



CASE STUDY

MOTO & GREGGS

Coolnomix® Report,

Report compiled by David Groves 22/07/2022

tutumenergy.es





Annual Savings for Greggs from this pilot:



kWh

2698.39kWh representing a reduction of 25% per year in energy consumption



CO₂

758.25 kg or 0.76 tonnes



Financial Savings

of £944.44



Coolnomix®

Reduce the energy consumption of your air conditioning and refrigeration without affecting the output you need. Our technology is maintenance free and can be easily installed by our qualified engineers with no disruption to your operation.

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

About



Greggs is a British bakery chain, specialising in savoury products such as bakes, sausage rolls, sandwiches along with a number of sweet items.



OVERVIEW

Tutum Energy and Moto Hospitality, along with Greggs agreed to carry out a 28 day trial on a walk in refrigerator and air conditioning unit at the Pease Pottage service station and an air conditioning unit at the southwaite service station.

TRIAL

- Coolnomix® units were installed and connected to two air conditioning units and a walk in fridge at the Pease Pottage and Southwaite service stations. 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 installed and activated at the Pease Pottage service station on 25th November 2020 and at the Southwaite service station on the 16th February 2022. 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 Greggs.





RESULTS

Moto & Greggs, England

DAILY



- Coolnomix® active (ON) reduced daily energy consumption on average by 25% reducing the kWh consumption across the pilot AC unit by 7.39 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.



DAILY ENERGY CONSUMPTION (KWH) AND SAVING WITH COOLNOMIX®			
Site	Daily consumption (kWh)		Daily savings (kWh)
	OFF	ON	
Greggs	33.11	25.71	7.40

CONSUMPTION BY AIR CONDITIONING & REFRIGERATION UNITS PER DAY (KWH)				
Site	Average Daily consumption (kWh)			
	WEEK 1	WEEK 2	WEEK 3	WEEK 4
Pease Pottage-Greggs (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

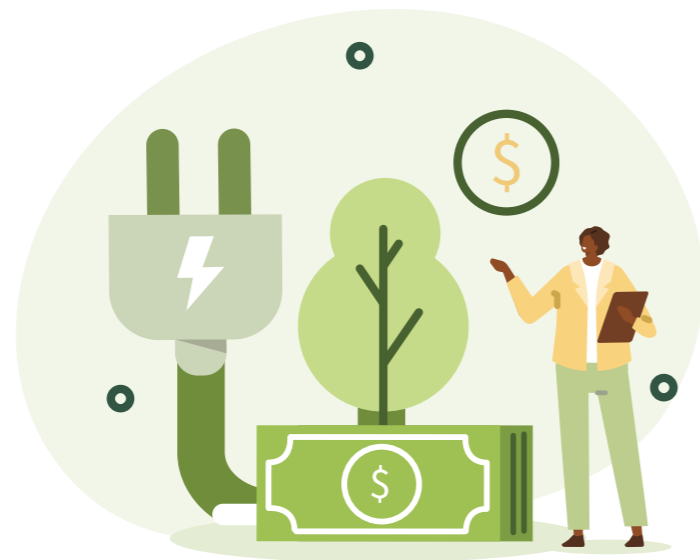
ENERGY REDUCTION & SAVINGS FORECAST (2 AIR CONDITIONING UNITS & 1 REFRIGERATION UNIT)			
	kWh	Financial savings	CO2 (kg)
Daily	7.39	£2.59	2.08
Weekly	51.75	£18.11	14.54
Monthly	207.00	£72.45	58.17
Annually	2,698.39	£944.44	758.25



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 Greggs branches, 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 = 89,946 kWh per year
CO2 savings = 25,275 kg or 25.28 tonnes
Financial savings = £31,481

(based on the average of 2.46 kWh per day)

After 5 years

kWh = potentially over 440,000 kWh saved
CO2 = 125+ tonnes saved
Financial savings = over £150,000

After 10 years

kWh = potentially over 850,000 kWh saved
CO2 = 252+ tonnes saved
Financial savings = over £300,000

WE'RE AHEAD OF THE GAME

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.

[See our Coolnomix® brochure and videos](#) / [See our other solutions](#)



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