

Termottimizzatore®



**The Termottimizzatore® is
the new Iron Shark patent.**

The Termottimizzatore ® (Thermal Optimizer) is a heat regenerator designed to achieve a dual objective in a very short time span:

- 1) **Your company's energy saving requirements.**
Thermal optimization means return on initial investment in less than two years.
- 2) **Safeguarding of the environment in which we live;**
by burning less fuel, we can significantly reduce emissions of carbon dioxide (CO₂) and other pollutants.

TYPES OF EMISSIONS FROM WHICH IT IS POSSIBLE TO RECOVER HEAT:

Fumes from heating boilers
Fumes from steam generators
Fumes from process furnaces
Fumes from diathermic oil boilers
Environmental expulsion of hot air from processes
Environmental expulsion of steam from processes
Expulsion of water from processes or drainage
Circulation of process water
Dusts and granules from industrial processes

ECO-TH FAMILY

Heat recovery is performed on a gas (or steam) flow, but also on liquid, mud or granulate, towards a second flow in a liquid state. In the case of a boiler (or a steam generator), the Termottimizzatore® of the **ECO-TH** family recovers and reutilizes much of the heat that would otherwise be released into the environment with combustion fumes. The heat is returned to the water of the boiler (or the feed tank).

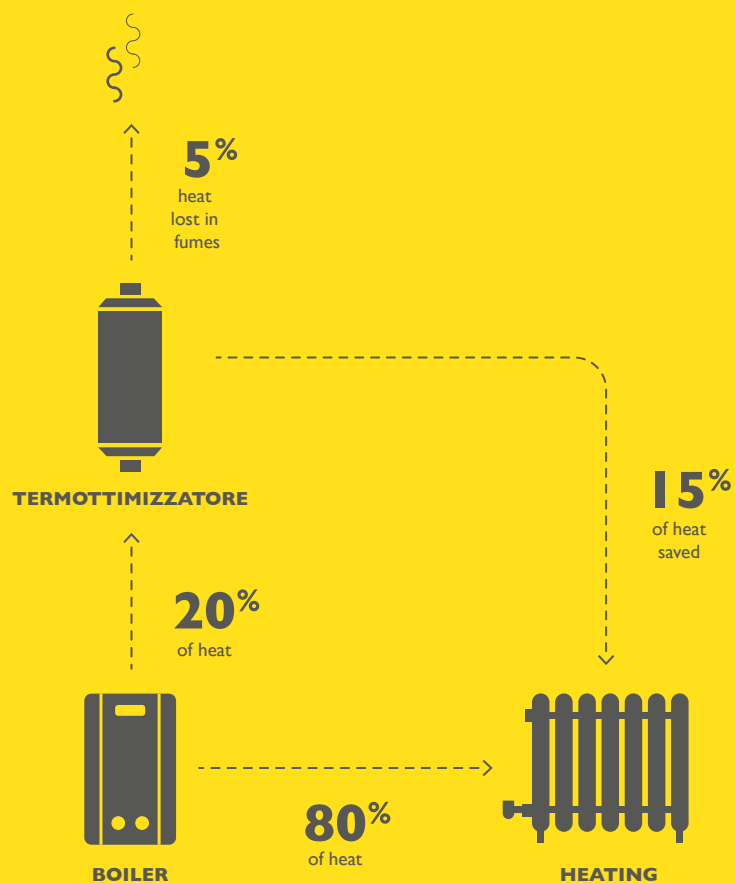
The heat recovered from fumes and made available to the user is equal to as much as **75%** of what would otherwise be irremediably lost in the atmosphere; this recovered heat is also equal to as much as **15%** of the total initially supplied by the fuel.



ECO-TSX FAMILY

Heat recovery is performed on a gas or steam flow towards a second gas flow. In the case of a boiler (or a furnace), the Termottimizzatore® of the **ECO-TSX** family recovers and reutilizes much of the heat that would otherwise be released into the environment with combustion fumes, returning it to the combustive air.

The heat recovered from fumes and made available to the user is equal to as much as **60%** of what would otherwise be irremediably lost in the atmosphere; this recovered heat is also equal to as much as **12%** of the total initially supplied by the fuel.



SECTORS OF UTILIZATION

TERMOTTIMIZZATORE® (ECO-TH ED ECO-TSX)

Industrial plants
Clinics and Hospitals
Residences and Apartment buildings
Swimming pools and Sports centers
Shopping centers
Hotels and Resorts

SECTORS OF UTILIZATION



Residences



Clinics



Industrials



Shopping centers



Swimming pools



Hotel

RETURN ON INVESTMENT

Thanks to high levels of savings on fuel consumption, the cost of purchase and installation of the Termottimizzatore (Thermal Optimizer) is generally recouped in two years.

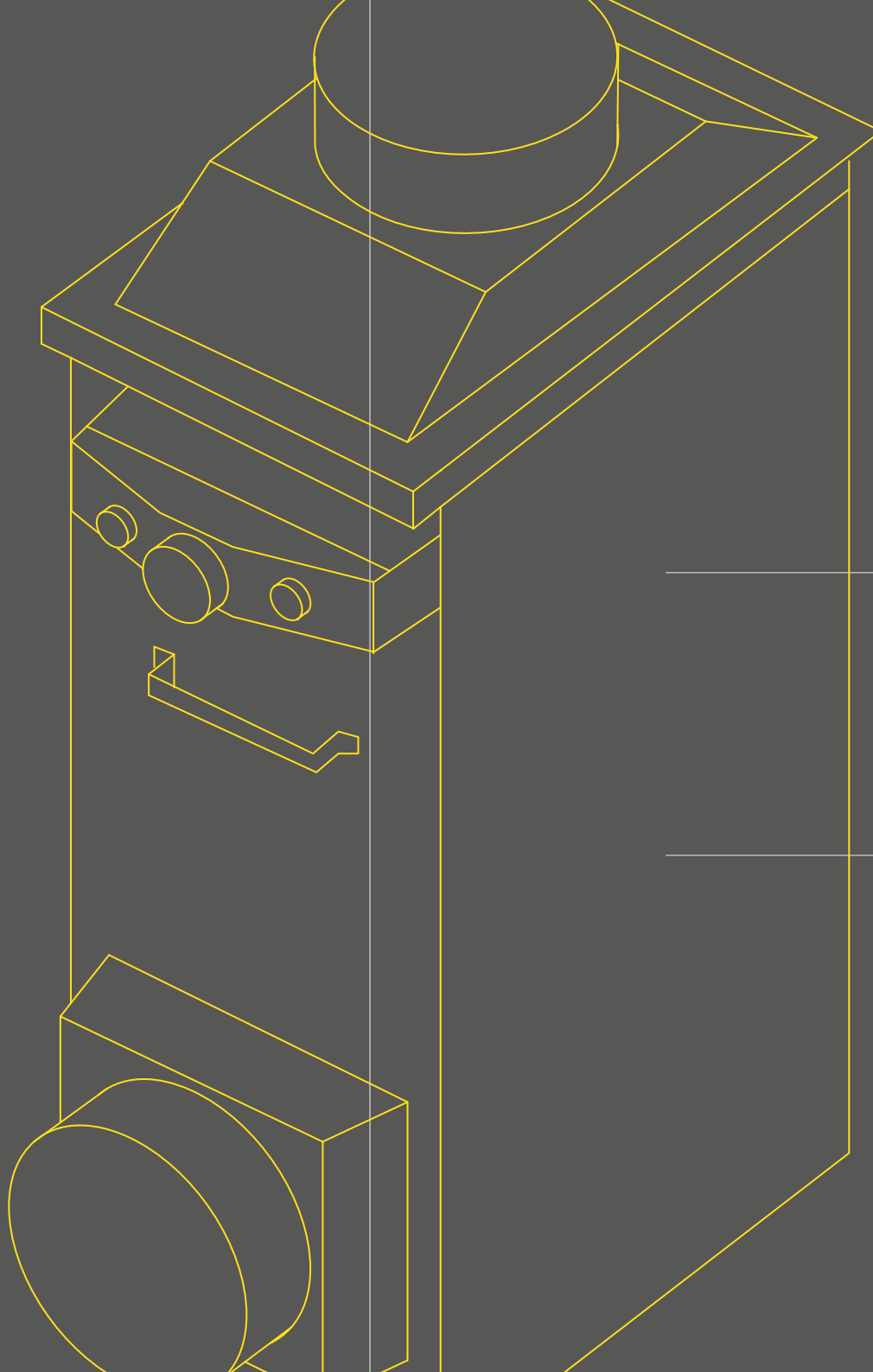
Furthermore, by burning smaller quantities of fuel, it is possible to significantly reduce emissions of carbon dioxide (CO₂) and other pollutants.

Termottimizzatori® ECO-TH and ECO-TSX

The heat regeneration devices of the ECO-TH and ECO-TSX families of Termottimizzatori® (Thermal Optimizers) have been invented, designed and constructed to respond to requirements of heat recovery and resulting reduction of fuel consumption and gas emissions.

The Termottimizzatori® (Thermal Optimizers) are patented heat exchangers that permit high levels of energy recovery, therefore augmenting energy efficiency of the systems where they are installed.

One of the two fluids involved in heat exchange is typically a case of thermal waste, where energy is dispersed without being recycled in the process. The Termottimizzatori®, with respect to the heat exchangers on the market, have the advantage of adapting well to particularly problematic fluids (slurry and dusts) or chemically aggressive substances (combustion fumes from oils and biogas).



1

VERY HIGH LEVELS OF ENERGY RECOVERY

Fuel savings of up to 25%.

2

ENVIRONMENTAL SUSTAINABILITY

These devices reduce CO2 emissions of the climate control systems on which they are installed.





CASE STUDY

HOTEL

Fuel consumption: 130.000,00 €/anno

Initial investment: 27.500,00 €

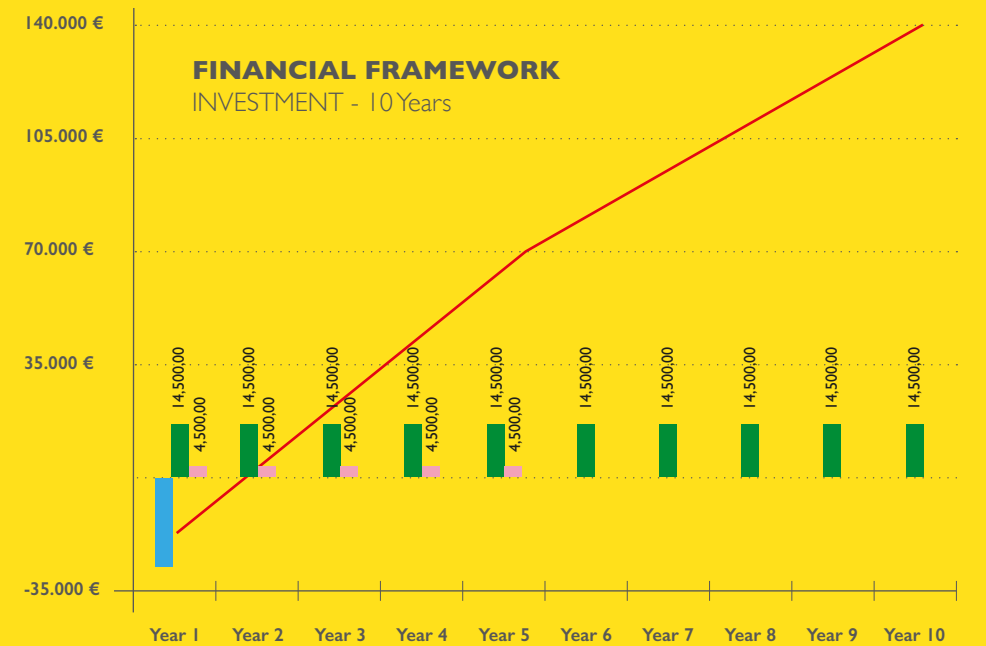
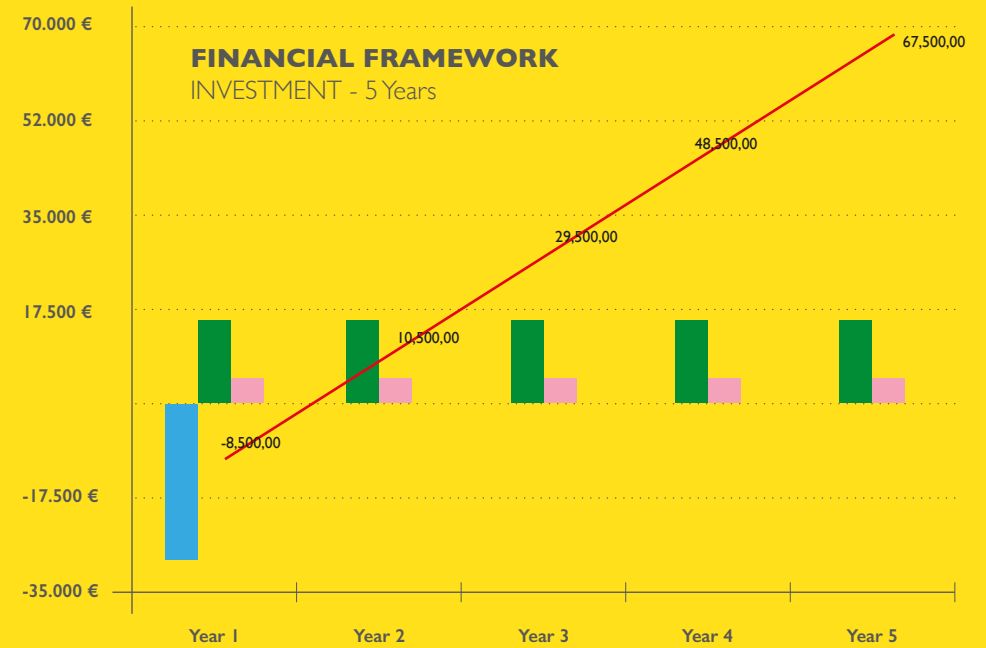
Savings achieved: 11,2%

Fuel savings: 14.500,00 €/anno

Energy Efficiency Titles (TEE): 4.500,00 €/anno

Tax deduction: 1.375,00 €/anno

LEGEND





CASE STUDY

INDUSTRY

Fuel consumption: 432.000,00 €/anno

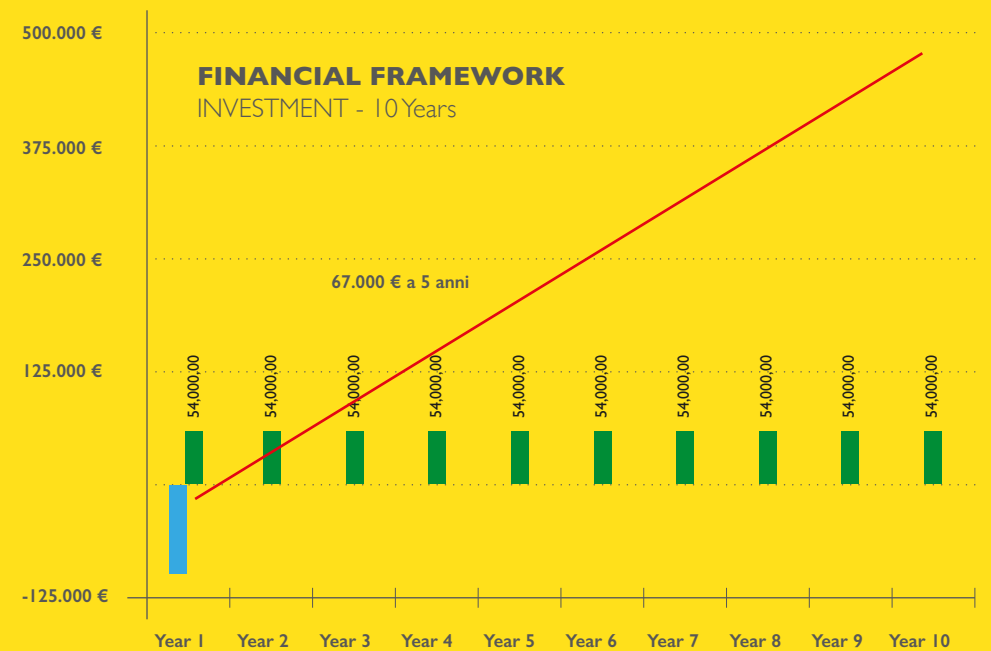
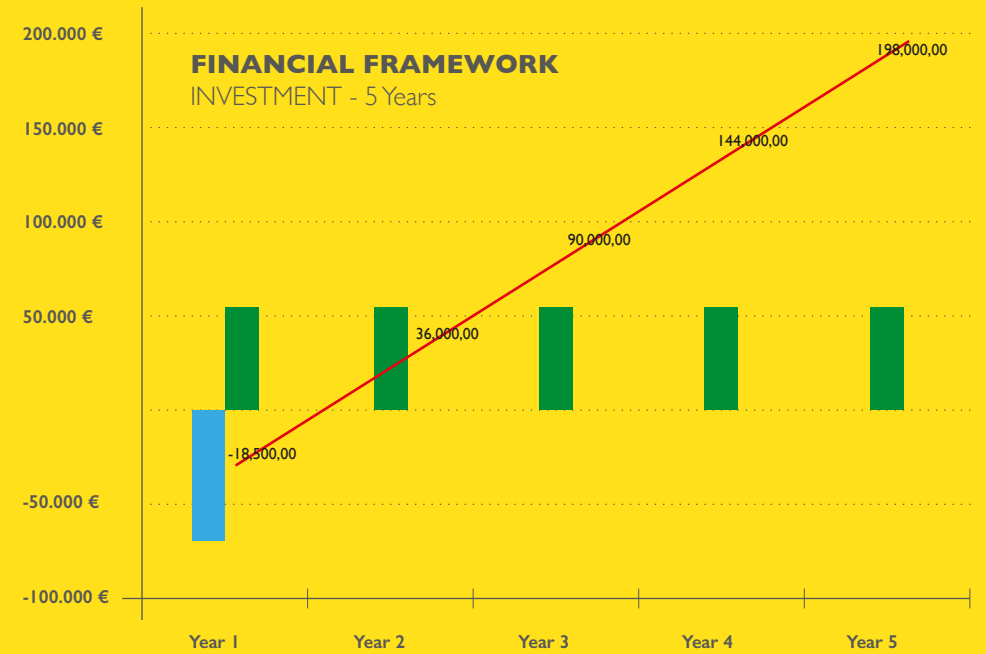
Initial investment: 72.000,00 €

Savings achieved: 12,5%

Fuel savings: 54.000,00 €/anno

Tax deduction: 3.600,00 €

LEGEND





CASE STUDY

SPORTS FACILITY

Fuel consumption: 60.000,00 €/anno

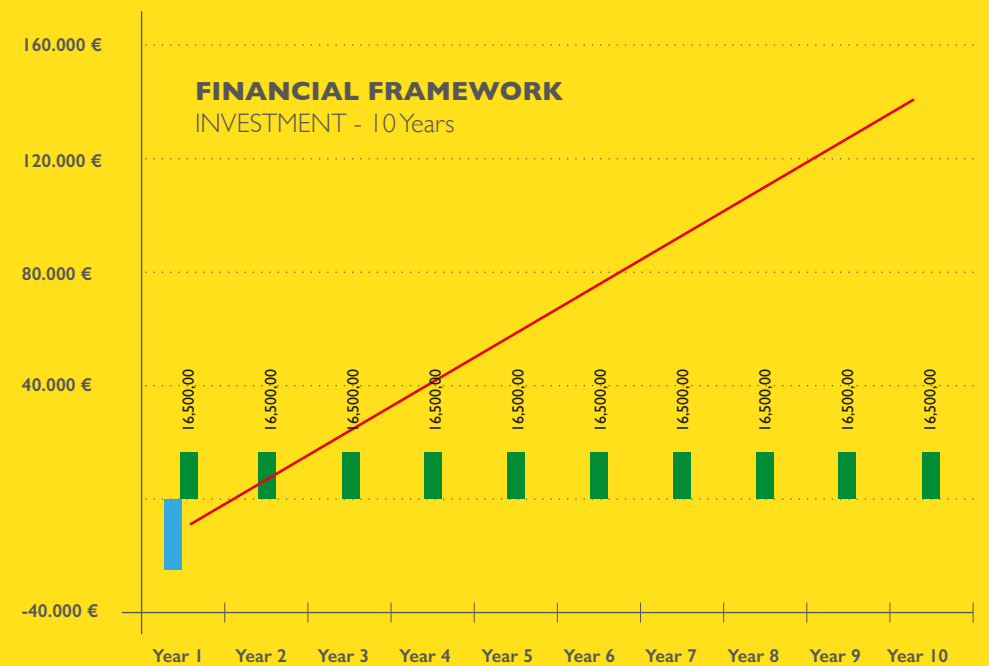
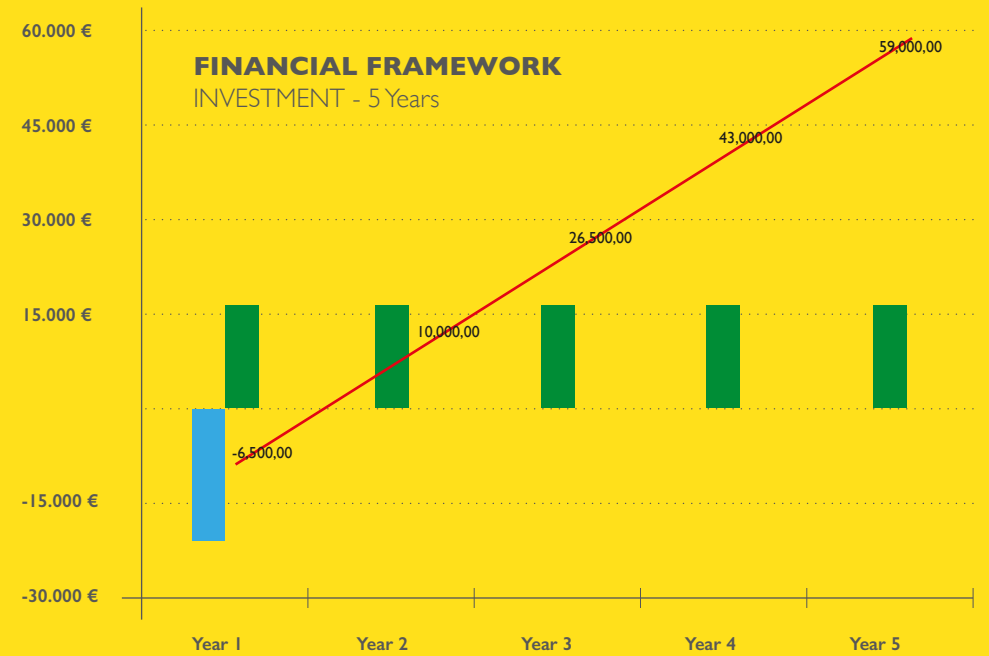
Initial investment: 23.000,00 €

Savings achieved: 27,5%

Fuel savings: 16.500,00 €/anno

Tax deduction: 1.150,00 €

LEGEND



OPERATIVE HEADQUARTERS

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