

# A Low Carbon Route Map

Guidance for communities applying to the  
Climate Challenge Fund



# Travel

It's our future



# Foreword

All over Scotland and beyond, people are working together in communities to reduce CO<sub>2</sub> emissions. These are early days and there is still much to learn about what works – and lots of new approaches and ideas to be tried and explored. Any community thinking of developing carbon reduction projects will be at the forefront of the journey to a low carbon society. This means that while there is much to learn from others' successes (and occasional failures), some of this is uncharted territory in which you'll be pioneers.

The Route Maps aim to help you and your community develop projects that are relevant, engaging and have maximum chance of success. Most of the Route Maps cover four areas to help you start your community's low carbon journey:

**Surveying the landscape:** Before starting any new journey it's important to learn as much as possible about what lies ahead. Here you'll find an introduction to the topic, relevant carbon emissions, and how they can be reduced.

**Choosing your particular route:** There are many ways communities can reduce CO<sub>2</sub>, and many different routes to success. Here you'll find information to help you think through different approaches and to choose ones that are right for your community, and, ideally, not only reduce CO<sub>2</sub> but have other benefits as well.

**Planning your journey:** Here you'll find advice to help you make the detailed plans for your journey – and how to keep track of where you are so you know if you're making progress.

**Signposts:** To sources of further information and advice.

There are currently six Low Carbon Route Maps covering Project Planning, Energy, Travel, Food, Community Buildings, and Feasibility Studies.

**Two warnings:**

The Route Maps don't replace the detailed Climate Challenge Fund guidance on completing an application – read that as well

Not all the measures mentioned are eligible for funding from the Climate Challenge Fund – but they help present the bigger picture, and you may want to include them in a project with funding from other sources.

Every community is different; the aim of the Route Maps is not to tell anyone the 'best' way to do any project (because there is no one 'best' way) but to help you develop projects that work for your community.

*Good luck – enjoy the journey!*

The *Low Carbon Route Maps* have been researched, written and designed by Footprint Consulting Ltd; Environmental and Resource Economics Limited; and Alan Speedie Associates Ltd for the Climate Challenge Fund, July 2009.

## Surveying the landscape

### Travel and carbon emissions

Over the past few decades, the increasing separation of home, workplace, community health, and leisure facilities has meant that people are travelling further. Witnesses to this trend are out of town retail parks, business park workplaces, the movement of sports stadia to edge of town sites, new 'campus'-type hospitals and 'drive-in' restaurants. Leisure travel has seen the explosion of 'low-cost' airlines and the trend towards taking longer and more frequent journeys. While there may be benefits from these changes, there have certainly been negative CO<sub>2</sub> consequences arising from more traffic, with the accompanying increased use of fuel and greater emissions.

Transport accounts for over 20% of Scotland's total greenhouse gas emissions. Breaking this down further, the largest share of these emissions is from road transport at 17% of the total emissions<sup>1</sup> (2006) or a total of 10.06 million tonnes CO<sub>2</sub> equivalent. Setting aside road freight, this leaves a considerable potential for reducing CO<sub>2</sub> by encouraging people to firstly reduce their travel, and secondly, to travel, when necessary, in more sustainable ways. Section 2.1 below sets out possible actions you can take in this respect.

### Travel projects can have other benefits

There are a number of benefits that result from lower carbon transport.

In environmental terms, these include reduced use of resources, reduced pollution and congestion.

In social and community terms, these include: reduced risk from accidents; improved health from cuts in pollution, diesel particulates and unburned hydrocarbons; and potentially better access to affordable public transport – especially important for families without cars.

In economic terms, these include: reduced costs of accidents; less congestion, so faster journeys; and reduced wear and tear on roads. If people travel less, they are more likely to shop and spend their leisure time locally. This helps boost the local economy.

## Key Players - Making your Project Happen

There are several main groups with an interest in travel and transport that you'll need to talk to, and maybe work with, if your project is to succeed. These include:

- The local authority

- Local people

- Local businesses

- Organisations with an interest in different aspects of transport.

### The local authority

There are thirty-two local authorities in Scotland. Local authorities have responsibility for local transport – planning, building and maintaining local roads and footpaths. Trunk roads,

motorways and railways are the responsibility of the Scottish Government, delivered through Transport Scotland.

Transport does however extend beyond and between the individual councils. Since December 2005 Scotland has been covered by seven regional transport partnerships (RTPs). You'll find further details about these and what they do on the Scottish Government's website<sup>2</sup>. Given their 'strategic' function you are unlikely to be directly involved with such a partnership in taking forward your project, but these are mentioned here to provide a summarised picture of transport in Scotland.

Local authorities all have powers to build and maintain roads, footpaths and cycleways, as well as being able to support (to a limited extent) public transport – for example providing socially important bus services.

### Local people

The support of the local people is invaluable when it comes to making any project work; travel and transport are no exceptions. Unless you have a motorway or major route running through your area, most of the car use in your community will be generated locally. So your project can make a real difference, by engaging people through a number of means – see the Project Planning Route Map for more information.

### Local business

Local businesses can do a lot to shape the community through their use of transport, and their employees' travel habits. As important partners in the community, you will want to work with them to reduce emissions. If the businesses are small, they might not have time to think about carbon cutting. It's a common story that such businesses are too busy worrying about the bank manager to think about much else. But when so much about cutting CO<sub>2</sub> is about cutting energy and hence fuel and power, then a collaboration with local businesses can be a 'win-win', with benefits for them and for your project.

This might mean coming up with suggestions for saving energy, like working with the Energy Savings Trust (EST) to get an energy audit done. If it's a bigger company with annual energy bills over £50,000, then the Carbon Trust can help. It might mean helping cut their delivery mileages - or identifying possible new markets. Working with them can help boost your project and at the same time raise the businesses' profile in the community and increase local sales.

### Organisations

We refer to and list a number of these in this guidance. These might well be campaigning organisations like Friends of the Earth Scotland, Transform Scotland, Sustrans and WWF-Scotland. They produce a great deal of material on transport policy and on how to develop transport-related projects.

These also include government-related bodies such as Transport Scotland, which sets out the strategic framework for what's being done on transport in Scotland, Paths for All, with Paths to Health (a partnership including Scottish Natural Heritage) and the Energy Saving Trust which can give advice on particular aspects of transport.

## Choosing your route

There are clearly a number of steps you can take towards more sustainable transport within your community. These are outlined in the following scenarios. These fall into two broad categories, firstly substituting a more carbon-intensive way or travelling with a lower- (or no-) carbon alternative. Secondly, devising ways of reducing travel altogether, again resulting in a CO2 saving. Remember also that how you engage with people over time, establishing relationships and building trust, can be even more important than planning and implementing a specific project.

Using published information, you can devise a robust project, supported by data on CO2 emissions for the different modes of travel.

As a community you will want to consider ways in which you can minimise your CO2 from travel. You can work together as a group on a single, collective action or you can work together while aiming to encourage and deliver actions by individuals. Note that this section only considers the benefits and CO2 reductions directly attributable to travel and transport. There will be other benefits such as community development and cohesion, financial, economic and health which are not considered below but which will add value to your projects.

We consider five aspects of transport where projects can change current behaviour to reduce emissions through collective community action. These relate to:

- Travelling less – including video-conferencing, journey planning and ‘hot offices’
- Using public transport, in the form of a community minibus service
- Lift-sharing
- Eco-driving and car maintenance
- Active travel, including walking and cycling.

### Travelling less

The most efficient way is to reduce travel by doing away with unnecessary journeys.

Video-conferencing, rather than travelling to a meeting, can reduce a significant amount of CO2. For example, a video-conference between Edinburgh and London saves 95 tonnes of CO2, compared with one person flying to a meeting.

Journey planning also cuts travel and thus emissions, by optimising your route. Several sites are signposted below which provide tools to calculate best routes. Transport Direct provides a useful public transport option for a journey, with stages and times, as well as a carbon calculator for the selected journey.

Homeworking can make a big difference to travel. Looking specifically at the implications for CO2 emissions, working from home one day in five will save 20% of journeys and emissions. It also takes cars off the road, which at work times will reduce congestion.

However, working from home is not without some costs. For example, there may well be added daytime heating costs. These will offset CO2 savings made from reduced travel. A community project can help people negotiate home working with their employers. Provide a briefing on the

advantages, tackle the potential problems head-on, and come up with ways in which these can be addressed or at least mitigated.

You can work with employers in your community to allow and encourage home working. This then takes the onus off the individual employee, and potentially opens up homeworking as an option for everyone.

### Shared and public transport

Public and shared transport provides a climate friendly, more inclusive alternative to the private car. Minibus, bus and coach also provide a good alternative to cars in terms of emissions.

With buses, your community can support local services. Possible ideas might include ensuring that timetables are widely available and distributed in the community; are displayed on bus stops and in prominent locations, such as community centres and village halls; and the information is kept up to date through regular contact with the operator.

Rail travel produces less CO<sub>2</sub> than driving<sup>3</sup> and as such it is a good alternative. Projects might include various ways of encouraging the use of rail services or adopting a station building. Such community rail schemes have been adopted successfully in England. Whatever the case, you can use ScotRail's stated targets<sup>4</sup> of reducing its CO<sub>2</sub> emissions to engage the company in discussion.

### Lift-Sharing

Sharing a car can be done in two different ways; the first is the more widespread, but less formal, practice of getting or offering a lift in a car. The second way is by joining a club which provides a car for your use when you need one.

Your community can consider establishing or signing up to a lift-share scheme. This has the advantage of putting more people in a car and thus reduces the emissions for each. See Signpost for links to more information.

### Eco-Driving and Car Maintenance Practices

With changes to the car tax system, people can be encouraged to use cars which reduce emissions significantly. A project might be to encourage such a move away from fossil-fuel powered cars, towards these lower-emission alternatives – providing information, examples and availability. Local businesses and organisations could be encouraged to use hybrid-electric or electric vehicles.

The UK-Government supported web site [VCACarFuelData.org.uk](http://VCACarFuelData.org.uk) provides information on vehicle emissions for new cars, allowing a comparison between brands.

The way people drive makes a difference to the amount of fuel used, and hence the cost of driving and the resulting emissions.

The challenge for any project is how to change driver behaviour. Clearly a community-based project, where people are known to each other and can exert a measure of peer-influence, can fulfil such an awareness-raising and reinforcement function.

### Active Travel

Walking is clearly the zero-emission way to travel and as such has potential to cut individual CO<sub>2</sub>, when compared to any other form of transport. Yet the Scottish Environmental Attitudes and Behaviours Survey 2008 showed that 41% of shopping trips of less than a mile were by car. Similarly 33% of people with work journeys under a mile drove to work!

A number of people already walk or cycle to work (about 16%). Communities can encourage more people to join in with. Suggestions for walking are signposted below, with established campaigns such as 'Walk to School Month' and 'Walk to School Week'.

Cycling is a very low carbon form of transport. When proposing a cycle project, there are a few factors to bear in mind, like weather, distance and facilities at, for example, schools, workplaces and other destinations.

With cycling, your community can make a further cut in its emissions. Signposted resources include cycling proficiency training; bike recycling; and the UK Government's Cycle to Work scheme. Your community can help publicise and increase uptake of the scheme. The advantage of cycle (and walk) to work schemes is the high rate of CO<sub>2</sub> saving – one person switching a 32km journey would save 1.505 tonnes of CO<sub>2</sub> annually.

Sustrans also provides a specific fact-sheet<sup>5</sup> on 'Low Carbon Travel' setting out the arguments and figures to support sustainable transport (not just cycling!), along with a number of useful references. The Cycle Touring Club provides further practical advice<sup>6</sup> on setting up and running a cycling group.

School travel provides a particularly important opportunity for cycling. Up to one-fifth of peak hour traffic is due to the 'school run'<sup>7</sup>. Sustrans has a web page<sup>8</sup> dedicated to Safe Routes to School, signposting a large amount of information and advice on cycling. The Eco-Schools Programme in Scotland contains a section on transport, making connections with related issues like health and well-being<sup>9</sup> and suggests a number of practical measures that schools as communities can engage in.

## Planning your route

### Key data

Mode of travel	kg CO <sub>2</sub> /mile	kg CO <sub>2</sub> /km
Average petrol car	0.3332	0.2070
Average diesel car	0.3185	0.1979
Average car (unknown fuel)	0.3286	0.2042
Average petrol motorbike (unknown size)	0.1704	0.1059

**Table 1: Selected emissions factors for private transport.**

Mode of travel	kg CO <sub>2</sub> /passenger kilometres travelled
Local bus	0.1158
Coach	0.0290
National Rail	0.0602
Air – Short-haul international	0.3106
Air – long-haul international	0.3497

Table 2: Selected emission factors for passenger transport

### Estimating potential savings

A community's travel will account for a substantial amount of carbon, the exact amounts depending on a number of factors including the mode of travel, the distance, the type of vehicle and the numbers commuting out rather than working in the community.

Using the tables above, travelling from, for example, Forfar to the new station at Laurencekirk would involve a 72 kilometre trip and CO<sub>2</sub> emissions of 14.7kg. A community with 500 people travelling 32 kilometres (about 20 miles) each day by car would generate over 3.6 million kilometres over a 225 day work year and emit over 735 tonnes of CO<sub>2</sub>! Looking at this hypothetical community, we look at how a series of measures can reduce this. Where do we start? The table shows the 'business as usual' distances and carbon emissions the community wants to reduce:

## A Low Carbon Route Map: Travel

Activity	No. of people	Percentage of travel by car	Distance travelled (km)	Travel emissions (daily)
'Business as Usual'	500	100%	500 x 32 = 16,000	16,000 x 0.2042 = 32,672kg or 32.67 tonnes
Total - Annual	-	-	500 x 32 x 225 = 3,600,000	3,600,000 x 0.2042 x 225 = 735,120kg or 735.12 tonnes

### The 'Hot Office'

Your community comprises 500 people travelling an average of 32 kilometres (or around 20 miles) to and from work to six main destinations. This means a daily total of 16,000 km. With average car emissions of 0.2042, this means daily emissions of 3.267 tonnes CO<sub>2</sub> and annual emissions of 735.12 tonnes (based on a 225 day working year). Your project aims to reduce this.

A shop in the community makes a sizeable area available to rent out as a workspace. The local ESSac can advise on making this (and the rest of the shop) as energy-efficient as possible. Not everyone needs a desk full-time, so each workspace can be used for more than one worker. The results of the project for travel are as follows:

Activity	No. of people	Percentage of travel reduced as a result	Reduction – distance travelled (km)	Travel emissions reduced (daily)
Reduction in work journeys	500 to 490 (10 full-time users of hot office)	2%	320	320 x 0.2042 = 65.3kg
Total - Annual	10		72,000	72,000 x 0.2042 = 14,702kg or 14.7 tonnes

### Shared Minibus Travel

Your community survey tells you that of 490 people now travelling each day, while these go to a number of different destinations, 50% of these go to, or through, town A – that's 245 people. Bus services are available from A to peoples' work destinations. By a combination of providing a daily bus, 25% of your 245 (that's 61 on top of the original 10) travellers agree to leave the car at home and take your community buses to town A and travel on from there using the existing bus services. That means your original 500 commuters are down to 429. Although there are still bus emissions to take into account, these are much less (56%) per passenger kilometre than those of the average car.

## A Low Carbon Route Map: Travel

Activity	No. of people	Percentage of travel reduced as a result	Reduction – distance travelled (km)	Travel emissions reduced (daily)
Minibus shared work journeys	490	12.5%	1,960	$1,960 \times 0.2042 = 400.23\text{kg} + 226.97\text{kg}$ (bus emissions) = net 173.26kg
Total - Annual	61		441,000	$441,000 \times 0.2042 = 90,052\text{kg} + 51,068\text{kg}$ (bus emissions) = net 38.98 tonnes

### The Lift-Share Scheme

You recognise that there are 429 people who can't (or at this stage won't) give up travelling by car to work. There are still steps you can take to help them reduce their carbon emissions. The first step is to organise a lift-share arrangement. With 20% of people signing up and using the system (half as drivers, half as passengers), that equates with a further 43 commuter journeys amounting to 1,376km. Your commuter figure has fallen from 500 to 386 – a reduction of 23%.

Activity	No. of people	Percentage of travel reduced as a result	Reduction – distance travelled (km)	Travel emissions reduced (daily)
Lift-Share scheme	429	10%	1,376	$1,376 \times 0.2042 = 280.98\text{kg}$
Total - Annual	86 (43 drivers, 43 passengers)		309,600	$1,376 \times 0.2042 \times 225 = 63,220.32\text{kg}$ or 62.22 tonnes

### Greener Driving Practices

With 386 people in your community still travelling to work by car, it makes sense to minimise the resultant emissions. The DirectGov website contains a package of six carbon cutting measures for drivers. The site is signposted below. Overall a 'greener driving' project for a community can save around a further 8% of fuel and emissions. In carbon terms for our hypothetical community this would cut a further 0.206 tonnes off the daily emissions from driving.

## A Low Carbon Route Map: Travel

Activity	No. of people	Percentage of travel reduced as a result	Reduction – fuel use	Travel emissions reduced (daily)
Lift-Share scheme	386	-	8%	$12,352 \times 0.2042 \times 0.92 = 202\text{kg}$
Total - Annual	386	-		$202\text{kg} \times 225 = 45.45 \text{ tonnes}$

### Cycling

The community promotes a 'cycle to work' and 'cycle to school' project.

As a result 2% (or 10) of our community of 500 switched from car to cycling, reducing the daily travel by 320km.

Saving from reducing car travel by 320km = 15.054 tonnes of CO2 annually.

### Stickiness

It's worth thinking about how long the effects of a project will last. We call this the 'stickiness'. In the examples above, we've done the calculations assuming that the project will have an impact for at least a year. This may or may not turn out to be accurate – and will depend on a range of factors. See the Project Planning Route Map for information about this, and on how to account for it in your estimates of CO2 reduction.

## Signposts

### Emissions - general

AEA 'Greenhouse Gas Inventories for England, Scotland, Wales and Northern Ireland – 1990 – 2006' (Report to Defra and the Devolved Administrations) September 2008 viewed at [http://www.airquality.co.uk/reports/cat07/0809291432\\_DA\\_GHGI\\_report\\_2006\\_main\\_text\\_Issue\\_1r.pdf](http://www.airquality.co.uk/reports/cat07/0809291432_DA_GHGI_report_2006_main_text_Issue_1r.pdf)

### Transport – general

Cairns, S et al 'Smarter Choices – Changing the Way We Travel' (Volume 2) Case Study Reports, Department for Transport, July 2004 viewed at <http://www.dft.gov.uk/pgr/sustainable/smarterchoices/casestudy/terchoiceschangingtheway5765.pdf>

Defra - <http://www.defra.gov.uk/environment/business/reporting/pdf/ghg-cf-guidelines-annexes2008.pdf>

Transport Scotland - <http://www.transportscotland.gov.uk/>

Direct Gov -

<http://www.direct.gov.uk/en/Environmentandgreenerliving/Greenertravel/index.htm>

InfoScotland - <http://www.infoscotland.com/gogreener/31.html>

### Transport – Regional Transport Partnerships

General information

<http://www.scotland.gov.uk/Topics/Transport/regional-partnerships>

Shetland Transport Partnership (ZetTrans) – <http://www.zettrans.org.uk/>

Highlands and Islands Transport Partnership - <http://www.hitrans.org.uk/>

North-East of Scotland Transport Partnership - <http://www.nestrans.org.uk/>

Tayside and Central Scotland Transport Partnership - <http://www.tactran.gov.uk/>

South-East of Scotland Transport Partnership - <http://www.sestran.gov.uk/>

Strathclyde Partnership for Transport - <http://www.spt.co.uk/>

South-West Scotland Transport Partnership -

<http://www.dumgal.gov.uk/index.aspx?articleid=2480>

### Walking

Living Streets - <http://www.livingstreets.org.uk/>

Living Streets – 'Step-Up' (secondary schools) - <http://www.stepup.org.uk/index.php>

Paths for All Partnership - <http://www.pathsforall.org.uk/>

Paths to Health - <http://www.pathsforall.org.uk/pathstohealth/index.asp>

## A Low Carbon Route Map: Travel

Ramblers Scotland - <http://www.ramblers.org.uk/scotland/>

Step-Up - <http://www.stepup.org.uk/index.php>

Walk to School - <http://www.walktoschool.org.uk/>

### Cycling

Sustrans Scotland - <http://www.sustrans.org.uk/sustrans-near-you/scotland>

Cycling Touring Club - <http://www.ctc.org.uk/desktopdefault.aspx?tabid=0>

UK Government - <http://www.cyclescheme.co.uk/>

### Public transport – general

Friends of the Earth Scotland - [http://www.foe-scotland.org.uk/resources/publications#Policy\\_Briefings](http://www.foe-scotland.org.uk/resources/publications#Policy_Briefings)

Transform Scotland - <http://www.transformscotland.org.uk/home.aspx>

Traveline – <http://www.traveline.org.uk>

### Public transport – buses

First Bus Group – <http://www.firstgroup.com/ukbus/>

Stagecoach - <http://www.stagecoachbus.com/>

### Public transport - trains

Network Rail - <http://www.networkrail.co.uk/>

First ScotRail - <http://www.scotrail.co.uk/>

Community Rail Strategy - Department for Transport - <http://www.dft.gov.uk/pgr/rail/strategyfinance/strategy/community/intro/introductiontocommunityrail?page=1#a1000>

Community Rail - Network Rail - <http://www.networkrail.co.uk/asp/983.aspx>

### Travelling less

Energy Saving Trust Scotland - <http://www.energysavingtrust.org.uk/scotland>

### Eco-driving

DirectGov - [http://www.direct.gov.uk/en/Environmentandgreenerliving/Greenertravel/DG\\_064428](http://www.direct.gov.uk/en/Environmentandgreenerliving/Greenertravel/DG_064428)

Energy Saving Trust - <http://www.energysavingtrust.org.uk/Cars-travel-and-driving/Drivers/Smarter-driving>

VCACarFuelData.org.uk - <http://www.vcacarfueldata.org.uk/index.asp>

## Journey planner web sites

AA - <http://www.theaa.com/route-planner/index.jsp>

Michelin – <http://www.via-michelin.com> – also gives cycle route options, with times and distances

TransportDirect - <http://bgateway.transportdirect.info/web2/home.aspx?repeatingloop=Y> – provides public transport options and calculates carbon emissions

## Lift-share

Lifshare.com - <https://www.liftshare.com/uk/>

Liftshare.com - safety aspects of lift-sharing -  
[https://www.liftshare.com/v3/pages/info\\_faq.asp?skin=277](https://www.liftshare.com/v3/pages/info_faq.asp?skin=277)

## Car clubs

City Car Club (currently Edinburgh only)

<http://www.citycarclub.co.uk/index.php>

## Home working

Cairns, s et al 'Smarter Choices – Changing the Way We Travel' Department for Transport, 2004, Chapter 10 (teleworking) viewed at

<http://www.dft.gov.uk/pgr/sustainable/smarterchoices/ctwwt/chapter10teleworking.pdf>

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<sup>1</sup> AEA 'Greenhouse Gas Inventories for England, Scotland, Wales and Northern Ireland – 1990 – 2006' September 2008, Chapter 3, Emissions in Scotland, Table 3.1, page 9

[http://www.airquality.co.uk/reports/cat07/0809291432\\_DA\\_GHGI\\_report\\_2006\\_main\\_text\\_Issue\\_1r.pdf](http://www.airquality.co.uk/reports/cat07/0809291432_DA_GHGI_report_2006_main_text_Issue_1r.pdf)

<sup>2</sup> See <http://www.scotland.gov.uk/Topics/Transport/regional-partnerships>

<sup>3</sup> See <http://www.scotrail.co.uk/environment/environmental-benefits-public-transport.html> for comparisons

<sup>4</sup> See <http://www.scotrail.co.uk/environment/what-were-doing.html> for ScotRail's emissions targets

<sup>5</sup> Sustrans 'Low Carbon Travel – reducing the climate change impact of road transport' (Information Sheet FF44) April 2007, viewed at <http://www.sustrans.org.uk/webfiles/Info%20sheets/ff44.pdf>

<sup>6</sup> See Cycle Touring Club web site for details at <http://www.ctc.org.uk/DesktopDefault.aspx?TabID=3830>

<sup>7</sup> The Observer 'School run parents face crack-down at rush hour' 31 August 2004 viewed at <http://www.guardian.co.uk/uk/2003/aug/31/politics.schools> ; BBC web site 'Pupils prefer gossip to school run' 22 May 2000 viewed at <http://news.bbc.co.uk/1/hi/education/755739.stm> ; Daily Mail '£75 charge for parents who do the school run in a 4x4 'gas guzzler'' 20 April 2008, viewed at <http://www.dailymail.co.uk/news/article-560906/75-charge-parents-school-run-4x4-gas-guzzler.html>

<sup>8</sup> See <http://www.sustrans.org.uk/default.asp?sID=1094226578046&pID=>

<sup>9</sup> See <http://www.ecoschoolsscotland.org/page.asp?pg=39>