
Breather Ventilation

Powerful new flat ventilation system

The Problem with Building Ventilation

Costly heating

Buildings require 20-40% more heating
EU residences could save 369 TWh per year

Costly air quality

We spend 90% of our time indoor
Affects health, comfort and performance

Costly space

No space available in existing apartments
Most existing solutions either too bulky or inefficient



Growing Market

Energy Recovery

New building codes will soon make Heat Recovery Ventilation a requirement

In Germany the HRV market grew by 18% in 2012

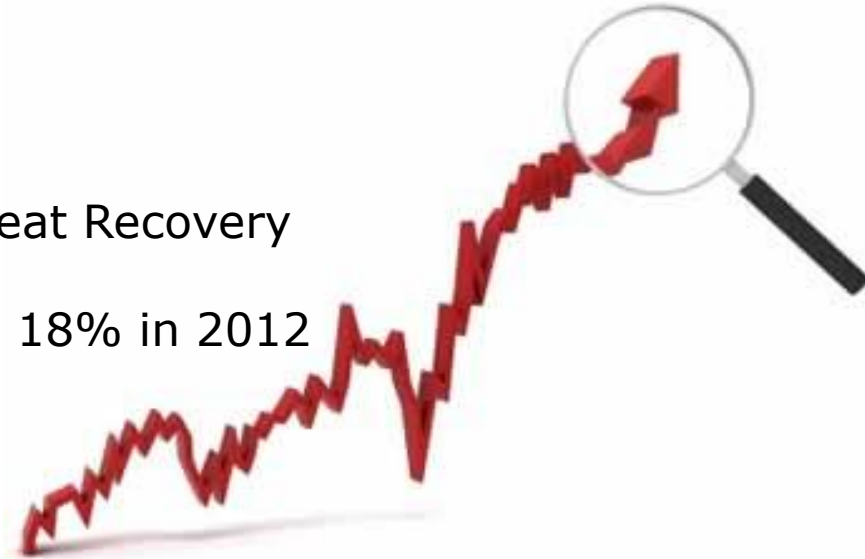
Cleaning the indoor air

The awareness is rising

According to [WHO](#) particle pollution lowers the average life expectancy in EU by 8.6 months!!

Saving space

Majority of existing buildings is without ventilation with heat recovery or air cleaning



**A suitable solution for the existing building stock is missing!
A powerful small solution is needed !**

Our Solution: Flat Ventilation

The flat design gives us more space to treat the air
This has several benefits:

Cheaper heating

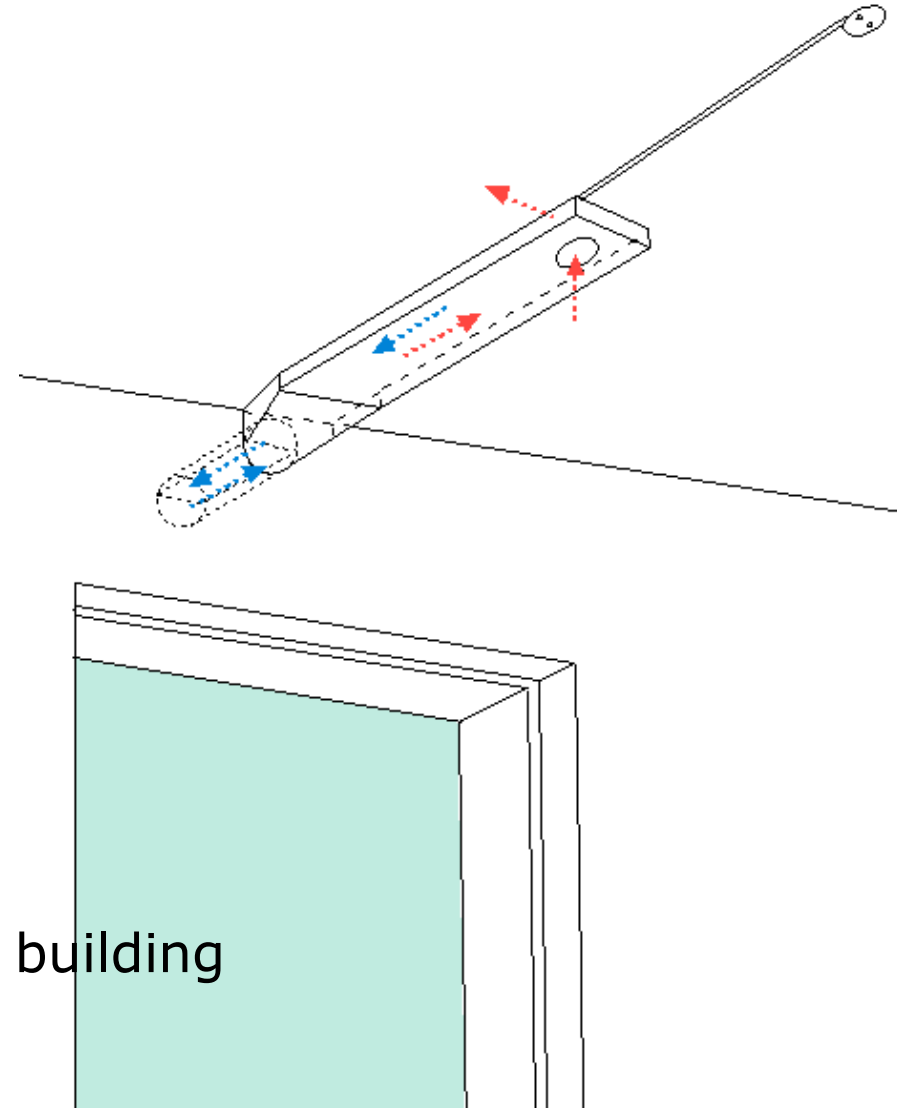
Over 80% heat recovery
Energy recovery also possible

Cleaner air

Unlimited space for filters
Maximum performance

Invisible ventilation

Subtle design 2-6 cm thick.
Looks as a structural part of the building



The Best Solution Combines All

Future market trend

As the markets develop, the best solution will need to comply with all the main customer demands:

Energy conservation, indoor air quality and space economy

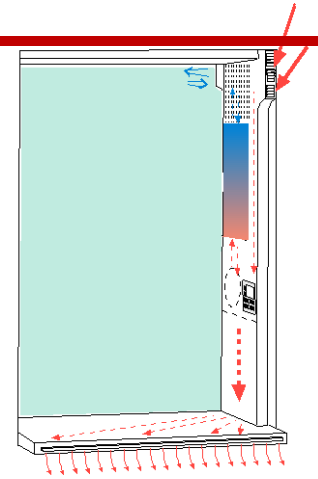
Ours is the only compact, yet powerful solution that can easily meet all those demands



The Spin-offs:

Window integrated solution

- Our solution can easily be fitted into a window frame



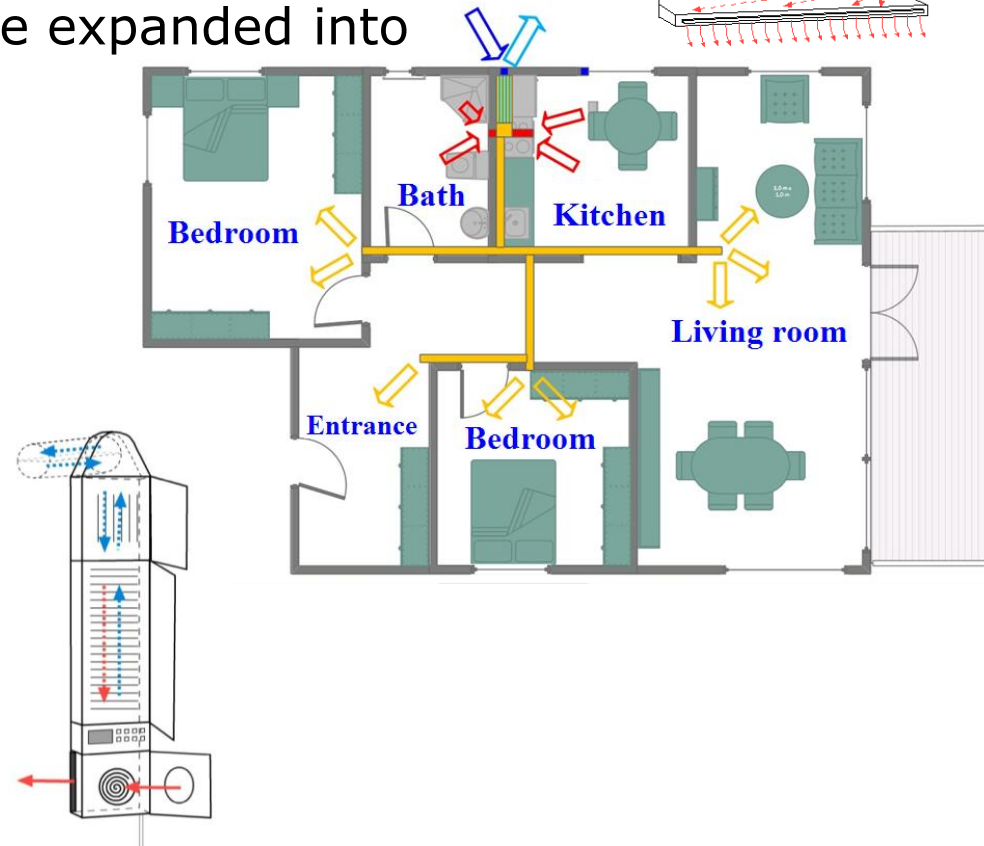
Central solution

- The ceiling unit can easily be expanded into central system

Modular additions

Any flat air treatment module of any length can be added:

Heat exchangers, humidity recovery, higher grade filter, ultra fine particle filters, heaters, coolers, additional controls and more.



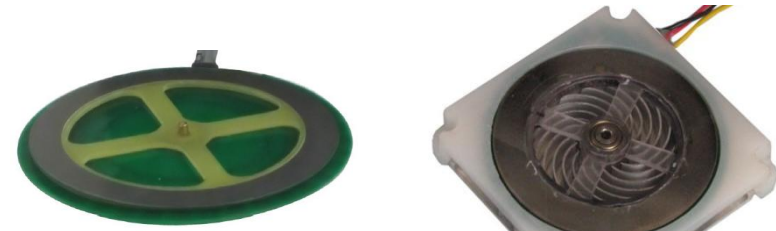
Our Technology

Integrated motor-blower technology¹

- Over a decade of development of blowers and motor technology
- Originally developed for computer cooling
- Products included the world thinnest cooler (for PC)
- Awards (gold and silver price in the Semitherm conference)
- Numerous patents

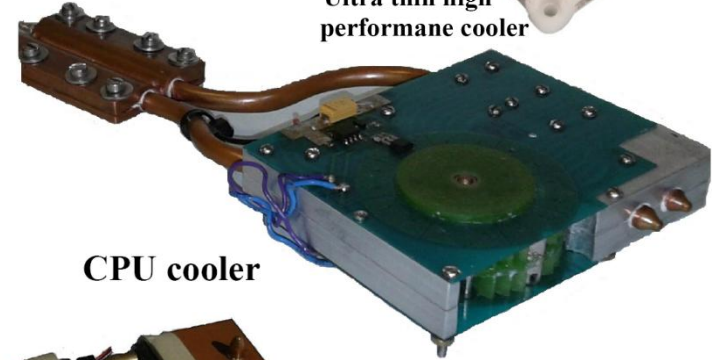
Technological lead over competitors

- Higher efficiency, more capacity and better pressure performance than any other similar flat solutions



Radial motors

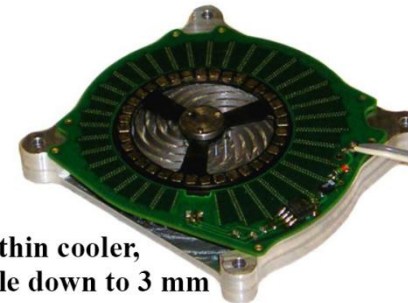
Ultra thin high performane cooler



CPU cooler



High performance cooler,
 $R_t = 0.18 \text{ } ^\circ\text{W}$



Ultra thin cooler,
scalable down to 3 mm

The Team:



Johannes Loftsson, CEO

Founder: Strong analyzer and experienced in research, project control, IAQ and building design

Ed Lopatinsky, CTO

Exceptional problem solver and the inventor of over 80 patents

Also

Dan Schafer: Electronics specialist

Greipur Sigurdsson: Communication system specialist

Extended group

Business consultant, Acoustic engineer, Verkís (engineer consultant), Ísloft (Ventilation contractor), Rafloft (Filter contractor), Reykjavik University, University of Iceland and more.

Project Status:

Development of core technology (finished)

Centrifugal and crossflow blowers, motor technology and heat exchanger

Numerous products and prototypes built



Flat high capacity flat blower
THK 22 mm V = 140 cfm



80% Heat Recovery

Building POC Prototype (mostly finished)

Compact blower unit built

Some minor work left on heat exchanger



Testing the POC prototype

Next steps:



Stage 1: Trade show prototypes (100 kUSD)

4 cm thick, 15 l/s, silent, 80% heat recovery and filters
Present at trades shows (ISH april 2015, and more)

Showcase prototype

Partnership with existing ventilation system producers or window frame manufacturers (potential exit for seed investors)
Possible to go a licensing route

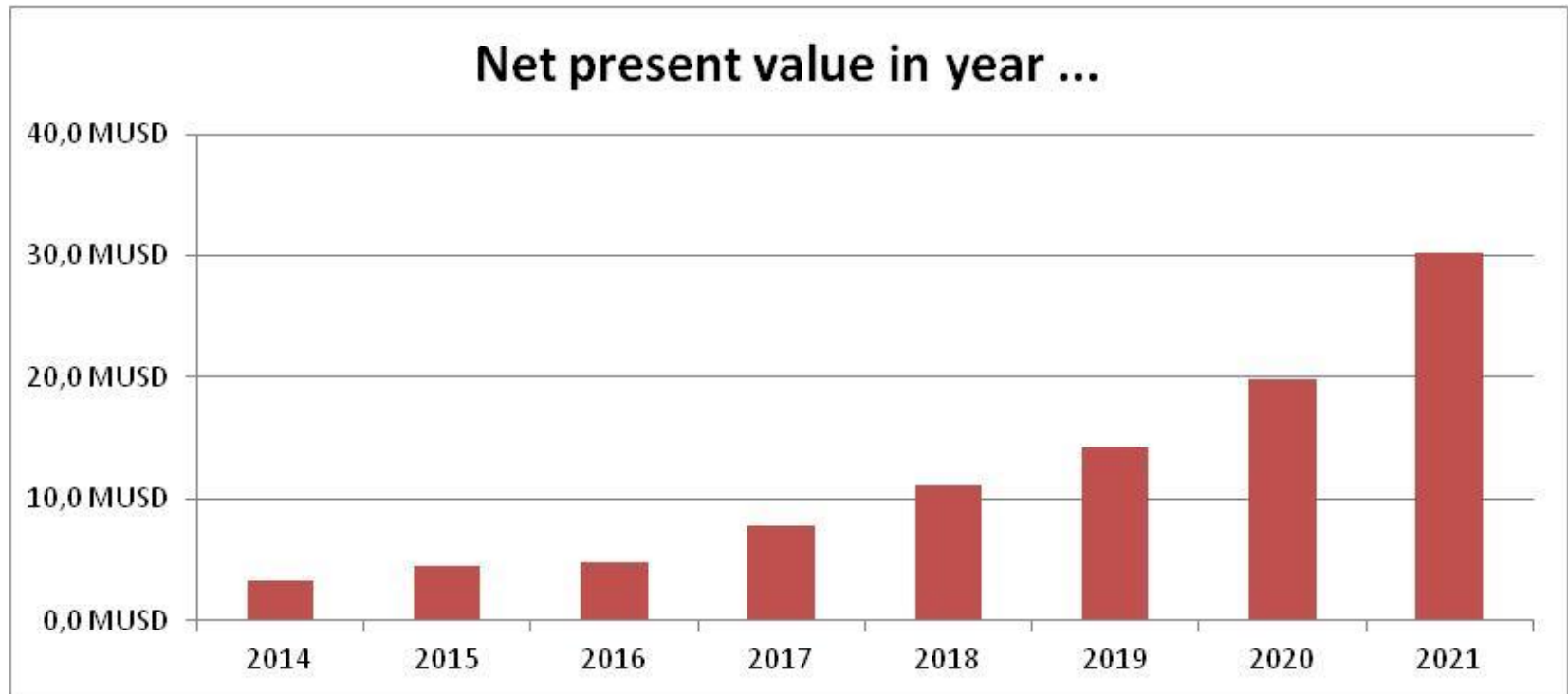
Stage 2: Getting the product to the market (900 kUSD)

Production and testing of zero-production prototype
Producing and selling the first batch

The Opportunity:

Future company valuation

Driven by the fast growing market



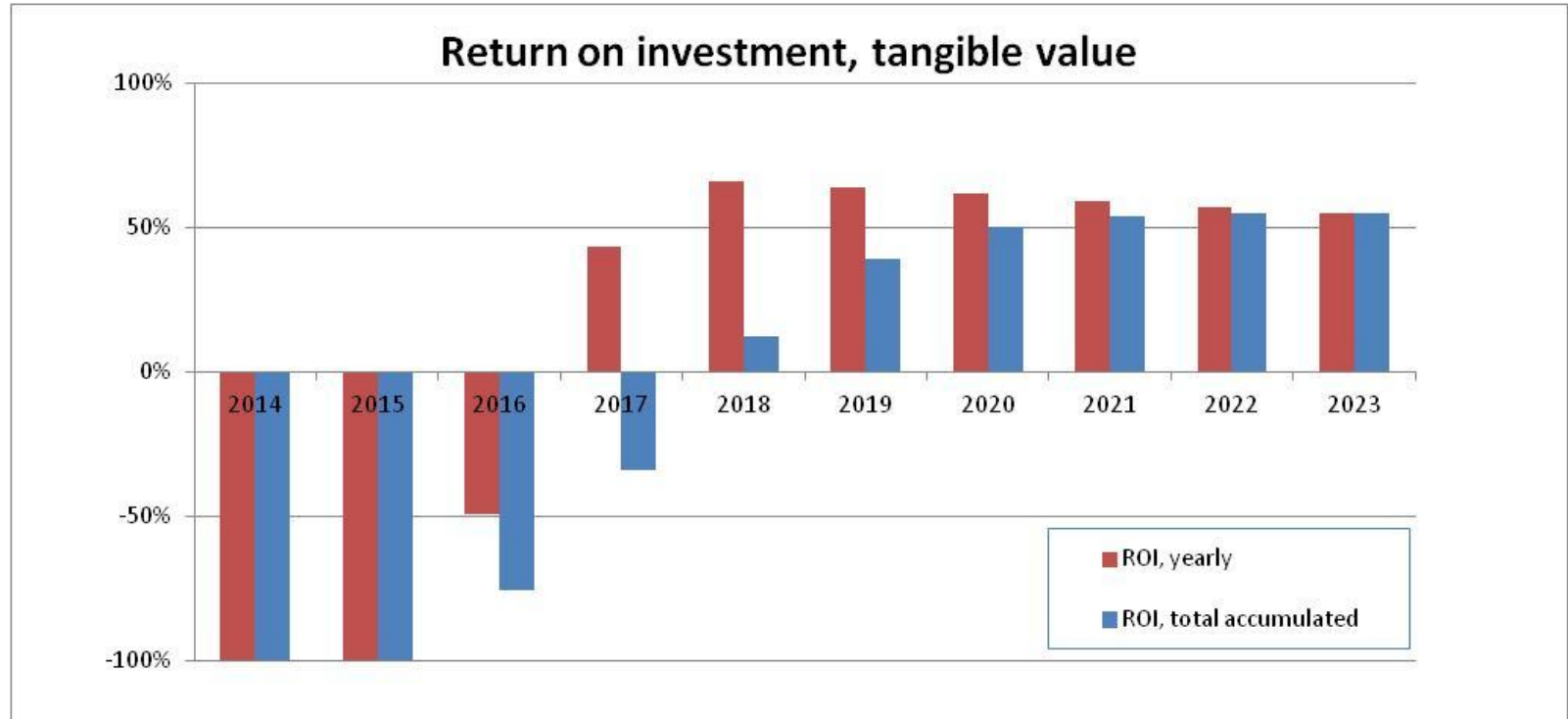
Break even reached at 3500 sold units

Projected market share of 2-4% of the European market

The Opportunity: ROI

Cumulative ROI

Positive in 2018, 55% in year 2021



ROI based on company valuation projects 15 folded value increase on next step of funding in 2015

Investment Summary

At the End of Stage 1

- Patented prototype with revolutionary capabilities
- Potential exit in 2015, at second stage of funding, at 15 fold ROI
- Spin-offs will help attract big players, such as ventilation system producers or window frame manufacturers
- Licensing route always possible as a fallback plan

Breather Ventilation ehf

Heating has never been cheaper



Air has never been cleaner