#### **New Authentic Mechanics**



# **TECHNOLOGY**



## Summary

- Novel patented technology for saving up to 40% of energy in refrigeration
- Addressable market of \$25.7B
- Ready for commercialization working product
- Strong experience team
- Seeking \$3 million for initial market development and productization





### What is Ecokor?

We are using a novel and patented multi-cascade for improvement in the efficiency of the refrigeration cycle. . We include clever algorithms which continually optimize performance according to ambient temperature. Ecokor is placed between the compressor and the fridge or area that needs to be cooled with advanced switching schedule decrease energy consumption and prolongs lifetime.





### **Ecokor Models**

System developed for refrigerated trucks



System for stationary applications

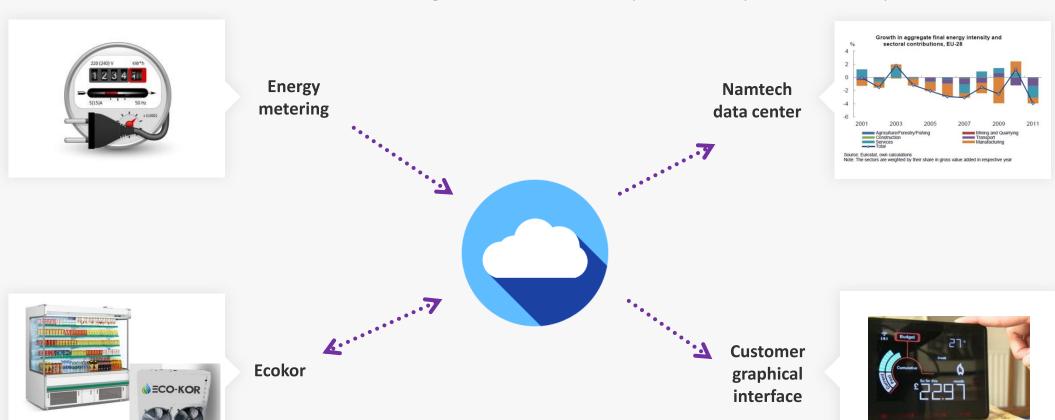




## **Engaging the Customer**

Our system includes a simple monitoring system which showing energy savings data via cloud.

As well, we will take the data gleaned from the system to optimize the operation.





# **Energy Savings**

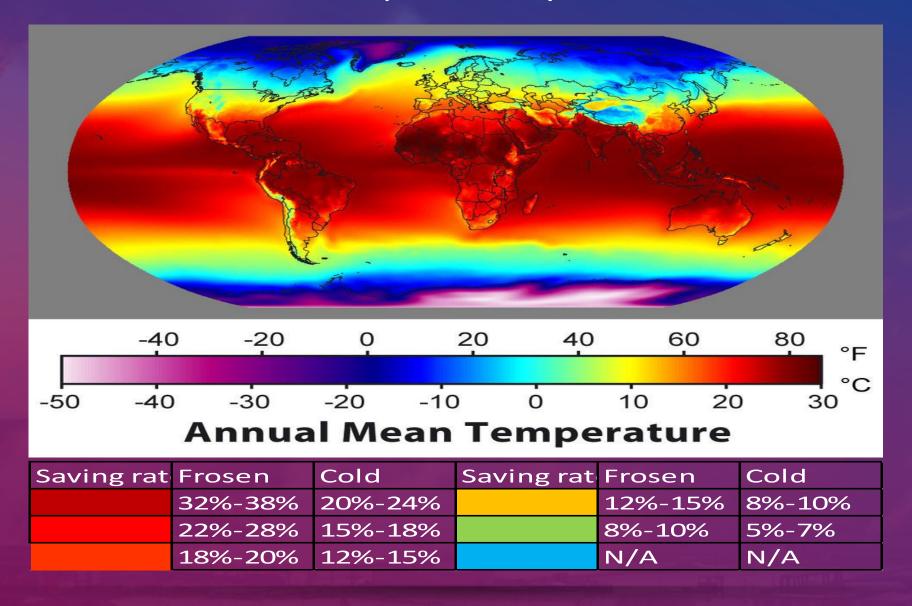
Ecokor saves up to 38% of the energy depending on the system type, ambient temperature, and climate.

Our technology prolongs system lifetime by 25% years "





### An enormous market particularly in warmer climates





**B2B – ONE TIME PAYMENTS** 

GROSS MARGIN: 60%-70%

THE CUSTOMERS:

**FOOD AND PHARMACY** 

WAREHOUSES, SUPERMARKETS

CHAINS, FOOD PLANTS,

REFRIGERATION LOGISTICS FLEETS

### **Business** model



3-4 year ROI



ESCO (Energy Service Companies) model available. No internal funds needed



Climate finance deal can be provided by Ampa Capital or other finance institutions



Our customers **save money and** contribute to the battle against climate change



Turnkey system deployment



# Market size: The serviceable addressable market is \$25.7billion

Refrigeration is essential for the food and pharmaceutical industries and our systems are relevant for most sections of the market

Supermarkets	Cold warehouses	Food plants	Refrigerated Trucks and Containers
600,000 stores	616million m <sup>3</sup>	2 billion ton production	22 million units
\$3 billion	\$7.5 billion	\$3.2 billion	\$12 billion





Competitors?

To the best of our knowledge, we are know systems attempting improvement of the cycle efficiency using similar approaches like economizers of Bitzer or new cooling agent of Thermo-king . There are companies which are working on various components of the system and improving their efficiency. We see these components as being complimentary rather than competitive.

> One thing we want to emphasize. They save 2-10%.

We save 10-38%. Big difference.



Total sales potential 2021 - \$1.9 m

















### In negotiation



















# Strong Intellectual property portfolio

TECHNOLOGY		
Number	Status	Description
IL2017/051383	PCT/National stage submitted in USA, EU, India, China, Korea & Japan	Combined-Type Cascade Refrigerating Apparatus
IL2019/050518	PCT/National stage submitted in USA, EU, Japan, India, China, Korea, Singapore, Mexico, Australia, Brazil and Vietnam	Multi Cascade Cooling System
254616	ISR/Patent	Combined-Type Cascade
260159	ISR/ Final Published	Multi Cascade Cooling System
278561	Submitted in Israel	Multi Cascade Heating System



### The heating market

#### Solved problem



A sharp drop in thermal power and energy efficiency ratio (COP) at low outside temperatures. As result, the user should acquire an additional heating element. In some situation the disadvantage preponderates all the advantages of heat pumps. Difficulty and even inability to achieve temperature 55 Celsius degrees (border temperature of Legionella) in the reverse water heating reservoir in winter period. High energy costs (sometime, more than 30% of total energy spending) frosted evaporator thawing.



The opportunity

The multi cascade technology will open 2-5 billion dollar niche at heat pump industry to markets such North US, Canada, Russia, and Scandinavia. Our simulations show that we will save more than 31% in Helsinki and 35% in Quebec City with our designs.



# The Namtech ecosystem

### Stationary applications











### Refrigerator trucks









### Heat pumps











### The team



Chairman - Dr. Gil Aloni Former CEO of LitoGroup

A leader in the Israeli transport refrigeration industry, former executive in blue chip Israeli transportation and cooling enterprises including Egged and Amcor



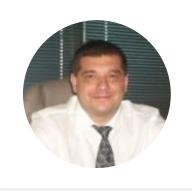
CEO - Andrey Dobkin
M.Sc Heat physics & Energy

Rich experience in energy efficiency technologies, proven management record of business companies and NGO, especially, in the cooling field. Co-author of 10 patents



CTO - Michael Sitkovsky M.Sc.

Proven experience in implementation and commercialization of cooling and refrigeration projects, strong academic record Co-author of 7 patents



**CFO - Ofer Vexler** CPA, MBA

Harvard programs alumnus, strong record in the commercialization of innovative businesses. Certified professional in Climate Finance - World Bank; Approved expert of the EBRD and EU H2020



# **Advisory Board**



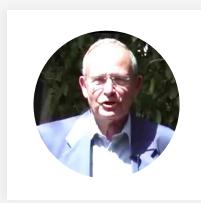
#### **Yoel Kish**

One of the founding fathers of the Israel refrigeration industry, the founder of Kish Kirur (LitoGroup). One of major market players of Israeli refrigeration trucking industry



#### **Professor Simon Litsyn**

One of an inventors of USB Flash technology, professor of Tel Aviv University, and founder of several electronics companies includes startups.

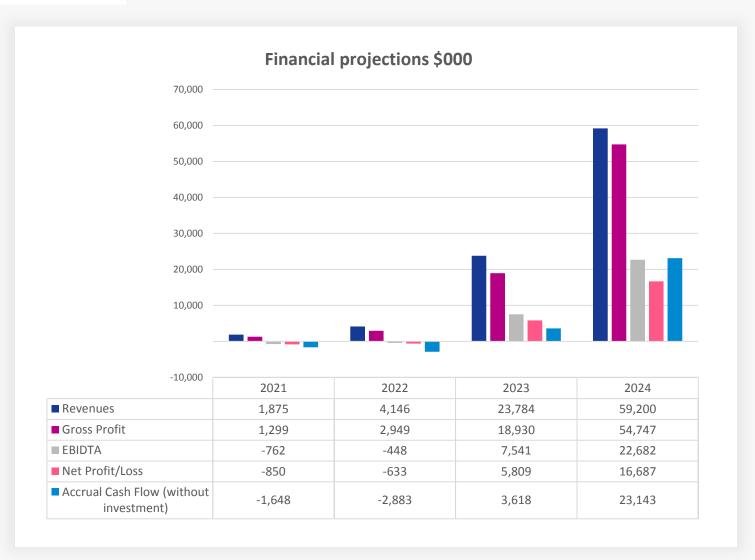


#### **Shmuel Ben Ari**

Former chief engineer of Egged (leading Israeli public transportation company with the fleet of more than 5,000 units), head of transport department of Israeli Association of Engineers



### **Financials**







# Thank you!

For more details please contact Ofer Vexler at ofer@nam-technology.com, tel. +972-54-755-0034

