ASHMERE SOLUTIONS

Coolnomix

reducing energy consumption & C02 emissions

www.ashmere.solutions

Constructionline Reg no. 00315887

ISO 9001:2008 CERTIFIED Cert no. 14122140

Alcumus SafeContractor Cert no. UG3970

NICEIC APPROVED CONTRACTOR Cert no. 607974000

QMS ISO 14001 : 2015 REGISTERED Cert no. 110792021

PERRY JOHNSON REGISTRARS, INC.

UKAS MANAGEMENT SYSTEMS

Coolnomix®

reducing energy consumption & C02 emissions

ASHMERE SOLUTIONS

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About.

Ashmere Solutions are an engineering company who have been in business for over 20 years. They are an expert Mechanical & Engineering service provider and independent supplier of power solutions for critical, industrial and commercial operations.

Ashmere Solutions deliver a powerful suite of globally patented, innovative energy reduction solutions that save their clients money by lowering energy bills whilst reducing their carbon emissions. Our core solution for reducing carbon emissions is COOLNOMIX®; an airconditioning and refrigeration energy optimisation technology. Our other technologies include Voltage Optimisation (VO) & Stabilisation, Commercial Energy storage, EV charging and PV + Batteries. Ashmere Solutions, via our in house engineering team an energy efficient end to end solution from Site Survey - ROI analysis & payback guarantees - Installation - Monitoring and Verification.

In a world, increasingly dominated by rising energy prices and climate change, Emissis are proud to be working alongside some of the leading UK businesses supporting them on their journey towards net zero saving them millions in energy overspend and waste in the process.

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Net Zero is coming...

The UK and EU are legally bound to reach net zero by 2050 and several other major economies are doing the same. More businesses than ever before are now having to report on carbon emissions.

Start your net zero journey today and reap the benefits sooner. We deliver a powerful suite of solutions that reduce your carbon emissions, save you money with lower energy bills and generate revenue from being a more flexible energy user with the help of today's leading technology.

We work with:

Lloyds Bank · sodexo · Wates · NHS · Subway · Bouygues Energies & Services · BBC · next · DW Fitness First · Frankie & Benny's · The co-operative · People's History Museum · Walkers · QHotels · moto · Heinz · Debenhams · Unilever · Dell · Dow · Durham Tees Valley Airport · EMCOR UK · NHS Gateshead Health NHS Foundation Trust · NHS South Tees Hospitals NHS Foundation Trust · northumbria University Newcastle · West Yorkshire Police · Emerson · ess · Newcastle Gateshead · Hagemeyer · Progress General Services · redstone · Riventa · Schneider Electric

Introducing Coolnomix®:

Coolnomix® is our innovative energy-saving solution that reduces the energy consumption of your air-conditioning and refrigeration systems without compromising their performance.

Cooling and refrigeration account for 20% of the CO2 emissions produced by most businesses, but with Coolnomix®, you can make a significant impact on your carbon footprint. It's a fast-fit, low-cost, intelligent thermostat designed for air-conditioning and refrigeration systems that can dramatically reduce energy consumption.

The Key Benefits:

- Unrivalled energy saving performance
- Up to 40% reduction in energy use
- Reduced carbon emission
- Fast return on investment (ROI)
- App. displays kWh/CO2e data & remote switch
- Improved temperature stability
- Improved air quality and comfort assurance
- Reliable high impact technology

coolnomix

We keep your people, equipment and produce cool, and your energy budget from overheating.

We help businesses to make big energy and carbon savings without changing cooling needs so that your building users are kept comfortable, equipment stays cool and your produce remains chilled.

COOLNOMIX is British designed technology that is maintenance free and can be easily installed by our qualified engineers with no disruption to your operation.

COOLNOMIX is a versatile system that operates in both heating and cooling modes. It includes advanced features such as automatic temperature tracking and a remote monitoring control dashboard.

As well as being completely maintenance-free, coolnomix is saving our clients up to 40 % in cooling mode and up to 20% in it's new heating mode.

Our Coolnomix Customers Include:

sodexo Wates Coca-Cola European Partners moto DAKOTA NHS SUBWAY Newcastle University ASDA BOUYGUES

Growing demand for air-conditioners is one of the most critical blind spots in today's energy debate. If left unchecked, energy demand from air-conditioners will more than triple by 2050. The answer lies first and foremost in improving the efficiency of air-conditioners, which can quickly slow down the growth in cooling-related electricity demand. Indeed, the opportunity for efficient cooling lies in the market's current inefficiencies: there are huge disparities in the efficiencies of air-conditioners sold today across the globe.

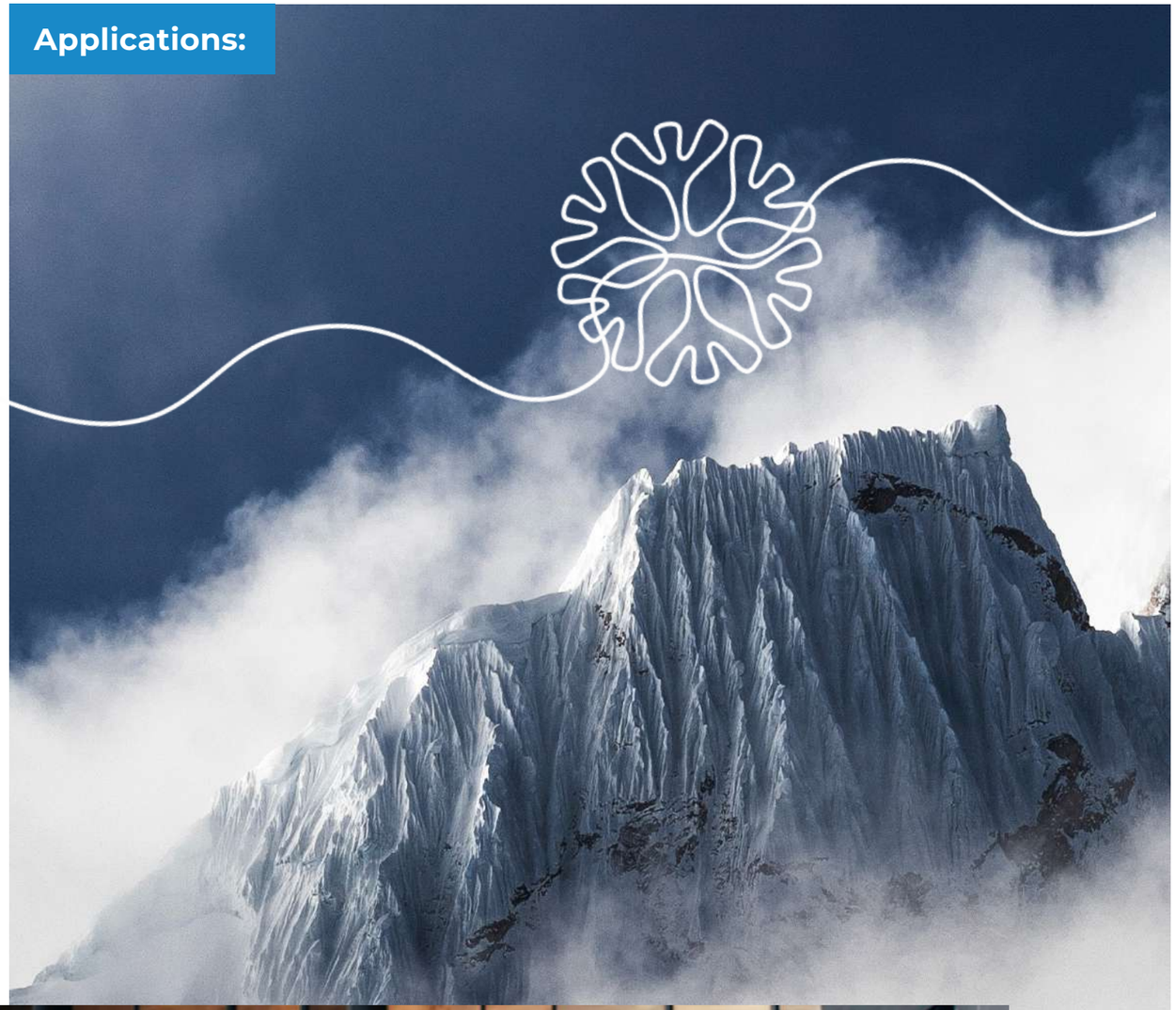
- Fatih Birol, Executive Director, IEA

COOLNOMIX can save up to 40% of the energy consumption on all types of air-conditioning units. Installed across all commercial settings, COOLNOMIX could save 6.9 TWh in Europe alone.

COOLNOMIX can help any business who uses air-conditioning to cool environments or refrigeration to keep produce chilled.
We have installed COOLNOMIX in many different businesses:

- Airports / Transport
- Supermarkets / Retail
- Data Centres
- Manufacturing
- Hotels / Restaurants
- Offices / Commercial
- Coldstores
- Universities / Education
- Hospitals / Health Centres
- Venues / Museums

Applications:



Air-Conditioning

- Commercial split type air-conditioners e.g. wall-mounted and cassette based package based and double expansion DX units up to the largest sizes
- Ducted air-conditioners with AHUs
- Inverter based VRV and VRF air-conditioners

Refrigeration

- Industrial refrigerators used in the manufacturing sector e.g. food processing and pharmaceuticals
- Walk-in refrigerators used in the food and beverage sector
- Retail sector refrigerators e.g. vegetable and dairy display units, cold drink cabinets, wine warehousing refrigeration

Cooling

- Data Centres
- Comms Rooms
- Server Rooms

Heating

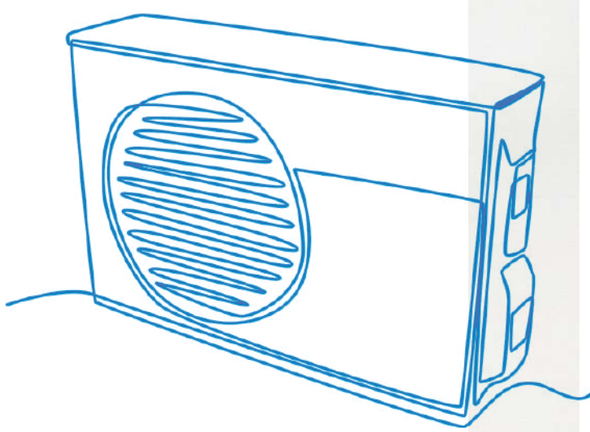
- Offices
- Residential Apartments / student homes
- Schools & Universities
- Hospitals & Carehomes

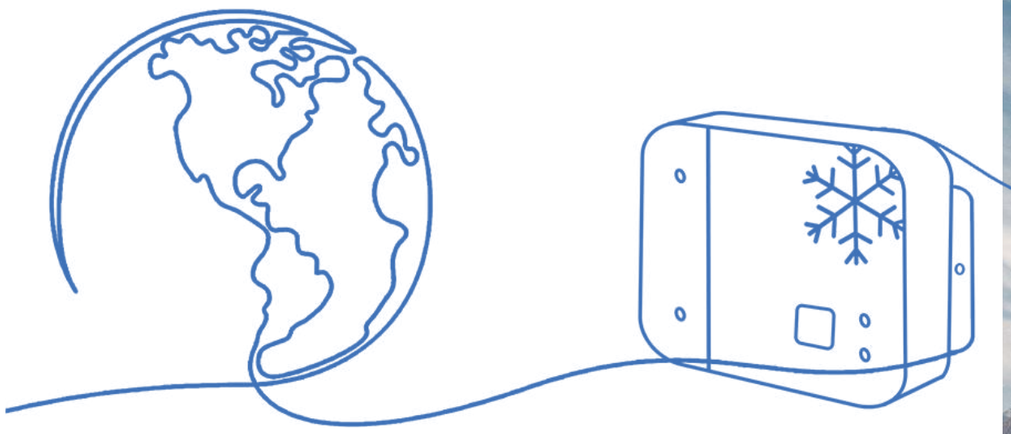
Main features

- Non-invasive Intelligent thermostat with dual temperature sensors
- Auto-detection of cooling and reverse cycle operation
- Sixteen user selectable operating temperatures
- Built-in audible alarm in the event of a cooling failure (alarms can be silenced or turned off)
- COOLNOMIX App. for monitoring and remote control
- Retrofit solution installed in 2 hours by qualified installer with no disruption
- Local isolation bypass on/off switch

Main benefits

- Unrivalled energy-saving performance
- Up to 40% reduction in electricity use
- Reduced carbon emissions
- Fast Return on Investment
- App. displays kWh/CO2e data and remote switch
- Improved temperature stability
- Improved air quality and comfort assurance
- Zero dripping or icing up
- Reliable high-impact technology
- 24-hour support and a three-year warranty



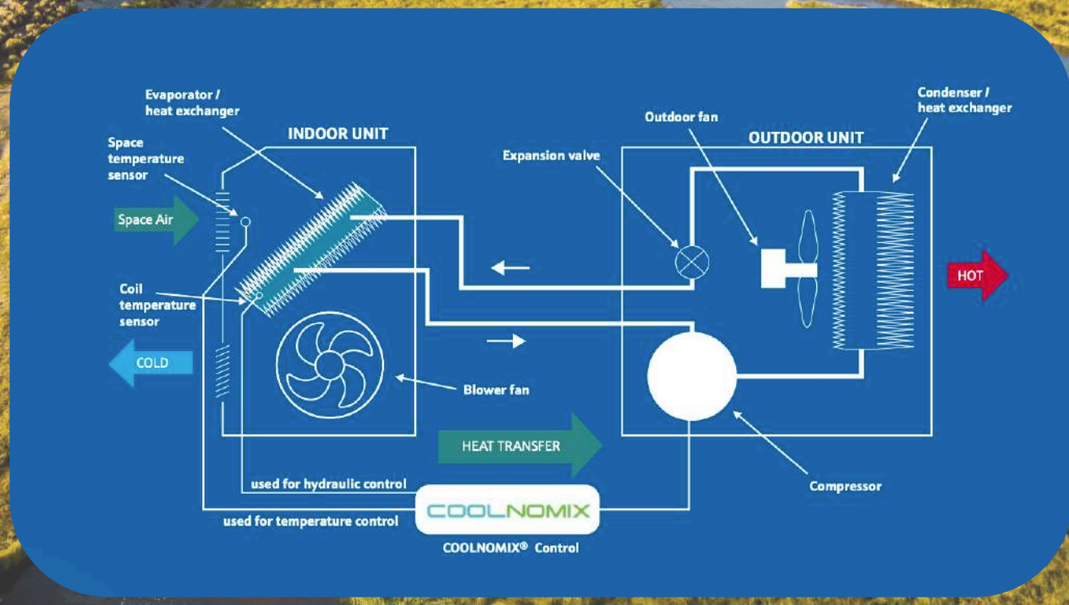


Technical

In most air-conditioning applications, a lot of energy is wasted because the unit's compressor (the primary running cost component) runs much longer than necessary. Our patented Optimised Refrigerant Supply® (ORS®) process, integrated into the advanced COOLNOMIX® control device, reduces the cooling system compressor's run-time, thus reducing electricity consumption, even in the most demanding, high and humid environments.

The COOLNOMIX® ORS® technology uses two temperature sensors in analgorithmic 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 +/-0.5°C (+/-0.9°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 COOLNOMIX® ORS® advanced system then starts and stops the compressor at appropriate times to optimise running costs.



Products:

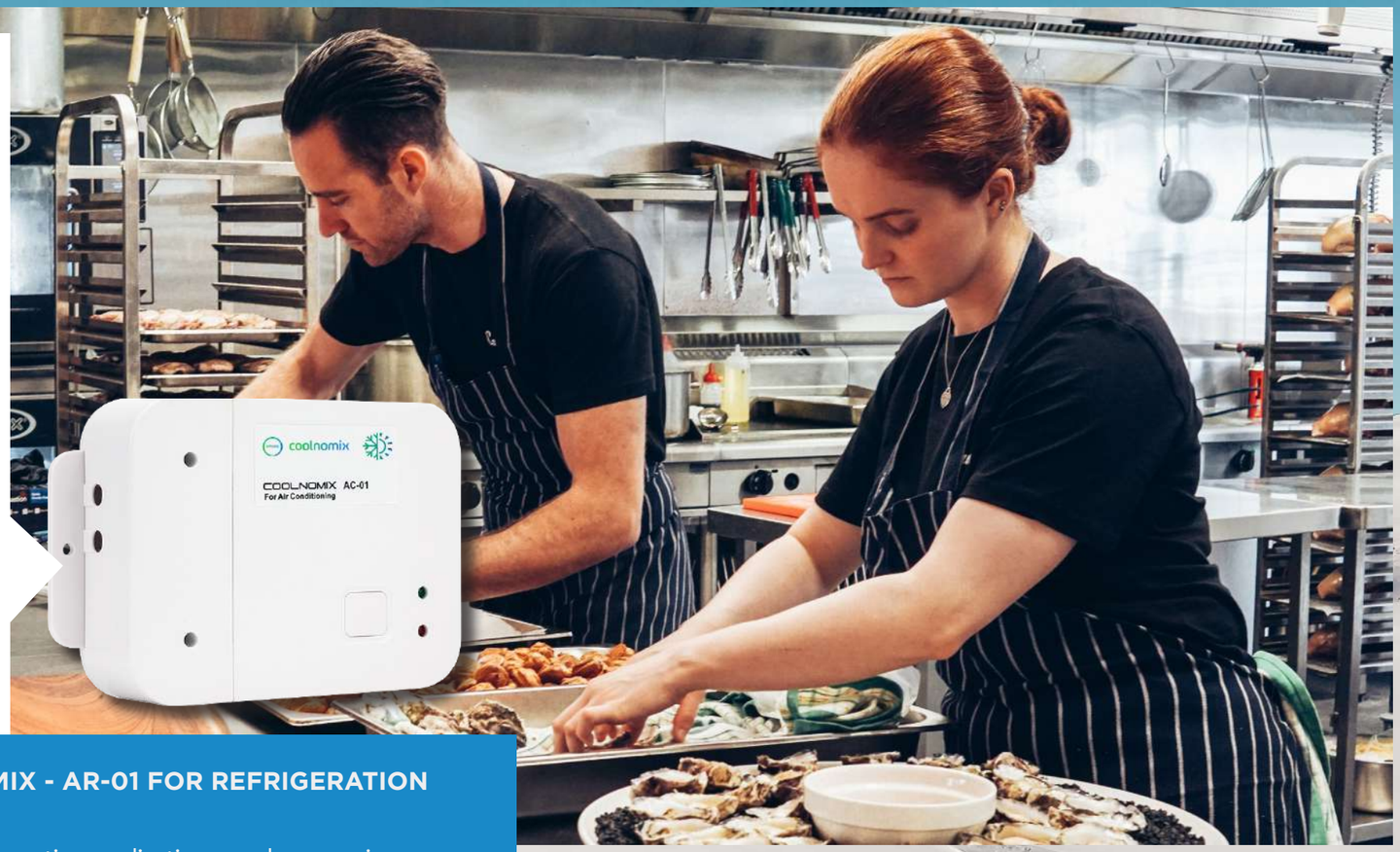
COOLNOMIX - AC-01 FOR AIR-CONDITIONING

In most air-conditioning applications a lot of energy is actually wasted because the unit's compressor (the main energy cost component) runs much longer than is needed.

COOLNOMIX® AC-01® is a revolutionary retrofitcontrol system to substantially reduce running costs in fixed temperature compressor driven air conditioning equipment.

COOLNOMIX® AC-01® is easily fitted to commercial air conditioning systems, regardless of their type or size—including units up to 50 tons or more!

Using our international patent published Optimised Refrigerant Supply (ORS)® technology, COOLNOMIX® AC-01® is designed to reducerunning costs in even the most demanding high humidity environments.



COOLNOMIX - AR-01 FOR REFRIGERATION

In most refrigeration applications much energy is wasted because the compressor (the main energy component) runs longer than is needed. Heating to melt ice adds to this wastage.

COOLNOMIX® AR-01® is a new retrofit energy optimisation system to reduce running costs even with the largest compressor driven refrigeration equipment.

COOLNOMIX® AR-01® is easily fitted to existing equipment used to cool dairy products,drinks, wine, perishable foods, vegetables etc. in supermarkets and other commercial areas.

Using our worldwide patented technology called Optimized Refrigerant Supply (ORS)®,the COOLNOMIX® AR-01® is designed for cooling and vending machine applications where the control temperature is above 0°C (32°F).

"

sodexo

I am very impressed with the Coolnomix technology with its proven performance to deliver energy and cost saving across our clients air conditioning and refrigeration estates. Coolnomix has surpassed my expectations and we are actively endorsing it across our client base!

Critically important to Sodexo, the Coolnomix technology does not affect either the operating performance or impact on the manufacturers warranties whilst continuing to deliver valuable energy savings.

- Frazer Russell, Global Energy Manager, Sodexo

The Restaurant Group

The Restaurant Group currently operate over 400 restaurants and pub restaurants through the UK, employing around 14,000 people. They also operate a Concessions business which trades primarily in UK airports. Their principal trading brands are Wagamama and Frankie & Benny's.

Emissis and The Restaurant Group agreed to run a pilot trial, installing Coolnomix on several Air Conditioning units across their restaurant portfolio. These units were installed at: Goodram Gate in York, Trinity Centre in Leeds, Whiterose in Leeds, Frankie & Benny's at the Printworks in Manchester and Wagamama in Coventry.

In order to accurately measure the kWh consumption of these units, smart meters were connected to the system compressor of the Air Conditioning units. The units were installed and activated across a number of months in 2022, set to run in weekly cycles of Coolnomix OFF followed by Coolnomix ON for 4 weeks or 28 days.

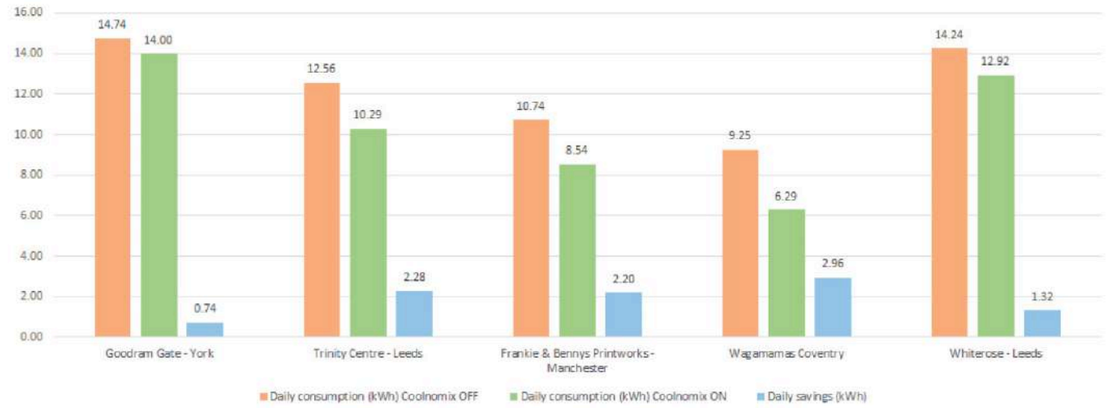
Annual Savings Across The Restaurant Group*

69,339.90 kWh per year

Co2: 19,484.51kg or 19 tonnes

Financial Saving of £20,801.97

The Restaurant Group - Air Conditioners Daily kWh



Conclusion

The pilot accurately confirms energy savings for kWh and CO2 reductions with Coolnomix installed on the Air conditioning units. The financial savings have been based on an electricity supply cost of 0.30p per kWh. With average electricity prices set to rise beyond 0.40p per kWh over the next few months and with further inflation forecast over the coming years the savings model and Coolnomix payback period will only improve.

Spread over an AC estate across The Restaurant Group, consisting of 100 suitable units, the annual benefits of installing Coolnomix based on the pilot results will be as follows:-

*Energy Reduction & Savings Forecast (based on 100 Coolnomix units installations)

Year 1

kWh (based on an average of 1.90 kWh per day) = 69,339.90 kWh per year
CO2 saving = 19,484.51kg or 19 tonnes
Financial savings = £20,801.97

After 5 years

kWh = potentially over 346,000 kWh saved
CO2 = 97+ tonnes saved
Financial savings = £100,000+ saved

After 10 years

kWh = potentially over 690,000 kWh saved
CO2 = 190+ tonnes saved
Financial savings = £200,000+ saved

NHS England

The National Health Service (NHS) in England was established with the National Health Service Act of 1946, and came into effect on 5th July 1948. The founding principles of the NHS were that services should be comprehensive, universal and free at the point of use for residents of the United Kingdom. The NHS across the United Kingdom sees one million patients every 24 hours and with 1.7 million staff, it is the fifth largest employer in the world, as well as being the largest non-military public organisation in the world.

Emissis and a number of NHS Sites across England agreed to run a pilot trial, installing Coolnomix on several Air Conditioning and refrigeration units. These units were installed at: NNHS Broomfield, NHS Hull and NHS North Tees, along with a new pilot beginning at NHS Huddersfield at the end of September.

In order to accurately measure the kWh consumption of these units, smart meters were connected to the system compressor of the Air Conditioning units and the external condensers of the refrigeration units. The units were installed and activated across a number of months in 2022, set to run in weekly cycles of Coolnomix OFF followed by Coolnomix ON for 4 weeks or 28 days in total.

Annual Savings Across NHS England*

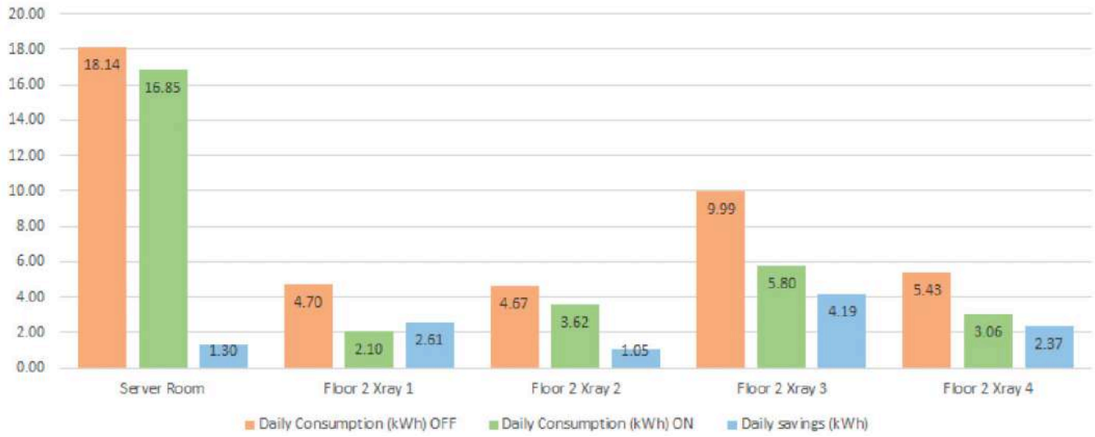
116,247.48 kWh per year

Co2: 32,665.54kg or 32 tonnes

Financial Saving of £40,686.62

*Energy Reduction & Savings Forecast (based on 100 Coolnomix units installations)

NHS - Air Conditioners Daily kWh



Results across NHS England so far:

Coolnomix active (ON) reduced daily energy consumption by 22% reducing kWh consumption across the 14 pilot AC units and 2 refrigeration units by kWh per day. This saving is based on average daily consumption of electricity with Coolnomix ON and Coolnomix OFF over the 4 week trial period.

Conclusion

The pilot accurately confirms energy savings for kWh and CO2 reductions with Coolnomix installed on the AC and refrigeration units. The financial savings have been based on an electricity supply cost of 0.35p per kWh. With average electricity prices set to rise beyond 0.40p per kWh over the next few months and with further inflation forecast over the coming years the savings model and Coolnomix payback period will only improve.

Spread over an AC and refrigeration estate across NHS England, consisting of 100 suitable units, the annual benefits of installing Coolnomix based on the pilot results will be as follows:-

*Energy Reduction & Savings Forecast (based on 100 Coolnomix units installations)

Year 1

kWh (based on an average of 3.18 kWh per day) = 116,247.48 kWh per year
CO2 saving = 32,665.54kg or 32 tonnes
Financial savings = £40,686.62

After 5 years

kWh = potentially over 580,000 kWh hours saved
CO2 = 160+ tonnes saved
Financial savings = £200,000+ saved

After 10 years

kWh = potentially over 1.1 million kWh saved
CO2 = 320+ tonnes saved
Financial savings = £400,000+ saved

I'm sold on Coolnomix, I need no further convincing!

- Tom Stewart
Net Zero Carbon Technical Innovations Manager, NHS England

Moto Services

Emissis and Moto Hospitality agreed to carry out a 28 day trial on a walk in refrigerator and various air conditioning unit at a select number of service stations across the UK including; Pease Pottage, Southwaite, Trowell, Cobham & Toddington. Moto is a British service station operator, operating 59 service stations across the UK, making it the UK's largest service area operator.

Trial

Coolnomix units were installed and connected to air conditioning units in various areas of the Moto service stations and a walk in fridge at the Greggs Bakery in the Pease Pottage station. In order to correctly measure the kWh consumption of these units, smart meters were connected to each of the external condensers for both the air conditioning and refrigeration units.

The units were set to run in weekly cycles with Coolnomix OFF - Coolnomix ON - Coolnomix OFF - Coolnomix ON mode for 4 weeks or 28 days in total. During the pilot the metered half hourly and 4 hourly data has been downloaded and analysed. This data is available to the engineering team at Moto.

Annual Savings Across Moto*

91,454 kWh per year

Co2: 25,699kg or 25.70 tonnes

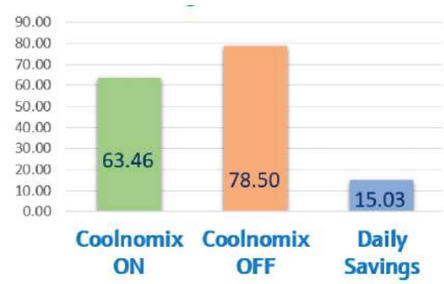
Financial Saving of £32,009

*Energy Reduction & Savings Forecast (based on 100 Coolnomix units installations)

Daily

Coolnomix active (ON) reduced daily energy consumption on average by 23% reducing the kWh consumption across the pilot AC and refrigeration units by 15.03 kWh per day.

This saving is based on average daily consumption of electricity with Coolnomix ON and Coolnomix OFF over the 28 days of the trial.



Average daily consumption by 5 air conditioning & 1 refrigeration units per day (kWh)

	Average Daily Consumption			
	Week 1	Week 2	Week 3	Week 4
Toddington - Lucky Coin (AC)	8.67	6.36	6.13	5.61
Trowell - Costa Coffee (AC)	13.51	9.17	12.57	10.21
Cobham - M&S Office (AC)	4.46	3.89		
Pease Pottage - Greggs Shop (AC)	5.34	3.80	5.86	4.49
Pease Pottage - Greggs (Walk in fridge)	9.04	6.71	5.99	5.47
Southwaite - Greggs (AC)	21.10	12.81	16.10	18.44

Conclusion

The pilot accurately confirms energy savings for kWh and CO2 reductions using just one Coolnomix unit attached to an Air conditioning unit. The financial savings have been based on a trial site electricity supply cost of 0.35p per kWh. With average electricity prices set to rise beyond 0.40p per kWh over the next few months and with further inflation forecast over the coming years the savings model and Coolnomix payback period will only improve.
Spread over an estimated air conditioning and refrigeration estate across various Moto service stations, consisting of 100 suitable units the annual benefits of installing Coolnomix, based on the average of the pilot results will be as follows:-

*Energy Reduction & Savings Forecast (based on 100 Coolnomix units installations)

Year 1

kWh (based on the average of 2.51 kWh per day) = 91,454 kWh per year
CO2 saving = 25,699kg or 25.70 tonnes
Financial savings = £32,009

After 5 years

kWh = potentially 450,000+ kWh saved
CO2 = 125+ tonnes saved
Financial savings = £160,000+ saved

After 10 years

kWh = potentially over 900,000 kWh saved
CO2 = 250+ tonnes saved
Financial savings = £320,000+ saved

The University Of Greenwich

The University of Greenwich, after a successful pilot project, are installing 124 Coolnomix energy saving units across their air conditioning (AC) estate across 3 campus at Medway, Avery Hill & Bathway and at Greenwich.

Coolnomix is a globally patented, innovative, retrofit, energy reduction device that reduces energy consumption and C02 emissions when installed on air conditioning and refrigeration equipment without affecting the performance or output of the AC units.

The units will reduce energy consumption by a forecast 23% saving the University of Greenwich over 315,000 kWh in electricity overspend. In addition, Coolnomix will save over 85 tonnes of C02 by reducing the emissions from each campus site. On average, each Coolnomix unit will reduce energy consumption by around 3kWh every day!

The technology is designed to payback within a period of 12 - 18 months and with an expected lifespan of 10 + years it will continue to deliver financial and carbon savings for the University for many years to come.

Annual Savings Across The University of Greenwich*

183,933 kWh per year

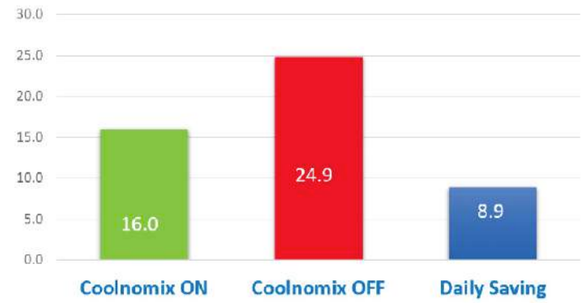
Co2: 50.95 tonnes

Financial Saving of £56,761.72

*Energy Reduction & Savings Forecast (based on 124 Coolnomix units installations)

Daily :

Coolnomix active (ON) reduced daily energy consumption by 8.9 kWh across 3 units per day.



Trial:

Coolnomix units were installed and connected to 4 Air conditioning units at Greenwich University. 4 smart meters with remote monitoring were connected to each of the AC Units external condenser to measure kWh consumption.

The units were monitored throughout a 28 day period which started on the 27.05 and finished on the 24.06. The units were set to run in weekly cycles with Coolnomix OFF - Coolnomix ON - Coolnomix OFF - Coolnomix ON mode for 4 weeks or 28 days in total.

The COOLNOMIX installed in the Dreadnought UPS room will be running for an extra week as we have had some technical issues whilst receiving the Data.

Conclusion:

The pilot accurately confirms energy savings for kWh and CO2 reductions on 4 AC units. The financial savings have been based on a trial site electricity supply cost of £ 0.30 per kWh.

With average electricity prices set to rise beyond £ 0.30 per kWh over the next few months and with further inflation forecast over the coming years the savings model will only improve.

It is estimated that the savings model will also improve dramatically over the warmer summer months as the outside temperature increases making the AC unit work harder. The forecast 12 month and 5 years have NOT factored in inevitable inflation.

Year 1

kWh = 183.933 kWh per Year
CO2 saving = 50.95 tonnes
Financial savings = £56,761.72

After 5 years

kWh = potentially over 900 kWh saved
CO2 = 250+ tonnes saved
Financial savings = £250,000+ saved

Whitbread

Emissis contacted Whitbread last year to pilot the Coolnomix technology across 2 Whitbread walk in fridges to monitor the energy consumption reduction Coolnomix could provide Whitbread across their estate. Emissis working closely with the team at Whitbread carried out a further 28 day trial on 2 sites at Stevenage and at Luton attaching Coolnomix to 2 refrigerators. Coolnomix units were installed and connected to 2 refrigeration units at 2 Whitbread restaurants throughout March 2022 and then again in June 2022.

Emissis installed 2 intelligent smart meters with remote monitoring connected to each of the refrigerators external condenser to measure kWh consumption. The units were monitored throughout a 28 day period in March 2022 and then again in June 2022. The CNX units were set to run in weekly cycles with CNX off - CNX on - CNX off - CNX on mode for 4 weeks. During the pilots the metered half hourly and 4 hourly data has been downloaded and analysed. This data is available to the energy team at Whitbread.

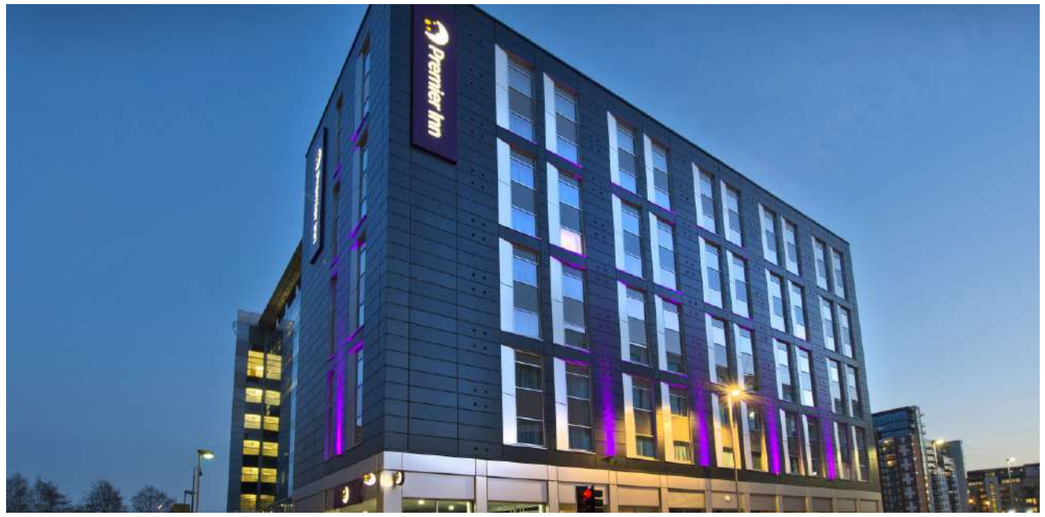
Coolnomix active (ON) reduced daily energy consumption by 18% in March reducing kWh consumption by 2.2kWh per day. In June Coolnomix active (ON) reduced daily energy consumption by 20% reducing kWh consumption by 3.27kWh per day across the 2 pilot refrigeration sites.

Annual Savings Across Whitbread*

446,845 kWh per year

Co2: 223 tonnes

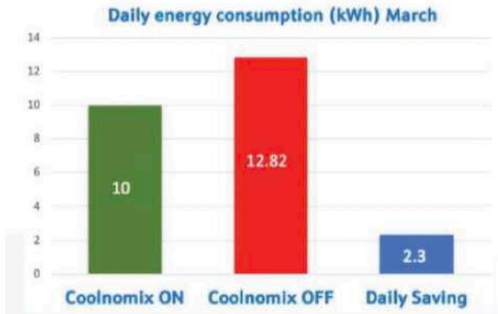
Financial Saving of £134,053

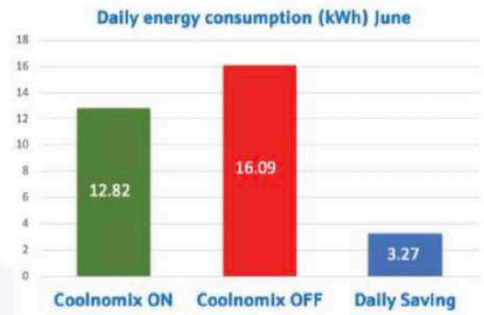


*Energy Reduction & Savings Forecast (based on 751 Coolnomix units installations)

Daily :

The pilot accurately confirms energy savings for kWh & C02 reductions across 2 Whitbread sites monitored over a 2 month period in the months of March and June 2022. The financial savings have been based on a trial site electricity supply cost of 0.22p per kWh. With average electricity prices set to rise well beyond this price over the forthcoming years and with further inflation the savings model and payback period will only significantly improve.





Trial:

Emissis to further the case have also carried out a study on 100 Installed Coolnomix Units on walk in refrigeration which has provided the following supporting data.

The data below is based on the ACTUAL results taken from 100 Coolnomix units installed on refrigerators across the restaurant and fast food sectors over the period from April 1st 2022 - July 1st 2022.

Savings Figures based on the kWh & C02 saved by 1, 10 and 100 Coolnomix AR-01 Units

		kWh	Carbon (Kg)	Savings at average supply price of 0.31p per kWh
1 unit	1 day	2.69	0.76	£0.83
	1 year	981.33	275.75	£304.21
10 units	1 day	26.89	7.55	£8.33
	1 year	9,813.29	2,757.53	£3,042.12
100 units	1 day	268.86	75.55	£83.35
	1 year	98,132.86	27,575.33	£30,421.19

Note: kWh supply price across all brands was confirmed at 0.31p. With rising energy prices together with ongoing inflation it is widely accepted that electricity prices will rise again only improving the savings figures confirmed above

Sodexo Client, Financial Sector

Sodexo implemented Coolnomix at one of their largest clients. Their client, a financial institution that provides a range of financial products and services to a diversified individual and corporate customers.

Emissis , Sodexo and their client agreed to carry out a 4 week trial on an Air Conditioning units at one of their branches.

Coolnomix units were installed and connected to an air conditioning unit along with smart meters being connected to the systems compressors for the air conditioning unit, in order to correctly measure the kWh consumption.

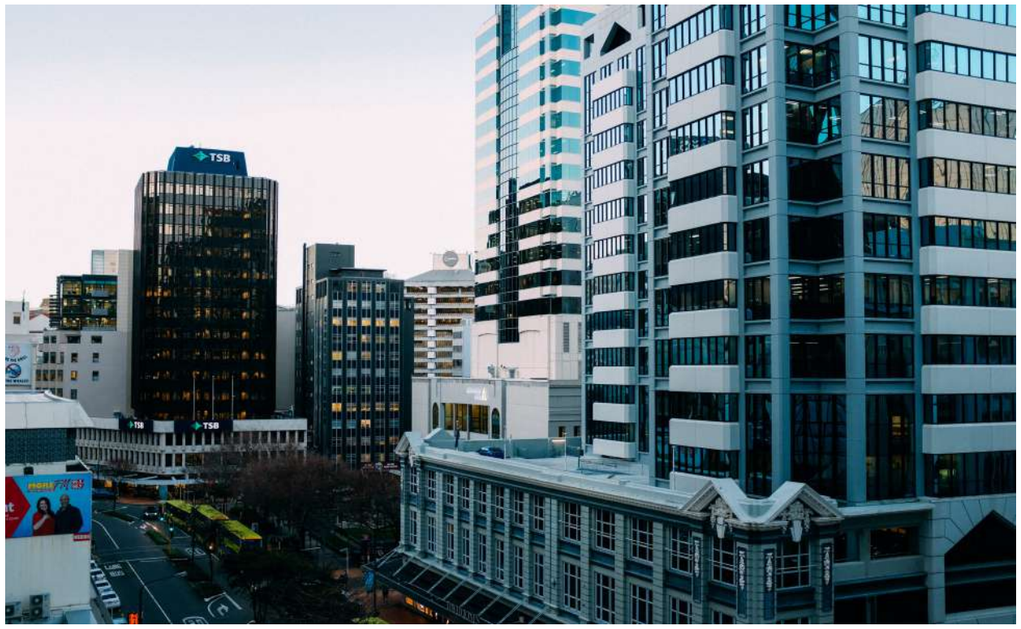
The unit was installed and activated on the 22nd July 2022 and set to run in weekly cycles with Coolnomix OFF - Coolnomix ON - Coolnomix OFF - Coolnomix ON mode for 4 weeks or 28 days in total.

Annual Savings (800 branches)* :

17,154,400 kWh per year

Co2: 3,122,400 kg C02

Financial Saving of € € 2,058,528.00

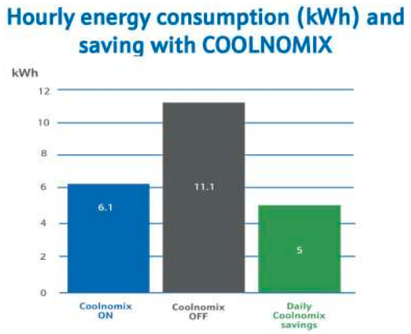


*Installing Coolnomix across 800 branches could offer the following savings annually

Hourly Savings

COOLNOMIX active (ON) reduced daily energy consumption by 37.7% , providing a reduction of 5kWh per hour.

This saving is based on the average hourly consumption of power with COOLNOMIX ON and COOLNOMIX OFF over the period of the test.



I am very impressed with the Coolnomix technology with its proven performance to deliver energy and cost saving across our clients air conditioning and refrigeration estates. Coolnomix has surpassed my expectations and we are actively endorsing it across our client base! Critically important to Sodexo, the Coolnomix technology does not affect either the operating performance or impact on the manufacturers warranties whilst continuing to deliver valuable energy savings.

- Frazer Russell, Global Energy Manager, Sodexo

Conclusion

The trial test accurately proves the daily energy savings with COOLNOMIX, allowing us to predict the annual carbon emissions reduction, energy savings plus the financial benefit. We have based cost savings on the trial site's electricity supply cost of Euro 0.12 per kWh excluding any CCL (climate change levy or renewables tax). The COOLNOMIX trial delivered a 37.7% energy reduction in electricity consumption; annualised this equates to a reduction, per site:

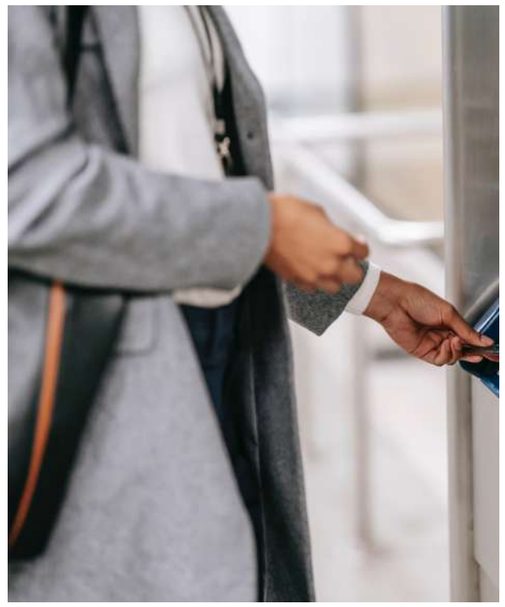
- **21,443kWh**
- **3,903kg of CO2**
- **Cost Savings of € 2,573.00**

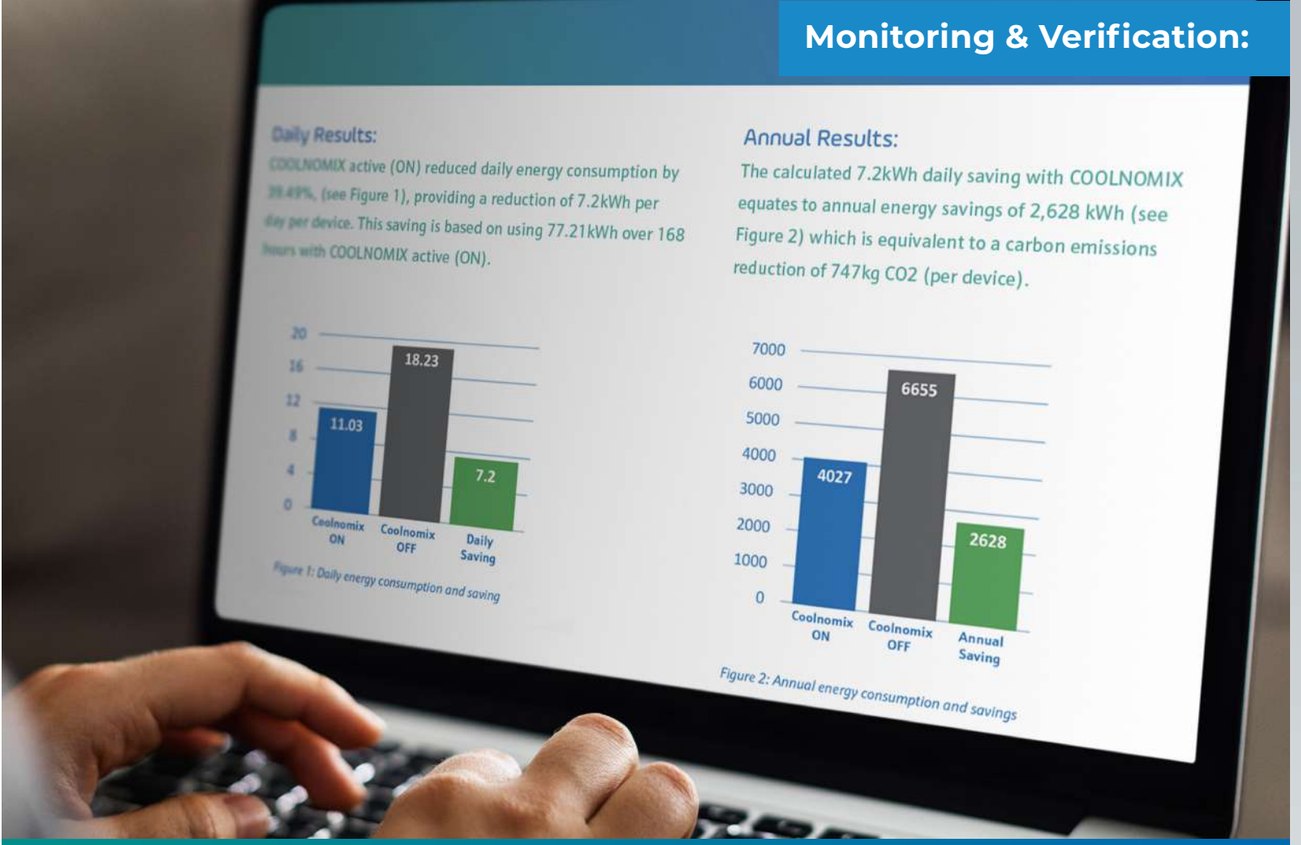
Installing Coolnomix across 800 branches could offer the following savings annually:

- **17,154,400 kWh**
- **3,122,400 kg C02**
- **Euro 2,058,528**
- **Rapid return on investment of 12 months**

Installing COOLNOMX across all A/C systems at over 800 Branches offers a significant energy, cost and emissions savings and over a 10-year period would achieve the following:Electricity(kWh) reduction:

- **88,622 KWh**
- **CO2 reduction: 31,000 tonnes**
- **Financial savings: € 20.6million**





Intelligent Energy Reduction:

Identifying reductions through Online Remote Metering & Monitoring

The Coolnomix energy reduction system doesn't just reduce energy use and the associated costs, but as it is tailored, flexible and expandable it offers a number of benefits, including:

- Provides complete visibility on energy usage – find out where your money is going
- Complete turnkey solution to energy reduction – Emissis take care of the data analysis and provide the best solution for your needs. All you need to do is enjoy the savings
- Reduces both energy spend and carbon footprint
- Performance guaranteed to save at least the cost of solution

Coolnomix monitoring & Verification platform

We are proud to introduce our online monitoring and reporting service for Coolnomix. Our new data reporting platform provides real-time data and analytics on your energy consumption, allowing you to identify and address areas where energy savings occur.

By optimising your Air -conditioning and refrigeration with Coolnomix, you can reduce your energy spend by up to 40%. With our online monitoring and reporting service, you can easily track your progress and measure the impact of your energy-saving initiatives.

Join the growing number of businesses that have already benefited from Coolnomix and start saving today...

News:

Coolnomix Named As Winner Of Wates & Lloyds Banking Group Sustainable Innovation Competition

Coolnomix has the opportunity for its product to be piloted within Lloyds Banking Group's buildings...

Coolnomix has been named as one of four winners of a competition launched by Wates Group and Lloyds Banking Group to find the next generation of green tech businesses that will support Lloyds in its transition to net zero carbon operations.Coolnomix now has the opportunity to be piloted across Lloyds' branches and offices. Lloyds will be making an overall budget investment of £100,000, which will be available to the four winners and will allow the technologies' to be tested in a live environment to understand whether they can ultimately be rolled out at scale.

Over 170 companies applied to the sustainability innovation competition, which aimed to unearth and champion new sustainable technologies for the built environment. Following a rigorous assessment process by Wates Sustainable Technology Services' technical advisory panel, Coolnomix pitched to judges in a Dragon's Den style event at the Mitie headquarters in the Shard, London at the end of January.

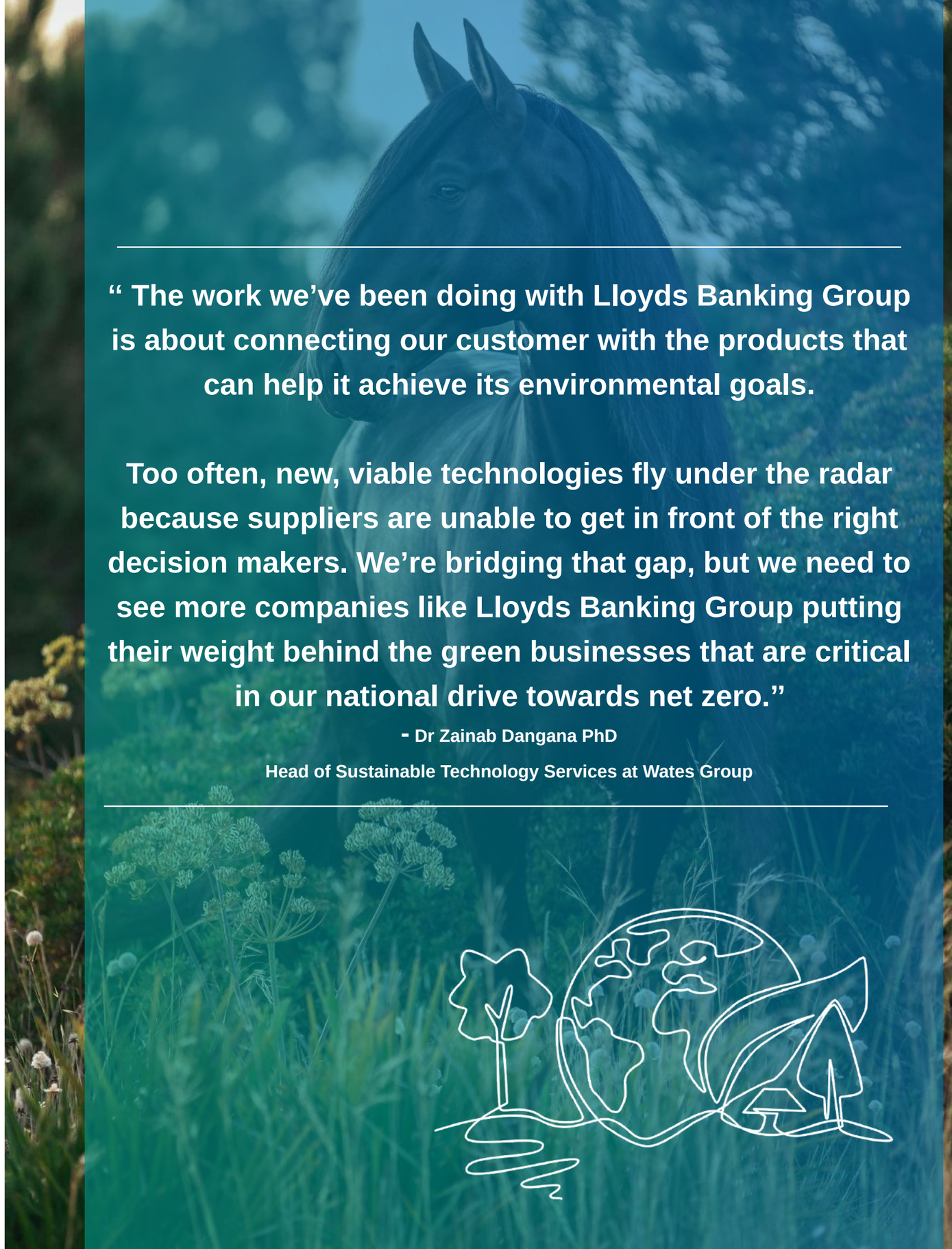
Coolnomix was selected because of its ability to deliver against Lloyds Banking Group's ambitious operational pledges, which commit to net zero carbon operations and a 50% reduction in energy consumption by 2030, as well as a 40% reduction in absolute water consumption by 2030.

As well as the opportunity to be rolled out across Lloyds' branches and offices nationwide, Coolnomix will be added to the Wates Innovation Network (WIN) Portal as an Innovation Partner, alongside other pioneering green tech businesses.

The Portal is a free to use online marketplace for suppliers of environmental technologies that enables them to connect their product with built environment customers across the supply chain.

"We are very excited to work with the finalists and our partners in the coming months to pilot these technologies in our offices and branches. The winning technology will have access to our innovation budget to test their solutions in our buildings, and roll out at scale if the pilots are successful. This is a great opportunity for speeding up our transition towards a greener future and achieve the Group's operational climate pledges."

- Matteo Deidda , Senior Sustainability Managerat Lloyds Banking Group



Coolnomix Client Process

Enquiry - Desktop - Site Survey- Installation

Step 1. Discovery and Assessment

In the preliminary discovery and desk assessment, we will assess whether and how COOLNOMIX can aid your business in accomplishing its energy and carbon emissions reduction strategy. We will gather relevant data from you to gain a thorough understanding of your operation/site(s). This will allow us to promptly verify COOLNOMIX's potential and the immediate benefits that align with your objectives.

Step 2. Proposal/Desktop Survey

Based on the information collected from the Discovery and Assessment phase, we will create a desktop proposal that demonstrates the direct advantages of COOLNOMIX and how it can help you fulfil your energy and carbon emissions reduction objectives. The business case will provide a detailed projection of the Return-on-Investment and payback.

Step 3. Site Evaluation

We offer a 'no charge - no obligation' assessment programme to examine whether COOLNOMIX is suitable for your operation/site(s). We can arrange to visit your site(s) and perform a physical and engineering evaluation.

Step 4. Installation

Efficient and timely delivery of projects requires professional project management procedures. You can have confidence that our team of project managers and qualified engineers will complete the project as agreed and planned. We will oversee all aspects of your project, emphasising expert workmanship carried out safely and to the highest standards.

Constructionline Reg no. 00315887 · ISO 9001:2008 CERTIFIED Cert no. 14122140 · Alcumus SafeContractor Cert no. UG3970 · NICEIC APPROVED CONTRACTOR Cert no. 6079740000 · QMS ISO 14001 : 2015 REGISTERED Cert no. 110792021 · PERRY JOHNSON REGISTRARS, INC. · UKAS MANAGEMENT SYSTEMS

Quality Policy

We continually aim to provide excellent services to our customers and deliver solutions & projects both on time and within budget. We operate under a Quality Management System that has attained ISO9001:2008 certification.

We have a continuing commitment to

- Consistently achieving and improving the Quality Management System
- Continually improving the effectiveness of the Quality Management System
- Ensure that customer needs and expectations are determined and fulfilled with the aim of achieving excellence in customer satisfaction
- Communicating throughout the organisation the importance of meeting customer needs and legal requirements
- Establish the Quality Policy and its objectives
- Conduct management reviews of the effectiveness of the implementation of the Quality Management System
- Ensure the availability of resources

All personnel understand the requirements of the quality policy and abide with the contents of the quality manual. In addition to all UK and EU legislation and regulations, Emissis complies with all legislation specifically related to its business activities. We constantly monitor the quality performance and implement improvements where appropriate to ensure our quality policy's continuing suitability.

ASHMERE SOLUTIONS

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