



Camden Climate Alliance

Energy Efficiency Guide

Camden and Brent Business Climate Challenge

May 2025







SUPPORTED BY
MAYOR OF LONDON

Purpose of this guide

This guide has been formed based on insights from the **Camden and Brent Business Climate Challenge**. Building on the successes of the programme, this is an **energy efficiency guide** that can be used by any business that requires advice and a starting point for their **decarbonisation journey**.

The aim of the guide is to share the **learnings** from the Camden and Brent Business Climate Challenge to a wider audience and allow businesses to **replicate the journey** of those who participated.

Please click on the below icons to navigate through the guide, whether you would like more information on the **programme** itself, get to know why **energy efficiency** is important to businesses or get started with your own energy efficiency **action plan!**











PROGRAMME SUMMARY





Camden and Brent BCC summary



Context

In 2018, the Mayor of London declared a **Climate Emergency** and has since committed to making London **Net Zero carbon** by 2030. Industrial and commercial buildings make up **one-third** of London's emissions and **80%** of these buildings will still be standing in 2050. In 2019, there were almost **1.1 million** small and medium-sized enterprises (SMEs) located in London, the most of any region of the United Kingdom. Without action by businesses, including SMEs, London will be unable to achieve its target of **Net Zero emissions by 2030**.

What is the Camden and Brent Business Climate Challenge?

The Camden and Brent Business Climate Challenge (BCC) offers an opportunity to **stimulate building decarbonisation** to help meet Net Zero goals, create green jobs and more resilient and prosperous businesses.

The overarching aims of the Camden and Brent Business Climate Challenge (Camden and Brent BCC) are to maximise **energy savings and** reduce **fuel bills** and **carbon emissions** for up to 125 SMEs across Camden, Brent and Fitzrovia.

The programme achieves these aims by supporting **85 SMEs** to identify ways to reduce fuel consumption, costs, and related emissions. All businesses involved in this challenge, which ran from January 2024 to March 2025, have **committed to reducing their building energy consumption by 10%** in the 12 months after receiving their costed recommendation report.

The Business Climate Challenge (BCC) is crucial to reduce **energy consumption** and **carbon emissions** from SMEs in London, in line with national targets of achieving net zero by 2050.

Outputs of the Business Climate Challenge



Technical energy audits and site surveys



Energy management and monitoring through the IO-Gen platform



Costed recommendation reports for Scope 1 and 2 decarbonisation



Six training sessions on decarbonisation and climate topics



Bespoke additional services

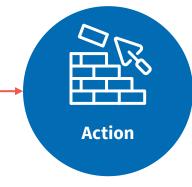
What does a typical decarbonisation journey look like?



- Collect 12 months of electricity, gas, and other fuel consumption data. It is important to have a full year as it exposes seasonal variances and allows direct month-by-month comparability every year.
- Convert energy consumption data into emissions using an emissions factor.
- Understand trends in your consumption.

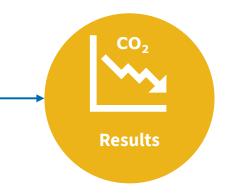
- Commission a site energy audit with a recommendation report.
- Talk through with a contractor to understand the best approach to achieve decarbonisation.
- Attend necessary training sessions to upskill relevant people.





- Implement recommendations to improve operational efficiency of your site and reduce energy consumption.
- Monitor energy consumption closely.

- Record energy consumption and analyse trends.
- Celebrate reductions in energy consumption and resulting CO₂ emissions!
- Publicise and share your journey to create lasting awareness!



ENERGY EFFICIENCY IN BUSINESSES





Why does energy efficiency matter for your business?

Reduction in Scope 1 and 2 carbon emissions

Reduced climate impact

Alignment with Net Zero goals and future proofing from regulation

Visible commitment to sustainability

More comfortable working environment

Sustainable behaviour change

Increased awareness on sustainability issues

Reduction in energy consumption and imports

Reduction in energy costs



Improved energy security and resilience

Increase in EPC rating and asset value

Common challenges for businesses

Challenges



Costs associated with improving energy efficiency and decarbonising their buildings



Barriers imposed by landlords or business stakeholders



Low staff awareness of sustainable behaviour and energy efficiency best-practice



Building restrictions e.g. limited space and access, Listed status



Thoroughly assessing your site for opportunities to reduce your energy consumption and emissions

Solutions

Apply for local or national grant funding to support with purchasing and installations



Educate on the benefits of improving energy efficiency



Deliver sustainability workshops and best practice guidance for staff and site users



Focus on what you can control, such as improve operational efficiency, degasify and purchase a renewable tariff



Hire a consultant to conduct a full site energy audit, and/or take advantage of free decarbonisation programmes



Accommodation & food

Case study Holiday Inn Camden

A Holiday Inn hotel located in Camden, with 130 rooms and food and beverage outlets.

Key measures implemented

- Introduction of temperature setpoints in the public facing areas.
- Half-hourly energy data tracking.
- Use of resources offered through the programme to encourage better energy management practices from contractors during refurbishments.

Estimated total savings of 545 tCO₂e (18% of current consumption) from all recommendations.

Testimonial

"These changes have given us a clearer picture of our energy use and helped us spot where we can make real savings without big investments. The recommendation report from Turner & Townsend was particularly useful—it's helped us plan for practical improvements like fitting fridge magnets and using self-regulating fans to reduce energy use"

Common areas of energy inefficiency



Fridge managers and timer controls not optimised



Outdated lighting with manual controls



Lack of control of HVAC equipment



Outdated and inefficient heating systems



Lack of on-site renewable energy generation

	Measures	Average carbon savings* (tCO ₂ e/year)	Average cost saving** (£/year)
	Encourage staff behaviour change	0.3	£238
	Increase server room setpoints	0.1	£103
#	Adjust heating/cooling controls	0.5	£243
Low-cost	Timer controls on catering equipment	0.7	£760
	Install fridge managers on drinks fridges	0.2	£133
	Install LED lights and/or lighting controls	0.3	£404
	Install equipment to increase control of HVAC equipment	9.1	£6,325
	Install secondary glazing	4.4	£2,497
	Install double glazing	0.5	£1,653
	Install roof insulation	0.6	£674
rofit	Install pipework insulation	0.2	£171
Deep retrofit	Electrify the hot water system	0.8	-£1,080
	Decarbonise the heating system	19.4	-£2,541
	Install a rooftop solar PV array	2.1	£4,058
	Replace catering equipment	10.4	-£7,535
	Install draught proofing	5.6	£735
Additional anorgy saying measures which were not identified for accommodation			

Additional energy saving measures which were not identified for accommodation & food businesses as part of the programme includes installing reflective radiator film and installing wall insulation.

^{*}Estimated annual average carbon savings, based on average times a measure was recommended in the sector as part of the Camden and Brent BCC.

^{**} Based on annual average £ savings on bills over the lifetime of the measure.

Retail & wholesale

Case study Juno Media

An online retailer of vinyl records, DJ & studio equipment with an office and warehouse based in an old, listed building.

Key measures implemented

- Enhanced heating controls and boiler usage for flexible adjustments based on daily weather needs and operating hours.
- Installed TRVs and improved efficiency of boilers/radiators through servicing, removing the need for portable heaters,
- Workspaces repositioned to maximize radiator heat.
- Better insulation with draught excluders and window repairs.
- Smart meters installed for energy monitoring.
- Power-saving reminders added to lights and PCs.
- New switches fitted in areas previously always lit, and LED tube replacements for fluorescent lights.
- Switched to greener energy supplier.

Estimated total savings of 481 tCO₂e (62% of current consumption) from all recommendations.

Testimonial

"We have seen a 10% reduction in 2024 v 2023 costs and so far in Q1 2025 a further 10% reduction v 2024"

Common areas of energy inefficiency



Lack of timer controls on catering equipment



Fridge managers and timer controls not optimised



Outdated lighting with manual controls



Outdated and inefficient heating systems



Lack of on-site renewable energy generation

	Measures	Average carbon savings* (tCO ₂ e/year)	Average cost saving** (£/year)
	Encourage staff behaviour change	0.2	£155
	Increase server room setpoints	0.2	£170
ost	Timer controls on catering equipment	1.1	£1,273
Low-cost	Install fridge managers on drinks fridges	0.1	£97
	Install LED lights and/or lighting controls	0.7	£929
	Install equipment to increase control of HVAC equipment	1.7	£1,680
	Install secondary glazing	2.3	£1,780
	Install double glazing	1.1	£1,665
	Install roof insulation	0.9	£680
ij	Install wall insulation	0.8	£150
Deep retrofit	Install pipework insulation	0.06	£40
	Electrify the hot water system	0.7	-£910
	Decarbonise the heating system	3.3	£383
	Install a rooftop solar PV array	2.6	£3,856
	Replace catering equipment	4.9	-£5,300
	Install draught proofing	0.8	£1,100
Additional analysis and an area which were not identified for the 10			

Additional energy saving measures which were not identified for retail & wholesale businesses as part of the programme includes adjusting heating and cooling controls and installing reflective radiator film.

^{*}Estimated annual average carbon savings, based on average times a measure was recommended in the sector as part of the Camden and Brent BCC.

^{**} Based on annual average £ savings on bills over the lifetime of the measure.

Arts, entertainment & recreation

Case study Post-production services company

A provider of highly creative post-production to a wide range of broadcasters and production companies, based in a Georgian townhouse with office and post-production spaces.

Key measures implemented

- Encourage staff to turn off IT equipment
- Increase server room cooling temperature setpoint
- Installed LED lighting

Measures planning to implement

- Install secondary glazing
- Install roof insulation

Estimated total savings of 46 tCO₂e (18% of current consumption) from all recommendations.

Common areas of energy inefficiency



Heating and cooling settings not optimised



Outdated lighting with manual controls



Lack of HVAC control equipment



Outdated and inefficient heating systems



Lack of on-site renewable energy generation

	Measures	Average carbon savings* (tCO ₂ e/year)	Average cost saving** (£/year)
	Encourage staff behaviour change	1.4	£1,889
	Increase server room setpoints	1.4	£2,056
#	Adjust heating/cooling controls	3.4	£3,500
ow-cost	Timer controls on catering equipment	0.5	£527
Low	Install fridge managers on drinks fridges	0.1	£170
	Install LED lights and/or lighting controls	1.6	£2,530
	Install equipment to increase control of HVAC equipment	4.3	£2,352
	Install secondary glazing	2.4	£1,706
	Install reflective radiator film	15.0	£5,190
	Install double glazing	7.2	£3,505
ij	Install roof insulation	4.9	£3,853
Deep retrofit	Install wall insulation	4.7	£2,560
	Install pipework insulation	5.1	£1,760
	Electrify the hot water system	0.5	-£1,780
	Decarbonise the heating system	11.8	-£4,051
	Install a rooftop solar PV array	2.0	£3,546
	Install draught proofing	0.1	£200
Additional energy saving measures which were not identified for arts, entertainment			

Additional energy saving measures which were not identified for arts, entertainmen & recreation businesses as part of the programme includes replacing catering equipment.

^{*}Estimated annual average carbon savings, based on average times a measure | 11 was recommended in the sector as part of the Camden and Brent BCC.

^{**} Based on annual average £ savings on bills over the lifetime of the measure.

Health & social care

Case study Pathological and clinical laboratory

A provider of highly specialised pathology and clinical laboratory services to clinicians, hospitals, community health services and their patients, based in an old London terrace.

Key measures implemented

- Encourage staff behaviour change regarding energy management practices
- Adjusted heating and cooling controls

Estimated total savings of 1,097 tCO₂e (37% of current consumption) from all recommendations.

Common areas of energy inefficiency



Server room cooling setpoints are set too cold



Heating and cooling settings are not optimised



No timer controls on catering equipment



Outdated and inefficient heating systems



Lack of on-site renewable energy generation

	Measures	Average carbon savings* (tCO ₂ e/year)	Average cost saving** (£/year)	
ost	Encourage staff behaviour change	1.1	£1,613	
	Increase server room setpoints	0.2	£303	
	Adjust heating/cooling controls	14.8	£22,613	
Low-cost	Timer controls on catering equipment (0.3	£178	
Lo	Install LED lights and/or lighting controls	0.4	£747	
	Install equipment to increase control of HVAC equipment	2.3	£3,630	
Deep retrofit	Install secondary glazing	1.4	£1,705	
	Install reflective radiator film	0.6	£205	
	Install double glazing	2.2	£1,103	
	Install roof insulation	0.1	£70	
	Install pipework insulation	0.1	£40	
	Electrify the hot water system	7.6	£990	
	Decarbonise the heating system	12.2	-£1,943	
	Install a rooftop solar PV array 🚑	1.5	£2,587	
	Replace catering equipment	0.4	-£120	
	Install draught proofing	0.1	£70	
Δddi	Additional energy saving measures which were not identified for health & social			

Additional energy saving measures which were not identified for health & social care businesses as part of the programme includes installing fridge managers and installing wall insulation.

^{*}Estimated annual average carbon savings, based on average times a measure was recommended in the sector as part of the Camden and Brent BCC.

^{**} Based on annual average £ savings on bills over the lifetime of the measure.

Education

Case study The Cavendish School

A small, independent girls' preparatory school in the heart of Camden Town with ~ 200 pupils.

Key measures implemented

- Closer alignment of HVAC to the school day and shutdown during school breaks.
- Automatic shutdown of computers at 7pm on Fridays.
- Streamlined usage of the hot cabinets in the catering kitchen.
- Reduction of cooling point in server room.
- Encourage staff behaviour change for lighting and leaving doors/windows open.

Estimated total savings of 973 tCO₂e (54% of current consumption) from all recommendations.

Testimonial

"The instant reduction in electricity usage due to the weekend computer shutdown was especially gratifying as it was so simple to achieve"

Common areas of energy inefficiency



Server room cooling setpoints are set too cold



Lack of control of HVAC equipment



Single glazed windows



Outdated and inefficient heating systems



Lack of on-site renewable energy generation

	Measures	Average carbon savings* (tCO ₂ e/year)	Average cost saving** (£/year)
Low-cost	Encourage staff behaviour change	1.8	£2,408
	Increase server room setpoints	0.2	£249
	Adjust heating/cooling controls	7.3	£5,855
	Timer controls on catering equipment	1.2	£600
	Install fridge managers on drinks fridges	0.2	£220
	Install LED lights and/or lighting controls	5.8	£8,992
	Install equipment to increase control of HVAC equipment	19.9	£17,064
	Install secondary glazing	8.4	£4,463
	Install double glazing 🚻	2.1	£1,380
Deep retrofit	Install roof insulation	0.1	£40
	Install pipework insulation	23.0	£19,300
	Electrify the hot water system	11.5	-£2,110
	Decarbonise the heating system	106.4	£17,985
	Install a rooftop solar PV array	5.9	£8,528
	Replace catering equipment	0.03	-£900
	Install draught proofing	0.1	£45
Addi	dditional energy saving measures which were not identified for education		

Additional energy saving measures which were not identified for education businesses as part of the programme includes installing reflective radiator film and installing wall insulation.

^{*}Estimated annual average carbon savings, based on average times a measure was recommended in the sector as part of the Camden and Brent BCC.

^{**} Based on annual average £ savings on bills over the lifetime of the measure.

ACTION PLAN

Resources to help you take action for your business





Understand your emissions

Baseline your energy consumption

Reading your energy bills

Your energy consumption and costs will be available in your energy bills. Further guidance on reading your energy bills is available in the following page. Energy consumption will be given in kWh, or m³/ft³ for natural gas. Energy consumption may be based on actual consumption, which may be indicated as A or C on an invoice, or estimated consumption if readings were not provided, indicated as E. Providing energy meter readings to your provider ensures you are billed correctly and allows you to track your consumption.

Monitor your energy consumption

Energy consumption and costs should be monitored on a regular basis (weekly, or at least monthly), and used to track performance by comparing against an energy baseline. Energy consumption, costs and emissions should be tracked.

Smart meters

Smart meters capture energy consumption in real time, usually in increments of 30 minutes, and allow for more precise data analysis. If your meter is not already a smart meter, you can request one for free from your energy supplier.



Example of energy tracking dashboard

Set your energy baseline

To monitor your energy consumption and performance, an energy baseline should be set. The energy baseline should reflect your usual business operations and should be used to set energy reduction targets.

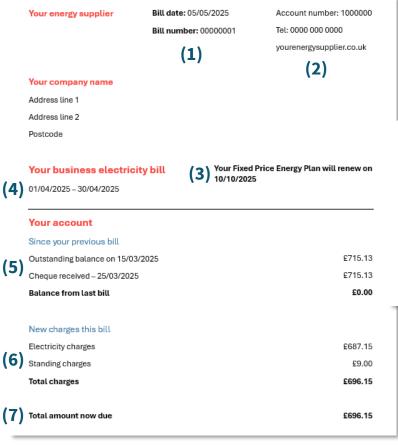
Calculate your carbon emissions

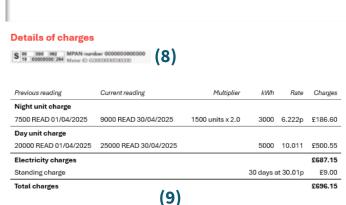
To calculate carbon emissions from your energy consumption, the <u>carbon</u> <u>emission factors from the UK government</u> should be use.

The Carbon Trust provides a tool to calculate energy related emissions for SMEs, available <u>here.</u>

Understand your emissions

Reviewing your energy bills





- (1) Bill date and bill number
- (2) Account number and supplier contact details
- (3) Contract information
- (4) Billing period
- 5) Outstanding balance from previous bills
- (6) Balance from this billing period
- (7) Total amount owed
- (8) MPAN or MPRN number (unique identification numbers for energy meters)
- (9) Breakdown of charges, including energy consumption, usually in kWh or m³, energy rates, and energy costs, and reading type (e.g. estimated, actual or read)



Reduce your emissions

Operate your building efficiently

Identify quick wins

Deliver behaviour change workshops to promote **good energy management practices** in staff

Ensure **good maintenance regime** for equipment

Align **heating**, **ventilation and cooling schedules** with operating hours

Install thermostats and temperature controls

Align **temperature controls with best practice**, aiming for lower temperatures for heating (18-21°C) and higher for cooling (21-24°C); the lower the difference between the indoor and outdoor temperature, the lower the losses

Install **LED lighting** with **presence controls** and **daylight dimming**

Ensure doors and windows do not have any **draughts**

Identify longer term investments

Investigate options to install **solar PV** to generate renewable electricity on site. A solar PV installation will generate clean energy on site, reducing your reliance on the electricity grid, and decreasing your energy costs. This will aid with the site degasification further down in your journey.

Upgrade the **building fabric** (e.g. double glazing, insulation...). Upgrading the building's insulation will improve its thermal efficiency, reducing thermal energy demand. This will aid with the site degasification further down in your journey.

Prepare for **site degasification** by making end-of-life plans for existing gas-powered equipment (such as gas boilers or gas catering equipment), prioritising higher efficiency options such as **heat pumps** and **induction equipment**. Switching from gas to electricity-powered equipment will reduce your energy consumption due to the higher efficiencies and will lead to a reduction in emissions year-on-year as the electricity grid decarbonises.



Grants



Camden Climate Fund

Value

Up to £5,000 with no match funding
Up to £15,000 with 50% match funding

Objectives

Funding is available to support organisations to implement key recommendations that improve the efficiency of their workplace and achieve cost and carbon savings

Eligibility Criteria

Small/medium/micro businesses who hold membership with the Camden Climate Alliance

Timeframes

Phase 4 January 2025 – October 2025 Phase 5 commences January 2026

Link: <u>Have Your Say Today - Camden Climate</u> Fund - Commonplace



Boiler Upgrade Scheme

Value

Grants up to £7,500 off the cost and installation of heat pumps and biomass boilers

Objectives

To encourage property owners to replace existing fossil fuel heating with more efficient, low carbon heating systems

Eligibility Criteria

Property must be a small or medium nondomestic building in England or Wales with a valid EPC and fall within a certain kWth range

Timeframes

Open from 23rd May 2022, closing 31st December 2027

Link: <u>Boiler Upgrade Scheme - GOV-UK Find a</u> grant



The Mayor of London's Energy Efficiency Fund (MEEF)

Value

Provides flexible and competitive financing (£500m total investment fund)

Objectives

Supports projects that deliver new low carbon technology or upgrade existing infrastructure to help make London net zero, including making buildings and infrastructure more energy efficient

Eligibility Criteria

SMEs/NHS trust/charity/local authority with a project summary and estimated output targets including decrease of tCO₂e

Timeframes

Currently open for applications (April 2025) no set close date

Link: Mayor of London's Energy Efficiency Fund
| London City Hall



Achieve carbon neutrality

Procuring renewable electricity and offsetting your emissions should be the final step of your carbon reduction journey, after all physical interventions have been assessed.

Procure renewable electricity

Procuring renewable electricity acts to offset your electricity consumption by procuring electricity from renewable sources. The electricity procured should be REGO-backed, and the supplier should also demonstrate additionality (which leads to the generation of new renewable electricity). The UKGBC provides best practice guidance on the procurement of green electricity.

Purchase carbon offsets

To achieve carbon neutrality after reducing your emissions as much as possible, the remaining emissions should be offset by purchasing carbon offsets. The UKGBC provides <u>best practice guidance</u> on the procurement of carbon offsets.

Additional resources

To help your business reduce its emissions

Tools



<u>Understanding and calculating your</u> <u>energy and carbon emissions</u>



The Carbon Trust – Steps to energy savings: tools for SMEs

Services



B Corp certification



<u>The Carbon Trust – SME guide to</u> <u>financing energy efficiency projects</u>



Guidance on environmental and sustainable accreditation schemes



Financial support - SME Climate
Hub

Learning



The Carbon Trust – The journey to Net Zero for SMEs



<u>UK Government – Energy Efficiency</u> for Businesses



Financial support - SME Climate

