

East Herts Council's route to net zero

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Why net zero carbon?

- UK government's legally binding target to reach net zero emissions by 2050
 - total greenhouse gas emissions will be equal to the emissions removed from the atmosphere
 - commitment is rooted in the Climate Change Act 2008, which was amended in 2019 to strengthen the target to net zero
- Council's Climate Change Strategy 2022-2026 – aim to become a net zero carbon council by 2030
- July 2023, the council restated and reinforced its commitment by making a Climate Emergency Declaration – by 2027:
 - reduce the council's carbon footprint as much as possible
 - identify a pathway offset residual carbon to achieve net zero

How are we doing?

Table 3: East Herts Council's gross emissions since the 2019 baseline

Financial year	Gross emissions - in tonnes	% reduction in gross emissions compared with the 2019 baseline
BASELINE 2019	2,940	
2020	2,800	5%
2021	2,565	13%
2022	2,446	17%
2023	2,436	17%
2024	2,380 ⁵	19%
2025	2,370⁶	19%

Started adding 'well-to-tank' emissions

Started adding robust calculations for home working

The details behind the 2025 figure

Table 2: Breakdown of the change in the council's CO₂e emissions total from 2023 to 2025*	
	CO₂e tonnes
Council's total emissions in 2023	2,436
Changes by 2025	
<ul style="list-style-type: none"> reduction due to the council's actions 	-266
<ul style="list-style-type: none"> addition to the government's calculated level of carbon emissions arising from the different types of fuel used by the council 	+6
<ul style="list-style-type: none"> addition due to a more accurate way of measuring emissions relating to council officers working from home 	+33
<ul style="list-style-type: none"> addition due to the council's decision to adopt emerging best practice to include 'well-to-tank' emissions for fuel used 	+162
Resulting total emissions by East Herts Council in 2025	2,370

* Component figures and totals rounded so total may be different by +/- 1 tonne from the summation of the component figures.

The details behind the 2025 figure

Council's actions and actions by staff	Tonnes of CO ₂ e - 2023	Tonnes of CO ₂ e - <u>2025</u>	Movement	Commentary
Gas use in council buildings <i>excluding leisure centres</i>	146	144	↓	Gas remains steady
Gas use in leisure centres	928	651	↓	Redeveloped leisure centres more efficient Reduction in shared used pools
Electricity use in council buildings <i>excluding leisure centres</i>	13	1	↓	Virtually all supply switched to carbon free tariff
Electricity use in leisure centres	245	329	↑	Full reopening of National Leisure Centre from electricity
Council's own vehicle fleet	8	0	↓	e-fleet fre
Staff commuting	160	152	↓	Off vehic
Staff and elected member business travel	29	21	↓	e-fleet business j
Waste management and grounds maintenance contractors' fleet and machinery	884	847	↓	Waste management contractor hired/leased newer, more efficient waste collection vehicles Grounds maintenance contractor switched some equipment from diesel to electrically powered

**266 tonnes
REDUCTION**

The details behind the 2025 figure

Methodological changes	Tonnes of CO ₂ e - 2023	Tonnes of CO ₂ e - 2025	Movement	Commentary
Emissions arising from home working	-	33	↑	New robust measure
Transmission and distribution losses relating to electricity usage	24	29	↑	New robust measure
Well-to-tank emissions associated with fuel use	-	162	↑	Newly added to the LGA model for calculating emissions Council has chosen to act with integrity and include these additional emissions

**200 tonnes
ADDITION**

Actions completed or underway

Actions underway or completed since March 2025 to further reduce the council's carbon emissions	
Actions	Anticipated reduction (tonnes of CO ₂ e) on the 2025 level that would be achieved by 2027
New waste management contract (a) <u>deploy</u> electric vehicles and (b) use HVO instead of diesel for the large vehicles	488 – assuming 5% of diesel use switches to carbon free electricity and 75% of remaining diesel use switches to HVO DONE
Continued reduction in the council's property portfolio	139 – cessation of shared used swimming pools by the council DONE
Bring forward SLM's switch to carbon free electricity at Hartham and Grange Paddocks leisure centres to 2026	365 DONE
Reopening of Hertford Theatre, now known as BEAM, with all heating provided by carbon free electricity rather than gas	6 – based on four months of pre-closure gas usage included in the 2024/25 total and the 2024/25 nationally defined conversion to carbon emissions factor DONE <i>Note: the full year gas use before closure resulted in 17 tonnes of emissions</i>
Switch the 0.4% of the council's electricity use still not on carbon free tariffs	1 – based on all remaining carbon-generating tariffs switching to carbon free tariffs DONE
Reduce staff commuting by fossil-fuelled vehicles	35 – based on 25% of officers switching from petrol, diesel or hybrid to full electric vehicles, with electricity from carbon-generating tariffs used ANTICIPATED BY 2027
Switch the council's business journeys to the e-fleet rather than individual officers' fossil-fuelled cars	7 – based on 25% of council business journeys switching to the council's e-fleet, powered by carbon free electricity ANTICIPATED BY 2027
TOTAL reduction when ALL DONE	1,041

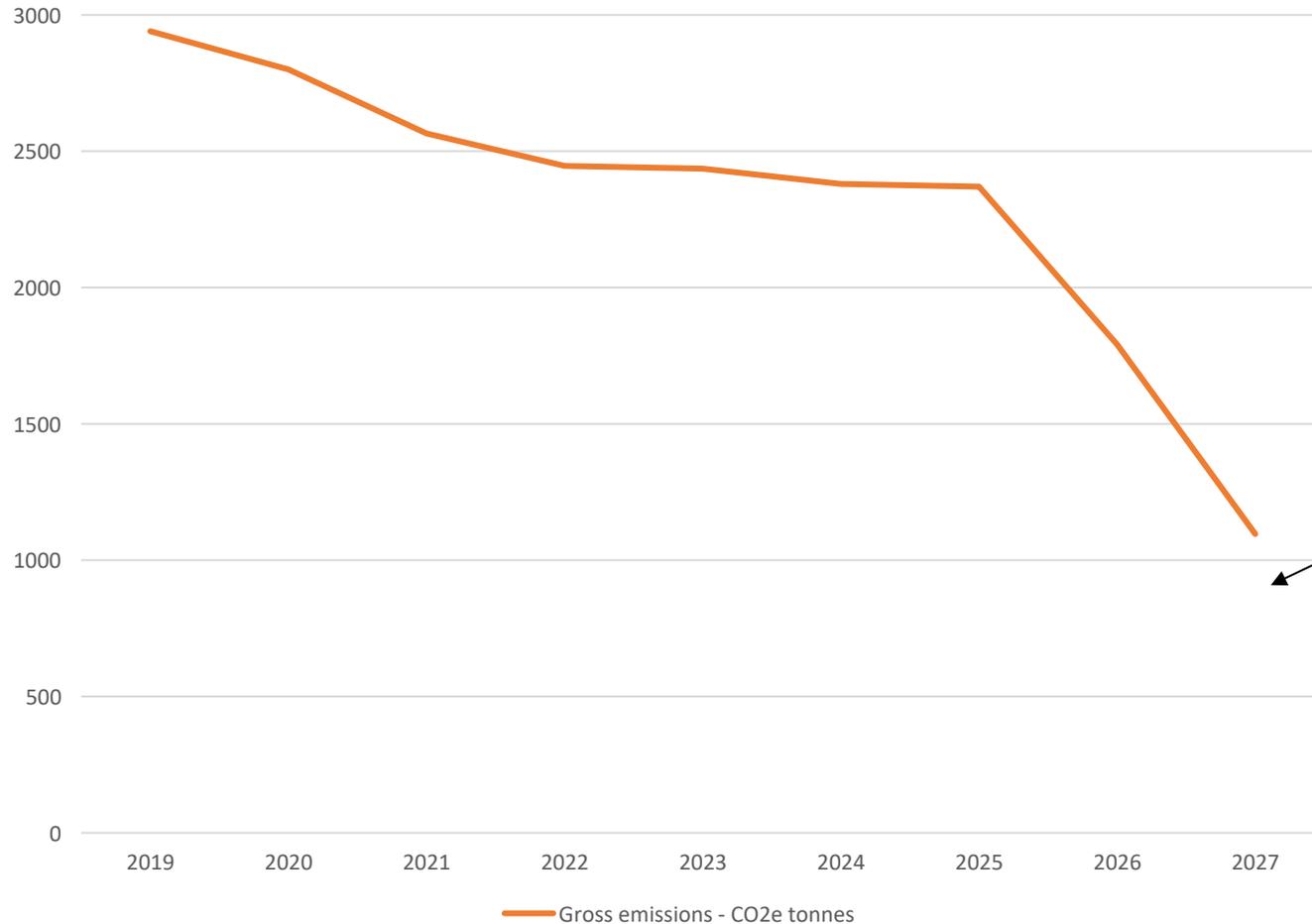


New actions since publication of the Emissions Report 2025

New actions since publication of the Council Emissions Report 2025	
Actions	Anticipated reduction (tonnes of CO ₂ e) on the 2025 level that would be achieved by 2027
Complete shift to 100% HVO for non-electric waste management vehicles rather than the 75% anticipated in the 2025 report	216 DONE
Fitting of a pool cover at Grange Paddocks Leisure Centre main pool funded with UKSPF monies <i>Note: Hartham Leisure Centre already had a pool cover</i>	17 DONE
Fitting a combined chlorine dosing and water flow system to reduce the heating requirements of Grange Paddocks' main pool <i>Note: given fixed UKSPF monies available, installation is more effective at Grange Paddocks than Hartham Leisure Centre in terms of emissions reductions arising from investment</i>	11 UKSPF FUNDING ALLOCATED – INSTALLATION DUE BY SEPT 2026
TOTAL additional reduction to be ACHIEVED	244

Projected emissions

East Herts Council's carbon emissions: actual to 2025, projected in 2026 and 2027



Emissions projected to 2027

Calculating *net* emissions

- The council's buildings and activities emit carbon
- Our land sequesters carbon
- The net carbon position = emissions – sequestration

Can be count the sequestration from the council green assets – and how?

- Research by the University of Hertfordshire
 - established that it is discretionary for local authorities to directly provide and maintain green assets
 - so, policy choices to do this mean sequestration should be included in a council's net carbon position
- Welsh LGA
 - established bespoke model to enable Welsh councils to apply the government-sanctioned National Atmospheric Emissions Inventory (NAEI) figures for sequestration from different green assets
- English LGA
 - the council and HCCSP have been encouraging the English LGA to adopt a Welsh-type approach
 - English LGA has agreed for East Herts Council to lead the way

East Herts Council leading the way

- The Hertfordshire-wide Biodiversity Study allows us to categorise all our green assets by habitat type
- NAEI provide carbon sequestration figures for each habitat type

Method – multiple hectares of each type by the appropriate NAEI sequestration figure

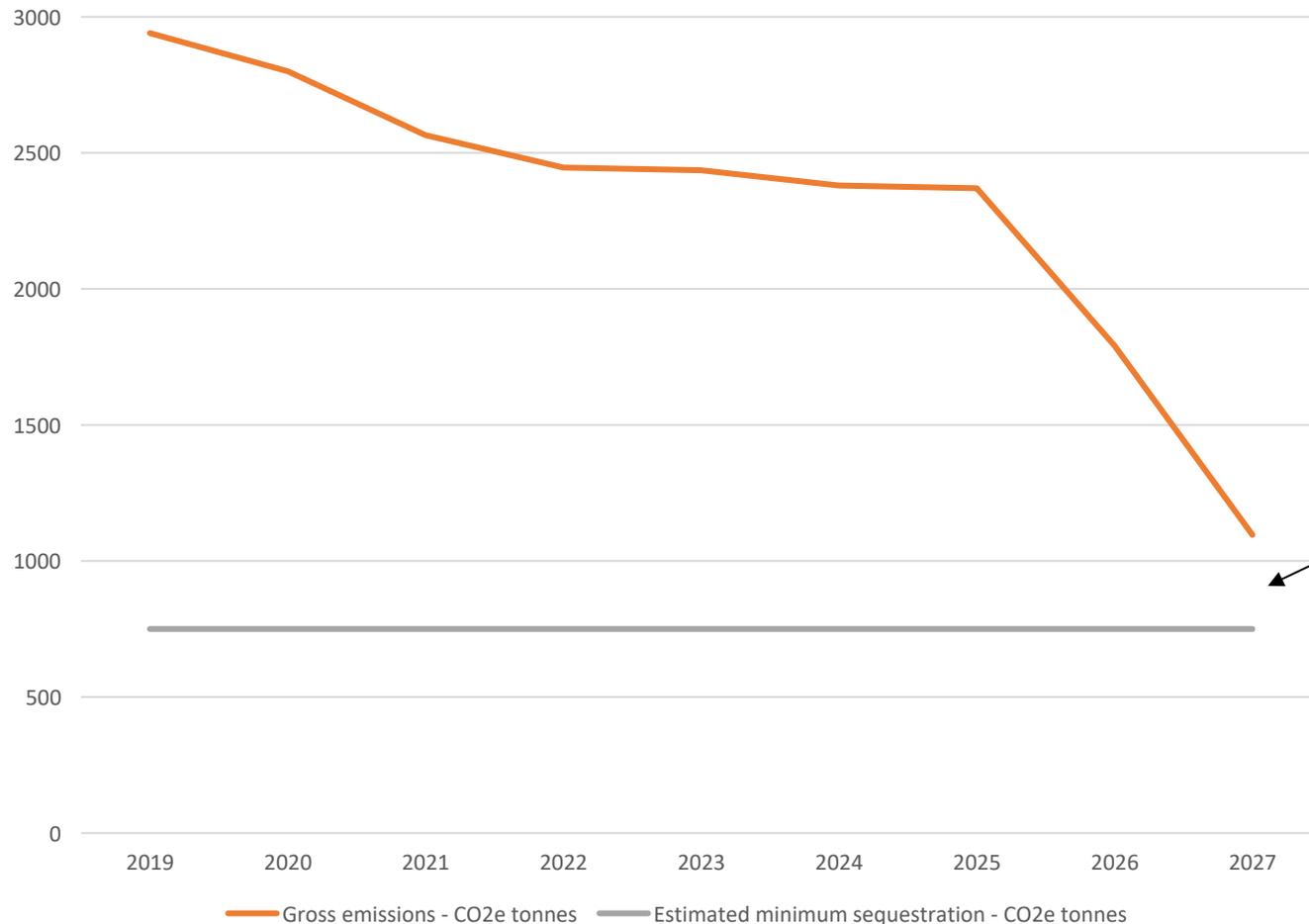
- Welsh LGA has produced ‘snapshot’ carbon sequestration figures
- We want to apply the latest NAEI figures as they become available. An NAEI scientist has confirmed the rigour of doing this
- We will pilot this approach – the English LGA is very interested

Sequestration of carbon by the council's green assets

- **Initial estimate = minimum of 750 tonnes sequestered per year**
 - Detailed assessment to be carried out in 2026/27
 - Final figure likely to be slightly higher given refinement of habitat type classification since initial estimate

Calculating *net* emissions

East Herts Council's carbon emissions: actual to 2025, projected in 2026 and 2027



Emissions projected to still be higher than carbon sequestered by green assets in 2027

Gap of 335 tonnes to be reduced to achieve a net zero position by 2030

Eliminating residual carbon at 2027

Possible action	Estimate carbon reduction in tonnes	Estimated cost - where known
Switch the gas used in the council's buildings to biogas - <i>excluding the leisure centres</i>	127 tonnes	£34,000 per year
Fund SLM to switch to biogas at Grange Paddocks and Hartham Leisure Centres	662 tonnes	£124,000 per year
Fund our grounds maintenance contractor to switch to HVO	138 tonnes	£22,000 per year
Re-engineering waste collection rounds	0.04 tonnes per <u>1,000 mile</u> reduction	£363 <i>saving</i> per 1,000 miles
Co-locate data centres and repurpose heat	Example if replacing <u>all natural</u> gas use <ul style="list-style-type: none"> • <u>Wallfields</u> - 97 tonnes • Hartham Leisure Centre - 275 tonnes • Grange Paddocks Leisure Centre - 324 tonnes 	Costs not known at this point
Solar or heat pumps to replace gas use	Example if replacing <u>all natural</u> gas use <ul style="list-style-type: none"> • <u>Wallfields</u> - 97 tonnes • Hartham Leisure Centre - 275 tonnes • Grange Paddocks Leisure Centre - 324 tonnes 	<u>Wallfields</u> = £500,000+ due to need for new substation Hartham and Grange Paddocks not known at this point
Solar canopies at council car parks	Would only reduce carbon if replacing gas use rather than <u>non carbon</u> electricity use	Not known at this point