Image: Energy-efficient building approach. Jirka DI, CC BY-SA 4.0, via Wikimedia Commons. Image page

Carbon Footprint Reduction Guide

Practical steps for lower-energy operations, cleaner travel, and measurable progress

70%	EV	5-step
target lighting energy saving from LED upgrades	charging infrastructure to support cleaner travel	roadmap for measurable reduction

This guide summarises our current carbon footprint reduction efforts and provides a practical route map for continuing improvement. The focus is on high-impact actions we can control: efficient lighting, electric vehicle charging, smarter energy use, and everyday behaviours that reduce avoidable waste.

Our commitment

- Reduce avoidable electricity use across our premises.
- Support cleaner transport choices through EV charging provision.
- Embed energy efficiency into maintenance, procurement, and staff routines.
- Track results so savings are visible, repeatable, and easy to communicate.

How to use this guide	Use it as a practical staff and stakeholder briefing: explain what has changed, what comes next, and how people can support lower-carbon operations day to day.

PRIORITY 1

LED lighting: immediate energy reduction

Image: LED lighting and efficient building illumination. ENERGY.GOV, Public domain, via Wikimedia Commons. Image page

Our move to LED lighting is one of the most direct ways to reduce electricity consumption. We are using a working assumption of 70% energy savings from LED lighting upgrades, which is consistent with Carbon Trust guidance that LED projects commonly deliver savings above 65% and that replacing halogen lighting with LED units can reduce electricity use by around 65% to 85% when the system is properly designed.[1][2]

Expected impact	A 70% reduction in lighting energy use lowers electricity bills, reduces emissions, and improves the consistency of lighting across working areas.

Guiding steps

1. Audit all internal and external light fittings, including emergency, corridor, office, storage, and car park lighting.
2. Replace inefficient fittings with quality LED units suitable for each area, rather than choosing lamps only by purchase price.
3. Add controls where practical, such as occupancy sensors, daylight sensors, zoning, and timed switching.
4. Check light levels after installation so savings do not compromise safety, comfort, or visibility.
5. Record before-and-after electricity use so the 70% saving target can be evidenced over time.

Sources for this section

1. Carbon Trust: Effective energy management for business:
https://www.carbontrust.com/sites/default/files/documents/resource/public/Effective-energy-management.pdf
2. Carbon Trust: Challenging the accepted wisdom around LEDs and energy efficiency:
https://www.carbontrust.com/news-and-insights/insights/challenging-the-accepted-wisdom-around-leds-and-energy-efficiency

PRIORITY 2

EV chargers: supporting cleaner travel

Image: Electric vehicle charging infrastructure. Visitor7, CC BY-SA 3.0, via Wikimedia Commons. Image page

Installing electric vehicle chargers supports staff, fleet, and visitor transition to lower-emission travel. For eligible UK organisations, the Workplace Charging Scheme can support up to 75% of purchase and installation costs, capped at a maximum of £500 per socket and up to 40 sockets across sites.[34]

Expected impact	EV charging helps remove a practical barrier to low-emission travel and demonstrates a visible commitment to sustainable operations.

Guiding steps

1. Assess staff, fleet, and visitor charging needs before choosing charger type or quantity.
2. Confirm site eligibility, dedicated parking arrangements, landlord consent where needed, and electrical capacity.
3. Use an authorised commercial installer and check whether the Workplace Charging Scheme applies.
4. Set clear usage rules covering booking, fair access, charging costs, and after-hours availability where appropriate.
5. Review charger use regularly to decide whether expansion or load-management is needed.

Sources for this section

3. GOV.UK: Workplace Charging Scheme: https://www.find-government-grants.service.gov.uk/grants/workplace-charging-scheme-2
4. GOV.UK: Electric vehicle chargepoint grants: https://www.gov.uk/guidance/electric-vehicle-chargepoint-grants

PRIORITY 3

Energy efficiency: reducing waste every day

Image: Energy-efficient building approach. Jirka Dl, CC BY-SA 4.0, via Wikimedia Commons. Image page

Energy efficiency works best when technology, maintenance, procurement, and daily routines reinforce each other. Carbon Trust guidance highlights that efficient equipment, controls, and employee energy-conscious behaviour all contribute to lower consumption and emissions.[5]

Expected impact	Small operational improvements become significant when they are repeated daily across buildings, teams, and equipment.

Guiding steps

1. Use smart meters or regular meter readings to identify unusual consumption and seasonal patterns.
2. Review heating, cooling, ventilation, refrigeration, and office equipment settings to avoid unnecessary runtime.
3. Introduce shutdown routines for lights, computers, chargers, appliances, and equipment outside working hours.
4. Procure energy-efficient replacements when equipment reaches end of life, considering lifetime running cost as well as purchase cost.
5. Nominate energy champions to report issues, encourage good habits, and keep progress visible.

Sources for this section

5. Carbon Trust: First steps in emissions reductions:
https://www.carbontrust.com/news-and-events/insights/first-steps-in-emissions-reductions

Implementation roadmap

A simple operating rhythm makes carbon reduction easier to manage and communicate.

Measure	Collect baseline energy use, lighting inventory, EV charging demand, and equipment operating patterns.
Prioritise	Target the highest-consumption areas first and sequence quick wins before larger capital projects.
Implement	Install upgrades with competent suppliers, clear specifications, and commissioning checks.
Engage	Brief staff on the reason for each change and provide simple actions they can follow.
Review	Compare post-upgrade performance against the baseline and share progress regularly.

Action checklist

- LED lighting survey completed and prioritised
- Controls assessed for corridors, communal areas, offices, and external lighting
- EV charging demand and parking eligibility reviewed
- Energy champions identified for each site or team
- Monthly meter readings or dashboard checks scheduled
- Sustainable procurement included in replacement decisions
- Progress report prepared for staff, clients, and stakeholders

Message to stakeholders	Carbon reduction is most effective when it is practical, measurable, and part of everyday decision-making. By combining LED lighting, EV charging, and disciplined energy efficiency, we can reduce operating costs, improve facilities, and demonstrate responsible environmental leadership.

Sources

1. Carbon Trust: Effective energy management for business: https://www.carbontrust.com/sites/default/files/documents/resource/public/Effective-energy-management.pdf
2. Carbon Trust: Challenging the accepted wisdom around LEDs and energy efficiency: https://www.carbontrust.com/news-and-insights/insights/challenging-the-accepted-wisdom-around-leds-and-energy-efficiency
3. GOV.UK: Workplace Charging Scheme: https://www.find-government-grants.service.gov.uk/grants/workplace-charging-scheme-2
4. GOV.UK: Electric vehicle chargepoint grants: https://www.gov.uk/guidance/electric-vehicle-chargepoint-grants
5. Carbon Trust: First steps in emissions reductions: https://www.carbontrust.com/news-and-events/insights/first-steps-in-emissions-reductions

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1. LED lighting and efficient building illumination: ENERGY.GOV, Public domain, via Wikimedia Commons. https://commons.wikimedia.org/wiki/File:LED_lights_strategically_placed_in_the_base_of_the_house_and_deck_help_the_University_of_Wisconsin-Milwaukee%27s_home_illuminate.jpg
2. Electric vehicle charging infrastructure: Visitor7, CC BY-SA 3.0, via Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Electric_Vehicle_Charging_Station.jpg
3. Energy-efficient building approach: Jirka DI, CC BY-SA 4.0, via Wikimedia Commons. https://commons.wikimedia.org/wiki/File:Bu%C5%A1t%C4%9Bhrad_-_University_Center_of_Energy_Efficient_Buildings_01.JPG