

## Global Action Plan

### Trewin Restorick

## Bringing energy efficiency to the workplace and beyond

### Summary

Although improving technology plays a key role in making energy more sustainable and reducing carbon emissions, behavioural change is just as important, and in some ways much harder to achieve. The way organisations operate and the way people go about everyday activities has an enormous impact on the demand for energy and natural resources, yet people often find it hard to form new habits and sustain them. Global Action Plan has spent the last 15 years tackling this problem through various programmes, one of which is Environment Champions, which started in 1997.

The programme aims to help organisations reduce both the energy they use and the waste they produce. This is achieved by building a team of 'Environment Champions' within the client organisation, and giving them training to equip them to analyse energy use and waste, and devise strategies for reducing them. Global Action Plan assists the team by producing audit reports for the organisation on energy use and waste production, supplying equipment for awareness-raising events, providing access to specialist expertise and being available to answer questions at any time.

Global Action Plan has trained over 1,200 people in 69 organisations through Environment Champions, and the work has influenced over 86,000 employees. The progress made is currently resulting in an estimated reduction in energy use of over 4.4 GWh/year, equivalent to over 3,100 tonnes/year of CO<sub>2</sub>. In addition to this, Global Action Plan estimates that the programme has resulted in annual reductions in waste of over 1,600 tonnes per year. This represents a further 9,300 tonnes/year of CO<sub>2</sub>, from the energy embodied in the waste materials and the avoidance of waste disposal. From the viewpoint of participating organisations, the benefits go far beyond the CO<sub>2</sub> and waste savings and associated cost reductions. They see employees gain from experience in team working and becoming more confident in challenging bad practice in the workplace when they see it.

The savings in energy and waste are not limited to the workplace – many employees say they are also taking the message home to family and neighbours, and changing practices there. Global Action Plan will be reaching an even wider audience over the coming years, as Sky has chosen them to be its charity partner and is making resources available for fundraising and dissemination.

### The organisation

Global Action Plan is an international network of national organisations, started simultaneously in the Netherlands and the USA in 1992. Trewin Restorick founded Global Action Plan UK in 1993, and is currently Director. Global Action Plan UK has over 50 staff, with a head office in London and regional offices in Exeter (covering the South West), Brighton (covering the South East) and Nottingham. Global Action Plan is concerned about the environment, with a focus on people and the practical, everyday action they can take to improve the world for themselves and others.

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## **Context**

Many businesses and NGOs working in sustainable energy focus on technology, from low energy lights and loft insulation to wind turbines and wood-fuel. While these are crucially important for achieving a low-carbon future, they need to be complemented by changes in behaviour.

Behavioural change is difficult to achieve, and especially to sustain, but it holds out the promise of significant reduction in energy use and carbon emission with minimal cost. It is this challenge that Global Action Plan has faced up to and made progress in tackling.

Global Action Plan has 15 years' experience in working to change behaviour, in homes, schools, businesses and the community, and has learned that it is essential to tackle the habits and attitudes that can form barriers to change. Since 1997 the Environment Champions programme has taken this experience and used it to help organisations take ownership of environmental issues and achieve lasting change through cultural shift in the workplace.

## **How the programme works**

Once an organisation has decided to take part in the programme, the first task is to gather together a team of about 20 'Environment Champions', ideally from different departments and levels of seniority. Global Action Plan then conducts an initial training session, where the team is briefed on the core aims of the programme: to reduce energy use and waste and thus their impact on the environment. Global Action Plan works with the team to carry out an initial audit of the energy use and waste production. Energy consumption is obtained from utility measurements and checked with the facilities manager. It may cover all types of energy use, or just electricity, depending on the organisation. A 'snapshot' of a day's waste from the organisation is categorised and weighed. The Global Action Plan facilitator then compiles an audit report, and the Environmental Champions team is reconvened for a second meeting to discuss strategies to reduce energy use and waste.

The strategies developed usually require some small physical changes, for example installing low energy light bulbs and providing recycling bins, but the main work is a communications campaign directed at the rest of the employees. These campaigns often make use of the corporate email and intranet, but usually focus on face-to-face communication using displays and special events. Exactly how the campaign is conducted is different for each client organisation, as their Environment Champions team decides what will be most effective for them. Some have hired equipment from Global Action Plan, such as the 'Energy Bike', which employees pedal to see how hard it is to generate energy for different appliances. Others have used novel campaigns, such as attaching helium-filled balloons with 'CO<sub>2</sub>' written on them to computer monitors left on over lunchtime. Some arrange competitions between different departments in an organisation, to see which one can improve most. These activities get people talking and encourage people to accept good environmental behaviour as a normal social standard.

The chosen strategies are implemented for four to seven months, and then a second environmental audit is carried out using the same methods as the first. Again the Global Action Plan facilitator compiles a report, this time detailing the energy and waste reductions that have been achieved. The Environment Champions team then meets again to celebrate their progress and plan the next steps. As the programme moves forward, the client continues to receive support from Global Action Plan through monthly meetings with the team, and also via email or telephone when questions arise.

Global Action Plan always customises its programmes for the needs of a particular organisation. It is also able to provide advice on specialist issues such as reducing the environmental impact of IT infrastructure, which can be significant in many organisations

## **How users pay**

The Environment Champions programme was initially grant funded on a per-client basis. Grant funding was very useful for developing the approach of the programme, although Global Action Plan found that their relationship with clients often ended when the initial grant-funded work had been completed. However, with the increasing interest in sustainability and the environment, many organisations are now prepared to pay for the service outright. Global Action Plan now operates the programme as a commercial service, charging client organisations typically £25,000 for the first year of work. Many clients now take up the option to continue paying to receive a service after that.

## **Benefits**

Since the programme started in 1997, Global Action Plan has worked with 69 organisations, including Investec, E.ON and Britannia Building Society. 52 of these took part in the waste reduction programme, and 37 took part in the energy reduction programme, which started later. Over 1,200 Environment Champion team members have been trained, while the total number of employees influenced is over 86,000. The benefits are in fact spread wider still, as there is evidence that employees are taking home the message they have received at work.

From the difference between the initial and final energy audits, Global Action Plan estimates that the programme has resulted in annual savings of over 4.4 GWh of energy, or on average about 200 MWh/year for each organisation (this figure includes electricity, gas and other heating fuels). Although long-term data is not collected at present, anecdotal evidence suggests that many organisations see continuing behavioural change. The savings, which average 4%, do not take into account other changes which take place in the organisation, in particular the trend for increasing use of electricity for IT. Given the challenge of motivating large numbers of staff, and also the trend of increasing use of energy for IT, such savings are impressive. In addition to this, Global Action Plan estimates that the programme has resulted in annual reductions in waste of over 1,600 tonnes per year, or about 50 tonnes/year per organisation. About 75% of the waste reduction is due to reduced consumption, and the remaining 25% due to increased recycling. The overall waste reduction is about 37%, and is much larger than the percentage energy reduction, possibly because it is easier to identify and to engage people with managing it.

The carbon savings arising directly from reduced energy use are equivalent to about 3,100 tonnes/year of CO<sub>2</sub>, or about 141 tonnes/year per organisation. There are also carbon savings associated with the reduction in waste, because energy is 'embodied' in the processing of raw materials and manufacture of products (like paper or aluminium cans) which end up in waste. There are further emissions associated with waste disposal in landfill, although these are only about 7% of the embodied emissions. Increased recycling also contributes to reduced emissions, because less energy is needed to manufacture from recycled materials than from raw materials. Global Action Plan has used materials data from DEFRA to estimate average savings of 4.5 tonnes CO<sub>2</sub> per tonne of prevented waste, giving a total of about 9,300 tonnes/year, or 291 tonnes/year CO<sub>2</sub> per organisation. This is slightly greater than the carbon saving associated with direct energy use, and shows the significance of waste reduction in reducing carbon emissions. However, there is much more potential for further reduction in carbon from direct energy use. The programme has been very cost effective at reducing CO<sub>2</sub> emissions, with a cost of about £30 per tonne/year.

For many clients, a Global Action Plan programme brings significant indirect benefits in the workplace, such as helping staff with teamwork and personal development, and giving them the confidence to challenge bad practice at work when they encounter it. It is for these reasons, as well as cost savings and environmental benefits, that many now chose to continue working with Global Action Plan.

Global Action Plan has also conducted annual surveys of its clients' employees to investigate the impact of their work on behaviour. It has found that up to 78% of employees have changed their behaviour at work with regard to waste or energy, while up to 77% reported changing their behaviour at home.

### **Potential for growth and replication**

There is potential for the impact of the programme to increase within current clients as they become comfortable with the processes and strategies and start to identify areas where further changes can be made. Global Action Plan is currently working with about 15 organisations, and adding about one new client per month, with the intention of trebling its number of active clients over the next two to three years.

Given the large number of businesses and other organisations in the UK there is room for significant growth and replication of the work. One way in which Global Action Plan has been increasing the impact of the programme is by working with multi-site organisations, where a team drawn from the different sites is trained and then sent back out to implement the chosen strategies. Recent examples include E.ON, Scottish and Southern Energy, and a 250-branch rollout with Britannia building society.

Global Action Plan intends to expand the Environment Champions programme to cover more areas, such as transport, supply chains and how the organisation interfaces with the community in their area. They are also starting to use carbon footprinting as a tool for engaging businesses and their staff.

### **Management, finance and partnerships**

The Environment Champions programme is managed by Chantelle Hoppé, the Head of Programmes. Although the initial work was grant funded, the programme now operates as a commercial service, and is funded by the fees paid by client organisations.

Global Action Plan has a range of partnerships that help it to achieve the best results from its work. They are working with Business in the Community on providing support to companies participating in the May Day climate change event, and are also in dialogue with the Sustainable Development Commission about engaging government departments and their employees. Global Action Plan has also created the Environmental Information Technology Leadership Team to promote green IT, sponsored by Logicalis and ComputerworldUK, and partnering with a range of organisations.

The most significant partnership for Global Action Plan is currently with Sky, who have chosen Global Action Plan to be their charity partner for the next three years. Global Action Plan hopes that this will bring over £1 million in funding, and also that they will be able to use the resources and experience of Sky to reach more people in both the UK and Ireland.

This report is based on information provided to the Ashden Awards judges by Global Action Plan, and findings from a visit by two members of the judging team to see their work.

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