

RiEnergy

We reduce energy consumption, **simple!**



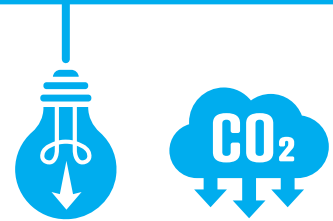
strategic partners with
hncare

RiEnergy

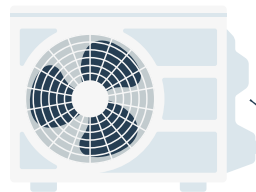
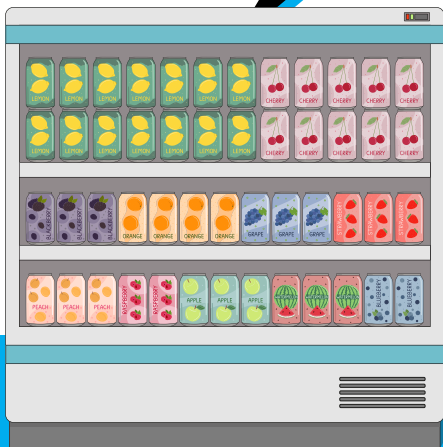
We reduce energy consumption, **simple!**

What we do, Put Simply!

We help businesses to make energy savings and carbon reductions with innovative offerings.



The Focus



In most refrigeration units and air-conditioning applications, a lot of energy is wasted because the unit's compressor (*the main running cost*) runs much longer than is needed.

Using our patented process called Optimized Refrigerant Supply® (ORS®) the advanced **RiEnergy** control device reduces the run-time of the cooling system compressor, therefore, reducing electricity consumption...

Even in the most demanding high and humid environments!

The Solution

The **RiEnergy** ORS® technology uses two temperature sensors in an algorithmic energy trading control arrangement to monitor the thermodynamic (*room or space temperature*) and the hydraulic (*refrigerant supply*) performance of the connected air-conditioning or refrigeration system.

In Operation...

...this algorithmic energy trading approach first uses the room or space temperature sensor to ensure that a required setpoint has been achieved.

Subsequently, this temperature sensor ensures that the space is maintained within $\pm 0.5^{\circ}\text{C}$ ($\pm 0.9^{\circ}\text{F}$) of the required setpoint. Meanwhile, a second temperature sensor connected to the indoor evaporator coil is used to identify when the compressor has done its useful hydraulic work in producing a supply of high-pressure liquid refrigerant.

Using the built-in algorithmic energy trading control, the **RiEnergy** ORS® advanced system then starts and stops the compressor at appropriate times to optimise running costs.



Yes OK! We know...
What on earth does
that mean, right?

Well basically, we have 2 sensors.
Sensor 1 reads set temperature,
Sensor 2 works like a switch,
so auto toggles on and off
when needed - Simple as that!

Unit Applications :



Air-Conditioning



Refrigeration



Cooling Systems

RiEnergy REPORT

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Phase One

Retail Trial

Annual savings for Retailer Phase 1 from three pilot installations.



19,771.24 kWh
representing a
reduction of 23%
per year in energy
consumption



8,402.78kg
or 8.4 tonnes
CO²
Reduction



Financial Savings
based on €0.45
are €8,897.06

Financial Savings
based on €0.65
are €12,851.31

Conclusion

The pilot accurately confirms energy savings for kWh and CO² reductions with RiEnergy installed on the AC and refrigeration units. The financial savings have been based on an electricity supply cost ranging between €0.45 and €0.65 per kWh.

With average electricity prices expected to rise over the coming months and further inflation forecast for over the coming years, the savings model and RiEnergy payback period will only improve.

Multi-national Forecourt Retailer

Our piloted forecourt retail company is a well established brand. They currently operate almost 200 locations in the Irish market and have a total of 620 petrol forecourt sites across Ireland, the UK and the USA, employing circa 15,000 people.

Pilot Overview

RiEnergy and our retailer agreed to run a number of trials, **including:** Installing RiEnergy on a set of 7 refrigeration units at one of their large service station sites. Installing on an air conditioning unit at a second site and installing on an air conditioning and refrigeration unit on a third site.

Energy Reduction & Savings Forecast

(Based on 100 RiEnergy unit installations)

Year 1

(based on an avg of
6.85 per unit kWh per day.)

kWh = 249,974.67 kWh per year
CO² saving = 106,239.23kg or 106.2 tonnes
Financial savings (at €0.45) = **€112,488.60**
Financial savings (at €0.65) = **€162,483.53**

After 5 Years

kWh = potentially over 1.2 million kWh saved
CO² = 530+ tonnes saved
Financial savings (at €0.45) = **€560,000+**
Financial savings (at €0.65) = **€810,000+**

After 10 Years

kWh = potentially over 2.4 million kWh saved
CO² = 1060+ tonnes saved
Financial savings (at €0.45) = **€1.1 million**
Financial savings (at €0.65) = **€1.6 million**

The Offering

Pay as you save in the current climate allows for RiEnergy to install our units on an opex model to allow the end user to save from day one.

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Call. 0818 543 001

Email. info@rigroup.io

www.rigroup.io



What's Included?

Price match guarantee and service audit twice yearly.

Calibration

Health and Awareness Checks

Data Collection

Seasonal Adjustments

If required.





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