

Session Activity: Travel

Objective: The purpose of the travel games is to first learn about the relative carbon intensities of different forms of available transport, and start thinking about how it's possible to make changes in the way we travel without having to significantly compromise our lifestyles.

Game One

How to play

The travel game cards each depict a different form of transport.

Give each of the travel cards to a different member of the group and ask them to line up holding their cards in front of them.

The other members of the group need to rank them in order of the average CO₂e produced per passenger mile – that's how much CO₂ and other greenhouse gases are produced for each mile travelled - and dividing the emissions between the passengers to arrive at an average per person per mile travelled figure.

Results (UK Government Greenhouse Gas Conversion Factors 2017)

Results	gCO ₂ e / mile	Notes
Cycle/walk	0	Powered by a plant based diet 😊
Rail – International	20	Look at www.seat61.com
Ferry - foot passenger	31	
Coach	44	
Rail / underground (UK)	75	
Electric car	88	Reduces annually as grid decarbonises further
Local Bus	164	
Motorbike	188	
Ferry – car passenger	213	
Short haul Flight[1]	258	Long haul 316g + more miles
Diesel/petrol car[2]	288	
Domestic flight	428	

Discussion

Q. Did any of the results surprise you?

It's not just the gCO₂e per mile to consider. The distances are very important. A family of 4 sitting on a beach in South Africa would burn 150 times more CO₂e visiting South Africa (over 15 tonnes) vs. less than 0.1 tonnes for a trip to Devon!

Q. Can you think of ways this information is helpful in helping reduce the carbon footprint of a journey?

When you undertake a journey, a key way to reduce the greenhouse gas emissions is to switch to a form of transport lower down the emissions rankings. i.e. towards cycling or walking.

KEY MESSAGES

Travel is undertaken for a wide range of reasons and there are significant variations between the travel undertaken by different households.

Strategies to reduce our travel related carbon footprint include:

- **Reducing the distance** we travel e.g. changing where we work or holiday
- **Reducing the number of journeys** we make e.g. aggregating journeys, working from home or using other ways to stay in touch.
- **Changing to a less carbon intensive form of travel**

Additionality is a key concept – does our journey directly add to the amount of total journeys undertaken (e.g. another car on the road) or make use of an existing service.

Travel can be an emotive subject. The amount we travel can be influenced by external factors such as 'love miles' and employment options. In addition, individuals have very differing views about the personal cost – financial, time or inconvenience – relating to different travel options.

Although you cannot significantly change the national average occupancy for a mode of transport – you can make a big difference to the number of people in your own car. That’s why lift sharing is a great way of cutting your car’s carbon footprint. However - every time you get in your car you are generating new carbon, whereas with public transport these services are already running. This is called ‘additionality’.

Game Two: The Brown Family

The Brown family travel a lot – to work and school, for household chores, social travel to see friends and for their holidays. They’re aware that their travel makes up a significant part of their carbon footprint and have asked for suggestions to help them cut their carbon footprint.

Give each participant a copy of the Brown Family travel scenario and allow five minutes for everyone to read it.

Set up three bits of flipchart paper each headed with a different area of travel (Community/Domestic Travel/Holidays) and divide each sheet into three sections:

- Quick win
- Could consider
- Major change

Going through each area of travel in turn, ask for suggestions for ways the Browns could reduce their travel carbon footprint. Write them on post it notes and ask participants which section you should stick it under (quick win, could consider, major change.) Allow debate and if there is disagreement probe for reasons for putting it in a particular category.

Discussion

There is no set right answer – different options will be easy or hard to undertake depending on the availability of other forms of transport, time and budgets and personal circumstances. Allow for debate and discussion but ensure discussion doesn’t stray into criticism of the personal choices of participants.

In the discussion, try and draw out a range of options including

- using their car with the lower emissions for journeys
- greener driving, lift sharing
- buy a more efficient or electric car
- get rid of a car and sign up to a pool car scheme
- using public transport
- cycling or walking
- working from home
- changing job/nursery to something nearer
- home delivery services
- finding classes nearer to home
- UK holidays or no-fly European or UK holiday (train?)

The way people will weigh up different options in their own lives will be influenced by a number of factors, for example where we work, our mobility and fitness, the time and money we have available and the need to transport children or other items!

External factors can also play a role for example, how good local public transport is in our area, the cost of fuel, other government taxes or incentives and EU legislation.

Optional Discussion if time:

Changing the way we travel is often perceived in terms of ‘giving up’ something – but there are lots of benefits too. What might be some of the benefits to the Browns if they were to take up some of your suggestions? E.g.

- Improved health from walking/cycling, cleaner air, noise pollution
- Saved time e.g. deliveries instead of shopping
- Saving money (e.g. pool car as a second car option)
- Better quality of journey e.g. can read on trains
- Discover beautiful bits of the British countryside instead of going abroad
- Less time spent at airports and on airplanes with complaining kids if reduce flying

FIND OUT MORE: Check out sustainable transport charity - www.sustrans.org.uk

Introducing the Browns:

The Brown family live in West Oxford. They are....

Father – Adam

Mother – Bess

Daughter – Claire, 3yrs

Son – Dan, 11 years

They own two cars, a Toyota Corolla (7 seater MPV, 294g/mile) and a Ford Fiesta (232/mile)

Their key travel activities are as follows:

Commuting

Adam - Each week he drives in the Toyota to Reading (27 miles away) and once to Bracknell (35 miles)

Bess – Drives to Eynsham (5 miles away) every day in the Fiesta

Dan gets lift to the local secondary school with Bess in morning and bus home.

Claire goes to a nursery the far side of Eynsham, driven by Bess.

Domestic travel

Adams drives to supermarket every week

Bess drive to a farm shop once a month for organic veg

Drive to a local swimming pool once a week as a family

Drive to London once a month to see friends

Dan driven to a violin lesson 10 miles away every week

Claire driven to singing class in the city centre every week.

Holidays

Family holiday in Florida each summer

Christmas holidays, 7 days visiting Adam’s parents in Hong Kong.

Adam & Bess go on a mini-break skiing each year, flying to a European airport

How could the Browns reduce their travel related carbon footprint?

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