

Carbon Literacy Project Ideas

Doing it differently: Transport

Fuel efficient driving



'Doing it differently' for car travel means reducing the 'carbon intensity' of these journeys.

Project aims

- Households choose more efficient cars, including choosing electric vehicles.
- Drivers adopt fuel efficient driving techniques.

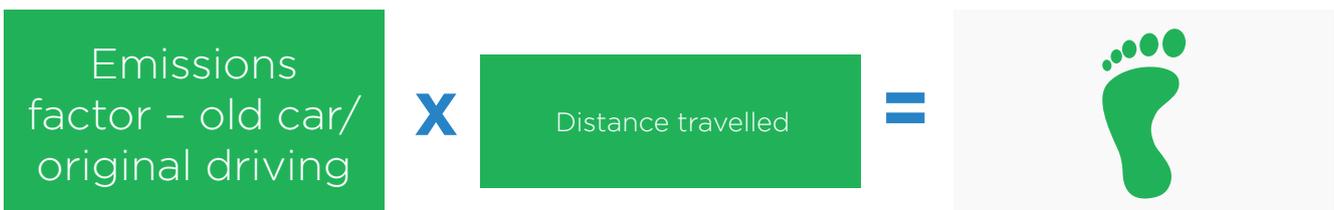
How does that save carbon? What's the measurable outcome?

All motorised forms of transport result in carbon emissions – whether this is from combustion of petrol/diesel or in generating electricity to power them. The amount of carbon emissions created by different vehicles to travel one mile varies according to model/make, engine size and type, so switching to a vehicle with a lower carbon intensity will reduce emissions. The way we drive a car also affects the emissions created in driving a mile – if we drive in a more efficient way this reduces the carbon intensity of the journey and thereby emissions.

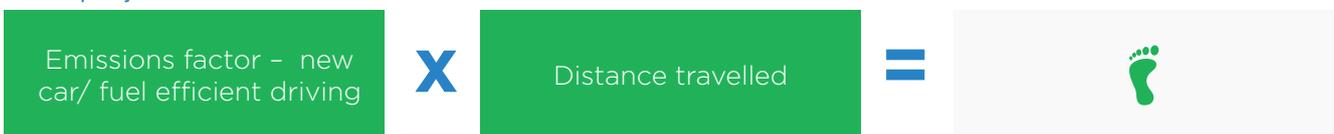
Measurable outcome: Reduce carbon intensity of car travel.

The CCF reporting tool and data collection guidance explains how you can monitor and evaluate how much your project has saved.

Before project



After project



Carbon footprint from driving.

What are the co-benefits? What are the potential 'community outcomes'?

Reducing fuel use through more efficient vehicles, or driving behaviours, will result in financial savings for drivers. Drivers can reduce consumption by on average 15% through adopting fuel-efficient driving techniques.

How do we demonstrate the co-benefits?

Financial savings: This is closely linked to the carbon savings you are already monitoring – reducing fuel use saves money.

What are the risks?

A new vehicle has a lot of embodied emissions associated with its production (anywhere between 7 and 35 tonnes CO₂e¹), which poses the question whether the embodied emissions will outweigh benefits from reduced emissions from use. If someone is buying a new car anyway, then choosing a more efficient model isn't creating extra carbon, nor is choosing to buy second hand. Electric vehicles do have higher embodied emissions than conventional cars, although reduced emissions from use still make these a good choice. See: <http://shrinkthatfootprint.com/wp-content/uploads/2013/02/Shades-of-Green-Full-Report.pdf>

The bigger risk is that participants react to reduced driving costs by choosing to drive more – this is known as the rebound effect. This exact trade-off has happened with car driving as a whole in Scotland. The cars on the road have got more efficient, but the miles driven by car has gone up, resulting in the overall change in emissions from car driving in Scotland since 1990 being minimal.

How do you increase fuel efficient driving in your community?

Designing your project: If you wish to develop a project to encourage people to reduce carbon intensity of car travel, you should investigate what are the most important barriers and opportunities in your community. Your consultation could look into:

1. What kinds of journeys and modes of transport are most common in your community?
2. How likely people are to take part in your proposed activities.
3. What are the opportunities/barriers for reducing the carbon intensity of car travel in your community?
4. What assets are there in the community, or wider opportunities, that could support your project aims?

The four questions, four zones grid from Shifting Normal can help you identify factors that could influence the willingness or ability to choose low emissions vehicles or drive more efficiently.

Example project activities

Below are some examples of typical activities that CCF projects run in order to encourage fuel efficient driving or switching to low emissions vehicles.

Awareness raising/information: Projects can promote the benefits of lower emissions vehicles, with open days and test-driving sessions popular.

Fuel efficient driver training: Projects can organise Fuel Efficient Driver Training in their community with a qualified instructor.

Car clubs: Setting up or promoting existing car clubs can give members of the community access to new, more efficient vehicles to use. Longer term this can have the knock-on effect of reducing private car ownership.

Visit our website to view a selection of case studies from past CCF projects:

www.keepsotlandbeautiful.org/ccf



¹How bad are bananas?' Mike-Berners Lee