

Greenpeace UK environmental performance in 2009

This is a report on the environmental performance of Greenpeace UK from January to December 2009. It aims to show the impact our organisation has on the environment, how we try to minimise it, and what we are doing to improve.

The report is organised into five sections:

- Measuring and reporting our CO₂ emissions
- Building energy use
- Travel
- Paper use
- Other aspects of environmental performance

Highlights

- Given the urgency of climate change, we are currently prioritising our efforts around reducing our own CO₂ emissions.
- Our activities were responsible for 313 tonnes of CO₂ in 2009: 39% of these came from our building (electricity and gas), 33% from travel and 28% from paper use.
- Our CO₂ emissions figures were externally audited for first time this year.
- We have steadily reduced our use of planes in recent years, to the extent that in 2009 it was only 28% of 2004 levels.
- We have set targets for reductions in CO₂ emissions relative to a 2009 baseline of 10% in 2010, and 42% by 2020.
- We will implement CO₂ budgets throughout the organisation in 2010, and use them as a tool to drive reductions in paper use and travel

A note on scope

Greenpeace UK directly employs 91 staff, all based at our office in London. Our office is also home to 18 staff from Greenpeace International. For the purposes of our CO₂ reporting all electricity, gas and all paper used in our office by these international staff is included in our figures, but their travel and external printing consumption is excluded. Instead, it is recorded and reported on by Greenpeace International in their annual CO₂ figures. Greenpeace International will produce consolidated figures for all Greenpeace operations from 2010 onwards, bringing together CO₂ consumption from all 28 National and Regional Offices, including Greenpeace UK.

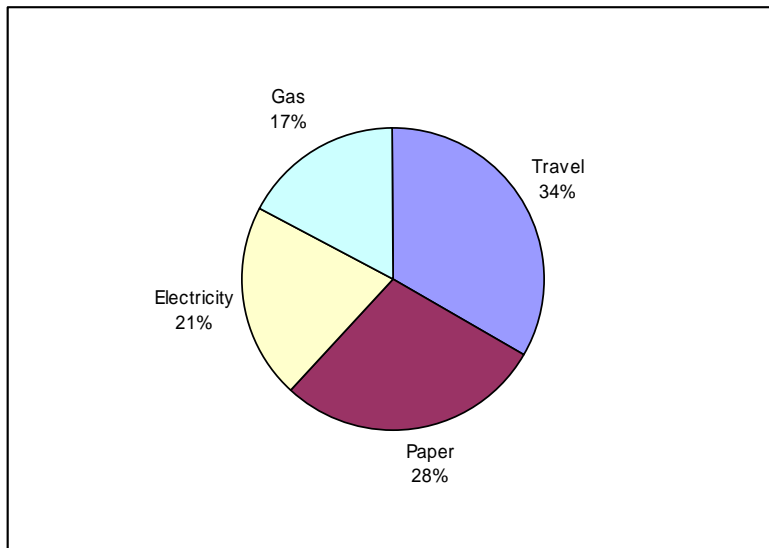
Measuring and reporting our CO₂ emissions

Where we are now

In 2009, Greenpeace UK was directly responsible for 313 tonnes of CO₂ emissions. These were broken down as follows:

Greenpeace UK CO₂ emissions in 2009:

	CO ₂ , tonnes	% of total
Travel	105	33%
Paper	87	28%
Electricity	67	21%
Gas	54	17%
Total	313	100%



In keeping with other Greenpeace offices throughout the world, our calculations of CO₂ emissions are based on the Greenhouse Gas (GHG) Protocol which is a widely used tool for measuring greenhouse gas emissions. The GHG Protocol is a partnership between the World Resources Institute and the World Business Council for Sustainable Development.

We have been keeping records of our electricity and gas consumption for several years. This year, for the first time, we introduced monitoring and reporting systems for all travel and paper related CO₂ emissions too.

We asked the company that audits our financial accounts to conduct an audit on our CO₂ emission figures. They were able to confirm that our CO₂ figures were materially

complete, arithmetically correct, and based on reasonable assumptions. However, in the absence of agreed international standards, CO₂ audits are nowhere near as robust as financial audits.

Plans for 2010 and beyond

We will use our 2009 figures as a baseline for the introduction of CO₂ budgeting in 2010. Our CO₂ budgets will mirror our financial budgets, so budget holders will be held accountable for the money they spend *and* the CO₂ they create. By gradually reducing the size of CO₂ budgets, we expect to further improve our performance particularly in relation to paper use and travel.

To support this, we will develop our accounting systems to record kilograms of CO₂ in addition to monetary transactions. This will allow us to produce monthly CO₂ management accounts alongside our financial accounts.

In 2009 we set the following targets for reducing our CO₂ emissions relative to a 2009 baseline:

1. Reduce our total CO₂ emissions from all activity by 10% in 2010
2. Reduce our total CO₂ emissions by 42% by 2020 through year on year reductions

You will find more information on how we plan to meet these targets in the sections that follow.

Building energy use

Where we are now

In 2009, our office building in London was responsible for 121 tonnes of CO₂, 41% of our total emissions. Of these, 67 tonnes came from electricity use and 54 tonnes from gas.

Supply

When we moved into our current building in 1991 we installed a gas combined heat and power system (CHP) to supply space heating, hot water and electricity. At the time this seemed like the most environmentally friendly way of meeting our needs, but the results in practice have been disappointing. CHP systems need to run for a minimum of 5,000 hours per annum to be effective, but they can only be used when there is sufficient demand. Our CHP has averaged around 500 hours per annum in recent years – most of the time our demand is simply not high enough. Instead, most of our heating and hot water is being provided by two standard gas boilers, and power is coming from the electricity grid. As a consequence of this and the fact our CHP is now reaching the end of its life, and after seeking advice from several independent consultants, we intend to decommission our CHP system in 2010.

Electricity is supplied by Good Energy on a renewable tariff. However, for the purposes of our CO₂ reporting, we have based our electricity related emissions on a Grid Emissions Factor for the whole of the UK, in line with GHG Protocol standards.

Our Good Energy supply is supplemented by a 600W solar PV array on top of the office, and a 5kW solar array on our warehouse roof. We don't have complete figures for how much electricity these two arrays provide, but we estimate a CO₂ saving in the region of 1.7 tonnes a year, about 2.5% of our total electricity consumption.

Demand

We installed a central Environmental Monitoring System in 1997 to provide detailed information about our electricity and gas consumption. In recent years we've been unable to get data off the system – basically, modern PCs are too fast to communicate with the old technology. Having recently resolved this problem, we're now able to analyse detailed patterns of gas and electricity use throughout the year, allowing us to make more accurate estimates of what our gas and electricity is being used for. The following figures are the latest we have at the time of writing this report, based on data from June 2009 – May 2010.

Analysis of Greenpeace UK building emissions June 2009 – May 2010:

Gas	CO ₂ emissions (tonnes)	% of fuel type	% of total
Space heating	29.5	56.2%	22.0%
Hot water	23.0	43.8%	17.1%
Total Gas	52.5	100.0%	39.1%
Electricity			
Server room	24.1	31.8%	19.4%
Air conditioning (server room)	8.1	10.6%	6.5%
Other base load ¹	23.8	31.4%	19.1%
Workstations "ON"	9.3	12.2%	7.5%
Building "ON" (incl. lighting)	10.6	14.0%	8.5%
Total Electricity	75.8	100.00%	60.9%
Building total (gas and electricity)	134.40		100.0%

¹ Base load is the electricity being consumed by our building when it's not in use (e.g. overnight). "Other base load" is the total base load less the IT server room equipment and its air conditioning. It will include things like the telephone system, and any residual power consumption of "switched off" equipment.

Note that IT equipment accounts for roughly 55% of our total electricity use (42 tonnes), even though we have implemented power saving “virtualisation” technology over the past few years to reduce the number of physical servers in use. We’ve found that our PCs can each consume up to 14W of power even when they are turned off, unless they are switched off at the plug.

Equally surprising to us is the fact that 74% of our total electricity use (56 tonnes) is from “always on” power use – the server room, its air conditioning and other base load.

Plans for 2010 and beyond

In line with our total CO₂ target, we aim to reduce building-related emissions by 10% in 2010. Based on estimates of potential CO₂ savings per £ spent, we will prioritise investigation and implementation of the following measures in 2010:

- Voltage optimisation of our power supply
- Improved draught proofing of doors and windows (we already have double glazing, but it is nearly 20 years old now)
- Replacement of our more inefficient lighting, and possibly improved switching
- Installation of timers on some power circuits to reduce “parasitic” power use
- Improved management and power saving on desktop PCs
- Improved management of heating and domestic hot water system
- Decommissioning our CHP unit

Overall, these measures could reduce our ongoing building CO₂ emissions by as much as 20% by the end of 2010. However, as they will be implemented throughout 2010, their impact in the first year will be considerably less than that, and whether we achieve our 10% reduction targets taking 2010 as a whole will depend a lot on timing.

In addition, we will be installing some significant additional IT equipment in our server room in early 2010, in order to improve security and reliability and to improve our mobile communications. This is expected to counteract some of the reductions in power use elsewhere.

Beyond 2010, our aspiration is to get as near as possible to a zero-carbon building by 2020. When we moved into our current building in 1991 we paid close attention to environmental aspects of the refurbishment, and much of what we did was best practice or even “cutting edge” for the time. Twenty years on, this is no longer the case. There is probably much that we can do to eliminate inefficiencies and heat losses, as well as choosing the most appropriate sources of renewable energy for our location and demands. With this long-term goal in mind, in 2010 we will select and work with an external partner with appropriate expertise to provide a long-term roadmap for the building.

Travel

Where we are now

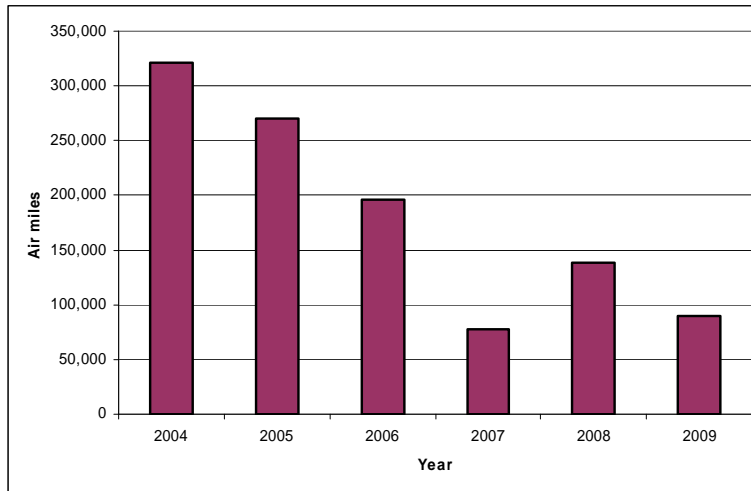
In 2009, travel by Greenpeace staff on business was responsible for 105 tonnes of CO₂, 30% of our total emissions. The breakdown of the source of these emissions is as follows:

Analysis of Greenpeace UK travel emissions in 2009:

	CO ₂ , tonnes	% of total
Flights	25.9	24.8%
Public transport:		
Rail	37.4	35.8%
Underground	0.9	0.9%
Taxi	0.5	0.4%
Ferry	0.8	0.8%
Bus and coach	4.6	4.4%
Private road travel	27.6	26.4%
Boats	6.9	6.6%
Total	104.6	100.0%

Since 2003 we have introduced progressively stricter policies and controls on air travel, and the results of this can be seen in the graph below. At present our policy is not to fly to any destination that can be reached within 24 hours by surface transport, and all flights must be approved in advance by our Chief Executive. As a consequence, our use of planes in 2009 was only 28% of 2004 levels.

Air miles flown on Greenpeace UK activities, 2004 - 2009:



In order to run our campaigns we sometimes need to travel by means that are not particularly environmentally friendly in themselves. The use of ships, boats, vehicles and other equipment is always considered and assessed in terms of whether the environmental and financial costs of the activities using them can be justified by the environmental benefits the campaign is seeking to bring about.

Very little business travel is undertaken by road unless it is necessary for preparing or executing specific actions or campaigns. With one exception, all the road vehicles currently owned by Greenpeace run on a mixture of recycled vegetable oil and mineral diesel. This is actually the cleanest way of running the fleet, as putting 100% recycled chip fat in the engines would cause them some problems in the long run and reduce their efficiency. We have one car that runs on LPG, which we plan to replace in the long run.

We actively encourage staff to travel to work by foot, bicycle or public transport, and indeed almost all do. A locked cycle shed is available and there are showers on each floor of the office and in the warehouse. Interest free loans are available for purchasing bicycles and associated equipment. Staff can claim 12p per mile when using their bicycles for business trips.

Plans for 2010 and beyond

We will continue to enforce our existing transport policies, and further reduce transport related CO₂ emissions through setting individual and team carbon budgets for travel that are 10% lower in 2010 than in 2009.

We hope to be able to reduce our need to travel long-distances, without compromising our effectiveness, through the improved use of technology. The key initiative for 2010 will be the installation of improved video-conferencing equipment, in co-ordination with

other Greenpeace offices around the world. This will replace the old, low-quality equipment originally purchased in 1999.

Paper use

Where we are now

We strive to use only fully-recycled paper made from 100% post-consumer waste. For some products this is not an option and we use FSC certified virgin fibre. In 2009, our use of paper was responsible for 87 tonnes of CO₂, 29% of our total emissions. At the moment, these figures only take account for the CO₂ produced in manufacturing the paper we use in our printed materials.

The main categories of printed material, and their contribution to our CO₂ emissions, are as follows.

Analysis of Greenpeace UK paper-related emissions in 2009:

Paper use	Tonnes CO ₂	% of total
Supporter communication: Connect	36.6	41%
Supporter communication: Greenpeace Business	11.7	14%
Supporter communication: other	22.2	26%
Supporter acquisition and other fundraising	9.1	11%
Campaign reports	4.4	5%
In office printing and copying	2.6	3%
Total	86.6	100%

We do very little direct mail supporter recruitment. By far the greatest source of paper CO₂ emissions are regular mailings to our existing supporters. The largest single item is the publication of Connect, which we send to all supporters to keep them in touch with our work. To minimise paper use it comes as a small format magazine, but with an average circulation of around 97,000 it has a significant carbon footprint. We normally publish four editions of Connect a year, but in 2009, we reduced this to three.

We are trying to replace as many of our paper publications as possible with electronic alternatives. To some extent this depends on the preferences of our supporters. However, we are also struggling with VAT rules which allow us to reclaim a large chunk of the VAT we pay, but only if we provide our supporters with a paper magazine.

Our internal use of printer and copier paper is small in comparison to external print. The 2.6 tonnes of CO₂ equates to approximately 600 reams of paper, down from 1,000 reams in 2003.

Plans for 2010 and beyond

In 2010, we will drive reductions in paper related CO₂ emissions through setting individual and team carbon budgets for paper use that are 10% lower in 2010 than in 2009. We expect these reductions to be met by a combination of some or all of:

- transferring more communications on-line or via e-mail
- reducing the size of regular publications, including the number of pages
- reducing the number of people we send publications to
- reducing the frequency of regular publications
- reducing wastage on campaign reports and leaflets

Other aspects of environmental performance

Greenpeace UK aims to minimise the impact of our campaigns and operations on the environment, as far as is consistent with the achievement of our campaign goals. Given the urgency of climate change, we are currently prioritising our efforts around reducing our carbon emissions. However, we endeavour to maintain and improve on all aspects of our own environmental practice, and to act consistently with our campaign policies.

This section provides a brief overview of our current approach towards reducing our environmental impact in a range of other areas.

Waste and recycling

We currently recycle all paper, card, glass, cans and tins, and most types of plastic. We make recycling easy by providing multiple recycling bins in each unit work area, but only one residual waste bin. Vegetable waste is composted and garden waste is composted or recycled.

We examine our own needs so as to minimise our consumption, and we favour suppliers who minimise packaging and other waste. End-of-life computers are given to Computer Aid and a number of other companies for re-use.

We currently dispose of 1.5 pallets (large bins provided by the council) a week, down from 3 pallets a week when we moved here in 1991.

Purchasing

We are committed to promoting good environmental practice through our purchasing policies. For example:

- We only buy timber that has been certified by the Forest Stewardship Council.
- Because of the absence of an agreed certification scheme for fish, we don't buy fish or serve fish at Greenpeace events. Neither do we buy or serve meat.
- Our vegetarian staff canteen uses GM-free, organic, seasonal, locally produced food wherever possible.
- Tea, coffee and milk provided for staff are organic and fair-trade.
- We make strenuous efforts to avoid products which contain any substance on the OSPAR List of Substances for Priority Action, any substance on the EU consolidated list of CMR substances (carcinogenic, mutagenic, or reproductive

- We always use water-based inks in our printing, and these will be vegetable-based for litho printing.

Water Use

We have dual-flush flush low level cisterns in toilets, and mixer taps on all sinks and wash hand basins. We collect and use rainwater from our warehouse roof to water our garden.

Final conclusions

In 2009 we made a clear decision to focus our efforts to improve our environmental performance around reducing our CO₂ emissions. This commitment is embodied in targets for CO₂ reductions relative to a 2009 baseline of 10% in 2010, and 42% by 2020.

We see our plans to introduce CO₂ budgets in 2010 as central to achieving our planned reductions. But this will not be sufficient on its own, and we also need to invest in improvements to our organisational infrastructure. We already have lots of ideas for how to do this in 2010, including installing new video-conferencing equipment, increasing our emphasis on electronic communication with supporters, and many improvements to our building's heat and power systems.

However, reducing our emissions by 10% in 2010 will be a significant challenge, particularly in light of the efforts we've already made to improve our building and reduce our travel. Whether 10% reductions will be seen in our CO₂ figures for 2010 will depend to some extent on the timing of our planned projects throughout the year. But at the very least, by the end of the year we hope to have reduced our long-term emissions by a minimum of 10%.

Beyond that, 2010 will be an important year for planning to meet our aspiration for a zero-carbon building by 2020, and we are looking forward to working with an external partner with appropriate expertise to provide a long-term roadmap for the building.