



Young Scot 2010/11

Measuring & Managing Our Carbon Emissions

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The national youth information portal: www.youngscot.org

1. Summary

Young Scot, in delivering its services in 2010/11, is responsible for greenhouse gas emissions of approximately 175 tonnes of CO₂ equivalent (tCO₂e) compared to 252 tCO₂e in 2010. The largest single source is materials using 44%. Business travel is responsible for 23%, electricity use, 18%, 11% of emissions is associated with commuter travel by Young Scot staff, and 4% is attributed to freight. This is broken down into the categories - 'Scopes' – recommended by DEFRA for reporting as follows; Scope 1, 10 tCO₂e; Scope 2, 32 tCO₂e; and Scope 3, 113 tCO₂e (**see Annex 1**)

Business Travel is a significant source of emissions, 40 tCO₂e (85 tCO₂e), of which 43% is from car use (25% of total distance travelled (Young Scot and staff vehicles). Young Scot rail travel is responsible for 20% of business travel emissions, while accounting for 40% of distance travelled. Flights account for 35% of emissions and 33% of distance travelled and Taxis account for 2% of travel emissions and 1% of distance travelled.

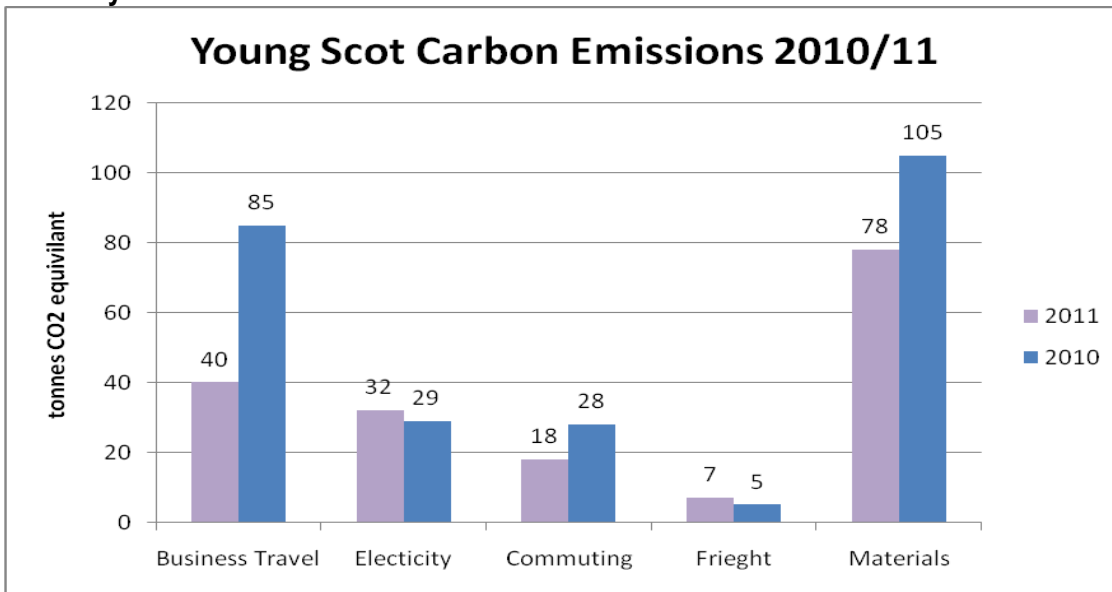
Emissions from electricity is 32 tCO₂e from Young Scot's share of the electricity bill at Rosebery House.

Commuting to work by Young Scot staff accounts for 19 tCO₂e. 33% of staff travel to work by foot or bike, emitting no carbon; 36% by bus, 20% by train, and 33% by car. This pattern reflects the benefits of Young Scot's good location for public transport.

Emissions from freight 7 tCO₂e associated with the shipping of printed materials - 84% from the shipping of Young Scot books from Dubai.

Emissions from materials is entirely due to the paper used in the Young Scot magazine (53 tCO₂e) and the Young Scot book 18 tCO₂e). Although ensuring all the paper for the Young Scot magazine is recycled would decrease the footprint by some measures, DEFRA approved emissions factors do not currently distinguish between virgin and recycled paper.

Summary continued



Overview of Greenhouse Gas Emissions

	2010/11		2009/10	
Scope & Source	tCO ₂ e	%	tCO ₂ e	%
Scope 1 (Direct emissions)				
Owned vehicles	10	6%	45	18%
<i>Scope 1 total</i>	10	6%	45	18%
Intensity Ratio	.27		1.32	
Scope 2 (Energy indirect)				
Office electricity	32	18%	29	12%
<i>Scope 2 total</i>	32	18%	29	12%
Intensity Ratio	.88		.85	
Scope 3 (Other indirect)				
Business travel (excl owned vehicles)	30	17%	40	16%
Staff commuting	19	11%	28	11%
Freight	7	4%	5	2%
Materials	77	44%	105	42%
<i>Scope 3 total</i>	133	76%	177	70%
Grand total (Scopes 1, 2 & 3)	175	100%	252	100%
Intensity Ratio, Scopes 1 & 2	1.16		2.18	

Notes and supporting information is provided in Annex 1

YSA/12/2011/006

These are the actions resulting from last year's report on the opportunities and priorities and are summarised

YSA/12/2011/006

Below with an update on the progress

	Action	Update
1	Undertake or commission an office energy saving review in collaboration with YouthLink Scotland	A review was carried out of the energy consumption of the office and we were unable to change the current consumption.
2	Review Business Travel Policy / Guidelines to include choice of travel mode, clustering of meetings and use of video conferencing	Young Scot has implemented the recommendations and has seen business travel dropped from 85 tCO2e to 40 tCO2e
3	Revise travel expense forms and recording to incorporate distance and mode of travel	We have implemented a new travel sheet which allows Young Scot to record the distance and travel effectively.
4	Engage with suppliers of print to explore opportunities to reduce total emissions	Young Scot after consultation with their suppliers has moved its print production from Dubai to Scotland.
5	Include the use of printed material in review of communication and messaging (see Action 12 below)	We have reviewed our printed materials and where appropriate we have reduced our print runs.
6	Explore with staff, as part of wider 'greening' initiatives, interest and opportunities for Young Scot to support them reduce their emissions from commuting. Seek advice and support from organisations such as A Better Way To Work	The Staff Wellbeing Group carried out a number of initiatives to look at different methods of travel for staff.
7	Develop supplier engagement programme to highlight Young Scot's interest in the environmental and social performance of suppliers	Young Scot as part of its responsible purchasing strategy has created a database of suppliers showing key information, including their environmental policy.

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8	Explore opportunities to purchase from and develop relationships with social enterprises in the UK and overseas	We have been amending our suppliers list to incorporate community funded organisations and social enterprises such as Stirling Management Centre, and the Melting Pot.
9	Investigate relevant certification and assurance schemes addressing environmental and social performance of suppliers	Young Scot has created a responsible purchasing strategy and is currently collating the evidence from our existing suppliers on their environmental policies.
10	Explore opportunities to provide communication and engagement with young people on behalf of other agencies	Our primary focus for the environmental information on the Young Scot websites is to provide general information and refer to specialist partner agencies.
11	Review the opportunities to incorporate sustainability issues into existing services	In the last year we have made some changes to our products and services to make them more sustainable. We request and store less offline resources, and use more online resources.
12	Review the ways in which Young Scot communicates, including the use of promotional items, to (a) reduce reputational risk, and (b) promote a consistent, congruent, message on Young Scot's commitment to sustainability	Young Scot has started to promote its environmental key messages on publications and printed materials.

Action points 3, 5, 7, 9 and 11 were carried out as part of our initial implementation and these have now been embedded into our policies and procedures. As part of our long term commitment the following action points will be carried on an ongoing basis 1, 2,

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4, 6, 8, 10 and 12.

2. Carbon Reduction

In this section we describe the sources of emissions in more detail and outline opportunities, priorities and agreed actions for carbon reduction

Office electricity

Young Scot shares an office with YouthLink Scotland. The two organisations share an electricity meter. Based on area of the office occupied Young Scot's share of emission from office electricity is 32 tCO₂e

Initial investigations suggest there is scope for reducing demand by: reviewing use of 'always on' equipment; powering down computers when not in use; and other energy saving measures.

Action	
1	Undertake or commission an office energy saving review in collaboration with YouthLink Scotland

Business travel

Emissions from business travel total 40 tCO₂e accounting for 23% of total emissions (business travel comprises two categories in the table above: emissions from vehicles owned by Young Scot (Scope 1) and those owned by staff and hire cars used for Young Scot business (Scope 2). The source of emissions and the distance travelled by each mode is set out below:

2010-2011 with the base year 2009-10 for comparison

Year	10-11				09-10			
Mode of travel	Emissions		distance		Emissions		distance	
	t CO ₂ e	%	km	%	t CO ₂ e	%	km	%
Young Scot vehicles	10	25	50,071	15	45	53	175,317	34
Private & hire vehicles	7	18	31,691	10	6	7	29,083	6
Total car	17	43	81,762	25	51	60	204,400	39
Domestic	4	10	21,615	7	9	11	49,582	10
International short haul	3	8	31,871	10	7	8	63,323	12
International long haul	7	18	53,752	16	5	6	33,629	6
Total air	14	35	107,238	33	21	25	146,534	28
Train	8	20	133,581	40	9	11	148,645	29
Bus	0	0	991	0	0	0	956	0
Taxi	1	2	5,057	2	4	5	15,455	3
Ferry	0	0	0	0	0	0	1,969	0
Total	40	100	328,628	100	85	100	517,959	100

Business travel (continued)

Rail is the preferred option for long distance travel, but domestic and international short haul flights are used when necessary to maximise effective use of staff time. Where considered essential, every effort is made to make effective use of the flight by clustering and organising additional meetings. Video conferences already substitute for travel where appropriate. Long haul international flights are associated with visits to suppliers overseas.

As an organisation serving the whole of Scotland the lack of public transport infrastructure in some areas, and sometimes the longer travel times where public transport is available, dictates the use of car transport. There are however opportunities to make more effective use of car (and indeed other) journeys through better planning — clustering meetings in geographical areas to minimise the number of trips and total distance travelled.

The current system of recording travel expenses makes calculating emissions more time consuming than it needs to be. Redesigning expense forms and setting up a system for regular recording of distance and mode of travel will make monitoring and reporting business travel emissions easier in future years.

Action		
2	Review Business Travel Policy / Guidelines to include choice of travel mode, clustering of meetings and use of video conferencing	Young Scot has implemented the recommendations and has seen business travel dropped from 85 tCO ₂ e to 60 tCO ₂ e
3	Revise travel expense forms and recording to incorporate distance and mode of travel	We have implemented a new travel sheet which allows to record the distance and mode of travel effectively.

Printing & associated freight

Information on emissions was not available from the printers. Estimates of the weight of paper used suggest emissions from the production of the paper use for the magazine of 53 tCO₂ and 18 tCO₂e for the book.

The magazine is printed and distributed by the Sunday Mail. A Carbon Trust report¹, which includes a case study of the Sunday Mail's parent group, Trinity Mirror, shows that paper manufacturing accounts for over 70% of the energy used in the production and distribution of newspapers. This proportion is likely to be lower for higher quality paper and high quality printing processes such as those used for the magazines and books. However this does indicate that the emissions from paper (calculated using DEFRA approved emissions factors) are likely to capture the majority of emissions associated with the production of Young Scot's books and magazines.

The paper used for the books is recycled and that for the magazines is virgin material. While currently DEFRA emissions factors attribute the same emissions to recycled and virgin material, other authorities, including the Carbon Trust report cited above, report lower emissions from recycled material. (The source of energy used in paper manufacturing also influences the levels of emissions).

The book is printed in Dubai and shipped to the UK. The emissions from shipping are estimated at 7 tCO₂e. The book is a technically complicated publication with 32 editions — one for each local authority area — and quality control is important. Following an extended period of consultation we will be moving the printing of these books to the UK for the 2011/2012 period onwards.

There are several potential opportunities to reduce emissions from printing:

Engage with the current suppliers (and potentially alternative suppliers) to review product specifications and printing technologies. This might include design, size, paper quality, and recycled content. Emissions from associated freight and travel should be included in such an evaluation.

Reduce the number and/or frequency of printing books and magazines, and consider the use of alternative communications technologies. The emissions from the use of alternatives should be considered in the evaluation.

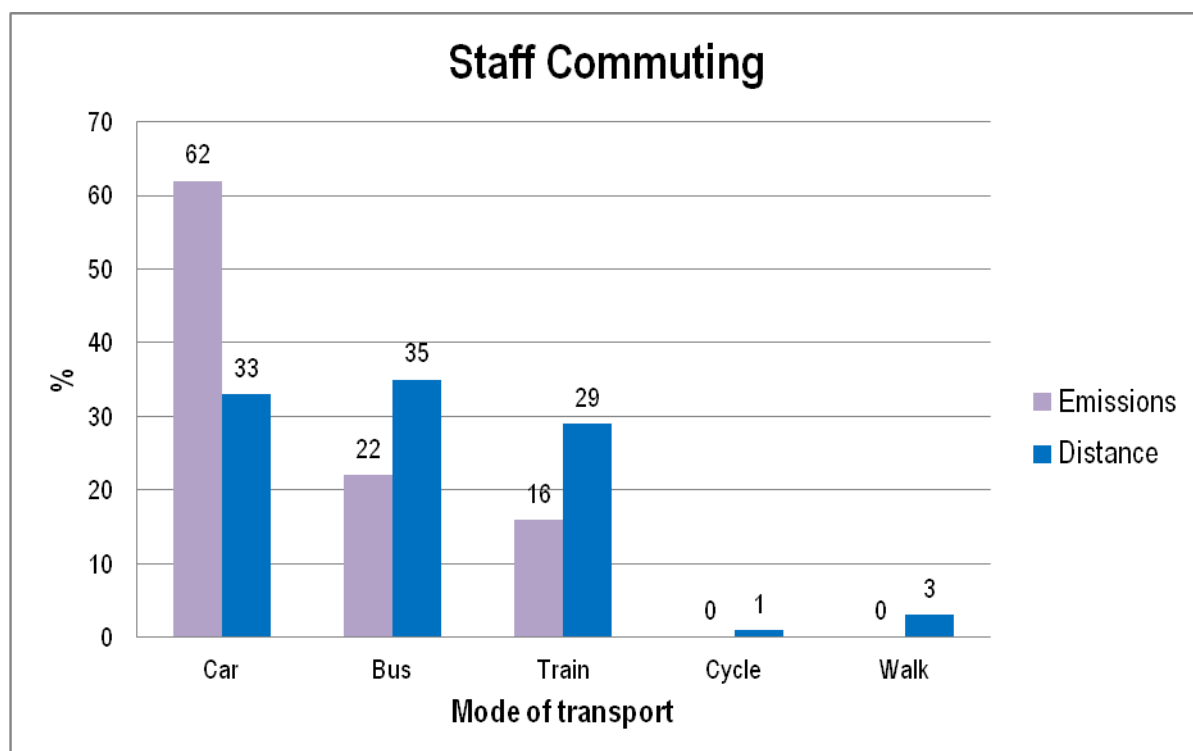
¹ The Carbon Trust, Carbon Footprints in the Supply Chain: The Next Step for Business (CTC616)

<http://www.carbontrust.co.uk/Publications/pages/publicationdetail.aspx?id=CTC616>

	Action
4	Engage with suppliers of print to explore opportunities to reduce total emissions
5	Include the use of printed material in review of communication and messaging (see Action 12 below)

Commuting

Commuting to work by Young Scot staff accounts for 19 tCO₂e. 33% of staff travel to work by foot or bike, emitting no carbon; 36% by bus, 20% by train, and 33% by car. Survey and anecdotal evidence suggests that commuting by car is restricted to journeys to train stations for onward travel and those living in remote areas where public transport is less available.



This pattern reflects the benefits of Young Scot’s good location for public transport. Opportunities may exist to support staff to further reduce emissions from commuting — for example eco-driving courses, lift-sharing, encouraging shifts in mode where applicable and supporting home working where appropriate. Young Scot recognises its obligations to support staff minimise emissions from commuting, while respecting the rights of individuals to act as they see fit outside of work — including commuting.

Action	
6	Explore with staff, as part of wider ‘greening’ initiatives, interest and opportunities for Young Scot to support them reduce their emissions from commuting. Seek advice and support from organisations such as A Better Way To Work



Communication and messaging

Young Scot is the leading provider of information to young people in Scotland. As such it has considerable opportunities to inform, engage and influence young people about climate change and other sustainability issues. These may include:

- Delivery of sustainability messages on behalf of other agencies;
- Engagement with young people on sustainability on behalf of other agencies;
- Incorporation of sustainability issues into existing services and communication.

Young Scot is aware of the importance of consistency and congruence in the way it engages and communicates with its stakeholders; and the importance of 'walking the talk'. This extends to the use of promotional items, which while they may have a small carbon footprint, can have significant symbolic value, for example, plastic bags.

Action	
10	Explore opportunities to provide communication and engagement with young people on behalf of other agencies
11	Review the opportunities to incorporate sustainability issues into existing services
12	Review the ways in which Young Scot communicates, including the use of promotional items, to (a) reduce reputational risk, and (b) promote a consistent, congruent, message on Young Scot's commitment to sustainability

Annex 1: Supporting explanations

This section presents explanations as recommended by DEFRA².

Company information

Young Scot is the national youth information and citizenship charity providing young people, aged 11 - 26, with a mixture of information, ideas and incentives to help them become confident, informed and active citizens.

Young Scot is the business name of Young Scot Enterprise, a Scottish registered charity (SC029757) and a company limited by guarantee (202687) with its registered office at Rosebery House, 9 Haymarket Terrace, Edinburgh, EH12 5EZ.

Reporting period

This report covers the period 31st April 2010 – 31st March 2011

Changes in emissions

In the base year 2009/10 Young Scot's emissions were 252tCO₂e and in 2010/11 it is now 175tCO₂e which equates to a 30% reduction in our carbon emissions.

Following better reporting in 2010/11, we have a more accurate reading for our business travel. The substantial drop in tCO₂e to the base year is made up of the better reporting and the changes we have made in our travel policy.

The drop in tCO₂e in materials, Scope 3, is a direct result of moving from 4 editions of the Young Scot magazine, to 3, in a reporting period.

Measuring & reporting approach; Organisational boundary

The financial control approach has been adopted. Young Scot has no overseas operations and no subsidiaries.

Young Scot's office is rented and shared with one organisation: Youthlink Scotland. Young Scot owns two vehicles, used for attending roadshows and transporting display materials to exhibitions and events.

Operational Scopes

The table below sets out the activities considered in the review and notes those included in each scope.

All calculations were performed using BestFootForward's *Footprinter*³ package with the 2009 factor set. Data sources and any adjustments are noted below.

² DEFRA (2009) Guidance on how to measure and report your greenhouse gas emissions

<http://www.defra.gov.uk/environment/business/reporting/pdf/ghg-guidance.pdf>

³ <http://www.footprinter.com>

Scope & Source	Comments (<i>italics</i> = not included)
Scope 3	Other indirect emissions, from sources not owned or controlled by Young Scot
Business travel (excl owned vehicles)	Based on distance travelled, estimated from expense claims. Where origin and destination not indicated estimated as follows: Taxis: cost applied to published tariff to estimate distance. Train: average distance of journey calculated from claims providing origin and destination and applied to remaining journeys. Bus: where destination not known the journeys have not been included in this analysis. Business travel includes long haul air travel by a contractor visiting overseas suppliers on Young
Staff commuting	Staff travel survey undertaken in August 2011. Where journeys use more than one mode of travel, emissions from all modes are included. For the number of journeys, the longest leg is counted for multi-mode journeys.
Freight	Based on tonne-km and mode. The main component is the delivery of printed material. Estimated to cover at least 95% of deliveries.
Materials	Paper and card for production of books and magazine. Estimated to cover at least 95% of purchased materials.
Professional services	Included as significant proportion of emissions.
Exhibitions, catering etc	Included as significant proportion of emissions.
Internet services	Estimated from expenditure based on emissions intensity ratio from Lumison's Carbon Footprint Report 2008/9 (http://www.lumison.net/carbon-footprinting). Included as use of internet services likely to increase.

Geographical breakdown

All Young Scot operations are in Scotland.

Base year 2009/10

In the base year Young Scot's emissions were 252tCO₂e and in 2010/11 it is now 175tCO₂e which equates to a 30% reduction in our carbon emissions.

In accordance with Defra's guidelines Young Scot has, for the first time, developed a base year recalculation policy. Going forward, the results from 2010/11 will be used as the base year against which other years will be measured. To ensure this base year remains representative we have established a significance threshold of 20%; i.e. should our carbon emissions fall, or rise, by 20% or more, we will recalculate our base year accordingly.

Targets

Young Scot is aiming for a 5% reduction in our carbon emissions, scopes 1, 2, and 3, per full time equivalent for the reporting year 2011/12. A significant step has already been made towards this by moving the printing of the Young Scot books from Dubai to Scotland. As such Young Scot's freight emissions will drop by 4 tCO₂e on the new 2010/11 base year.

We expect to reach this target by March 2012

Louise Macdonald, CEO of Young Scot, is responsible for the achievements of this target.

Intensity measurement

Tonnes CO₂e per full time equivalent staff have been selected on the basis of DEFRA guidance.