

*DRAFT 14/10/2009 awaiting final audit approval*

## **Progressio Environmental Assessment 2008-2009**

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## Introduction

This report provides an appraisal of Progressio's environmental performance for 2008/9 and provides a baseline against which to measure our environmental impact in subsequent years. The focus of this report is on:

- The activities of our London office;
- Total flights for the organisation (derived from London office, recruitment and in-country flights).

*Please note this report does not include impacts from overseas offices. We intend to include the office activities of our country programmes in future reports.*

The report reflects the importance Progressio, as an organisation working on environmental issues, places on our own green credentials. Indeed Progressio aspires to be a leading organisation in best practice on environmental impact reduction.<sup>1</sup>

## Objectives

The objectives of this environmental assessment are twofold.

1. To quantify and thereby better understand the impact that Progressio's work has on the environment
  - a. Aggregated results tell us the full impact of all that we do
  - b. Itemising these shows us how our different activities contribute

In order:

2. To identify the areas in which we should focus efforts to reduce our negative environmental impacts.

Progressio is committed to work on reducing environmental impacts across the board. But we are at the point where this requires ambitious planning and significant, long-term investments. To do that sensibly we need a breakdown of our impacts to facilitate good strategic decisions. We need to ensure that long-term investments are as effective as possible and that our efforts to reduce environmental impacts are properly monitored.

## Scope

Over the past two financial years Progressio has been building up our environmental reporting. In 2006-2007 we produced a travel survey, which looked at flights made by London office staff. In 2007-2008 this was extended to an assessment of the environmental impact of our London office staff air travel and paper usage, two major impacts.

For 2008-2009 we have made extensions to this work in two areas:

1. We have extended our assessment of the impacts of flights to include flights booked throughout the whole of the organisation

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<sup>1</sup> See Appendix 5: Vision for 2011 taken from Progressio's Environmental Impact Reduction Strategy 2008-11.

2. We have introduced an assessment of two more major impacts from the London office, natural gas and electricity

We have also been sent quantitative data on the activities of the Nicaragua country office and include that in the report.

### **Auditing**

This environmental assessment has been audited by environmental consultants Waterman Environmental Limited. Waterman Environmental Limited have also advised Progressio on the best choices of environmental impacts to measure.

### **Avoiding Double Counting**

When companies 'produce' output, when consumers 'consume' goods and services, and when an NGO like Progressio does its work, environmental impacts result. However, often a company produces output and it is then consumed by a consumer, or an NGO. If we were to calculate the environmental impacts of all these activities we would probably end up double counting certain impacts. How can we make sure this audit is not a part of a big process of double counting? There is an answer to this.

Progressio's emissions must be seen as our activities' contribution to the sum total of emissions caused by private and government consumption. This is an economic definition. Such a conceptualisation is sensible because our funding comes in three forms which all fit the model of provision of a final good or service:

- 1 Government expenditure embodies 'government consumption'
- 2 Donations from the public embody a form of 'private consumption'
- 3 Donations from trusts embody a form of 'consumption' on behalf of private individuals (living or not) or associations of people

### **Methodology: Office Activities and Air Travel**

In looking at Progressio's environmental impacts we have separated out our office activities from our air travel.

Both are significant impacts. Progressio's London office activities, for example, make up over 30% of the combined impact of running the office and flights made by London-based staff.<sup>2</sup>

One of the ways in which we can make progress in cutting our impacts as an organisation is by comparing the emissions levels of different country offices. We can then look to disseminate instances of best practice.

Progressio believes that our level of flights should be seen as the result of corporate and not individual country policies and should be addressed accordingly. Three features of the situation explain the thinking behind this:

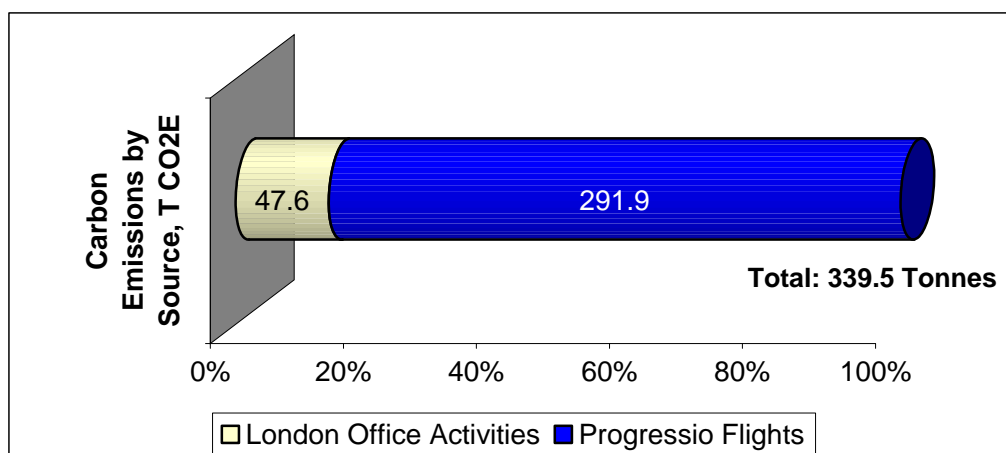
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<sup>2</sup> Using the information collected about Nicaragua office activities we estimate that across Progressio's office and flight activities office activities generate over 30% of our total impact in terms of CO2 emissions.

- Many of our flights are booked during the recruitment process for candidates who are not a member of any Progressio office at that time, and therefore it would be hard to attribute these flights to a particular office;
- Even flights that are booked for specific country office staff are the consequence of Progressio decisions about how we operate – we have a culture of using air travel to aid communication. For example, staff conferences are Progressio events which currently require flights from all offices;
- Reducing flights involves investment in equipment, services and a working culture across a number of offices, ultimately all of them.

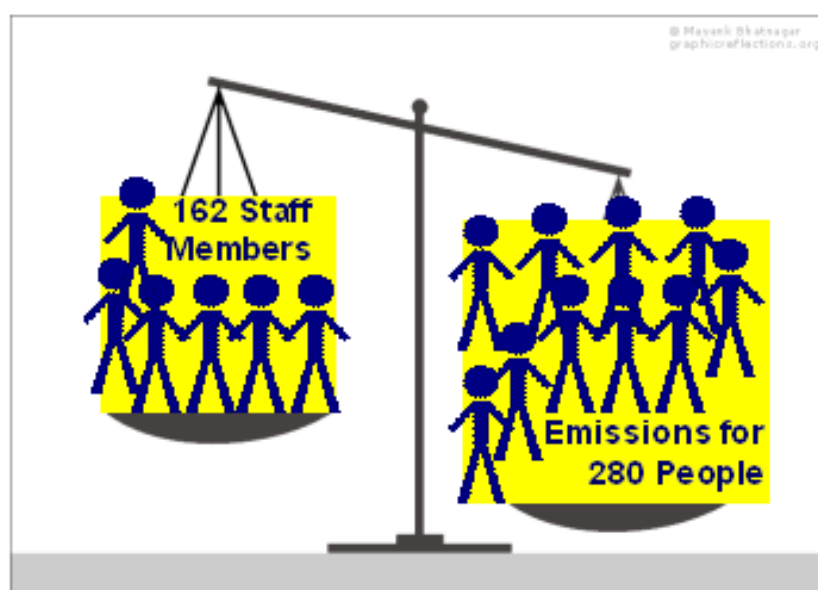
## Summary of Our Impacts 2008-2009

### Total CO2 Emissions



A key part of Progressio's programme work is on environmental projects which seek to improve the lives of the poor and marginalised. However implementing that work inevitably has environmental impacts which are not insignificant.

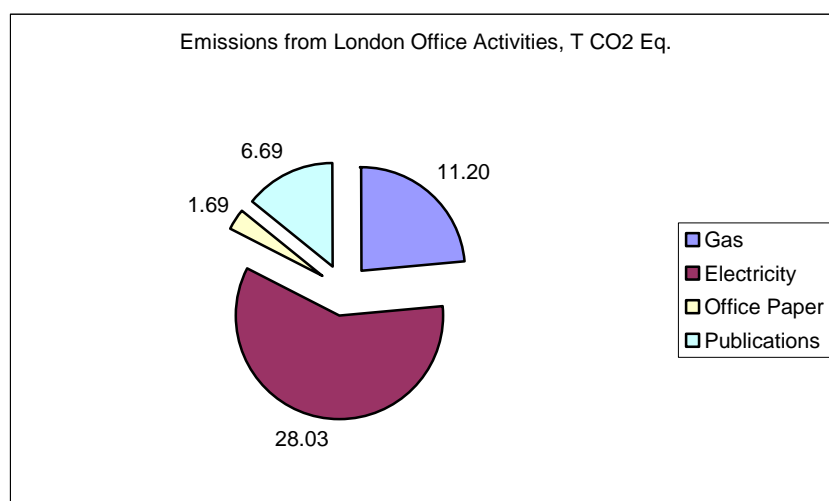
To give an indication of the scale of these emissions we have calculated that Progressio's activities per staff member account for 1.7 times the recommended quota of emissions per person necessary to stabilise climate impacts.<sup>3</sup>



*The number of Progressio members of staff compared with our emissions today, as expressed in the IPCC's recommended emissions quotas for 2050*

<sup>3</sup> IPCC scientists have recently argued that by 2050 we need to emit between 0.8 and 2.5 tonnes of CO2 per person yearly across the globe:  
<http://www.imeche.org/about/keythemes/environment/Climate+Change/Copenhagen+Conference/Future+Climate>.  
We have used a mean average of these upper and lower bounds to generate our statistics for the impact of our current emissions.

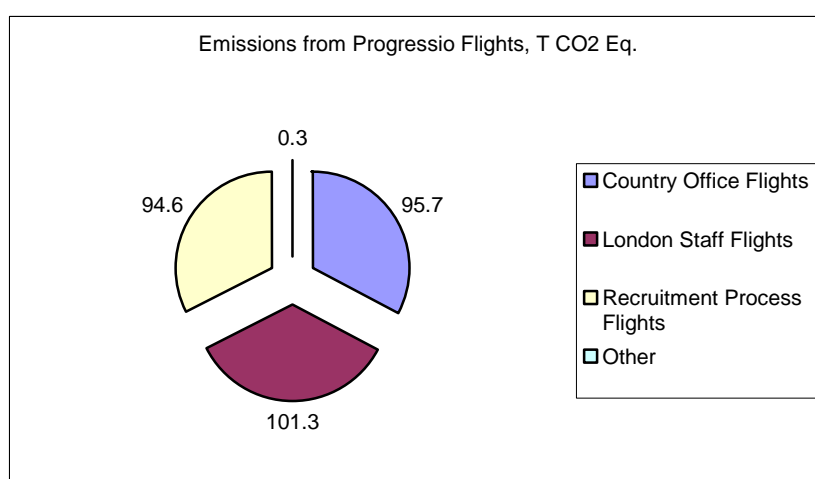
### London Office Impacts



In the London office this year we have measured the impact of electricity and gas for the first time. Although we purchase our electricity from a green supplier, the Carbon Trust and UK government recommend that for measuring our carbon emissions we should view this electricity in the same way as we would any standard electricity tariff, because they are fundamentally derived from climate-change contributing technologies.

The impacts from paper usage from 2008-2009 are very similar to those of the previous year. This indicates both that we have an effective measurement system and consistent behaviour. ***But the main lesson from the London office is the scale of electricity and gas emissions.***

### Progressio Flights



Our flights are of three different types – those oriented towards recruiting development workers, business trips for London staff and business trips for country office staff. London staff flights were measured last year and have increased only marginally. Again we see this is a good sign for our measuring processes, and a sign that we have consistent flying habits. It provides a good baseline to start addressing our impact in the future.

Newly measured flights in the two other categories produce significant impacts and, together with those for London staff, our flights reflect the largest contribution to greenhouse gasses based on what we have measured this year (we have not measured environmental impacts in our country offices this year).

### **What we can do about it**

For our London office activities there are some small incremental changes we can make to cut our impacts but there is a limit to what we can achieve in improving the environmental performance of our office building because of the leasehold nature of our tenure. By distributing our publications electronically we can reduce CO2 emissions derived from printing and distribution activities.

With flights we need to look at video conferencing and our working culture to see how we can work effectively as an organisation with less reliance on air travel.

It is important to state that whilst we have measured the negative environmental impacts of our work we have not undertaken any measurement of the positive environmental impact of our work. However we will investigate other measures such as carbon offsetting or similar schemes that can in some way mitigate the impact we have as an organisation.

On all of these things there are other organisations that we can look to for examples of good practice.

### **Achievements 2008-2009**

This year the Board approved an Environmental Impact Reduction Strategy of which this audited assessment is just one result. The implementation of this strategy should result in Progressio making the big strategic decisions we need to in order to be a leading organisation on environmental impact reduction.

Alongside strategic developments we have continued with incremental environmental improvements in the London Office. To date:

- Established a Green Group which meets monthly to discuss and implement our green strategy
- Moved to a green energy supplier
- Addressed office procurement (including cleaning products, low energy lighting, plumbed-in water fountain)
- Made presentations to staff meetings in order to change the attitudes and behaviour of staff
- Installed a timing system on our boilers allowing us to reduce gas usage on space heating
- Instituted in-office recycling collection points for glass, tins, plastics, etc, and a system for regular recycling using collections made by Islington Council
- Joined the cycle to work scheme allowing staff to purchase bicycles at a subsidised rate and installed cyclists' facilities in the office to encourage cycling to the office.

### **Initiatives 2009-2010**

For the current year we have three major activities planned:

- A trial of video conferencing equipment to facilitate organisational communications and reduce the need for flights;
- Eight research projects under the Environmental Impact Reduction Strategy to facilitate cutting our impacts. Research issues include: *a travel policy directive; a long term vision for change at Progressio<sup>4</sup>; priorities for improving in-country environmental impacts;*
- Data collection on country office activities as a basis for next year's comprehensive environmental assessment.

These strategic activities are essential for Progressio as we seek to start making big reductions in our environmental impact.

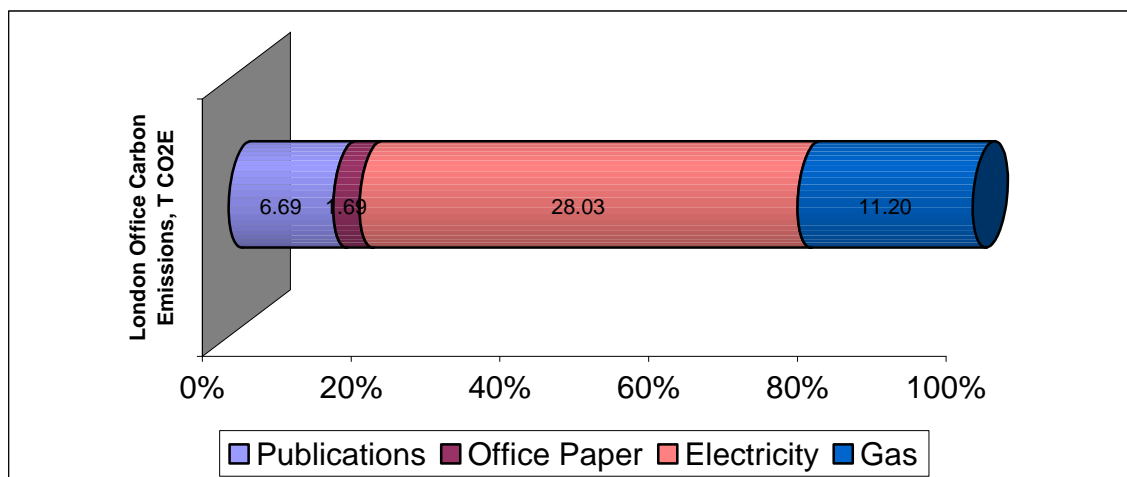
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<sup>4</sup> To include a look at where we want to be in 2015, 2020 and consideration of whether we want to adopt year-by-year carbon reduction targets. See also Appendix 5: Vision for 2011 taken from Progressio's Environmental Impact Reduction Strategy 2008-11.

## The London Office

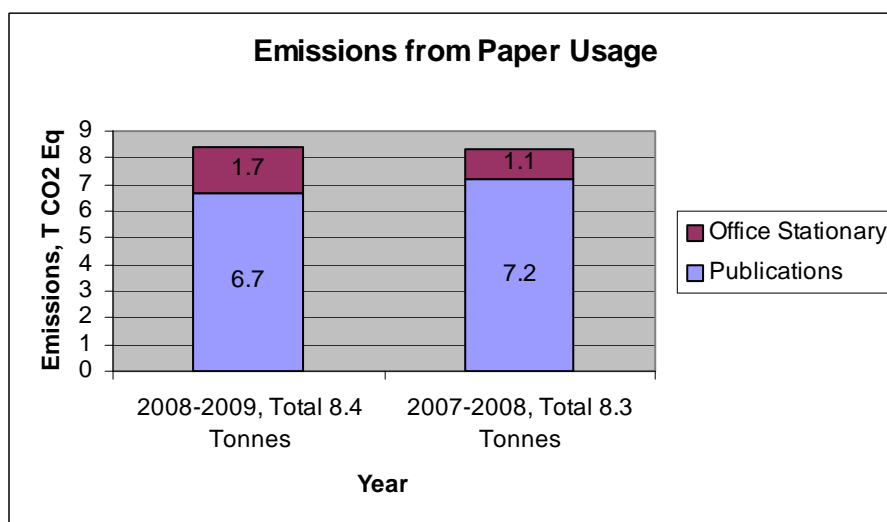
### Impacts today

London office activities generated 48 tonnes of CO<sub>2</sub> last year. Over 85% of this comes in the form of energy usage – emissions from gas and electricity supplies; the remaining small amount from paper usage.



### Comparison with last year

Last year only paper usage was measured as a London office impact. The most important development since last year is that we have a better picture of our impacts. Here is a comparison of the two financial years:



The overall emissions associated with our paper usage have risen a tiny amount (just over 1%), there is no reason to think that this is part of a trend. It seems likely that our paper usage is stable.

The increase in office stationary usage and a decrease in publications usage is explained by Progressio bringing in-house some printing for communications purposes.

### Per Person Energy Usage

We believe that gas and electricity usage in an office seem to be related roughly to staff numbers – heating office space and providing light and computers for one person is going to be a lot less reliant on gas and electricity than doing the same for 15 people. Because of this, in order that we can monitor our environmental performance in a meaningful way we need to look at the emissions from energy per person in the office.

The indicator ‘Number of Full Time Effective Office Workers’ has been developed which reflects two pieces of data – numbers of staff members as recorded by the Administration Manager at various times in the year; and an estimate of staff days taken away from the office per week due to working from home.<sup>5</sup>

Number of Full Time Effective Office Workers (FTEOW)	28.63
Emissions due to Gas per FTEOW, Tonnes CO2 / person	0.391
Emissions due to Electricity per FTEOW, Tonnes CO2 / person	0.988

### Reducing London Office Impacts

To significantly reduce our London office emissions we can do two things:

- Energy Efficiency: reduce our demand for energy
- Renewable Energy: access low emissions energy

#### **Energy Efficiency: reducing our demand for energy**

##### **Current Situation**

We have made some progress on this. We have installed thermostatic valves on most of our radiators, we have a boiler with a timer control system and this year an automatic lighting control system was fitted in the hallway. Staff have also become more environmentally aware with the majority turning off computers and lighting when not in use.

##### **Possibilities**

**Easy:** Turn down our thermostat a degree or two in winter and encourage staff to wear warmer clothing.

**Intermediate:** We could look at taking up less space as an organisation by hot-desking, reducing workspace sizes, cutting down on use of non-desk areas and stopping heating and cooling those unoccupied spaces.

**Ambitious:** There is a limit to the extent to which we can improve the energy efficiency of our current building without substantial financial investment. In the current economic climate this is unlikely, but ideas around creating an energy efficient building can be found in Appendix 6.

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<sup>5</sup> For future assessments this latter figure will be calculated from a survey of staff and not simply an estimate.

## **Renewable Energy: access low emissions energy**

### **Current situation**

We have a 'green' electricity tariff from Ecotricity. However the Carbon Trust and UK government recommend that for measuring our carbon emissions we should view this electricity in the same way as we would any electricity tariff, as being fundamentally from climate-change contributing technologies. Our space and water heating comes from a conventional natural gas supply. So we have not really approached this issue yet.

### **Possibilities**

**Intermediate:** Purchase carbon credits, carbon 'offsets', allocate a percentage of programme grants to Progressio environmental projects or invest in climate change abatement, adaptation or campaigning.

**Ambitious:** Again we are limited by the availability of supply in our current office location and the financial implications of investing in alternatives. More ambitious alternatives are outlined in Appendix 7.

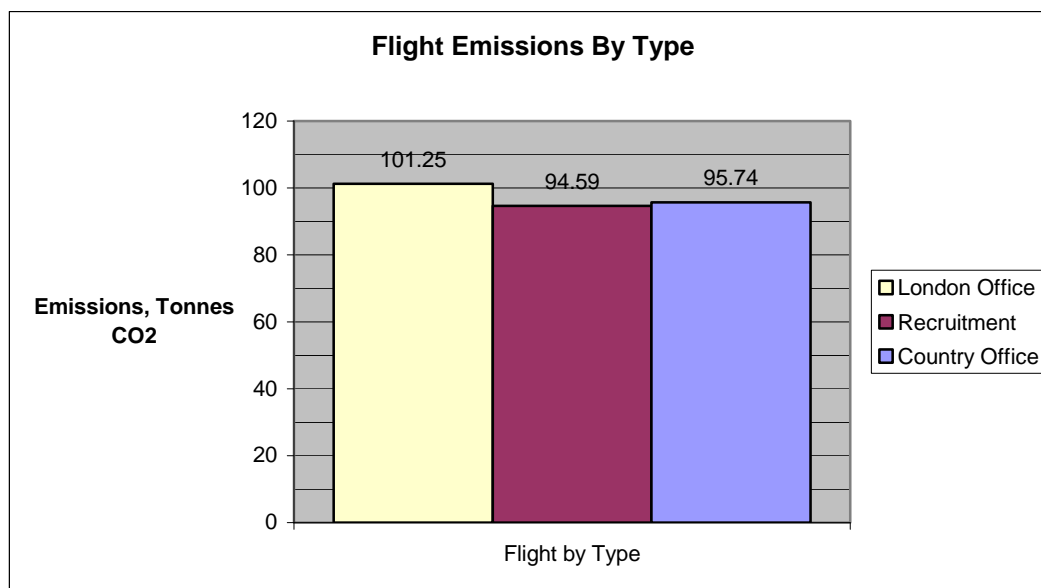
### **Other Offices**

We will be looking at the impacts in country offices starting with the next environmental assessment. In some instances Progressio owns the building in which we operate, which would of course provide more opportunity to implement environmental improvement measures.

## Air Travel

### Flights and impacts today

The chart below shows the emissions of flights we booked in 2008-2009.



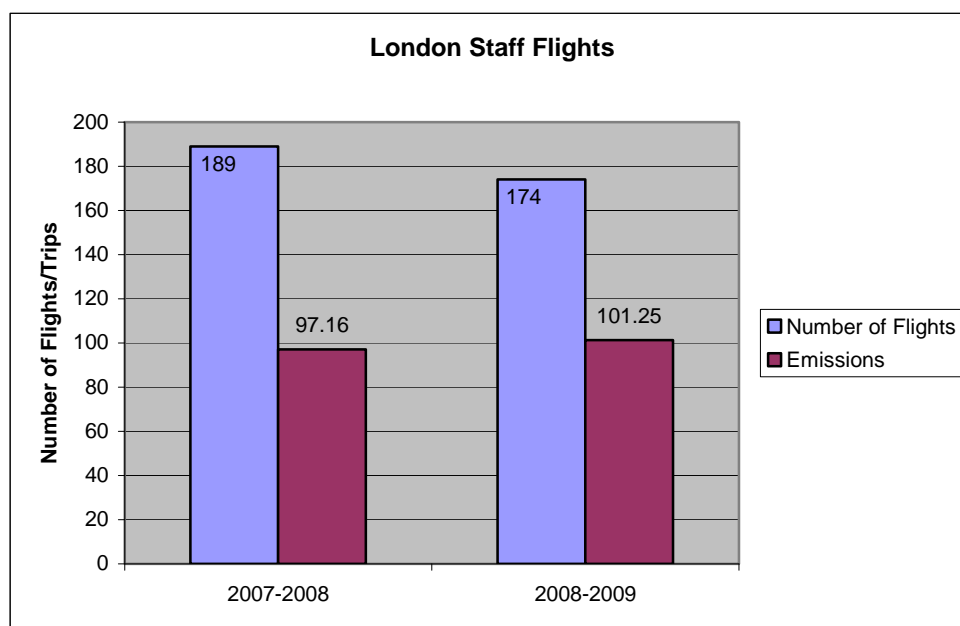
The total emissions from flights were 291.88 Tonnes CO2 equivalent.

These are broken down into four categories:

- Flights booked by the London office for staff
- Flights booked by various offices for recruitment purposes
- Flights booked by country offices for country representatives (CRs – managers of our country offices) and development workers
- Other (not in table as only accounts for a tiny proportion of emissions)

### **Compared with last year - London Office Staff Flights**

Last year only flights for London office staff were monitored. The chart below shows the number of flights, trips and emissions from this year and flights and emissions from last year.



A small reduction in the number of flights and a small increase in the emissions occurred this year.

### **Analysis of our different flights**

#### **London Office**

The table below shows different teams' flights and carbon emissions over the past two years:

	Number of Flights	Number of Trips	(07/08)	Emissions	(07/08)
<b>Programmes</b>	20	6	5	10.59	
<b>LAC</b>	27	5	8	13.01	
<b>AMEA</b>	23	5	10	14.54	
<b>Funding</b>	14	4	3	7.45	
<b>Communications</b>	24	5	0	20.45	
<b>Advocacy</b>	27	10	8	14.75	
<b>Finance/Admin</b>	28	8	6	16.62	
<b>Board/Director</b>	11	4	5	3.84	
<b>Recruitment</b>	0	0	1	0.00	
<b>Totals</b>	<b>174</b>	<b>47</b>	<b>46</b>	<b>101.25</b>	<b>97.16</b>

Emissions from the communications team leapt from 0 in 2007/08 to over 20 tonnes in 2008/09. The LAC (Latin America and the Caribbean) and AMEA (Africa, Middle East and Asia) teams each went on significantly fewer trips than the previous year, probably causing less emissions.

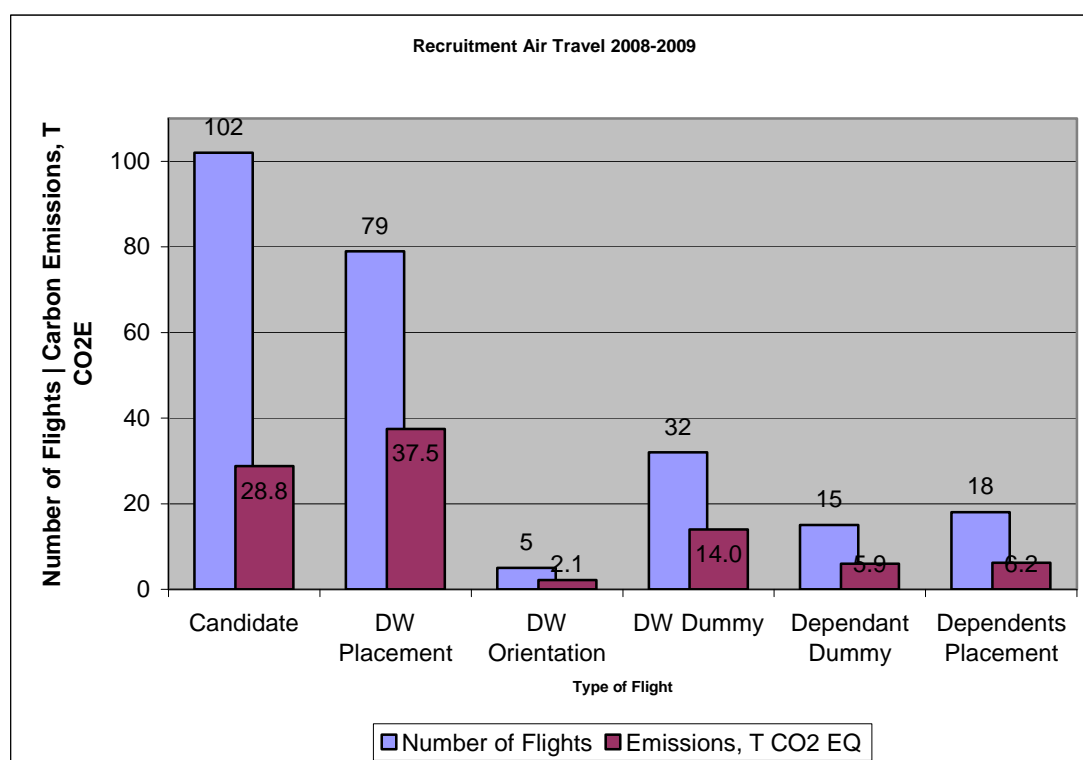
In total the emissions for the past two years have been similar, around 100 tonnes.

### Recruitment

Various activities in the development worker (DW) recruitment process contributed 94.59 tonnes of last year's emissions, 32% of our flights emissions.

The table below shows the different activities of recruitment and emissions they were responsible for:

Recruitment Activity	Explanation	Emissions, T CO2
Interview	Flying applicants to interviewed	28.81
Orientation	Flying new DWs to pre-role orientation training	2.15
Placement	Flying DWs to their work placement country	37.47
Dependents Placement	Flying family of DW to same	6.23
DW Dummy	Return flights from destination booked to diminish potential for visa problems on entry	13.99
Dependent Dummy	Same function for family of DW	5.95
<b>Total:</b>		<b>94.59</b>



What the figures show is that in terms of the recruitment process, the biggest impact is in the initial selection (candidate) and placement process. Dummy flights however are unused return flights booked to meet visa requirements. There may be significant opportunities to reduce selection (candidate) flights by greater use of phone/video conferencing and dummy flights by reviewing visa conditions.

### Country Office

Flights by DWs or CRs are frequently booked in-country for information sharing meetings between Progressio staff or meetings with external groups.

Country office flights contributed 95.74 tonnes CO2 last year. Around two thirds of this was for development worker travel, one third for country representatives.

The table below shows a country-by-country breakdown of these flights:

<b>Country Office Breakdown</b>			
<b>Country Office</b>	<b>CRs</b>	<b>DWs</b>	<b>Total Emissions, Tonnes CO2</b>
Zimbabwe	3.19	0.00	3.19
Malawi	2.66	0.00	2.66
Somaliland	3.87	1.55	5.42
El Salvador	3.14	0.95	4.09
Nicaragua	2.73	20.90	23.64
Ecuador	4.37	5.58	9.95
Honduras	0.00	11.29	11.29
Peru	3.96	11.40	15.36
East Timor	4.92	0.99	5.92
Dom Rep	3.78	7.83	11.61
Yemen	2.62	0.00	2.62
<b>Mean Average</b>	<b>3.20</b>	<b>5.50</b>	<b>8.70</b>
<b>Total</b>	<b>35.25</b>	<b>60.49</b>	<b>95.74</b>

There is significant variation between countries in emissions levels of CRs, DWs and overall.

For a number of countries there are no emissions from DW flights; for Honduras none from the Country Representative; whilst in several countries development worker emissions are over twice the mean average for all countries.

### Other Air Travel

This accounts for one return flight for a visiting speaker and created 0.30 tonnes of emissions.

### Reducing Flight Impacts

To reduce our flying impact we can do two things:

- 'Offsetting': financing carbon emissions mitigation projects
- Cutting flights

### Offsetting

The value of offsetting our carbon emissions will be addressed in research carried out in the near future. It is likely that even if research recommends offsetting that it will be stressed that we should still focus on reducing the emissions of our activities significantly.

## Cutting Flights

Reducing the flights we take is the only way we can cut emissions from flights. Three activities can facilitate this.

- Commission locally sourced in-country expertise (e.g. auditors, journalists and photographers)
- Video conferencing
- Changing the organisational work culture towards video- and tele-conferencing.

Many international organisations use video conferencing heavily and report a reduced need to meet face to face as a result of this.<sup>6</sup> WWF has published a report, *Travelling Light*, mapping the rise of video conferencing in big businesses and a reduction in flight dependence. On the basis of their research WWF are campaigning to ask businesses to reduce flights by a fifth.<sup>7</sup>

Within the UK international development community DFID use video conferencing extensively, as do other NGOs. We are currently researching other NGOs to see what experiences there might be in the sector that we can learn from.

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<sup>6</sup> For example Man Group and RBS have increased their video conference usage and say this has reduced reliance on air travel. <http://www.ethicalcorp.com/content.asp?ContentID=6047&ContTypeID=36>

<sup>7</sup> [www.wwf.org.uk/what\\_we\\_do/campaigning/one\\_planet/mobility/new\\_report\\_travelling\\_light/](http://www.wwf.org.uk/what_we_do/campaigning/one_planet/mobility/new_report_travelling_light/)

## Looking Forward

For 2009-2010 we aim to have a full understanding of all the major impacts of the organisation, across the globe. For this we need to introduce three further elements to this work:

1. To collect quantitative data on the activities of all country offices
2. To analyse the data coming from country offices in order to have environmental indicators of their impacts
3. To identify any further major impacts made at the London office and report on these (for example we may want to look at our refuse and recycling impacts)

Progressio is undergoing a process of restructuring and change. As a result future reports will seek to measure our impacts on a pro rata per staff member basis, in order to provide meaningful comparisons in the future.

## Conclusions

Progressio's environmental impacts are relatively minor. However, as a result of our office activities and flights, nor are they insignificant.

The analysis has shown that our CO<sub>2</sub> emissions are just over 2 tonnes per person, meaning Progressio's activities per staff member account for 1.7 times the recommended quota of emissions per person necessary to stabilise climate impacts.<sup>8</sup> Our major impact is in the form of air flights which account for 86 per cent of total emissions (excluding data on overseas office impacts).

As an international NGO it is not possible for us to eliminate flights or completely remove our office environmental impacts but there may be significant scope to reduce those impacts. Indeed Progressio has already made significant inroads into reducing its impacts, both in the London office and overseas (most notably in Honduras).

It should also be noted that Progressio invests in a large number of environmental projects in the countries in which we work as part of our core activities. Whilst it is outside the scope of this report to analyse the impact of this work it is important to note that Progressio, through its activities, also makes a hugely beneficial environmental impact.

This report sets out reliable and itemised numerical results showing exactly what our impacts are and providing a baseline to assess our future environmental performance. This knowledge is a first step on our long journey towards an environmentally sustainable Progressio.

The next, and challenging, steps are to take this information and apply creative and financial resources towards changing the way we work so we can reach that goal.

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<sup>8</sup> IPCC scientists have recently argued that by 2050 we need to emit between 0.8 and 2.5 tonnes of CO<sub>2</sub> per person yearly across the globe:  
<http://www.imeche.org/about/keythemes/environment/Climate+Change/Copenhagen+Conference/Future+Climate>.  
We have used a mean average of these upper and lower bounds to generate our statistics for the impact of our current emissions.

## Appendix 1: Methodology: Data, Emissions Factors & Assumptions

Headline assumption: all 'Carbon' emissions are given in units of CO2 Equivalent (CO2Eq)

- **Natural Gas**
  - Tariff: British Gas 'Business'
  - 1929 units used (taken from printed bills)
  - kWh, quoted by phone, 60,719<sup>9</sup>
  - Emissions factor from the Carbon Trust<sup>10</sup>
  - Emissions: 11.2 tonnes
  
- **Electricity**
  - We buy our electricity from Ecotricity
  - Ecotricity offer two business tariffs - 'New Energy' and 'New Energy Plus.' For both of these tariffs Ecotricity sell on the 'green' bit of the electricity to other companies<sup>11</sup>
  - In line with this fact *The Carbon Trust* and *Defra* conclude that tariffs like this should be considered as standard electricity when calculating emissions<sup>12</sup>
  - Units used 52,707 (taken from printed bills)
  - Emissions factor from the Carbon Trust
  - Emissions: 28.03 tonnes
  
- **Office paper**
  - Paper Quantity: 945Kg of paper ordered, sample examples weighed, purchases entered into spreadsheet over the year
  - Assumption: All of the paper products we purchase for office use is made of recycled material
  - Assumption: Business cards – not included in this calculation – do not contribute a significant environmental impact compared with the rest of office paper/card materials. This is based on a very small amount of money being spent on business cards in the year 2008-2009
  - Emissions data from Environmental Defense Fund calculation, [www.edf.org](http://www.edf.org)
  - Emissions: 1.69 tonnes
  
- **Publications**
  - Paper Quantity: 3,266kg of paper ordered, sample examples weighed, paper purchases calculated from invoices
  - Emissions data from Environmental Defense Fund calculation, [www.edf.org](http://www.edf.org)
  - 6.69 tonnes

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<sup>9</sup> Phonenumber with British Gas, 08450700135, 27 April 2009

<sup>10</sup> CO2 emissions calculated using figure of 0.185 Kg CO2 per kWh gas, taken from [http://www.carbontrust.co.uk/resource/conversion\\_factors/default.htm](http://www.carbontrust.co.uk/resource/conversion_factors/default.htm), 22 April 2009

<sup>11</sup> Telephone conversation 20 April, 2009, 08000 302 302. The tariffs: 'New Energy' – for each unit you consume the production operations of Ecotricity produces ½ a unit of electricity; 'New Energy Plus' – for each unit you consume the production operations of Ecotricity produce 1 unit of electricity. However Ecotricity sells all of the 'green' bits of the electricity they can – in the form of ROCs – to other companies

<sup>12</sup> Emissions factors: [www.carbontrust.co.uk/resource/energy\\_units/default.htm](http://www.carbontrust.co.uk/resource/energy_units/default.htm), 22 April 2009. Green tariffs: <http://www.carbontrust.co.uk/climatechange/policy/green-tariffs.htm>, 22 April 2009

- **Flights**

- Emissions Factors: Defra/Decc advice document: 2009 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting, page 21
- A multiplier of 1.9 which Defra/Decc say is suggested by 'current best scientific evidence' has been applied to these emissions factors<sup>13</sup>
- Assumptions
  - All Progressio flights taken are economy class
  - Some domestic flights for which no distance data has been supplied have been given a distance value the same as another measured domestic flight in that same country
  - Non-UK domestic flights have had the UK domestic flights emissions factor applied
  - For one distance a city nearby in the same country has been used as the closest location as a substitute
- Note: the dates for the financial year are slightly different for the London Staff travel Log. Dates are as follows:

London Office Staff	May 2008 – April 2009
DW Recruitment Processes	April 2008 – March 2009
Country Offices	April 2008 - March 2009

- Numbers of Flights: London Office Staff      174 flights
- Recruitment Process Flights                      251 flights
- Country Office Staff Flights                      283 flights
- Other    2 flights
- **Totals**    **710 flights**

- **Organisational paid Trains and Taxis**

- Not measured

- **Water**

- Not measured. We purchase our water collectively with a number of organisations, some of whom have heavy water usage requirements. Therefore it is not thought we can gain a good estimate of our usage from meter readings of this water supply

- **Recycling and Landfill**

- We currently recycle paper, plastic bottles, cans and cardboard
- We reuse plastic bags and have cloth reusable bags available
- We send other materials to landfill

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<sup>13</sup> "The emission factors refer to aviation's direct carbon dioxide (CO2), methane (CH4) and nitrous oxide (N2O) emissions only. There is currently uncertainty over the other non-CO2 climate change effects of aviation (including water vapour, contrails, NOx etc) which may indicatively be accounted for by applying a multiplier. The appropriate factor to apply is subject to uncertainty but was estimated by the IPCC in 1999 to be in the range 2-4, with current best scientific evidence suggesting a factor of 1.9. If used, this factor would be applied to the emissions factors set out here." p. 21, 2009 Guidelines to Defra / DECC's GHG Conversion Factors for Company Reporting

## Appendix 2: Nicaragua Office Impacts

### Nicaragua Office Major Impacts

- Natural Gas 125lbs
- Electricity 9,500KWh
- Office paper 39 reams
- Vehicle Use 23,000Km 3000L fuel
- Water 300m<sup>3</sup>
- Waste 3,000lbs organic and paper waste

### Appendix 3: Estimating office emissions across all of Progressio's operations

The electricity usage in the Nicaragua country office for 2008-2009 was very close to 20% of that of the London office. One makes the following three assumptions:

- The electricity usage in other country offices is similar to that in Nicaragua;
  - Based on the fact that country offices employ similar numbers of staff to service a similar number of DWs. Country offices – including Nicaragua – are mostly in quite hot countries meaning space heating energy requirements are likely to be similar;
- Electricity usage can be used as a rough measure of overall office emissions for a country, excepting publications emissions, which will be much greater in London than other offices.

If this is the case then we can make an estimate for the impact of activities in all the country offices:

In-country office emissions estimate

$$\begin{aligned} &= 20\% \times (\# \text{ of Country Offices}) \times (\text{London Office Emissions} - \text{Publications Emissions}) \\ &= 20\% \times 11 \times (40.92 \text{ Tonnes CO}_2) \\ &= \mathbf{90.02 \text{ Tonnes CO}_2} \end{aligned}$$

If you add the emissions from the London office to this you get the following figure for all offices:

**137.63 Tonnes CO<sub>2</sub>**

If this is the case then office activities generate over 40% of Progressio's total impact in terms of CO<sub>2</sub> emissions.

## **Appendix 4: Environmental Statement**

Progressio is committed to sustainable development both in our international development work and our office working practices.

We believe that it is important to see the connection between the choices we make as an organisation and the environmental impact of those choices for the planet as a whole, and particularly for people in the global South.

Damage to the environment threatens livelihoods and increases people's vulnerability to natural disasters. Invariably the poor are worst affected. We believe that communities have a right to a better quality of life through safeguarding the environment.

In our international development work, we therefore promote the sustainable use and local management of natural resources in order to help improve the lives of poor urban and rural communities. For example, we work alongside small-scale farmers to help them reduce both their poverty and their environmental vulnerability by farming in a way that protects and conserves natural resources. We also work to raise awareness and understanding of how policy and practice in the global North can contribute to environmental degradation and poverty in developing countries.

Sustainability is not just an aim of our development work. It is also a value embodied in the activities and practices of the organisation. By 2010, we aim to have incorporated environmentally sustainable approaches into all our work.

As a charity, Progressio must ensure cost-effectiveness in order to maximise the use of our resources for our charitable purposes. Similarly as an international organisation, some overseas travel is unavoidable for the effective management and implementation of our programmes. However, wherever possible within the terms of our charitable objectives, Progressio will seek to minimise the environmental impact of all our activities.

July 2007

## Appendix 5: Vision for 2011

- Progressio will have embedded environmental responsibility as a core value of the organisation including strong commitments in its 2011-2015 *Strategic Framework*
- Progressio will have a comprehensive understanding of its negative environmental impacts and will have practices in place to constantly measure and minimise those impacts
- Progressio will be seen by policy-makers, actual and potential donors/supporters, and by the third sector generally as a charity leading the way in understanding and facing up to its environmental responsibilities
- Progressio's environmental change practices will exemplify integrated action – being developed and applied at all levels of the organisation in London and in country offices, and involving all staff.

(Taken from Progressio's Environmental Impact Reduction Strategy 2008-11)

## Appendix 6: An Energy Efficient Building

We can reduce office running costs and environmental impact by using an office with significant architectural features promoting energy efficiency. Newly built or retrofitted offices can reduce demand for:

- **Space heating & cooling** – insulation and designing a building to make use of air flows, ground heat, external radiation and temperature conditions can reduce heating and cooling needs to zero in the most extreme cases
- **Lighting** – better use of natural light can reduce need for artificial light
- **Across the board** – incorporating energy efficient appliances, sensor technologies for equipment, saving space through office layout can reduce energy demand across the board

### Existing Examples

The National Trust have overseen the building of an energy efficient head office, they do not own the building but have a long-term lease on it. Greenpeace has engaged in significant energy efficiency retrofitting exercises to its building in Canonbury. Woking Council reduced its own emissions by 72% between 1990 and 2002 using some of these techniques.

## **Appendix 7: Investing in Renewable and High Efficiency Energy Sources**

### **Renewable Electricity**

Wind turbines, photovoltaic solar panels, certain types of biomass generation can all be used to produce electricity with minimal carbon emissions. There are opportunities for organisations to finance installation of this kind of technology on their own properties and also elsewhere in the UK and the world.

### **Combined Heat and Power – CHP<sup>14</sup>**

Producing and transmitting electricity using conventional coal or gas power usually generates over all efficiencies from fuel to plug of somewhere between 30-35%.

Using the same fuels to produce electrical power *and* heating on site can increase this conversion rate to over 90%. That means cutting emissions per unit of energy by over 50%.

Whilst renewable energy is the mid-term future for energy production, combined heat and power – CHP – must be a big part of the transition.

Small organisations can install CHP systems if they have the right kind of building and the right kinds of permissions. Or if not, investing in other schemes is an option.

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<sup>14</sup> More information, <http://www.woking.gov.uk/council/planning/publications/climateneutral2/energy.pdf>