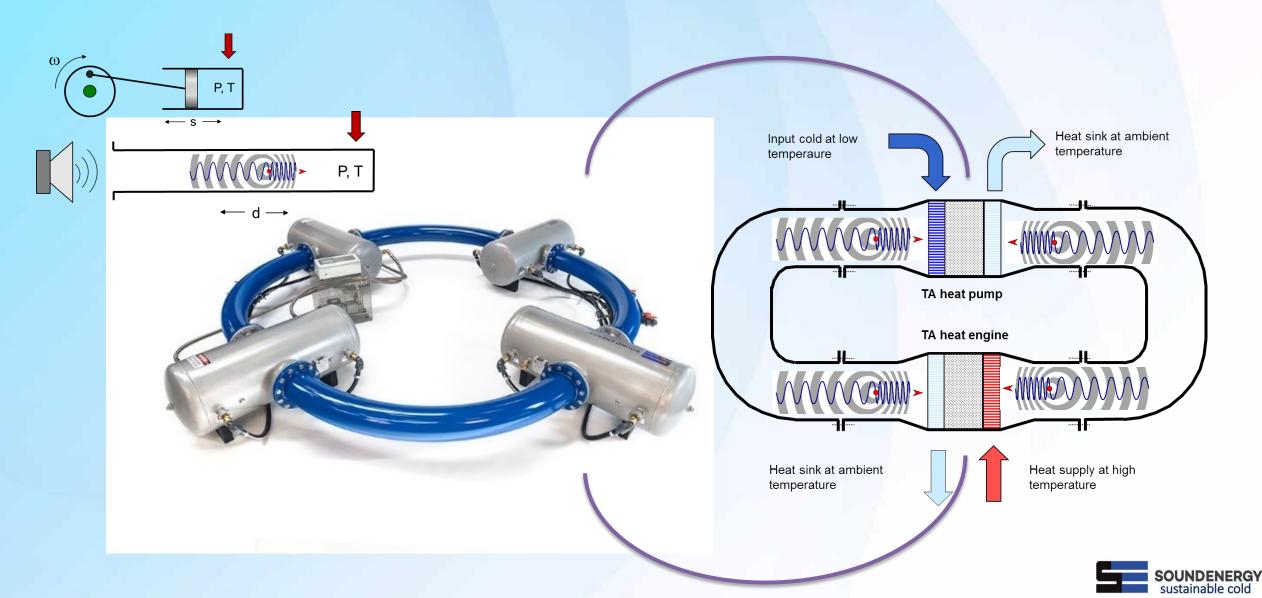
FLUID SCHEME

DRY OR W E T COOLING



Solution: 1st sustainable commercial grade cooling

thermal -> acoustic heat conversion





INTERESTEDIN DISCUSSING THE OPPORTUNITY?

Contact

Jadenny Mateo

Representative / Account Manager SoundEnergy

+ 31 (0)20 737 29 57

+31(0)97022365753 (Whatsapp)



SOUND ENERGY