

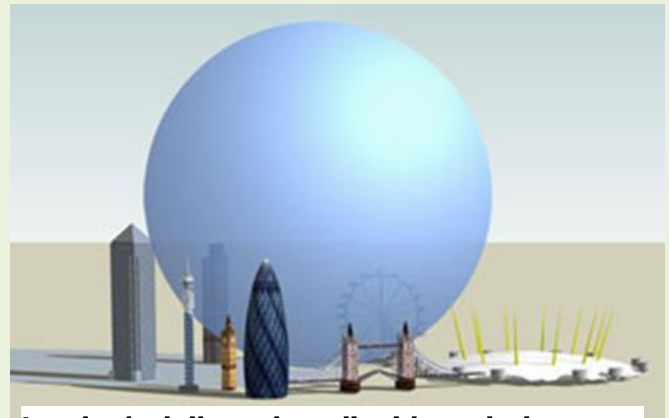
## Workplace bargaining: energy efficiency (beyond light bulbs)

Our growing demand for electricity has escalated the build-up of CO<sub>2</sub> in the atmosphere to unnatural levels. Our growing demand for electricity has escalated the build-up of CO<sub>2</sub> in the atmosphere to unnatural levels. From the 280ppm before the Industrial Revolution, beyond the 300ppm estimated peaks between the ice ages to over 400ppm in 2015.

The primary aim of the global climate change agreements is to reduce the concentration of dangerous emissions into the atmosphere.

Improving energy efficiency is the goal to reduce the amount of energy required to provide products and services. It includes businesses, buildings, products, equipment, homes and transport. Energy efficiency is an instrument to reduce energy usage and thus savings. It also:

- Improves our security of electricity supply by reducing primary energy consumption and decreasing energy imports,
- Helps to reduce greenhouse gas emissions in a cost-effective way and thereby to mitigate climate change,
- Shifting to a more energy-efficient economy should also accelerate the spread of innovative technological solutions, and
- Boosts economic growth and creates jobs in sectors related to energy efficiency.



**London's daily carbon dioxide emissions as a one tonne sphere (Carbon Visuals)**

Energy efficiency is directly linked to reducing greenhouse gases associated with [climate change](#). Every time we switch on electricity powered devices or machinery carbon dioxide (CO<sub>2</sub>) is released into the atmosphere.

While replacing your office with a state-of-the-art low carbon equipment or refurbishing to zero carbon standards may not be realistic, there's plenty to be done in all workplaces to save energy and thus reduce carbon emissions and footprint.

### WHAT IS A CARBON FOOTPRINT?

A carbon footprint is the total greenhouse gas emissions caused directly and indirectly by your business. It can be made up of direct activities (fuels burnt, transport, and process operations), indirect activities (electricity consumption) and supply chain activities (distribution, raw material manufacture, consumer use, and disposal).

### THE PREDICTED SAVINGS

In the UK there is an estimated £300 million opportunity in encouraging employees to adopt greener behaviours, which would result in saving over six million tonnes of carbon. The Department of Energy and Climate Change (DECC) estimate that energy efficiency and demand side policies could save a total of £18 billion on energy and transport bills by 2020.

## FIVE TRENDS SHAPING THE FUTURE WORKPLACE LINKED TO REDUCING CARBON AND ENERGY

The Carbon Trust believes there is a compelling business case for action and has identified [five potential changes to workplaces](#) and working practices with sustainability benefits. In each area there are implications for workforce. They include:

1. Energy efficiency equipment will become the norm (High likelihood and low disruption),
2. Offices will become smarter (High likelihood and low disruption),
3. Occupancy levels will rise (High likelihood and low disruption),
4. Working practices will become more flexible (Medium likelihood and medium disruption) and
5. Businesses may relocate (Low likelihood and high disruption) or build new.

## GETTING STARTED ON WORKPLACE ENERGY EFFICIENCY

1. Establish if your organisation has an energy efficiency, carbon management or overall environmental policy or plan. This would be found on intranets, staff pages or on the internet pages dedicated to CSR, Sustainability, and environmental performance and associated reporting including in annual reports.

2. Review the plan/policy for indicators:	
<ol style="list-style-type: none"><li>a. What are the priorities – this could be a specific area such as energy consumption but may be a combination of energy, waste or travel.</li><li>b. Reflects the organisational carbon footprint,</li><li>c. Are there specific targets (energy savings and carbon reduction) to be met?</li><li>d. Do the priorities and targets have guidance for staff?</li><li>e. Are there incentives or schemes that assist staff in achieving the targets?</li><li>f. Do the plans indicate any disruption that would affect staff performance? For example introduction of digital offices or timed heating and lighting?</li><li>g. Is there consideration or mention of strategies to support behavioural change?</li><li>h. Guidance on alternative practices that reduce carbon emissions – this could include the introduction of virtual offices, teleconferencing and telecommuting,</li><li>i. Are stakeholders identified, including the unions, and are they consulted?</li><li>j. How will projected savings be used? (re-invested into the organisation, staff incentives, training etc)</li></ol>	



3. Inform yourself on the management systems used to manage, monitor and report on environmental performance, savings and efficiencies. This could include environmental management standards or dedicated energy management systems.
4. Via the Prospect Branch Committee, advocate for **any gaps in the policy** with the appropriate body – for example, an Environment, Sustainability or Health & Safety Committee.
5. Encourage promotion of energy efficiency by raising awareness of benefits including improved savings and contribution to climate change plans and emissions reporting.
6. Negotiate for Prospect's involvement or contribution to future plans, surveys or changes to the policy with specific reference to impact on staff. This may include an agreement or charter)

## **BROAD BARGAINING POSITION FOR ENERGY EFFICIENCY INITIATIVES**

- **Consultation, consultation, consultation** - either as an official stakeholder as defined by standards or codes but ideally as the elected voice of the workforce as part of the bargaining agenda.
- Ensure that any change of policy does not shift carbon emissions from the organisation's carbon footprint to the individual member.
- Sharing the benefits from savings related to energy efficiency should be invested in people, skills, retaining jobs and continuous efficiency improvement.
- In many instances the introduction of energy efficiency initiatives will have direct implications on member work behaviour and performance – briefings and information on targets, ambitions and pathways to change are also important.
- Where there is new equipment and new low carbon process re-training is vital. Also, disruption of work due to new installations or refurbishment of buildings should be taken into consideration where this is link to performance indicators.
- Risk assessments (heating & lighting for example) and thorough consultation specific to work processes and shift patterns is vital.
- Virtual and digital offices in particular can lead to outsourcing of functions and jobs need to be protected.

## **SPECIFIC BARGAINING CONSIDERATIONS**

### **Lighting (switch-off, low level, timed)**

This has direct impact on access to buildings, natural light, risk areas and shift patterns. Thorough consultation and risk assessments should be undertaken to address concerns before changes are brought in.

### **Heating & cooling of buildings (timed day/night & seasonal)**

Many organisations are introducing timed (day/night) and seasonal systems. Considerations will vary depending on location and type of work space with possible implications for health and wellbeing.

### **Electronic equipment and machinery**

For general office equipment this could include default settings on printing, removing screen savers, automatic power-down, and energy ratings of machinery and protocols of charging private mobile device batteries.

Introduction of new low carbon machinery or changes to industrial process - training or retraining should be negotiated. Industrial processes lend themselves to innovation but have the potential to reduce jobs through mechanisation.

### **Paperless offices**

This may be introduced as 0% waste targets and will have direct implications on member's personal performance and indeed the ability to perform tasks.  
For example, paperless working will necessitate supply of mobile ICT equipment, larger device storage space, access to cloud technology and increased mail box facility.

	<b>Personal carbon budgets</b>	<p>These are established from a base line and set for an individual normally for a twelve month period. The impact of this is seen on decisions on travel, printing, etc.</p> <p>Pertinent here is that there is a mechanism to trade or renegotiate personal allowances. Punitive measures on exceeding allowances must be avoided.</p>
	<b>Refurbishment and retrofitting buildings (including solid wall and roof insulation)</b>	<p>Building works of any sort are highly disruptive and may affect individual performance and output.</p> <p>It would be vital that refurbishment is planned with staff input through consultation with staff in affected areas. Alternative space and equipment should not be downgraded or impede work outcomes.</p>
	<b>Relocation or new builds</b>	<p>Whilst new buildings are often state of the art in terms of low carbon functionality, there is a tendency to downsize with a move to either hot desking or remote working. The entire process is stressful and highly disruptive.</p> <p><b>Occupancy:</b> People to desk ratios is a growing issue in existing offices and new builds. Typically standards of 8M2 per workstation and 1.4 people per workstation (often expressed as a 7:10 ratio) are being adopted.</p> <p><a href="#">An occupancy audit</a> and impact assessments should be carried out to ensure member interests and needs are taken into consideration from the outset. This includes full and part time staff as well as those who work from home but may need to hot-desk. This can also include environmental factors such as air quality, ventilation, heating and lighting etc.</p>
	<b>Flexible working including, telecommuting, remote work, or telework including virtual or digital offices and cloud computing</b>	<p>There are both technical and social concerns for a member who becomes a remote worker. The technical implications may be immediate on initial set up whereas the social is long-term in nature.</p> <p>Technical difficulties and access to organisational cloud or on-line facilities will impede the members' ability to perform their role. It is critical that members are consulted regarding the feasibility of remote working and supported with a transition pathway to enable a smooth and stress free change to working remotely.</p> <p>It's important to negotiate a package of equipment, communications and connection that is appropriate to the type of work being undertaken remotely.</p> <p>Members will need to be assured of data protection instruments. Clear guidance on calculations and reimbursement of costs for connections, energy, heating etc are very important.</p> <p>Training on remote working would be ideal – this should include how to avoid miscommunication, balancing home and work life.</p>

## THE CHANGING LEGAL FRAMEWORK

The Climate Change Act 2008 sets out a legal obligation to annually report the UK's emissions and outlines a emissions reduction path. It set a target of reducing carbon emissions by 80% compared to 1990 levels by 2050, with a reduction of at least 34% by 2020.

The [ESOS Regulations 2014](#) bring into force Article 8 of the [EU Energy Efficiency Directive](#) and mandate that all large businesses in the UK undertake assessments of energy use and energy efficiency opportunities at least once every four years.

[EU Directive on disclosure of non-financial and diversity](#) information Introduces measures that will strengthen the transparency and accountability of an estimated 6,000 companies in the EU. These so-called 'Public interest entities' with more than 500 employees will be Required to report on environmental, social and employee-related, human rights, anti-corruption and bribery matter.

**Public sector targets** for 2010 to 2014 will continue for 2015/6. The target is to reduce greenhouse gas emissions by 25% from the 2009 baseline for the whole government estate.

There is also the [mandatory greenhouse gas emissions' reporting](#). From 1 October 2013 there is a requirement on all UK quoted companies to report on their greenhouse gas emissions as part of their annual Directors' Report. The government encourages all other companies to report similarly, although this remains voluntary.

[Energy Performance of Buildings Directive](#) is intended to improve the energy efficiency of buildings, reduce carbon emissions and reduce the impact of climate change.

## DEVOLVED GOVERNMENT PLANS AND SUPPORT

The devolved Governments of Scotland, Wales and Northern Ireland all have energy efficiency instruments that reflect regional ambitions, focus and responsibilities.

- **Scotland:** [Energy Efficiency Action Plan](#) sets out the wide-ranging programme of activity on behaviour change, household, business and public sector energy efficiency, infrastructure, skills, and finance.
- **Wales:** [National Energy Efficiency and Savings Plan](#) with a target of annually reducing greenhouse gas emissions by three per cent.

The [CRC Energy Efficiency Scheme](#) is a mandatory UK scheme aimed at improving energy efficiency and cutting carbon dioxide emissions in large public and private sector organisations. CRC policy is the responsibility of the UK Government, the Scottish Government, the Welsh Government and the Northern Ireland Executive. The Department of Energy and Climate Change (DECC) leads for the Government on CRC matters.

[Resources efficient Wales:](#) is the Welsh Government's point of access to provide information across a range of resource efficiency topics. They have a dedicated service on how to become energy efficient

[Northern Ireland Direct:](#) is the Northern Ireland Assembly point of contact for advice and guidance on energy efficiency.

## ADDITIONAL INFORMATION

**Carbon management plans ([Resource efficient Scotland](#))** Template and recommendations for establishing a carbon management plans (how to lowering carbon emissions whilst saving money on energy costs).

**The climate change reporting framework** Climate Change [Reporting Framework](#) is a voluntary reporting framework designed for reporting in financial reports. It includes greenhouse gas and energy efficiency activity.

The [Green House Gas Protocol](#) is a global standard for how to measure, manage, and report greenhouse gas emissions. It was developed by the World Resources Institute (WRI) and World Business Council on Sustainable Development (WBCSD).

**Eco-Management and Audit Scheme (EMAS)** [EMAS](#) is a voluntary initiative designed to improve companies' environmental performance. Its aim is to recognise and reward organisations that go beyond minimum legal compliance and continuously improve their environmental performance.

**[Carbon Trust Standard for Supply Chain](#)** is an independent certification for organisations that are measuring, managing and reducing greenhouse gas (CO<sub>2</sub>e) emissions in their supply chains.

**IEMA Acorn Scheme** [Acorn offers](#) accredited recognition for organisations evaluating and improving their environmental performance through the phased implementation of an environmental management system (EMS).

**ISO 14001 – International Standard** [ISO 14001](#) is the international standard for EMSs which specifies the features and requirements necessary to help organisations systematically identify, evaluate, manage and improve the environmental impacts of their activities, products and services.

**Energy management/reporting schemes (EMS)** European and international standards include ISO 50004 on implementing energy management systems, ISO 50006 on Key Performance Indicators and benchmarking and ISO 50015 on measurement and verification. The British Standards Institute (BSI) has a range of standards on energy efficiency including savings calculations (BS EN 1612), Benchmarking (BS EN 16231) to name but a few.

**The Code for Sustainable Homes** [BREEAM](#) is the Building Research Establishment's (BRE) Environmental Assessment Method. It sets best practice standards for the environmental performance of buildings through design, specification, construction and operation. It covers energy, land use, ecology, water, health and well-being, pollution, transport, materials and waste.

## OTHER RESOURCE LINKS

<a href="#">Carbon footprint of 40,000 UK public buildings</a> ( <a href="#">carbonVisuals.com</a> )	<a href="#">People counting – desk sensors</a> . Technology that captures desk occupancy data and metrics.
Guidance for businesses and organisations on <a href="#">how to measure and report their greenhouse gas (GHG) emissions</a> .	Government <a href="#">conversion factors for reporting</a> An online tool to convert 'activity data' such as distance travelled, litres of fuel used or tonnes of waste disposed into carbon emissions.
Prospect's <a href="#">Money to Burn toolkit</a>	Energy Certificates <a href="#">public bodies</a> and <a href="#">Energy Performance Certificate</a> (Scotland)
Trade union guides including <a href="#">Greening the Workplace</a> Negotiators Guide (Prospect), <a href="#">Go green at work</a> (TUC) and <a href="#">Targeting Climate Change</a> (TUC)	