



REDUCE YOURUSE







Message from the Chief Executive Officer Kilkenny County Council



I would just like to take this opportunity to thank all staff for participating in the 2023/2024 Kilkenny County Council Reduce Your Use Campaign.

Now that we have the final results from our campaign, we can see what can be achieved by taking small steps that will assist us reduce our emissions and work towards helping Kilkenny County Council reach our climate action goals. This report is part of

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an overall communicational strategy that will be used to keep you and the wider public informed on our progress in implementing our agreed actions in the Kilkenny County Council Climate Action Plan 2024-2029.

Special thanks to all the staff in the Thomastown and the Callan Area Offices who worked with the Climate Action team over the last number of months. It is through collective efforts like this that we can bring about positive change and create a more sustainable future for us all.

Sincerely

Lar Power Chief Executive Officer Kilkenny County Council



REDUCE YOUR USE CAMPAIGN OCTOBER 2023 - MARCH 2024

Kilkenny County Council signed up for the 2023/24 Reduce Your Use campaign. The Reduce Your Use Campaign is a voluntary initiative for the public sector as part of a whole-of-government national campaign to reduce energy use through the winter months.

Running from November 2023 to March 2024, we asked all staff to be mindful of their energy use and we encouraged delivery service areas and offices to take simple measures to reduce energy use over the winter months.

CASE STUDY

Also as part of this campaign, Kilkenny County Council selected the Thomastown and Callan Area Offices as two pilot buildings where we implemented a number of measures focusing on behavioural change in the Thomastown building and both behavioural change and some minor investment in energy saving in the Callan Area Office.





OBJECTIVE

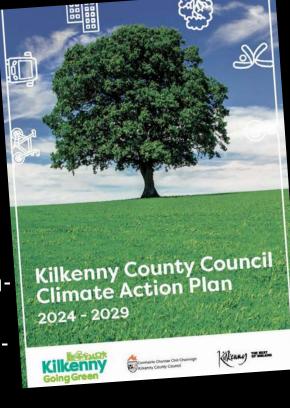
The overall objective of the Reduce Your Use Campaign for the Callan and Thomastown Area Office was to reach a combined energy savings on buildings between November 2023 to March 2024 of 15%.

Given Kilkenny County Councils commitment to reducing emissions in the recently launched Kilkenny County Council Climate Action Plan 2024-2029 and the ongoing situation in relation to energy prices and supply, there is now a concerted effort across Kilkenny County Council and the public sector to lead by example in lowering energy consumption and costs.

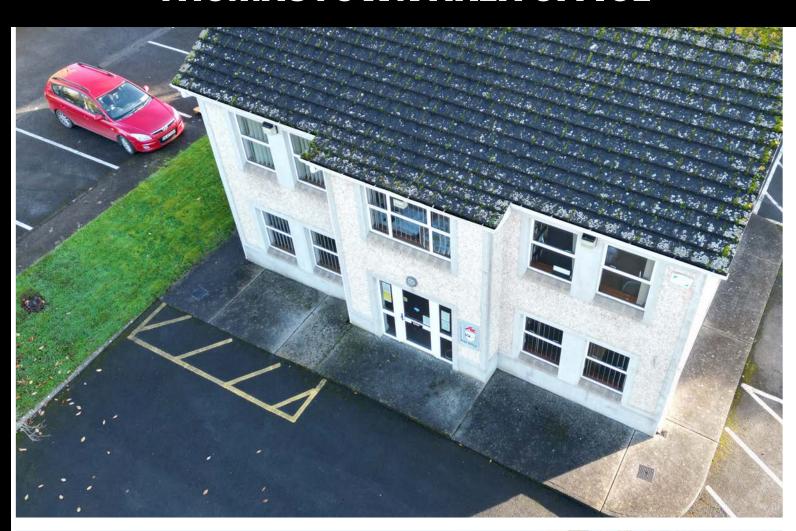
The Reduce Your Use energy efficiency initiative pro-

vides a structured programme of energy saving activities that Kilkenny County Council can use to help us reach our targets in the recently published Kilkenny County Council Climate Action Plan 2024-2029.

The Initiative is focused on taking action in the short term and on implementing measures that will set our organisations on a pathway towards achieving our 2030 energy efficiency targets.



THOMASTOWN AREA OFFICE





CALLAN AREA OFFICE



By reducing our daily energy use we can save money and limit our reliance on imported fossil fuels.











CALAN AREA OFFICE

As part of this campaign, Kilkenny County Council have selected the Thomastown and Callan Area offices as two pilot buildings for the Reduce Your Use Campaign.

Callan Area Office Building

The Callan building was constructed in 1840 and extended in 2000. The original building consists of 520mm of solid stone walls wall with no insulation. There is also basic attic insulation while all windows are single-glazed timber frame, the doors are of timber construction and the floor is solid concrete.

The extension has double glazed PVC windows and doors. The extension walls are assumed to be partly filled 300mm cavity walls. The area office is equipped with a 70 kW Bongioanni T100/7 non-condensing combi boiler installed in 2000 with Kerosene as the fuel used. Based on its age, the operating efficiency may be as poor as 50%. The heating is provided in the building through radiators having TRVs.

The key measures taken in the Callan building were a combination of behavioural change with some minor investment that will improve energy efficiency. For example replacing LED lights, resetting the timer on the oil burner i.e. reducing the hours of use.





THOMASTOWN AREA OFFICE

The Thomastown building is a more modern building that was constructed over thirty years ago. The building is of cavity wall construction with 130m2 of usable floor area split over two floors.

The building comprises a large open plan office, reception area, meeting room, toilets and storage room on the ground floor, with three large offices, canteen and two bathrooms on the first floor. The build is occupied to the normal 9 - 5 operation with the standard holiday and public holidays.

Unlike the Callan building which has received some investment to address energy efficiency, the key focus in the Thomastown building was solely on staff behavioural change. In other words we wanted to see what we can achieve in reducing energy use by behavioural change alone. Examples of efforts included putting timers on heaters, turning of radiators in rooms that were not in use, turning off lights and appliances and putting a timer on lights surrounding the building.





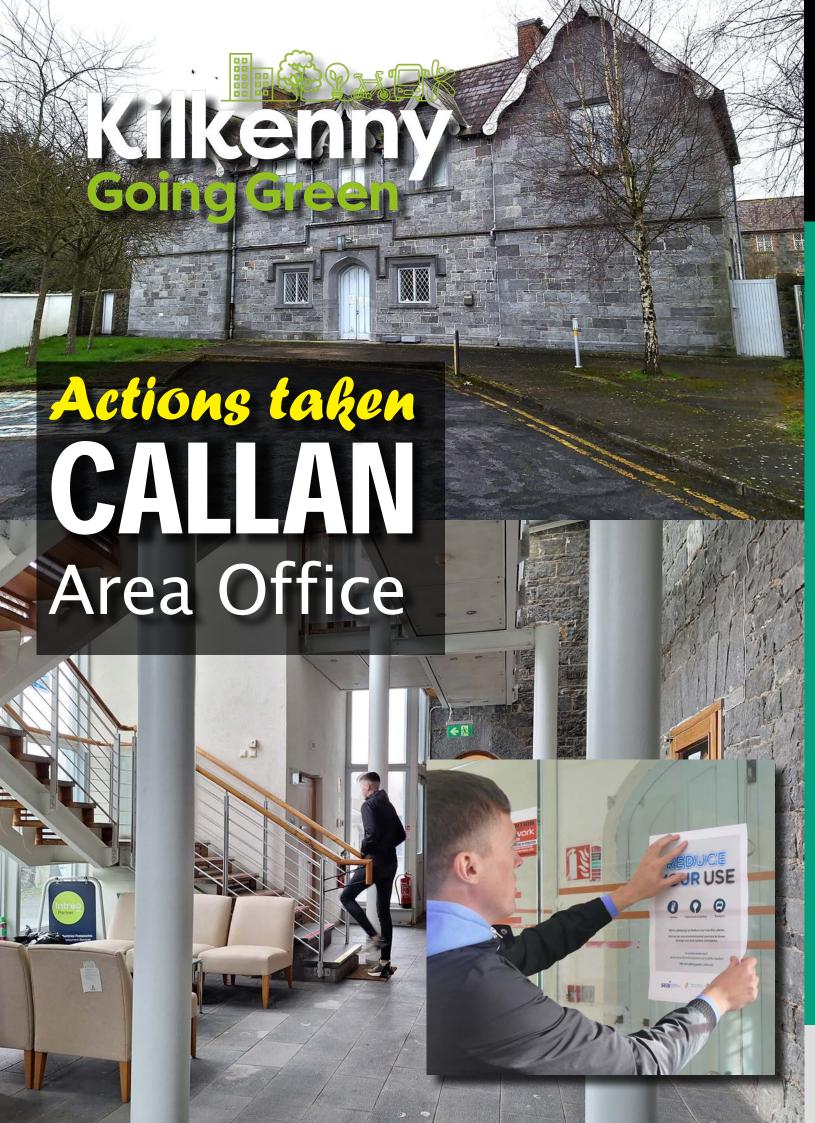


ACTIONS TAKEN IN THE CALLAN & THOMASTOWN AREA OFFICES









The Reduce Your Use measures incorporated in the **Callan Area Office included a combination of** behavioural change and an investment of 9,000 euros in energy saving improvements.

Communicational Campaign

A Reduce Your Use Awareness / Communicational Campaign was put in place in the Callan Area Office.

Oil Heating

The oil boiler was running nine hours per day seven days per week, totalling 63 hours per week. The oil burner 's use was then reduced to 42hrs per week i.e. reducing the daily use and timing it to one hour per day on Saturday and Sunday).

Radiators

Radiators in rooms not in use were turned off where feasible throughout the building.

Disconnection of heating pipes in the buildings atticHeating pipes in the attic were disconnected from the main heating system by installing valves.

Installation of LED Lights

In November 2023 there were 33 (120 Watts) fittings in the Area Office in Callan this number was reduced to 23 fittings with efficient LED 50 Watt bulbs installed. An additional 12 bulbs were replaced with energy efficient bulbs ,these were located in the stairwells ,meeting room and at the main entrance of the building.

By reducing our daily energy use, we can save money and limit our reliance on imported fossil fuels.







The Reduce Your Use measures incorporated in the Thomastown Area Office incorporated behavioural change only

Communicational Campaign

A Reduce Your Use Communicational/Awareness Campaign was put in place in the Thomatown Area Office.

Radiators

There are eight radiators in total in the building, four of these are new radiators incorporating built-in timers. The four radiators with timers were all reduced to 19C and the heating was turned off during Christmas and holiday periods.

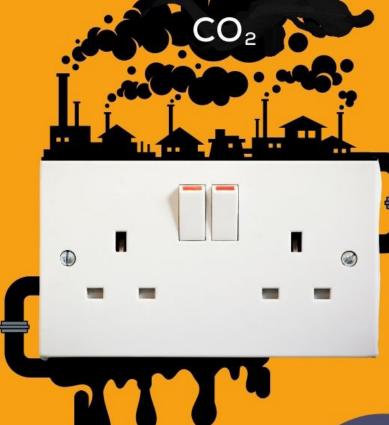
OUTSIDE LIGHTS/TIMER

A timer was installed to mange the buildings outside lights. These lights used to be on during the night, the timer is now set for the lights to be on in the winter between 4.30 - 5.50pm.





USE



REDUCE YOUR USE

By reducing our daily energy use, we can save money and limit our reliance on imported fossil fuels



CALCULATING THE REDUCTION IN ENERGY USE



CALCULATING THE RESULTS



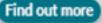
Johan Muller from the South East Energy Agency was tasked with independently calculating and reporting on the results from the Kilkenny County Councils Reduce Your Use Campaign in the Thomastown and Callan Area Offices. Johan used a number of methods when calculating the results in both buildings that included comparing baseline data readings over the last 3 years with energy consumption (kWH), savings in behaviour and savings in investment over the five month duration of the Reduce Your Use Campaign (November 2023-March 2024).

Given the Callan Area Office operates an oil burner for heating the building, different methods were used to calculate readings. For example using the HDD method, dipping the oil tank at various intervals throughout the campaign and incorporating how adjustments like the isolation of the heating from the attic reduced consumption, the reduction of use in hours of the boiler, and the upgrading of lighting. The final results gave some very interesting statistics, specifically showcasing how a change in behaviour combined with some minor investment can give some very positive results.









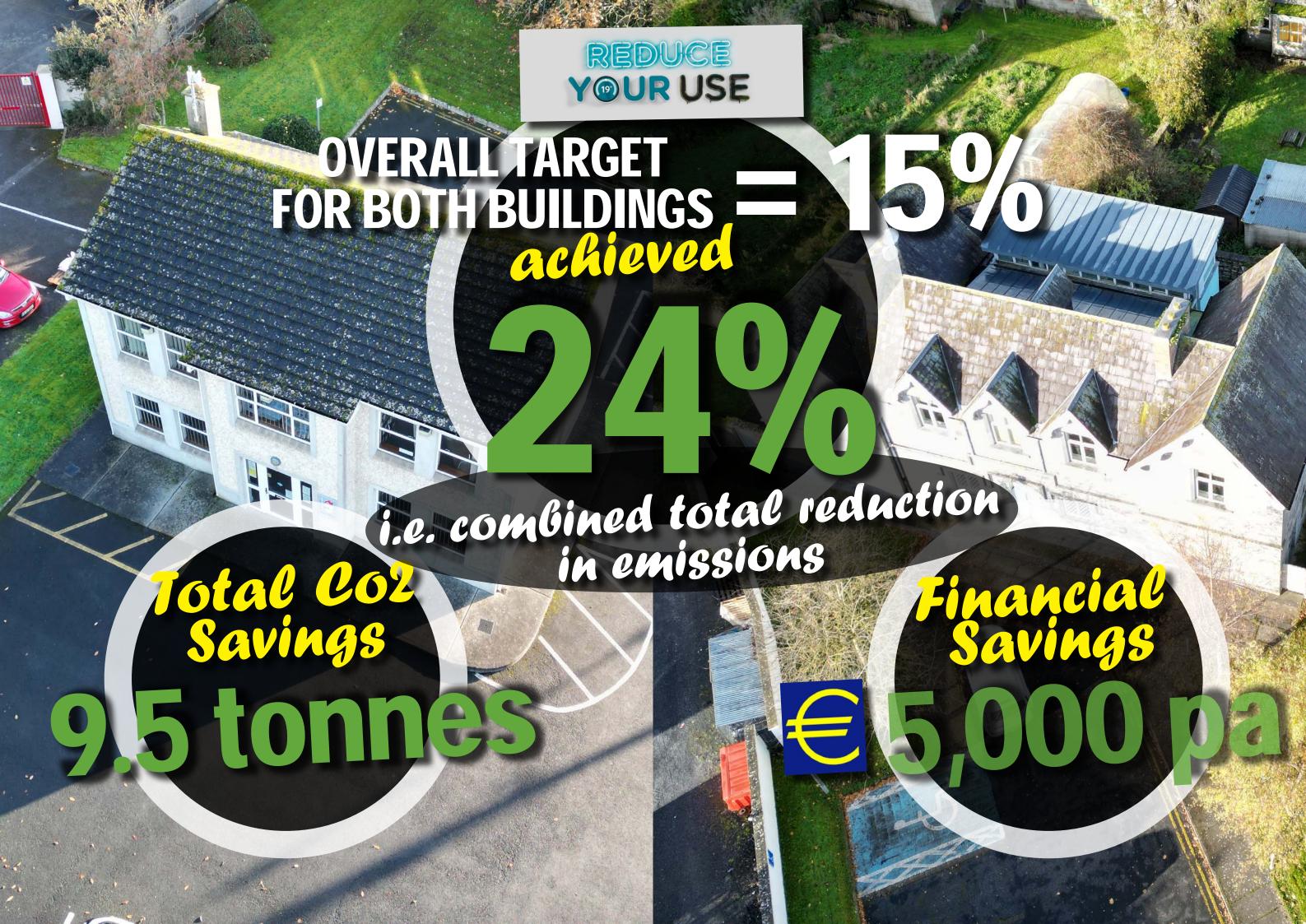




THE RESULTS

Thomastown & Callan Area Offices



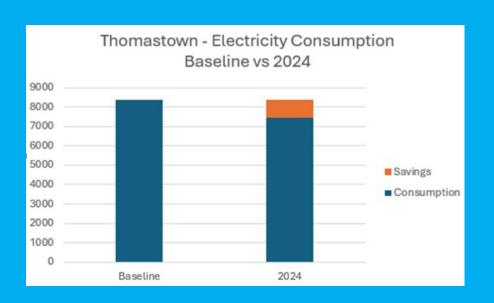


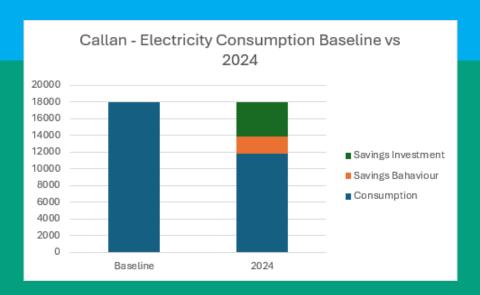


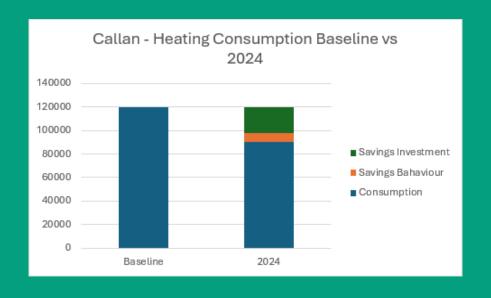
REDUCTION IN EMISSIONS













REDUCTION IN EMISSIONS





	Callan					Thomastown		Total		
	Heating		Electricity		Total			Total		
									Cost	kgCO2
	Baseline	2024	Baseline	2024		Baseline	2024	kWh	savings	savings
Consumption (kWh)	119,707	90,551	18,000	11,778	137,707	8,370	7,478	154,447		
Savings Behaviour (kWh)		21,541		2,128	23,669		892	25,453	€3,009	6,539
Savings Investment (kWh)		7,615		4,094	11,709			11,709	€1,968	3,316
Savings Behaviour %	0%	18%	0%	12%	17%	0%	11%	16%		
Savings Investment %	0%	6%	0%	23%	9%	0%	0%	8%		
Total Savings %		24%		35%			11%	24%	€4,977	9,855



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