



## ESOS Action Plan

### Technolog Group Ltd

Date: 04/03/25

Director Name	KALVIN MOORE.
Director Signature	<i>K Moore</i>
Date	4 <sup>TH</sup> MARCH 2025.

# Action Plan

## Technolog Group Ltd



**Start Date** 6th December 2023  
**End Date** 31st December 2027  
**Reporting Period** January - December

As part of the Energy Saving Opportunity Scheme (ESOS), Technolog Group Ltd are required to submit an Action Plan by 5th December 2024. An extension has been granted to the 5th March 2025.

This document outlines Technolog Group Ltd's Action Plan, which takes into consideration outcomes of the ESOS Report, including measures recommended through the energy audit that took place. The purpose of this plan is to consider potential actions following ESOS Phase 3, which will allow Technolog Group Ltd to increase their energy efficiency while decreasing their consumption in the period before ESOS Phase 4. Therefore, this plan will cover the interim period between ESOS Phase 3 and ESOS Phase 4 (December 2023 - December 2027).

To meet compliance this report will state Technolog Group Ltd's chosen actions, proposed deadlines for implementation, committed actions recommended through ESOS and action estimated energy savings.

Technolog Group Ltd have chosen the below energy saving measures as part of their Action Plan:

Commitment	Deadline	Recommended by ESOS	Organisational Purpose	Est kWh Savings (per year)
AC Upgrades	June-26	Y	Building	68,418
Pipework Insulation	May-25	Y	Building	4,523
Light Sensors 1	December-25	Y	Building	2,827
Light Sensors 2	December-26	Y	Building	2,827
Monitor Upgrades	December-24	Y	Building	1,786

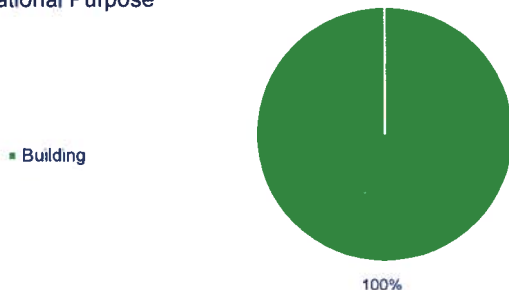
There are a few things to note about the measures listed above. The Pipework Insulation is currently underway and the goal is to complete installation by the end of April 2025. The Light Sensor installations are split into two measures due to the fact that installation is an ongoing process and Technolog Holdings Ltd aim to have 50% of installation complete by the end of 2025. By splitting the measure in two the savings can be tracked as installation progresses.

### Organisational Purpose:

The below table shows the above estimated annual savings of each commitment split by organisational purpose, per full year of installation.

Energy savings have been categorised by assessing what the saved energy is used for in the property.

Annual Savings per Organisational Purpose



Estimated Annual Energy Savings (kWh) per Organisational Purpose:

Building	80,381
Industry	0
Transport	0
Other	0

## Organisational Boundaries & Site Details

Technolog Group Ltd



### Organisational Boundaries

There has been no change to Technolog Group Ltd's entities which qualify for ESOS prior to 5th December 2024, therefore, within the Action Plan and inline with those reported within ESOS, the below Entities/Franchise/Organisations have been considered when deciding on the actions and sites to be included:

Franchise/Entity/ Company/Undertaking	SIC Code	Company Registration Number
Technolog Holdings Limited	64209 - Activities of other holding companies not elsewhere classified	4025830
Technolog Group Limited	64209 - Activities of other holding companies not elsewhere classified	3041827
Technolog Limited	26511 - Manufacture of electronic measuring, testing etc. equipment, not for industrial process control	1574170
Utilitec Limited	70100 - Activities of head offices	1677595
Utilitec Services Limited	74909 - Other professional, scientific and technical activities not elsewhere classified	3411545
Utility Data Services Limited	62030 - Computer facilities management activities	3492015

### Site Details

Please see below the sites each action is to be implemented at. In total these sites consume ~87% of all electric and ~80% of all gas used by Technolog Group Ltd. The primary consumer is the Technolog Sales Building, consuming ~38% and ~30% of total electric and gas usage, respectively.

Commitment	Sites	MPANs	MPRNs
AC Upgrades	Sales Building	1100008027104	2111185309
Pipework Insulation	Unit 2D Ravenstor Road	1100009235535	2111185006
Light Sensors 1	Manufacturing Building, Unit 2D Ravenstor Road, Unit 2C Ravenstor Road, Unit 2B Ravenstor Road & Sales Building	1100039674141, 1100009235535, 1100009235526, 1100009235517 & 1100008027104	5084167910, 2111185006, 2111184902, 2111185410 & 2111185309
Light Sensors 2	Manufacturing Building, Unit 2D Ravenstor Road, Unit 2C Ravenstor Road, Unit 2B Ravenstor Road & Sales Building	1100039674141, 1100009235535, 1100009235526, 1100009235517 & 1100008027104	5084167910, 2111185006, 2111184902, 2111185410 & 2111185309
Monitor Upgrades	Manufacturing Building & Sales Building	1100039674141 & 1100008027104	5084167910 & 2111185309

## Further Detailed Savings

Technolog Group Ltd



Technolog Group Ltd are committed to implementing 5 measures over the span of their Action Plan, these will mainly be put in place across the Technolog sites, as listed on page 3. Out of the 5 measures, AC Upgrades are to see the largest annual savings, as well as contributing the most savings across the whole Action Plan period. Please see below for further details on each saving:

Commitment	Further Detail
AC Upgrades	<p>Energy efficiency is an important factor when replacing the AC units which are more than 10 years old. Due to improving AC technology over time, units now come with higher energy efficiency ratio (EER) ratings. Not only does a more efficient unit mean reduced energy consumption; it also reduces the carbon footprint while maintaining ambient heating and cooling output. Sites audited in ESOS Phase 3 found approximately 30 split air conditioning units which are more than 10 years old and have low EER ratings. These air conditioning units are spread over three buildings. It was recommended to upgrade the ACs in the facilities with higher EER ratings that would bring savings of more than 40% in electrical consumption. Calculations are based on 30 cooling days and 223 heating days, savings of replacing units are estimated to be around 30%.</p>
Pipework Insulation	<p>Fully insulating the primary pipe work, valves and flanges was recommended during the ESOS Phase 3 site audits, as well as all ducting in HVAC systems. Technolog are focusing on the pipework that needs insulating in Unit 2D and are currently in the process of installing this insulation. Installation is scheduled to finish by the summer months of 2025 and will save an estimated 15% of gas consumption in relation to Unit 2D's 2023 annual gas consumption.</p>
Light Sensors 1	<p>Motion sensor lights use intelligent scheduling and automated controls to turn on only when needed. This type of lighting can save up to 20 percent of the energy used for traditional lighting. They also come with timers and dimmers that can be set to automatically adjust to different levels of brightness, depending on the time of day (which can increase savings up to 30%). Upgrading lighting by integrating lights with motion sensors is an ongoing project at Technolog's sites, with a goal set to install 50% of the sensors by the end of 2025 and the rest by the end of 2026. The reason for splitting the measure into 2 is so that it makes it easier to track energy savings as the years progress and more sensors are installed.</p>
Light Sensors 2	
Monitor Upgrades	<p>The ESOS phase 3 audit identified over 100 LCD monitors that would be beneficial to upgrade to LED. Technolog have replaced over 30 monitors in 2024, saving an approximate 152 kWh in 2024, and will go on to save approximately 1,786 kWh annually going forward. No further monitors have been slated for upgrade, however this could be subject to change as units age and potentially fail, requiring replacement and subsequent upgrade.</p>

## Further Detailed Savings

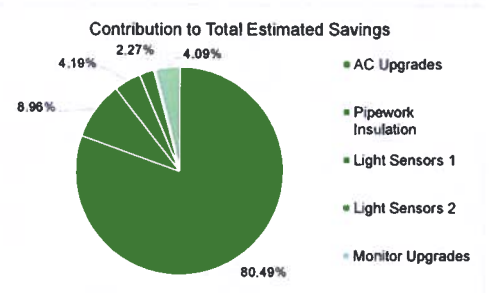
Technolog Group Ltd



### Saving Splits

The below table illustrates each commitments' contribution to the overall estimated savings, as well as the utility splits of each saving. AC Upgrades is the largest contributor at over three quarters of all savings. We can see from the table that gas savings make up 9% of all savings, with one measure - Pipework Insulation in Unit 2D - generating a potential 2% decrease in annual gas consumption compared to 2023 consumption. In total the Action Plan has the potential to reduce Technolog Holdings Ltd's total 2025 kWh usage by an estimated 1%, compared to 2023 usage.

Commitment	Utility	Contribution to overall kWh savings	Electric Savings	Gas Savings
AC Upgrades	Electric	80.49%	100%	0%
Pipework Insulation	Gas	8.96%	0%	100%
Light Sensors 1	Electric	4.19%	100%	0%
Light Sensors 2	Electric	2.27%	100%	0%
Monitor Upgrades	Electric	4.09%	100%	0%

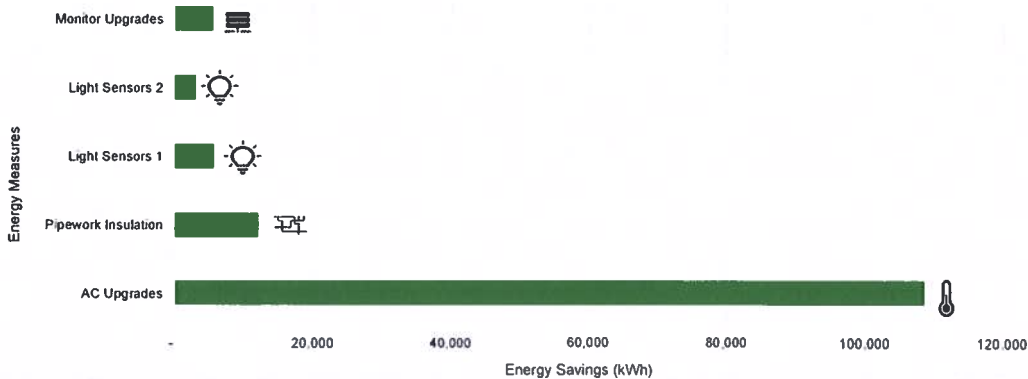


### Year on Year savings

Provided actions are implemented on time, the table below illustrates the expected kWh savings for each accounting period (January - December) of the Action Plan until 31st December 2027. These figures are based on estimates provided in the audits taken place during ESOS Phase 3, alongside data provided by Technolog Group Ltd.

	December 2023 - December 2024	January - December 2025	January - December 2026	January - December 2027	December 2023 - December 2027
Total kWh	152	4,822	49,489	80,381	134,843
AC Upgrades	0	0	40,114	68,418	108,532
Pipework Insulation	0	3,036	4,523	4,523	12,082
Light Sensors 1	0	0	2,827	2,827	5,653
Light Sensors 2	0	0	240	2,827	3,067
Monitor Upgrades	152	1,786	1,786	1,786	5,510

Potential Energy Savings by December 2027



# Future Projections

Technolog Group Ltd



As seen below the overall change in energy consumption is -16.17%, equivalent to a difference of 90,981kWh.

	2022 (ESOS Ph3)	
	Whole Portfolio	Comitment Sites
Elec	369,085	315,809
Gas	193,547	148,636
	<b>562,632</b>	<b>464,445</b>

	2023 Figures	
	Whole Portfolio	Comitment Sites
Elec	286,528	249,788
Gas	185,123	144,574
	<b>471,650</b>	<b>394,362</b>

	% Change	
	Whole Portfolio	Comitment Sites
	-22.37%	-20.91%
	-4.35%	-2.73%
	<b>-16.17%</b>	<b>-15.09%</b>

## 2025 Projections:

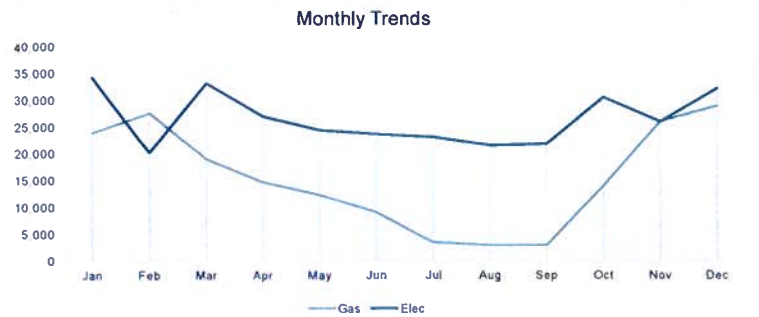
Projections are based on trends seen between 2022 and 2023 consumption in addition to estimated savings from the actions to be implemented. These are displayed across 3 plans as described below.

**Plan A**  
No energy saving measures implemented and based on the change in energy consumption between 2022 and 2023.

**Plan B**  
Implementing measures to 50% of commitment and based on the change in energy consumption between 2022 and 2023.

**Plan C**  
Implementing measures to 100% of commitment and based on the change in energy consumption between 2022 and 2023.

Monthly consumption trends (based on 2023 data for the whole portfolio):



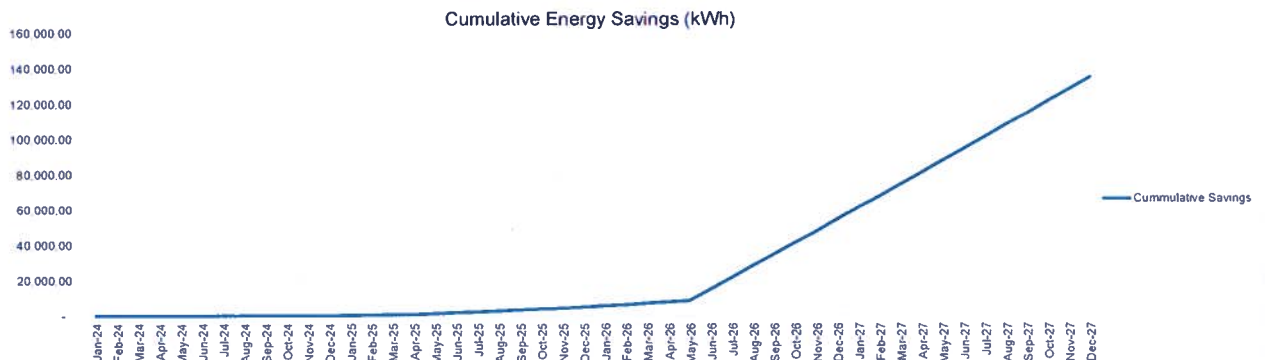
Whole Portfolio:	Plan A	Plan B	Plan C
Elec	172,682	171,789	170,896
Gas	169,359	167,841	166,323
	<b>342,041</b>	<b>339,630</b>	<b>337,219</b>

Comitted Sites:	Plan A	Plan B	Plan C
Elec	156,267	155,374	154,481
Gas	136,779	135,261	133,743
	<b>293,047</b>	<b>290,636</b>	<b>288,225</b>

\* Several gas consumption rebills to sites in the Technolog Group Ltd's portfolio make estimating future consumption complex, as negative values obscure each month's actual consumption value. Estimated values have been used for sites where negative consumption values exceeded -2,000 kWh in one month.

## Cummulative Savings

The below graph displays the potential cumulative energy savings across the Technolog Group Ltd portfolio if all energy efficiency measures are implemented in line with the confirmed dates. The savings are displayed on a monthly basis, with a maximum of 6,827 kWh potentially being saved each month once all energy measures have been implemented by December 2026. Any delays or issues with the implementation of measures will impact this graph and should be accounted for when looking at future projections. If the plan's full potential is met, annual energy consumption by the end of 2026 is expected to see a total saving of 49,489 kWh and total energy consumption for the Action Plan period up to December 2027 is expected to see a total saving of 134,843 kWh.



**Expected costs of proposed ESOS action plans**

<b>Commitment</b>	<b>Deadline</b>	<b>Estimated costs</b>	<b>Notes</b>
AC Upgrades	June, 2026	£45,000.00	
Pipework Insulation	May, 2025	£50	Partially completed
Motion Sensor installation 1	December, 2025	£1,000	
Motion Sensor installation 2	December, 2026	£1,000	
Monitor upgrades	December, 2024	£0	Complete
<b>Total</b>		<b>£47,050</b>	

