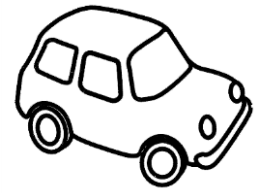


Introduction

In our modern, western society, car ownership symbolises and allows mobility, convenience and freedom. As our world has become more car-centred, participation in this world without a car has become more difficult and has put people under serious pressure to have one. In Ireland the number of vehicles on the road in 2019 was 2.8 million – up from 1 million in 1996.

Meanwhile, for the majority of people in the world owning a car is a luxury or is impossible.



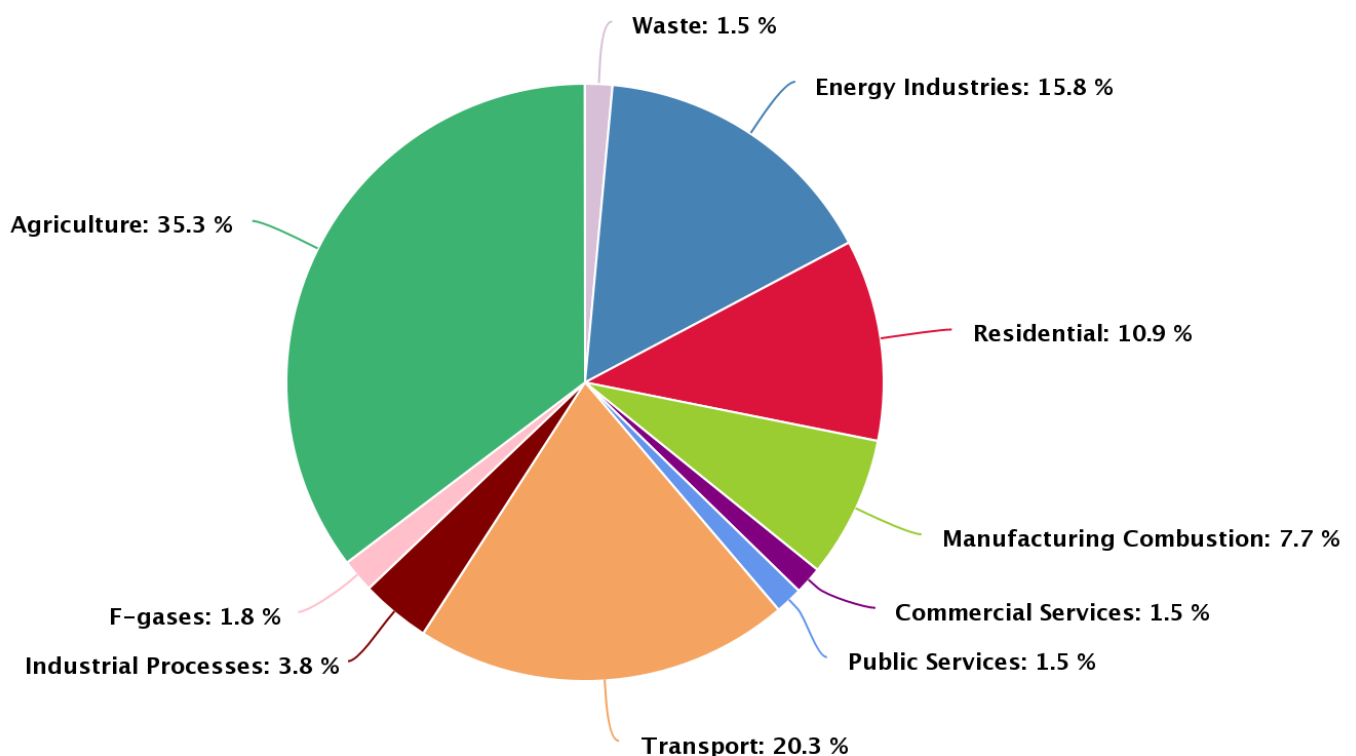
Climate Change

Petrol and diesel are scarce resources and when burned they have major environmental implications. A very high percentage of greenhouse gases and other air pollution can be attributed to cars and aeroplanes. In Ireland, transport accounts for over 20% of our total greenhouse gas emissions (see graph below) with the private car the largest contributor to that statistic. The manufacturing of cars also uses a lot of energy and materials.

Whilst giving tremendous benefits, current car usage is one of the most serious environmental and political issues for our planet.

The other transport issue that has a colossal impact on climate change is air travel, which these days is far more affordable than ever before but there is a hidden environmental cost to these trips. There are many actions and lifestyle changes that you could make to lessen your environmental impact.

The effectiveness of your actions will be much greater if you discuss them with the rest of your household and get them involved. One of the principles of Greener Living is that mutual support and encouragement both at the meetings and in the home is a great help in changing our lifestyle patterns.



(source – Environmental Protection Agency 2019)

Action!

Make a list of all your regular journeys. Information is the key to efficient action. By making a list of your transport needs you will be able to try out the actions suggested below.

Why act?

Get ready to ride

It's amazing how many people have a bike in the shed that only needs the puncture mending or other small repair work. Because the bike is not quite working, when a chance to cycle comes along it is missed.

Action!

Get your old bike ready for the road! If you don't have a bike, then consider buying a second-hand one. If you find you enjoy cycling, you can always upgrade to a better model later. More and more people are taking to the roads by bike and studies show tremendous health and social benefits.

Why act?

Cycle or walk

Short car journeys use more fuel, create more pollution and do more damage to your engine per mile than longer ones because the engine does not get a chance to warm up fully. More than a quarter of all car journeys are less than 2 kilometres, and most are made by car. That means that often you could substitute the healthier and much more environmentally friendly options of using a bike or walking. A cyclist can travel 680 km using the same amount of energy that is in one litre of petrol! A 2km bike ride will take 2 minutes longer than using the car in an urban area and around 5 minutes longer on more rural roads. Where parking is difficult, the bike may be quicker.

Action!

Consult your list of regular car journeys and decide on ones you could walk or cycle. Aim to substitute at least one car journey per week.

- ⇒ Could you cycle part of your regular commuter route and arrive at work well exercised and full of energy? Invest in a bike rack for your car and park up securely midway to your destination.
- ⇒ Check if you can avail of the Cycle to Work scheme through your workplace – ask your employer or see www.biketowork.ie or www.cyclescheme.ie
- ⇒ If you haven't cycled for years, consider a training course like CycleRight to keep yourself safe and build confidence.
- ⇒ Become a member of the public bike scheme in Cork City (www.bikeshare.ie) to use when in the city.

Why act?

Use public transport

We have probably all had bad experiences with public transport. However, in Ireland public transport has improved significantly in recent years. Taking a train or coach can be less stressful than driving, you can use the time to read, go online or relax and you don't have to find a parking space. The fact is that by using public transport you are making a significant difference to energy use, pollution and traffic congestion.

Action!

Consult the list of your regular car journeys and investigate the public transport options. Try and change one journey over to public transport.

- ⇒ Use the Park and Ride Service (Black Ash for Cork City)
- ⇒ Commuter season tickets are available for public transport and help save money.
- ⇒ LEAP cards can streamline the journeys and save you money. See <https://about.leapcard.ie/cork>
- ⇒ Use the National Journey Planner (www.journeyplanner.transportforireland.ie)
- ⇒ Wi-Fi is available on intercity buses and trains.

Why act?

Combine journeys

Cars hold a large percentage share of the short journeys in Ireland. 49% of the less than 2 km journeys and 72% of the journeys between 2 and 4 kms are by car. (Source: Dept. of Transport Report 2015)

With a little planning many journeys can be combined which will save you money and travel time as well as being more environmental. It's quite amazing how easy this can be once you get into the habit. The less you travel, the more time and money you have for other things. You use less energy and cause less pollution.

Action!

Go through the list of regular journeys with the whole household and see which journeys could be combined. When making new arrangements consider how they might fit in with the existing schedule.

- ⇒ Looking once more at your list of journeys to see if any of them could be reduced. You might have different options as to where to shop, where you will go for leisure activities and which school your children attend.

Why act?

Change your working schedule

If you spend half an hour travelling to work that's an hour there and back to do 8 hours' work. In other words, that's more than 10 % of your time that you are not being paid for; in fact it is probably costing you money, using energy, creating pollution and stress!

Action!

Especially since the COVID-19 crisis, many companies are encouraging employees to work from home as it saves them office expenses. You might investigate whether this is an option for you. If you can work flexitime, consider doing 4 long days instead of 5 normal days. This would reduce your travel time and fuel bill by 20%. If your workplace is half an hour away this would save you 50 hours a year, which is equivalent to an extra 6 days of holiday!

- ⇒ Discuss the above with your boss. If these options are not possible you might explore the options of moving closer to where you work or changing jobs to one that allows the above options or that is nearer to where you live.
- ⇒ While at work, we may have the option of avoiding traveling by having online meetings.

Car Actions

Why act?

Drive efficiently

The way in which you drive is probably the most significant factor affecting your fuel consumption. An aggressive driving style can add up to 12% whereas an energy aware driving style can save you 12%.

Action!

Driving in the correct gear, not accelerating aggressively and keeping between 80-90 kph (55-60mph) in top gear when the speed limit allows will ensure that you use fuel efficiently. These actions will also save you money on repairs as there will be less strain on the car. If your car looks set to idle for more than 30 seconds (traffic lights, etc.) it is more efficient to turn the engine off. If you have taken the next action of getting the car serviced there should be very little delay in it re-starting. See also <https://www.theaa.ie/blog/fuel-efficient-driving-10-top-tips/>

- ⇒ If you have two cars, then use the most efficient one as the first choice, and ask if the second car is needed.
- ⇒ Another option may be to use car club services like GoCar, see www.gocar.ie

Why act?

Have your car serviced regularly

90% of badly polluting vehicles can be re-tuned in only 15 minutes. Even if your vehicle is not badly polluting by having it serviced regularly you will reduce its pollution by making it run more efficiently, saving you money on fuel and repairs.

Poorly aligned wheels, badly adjusted brakes and poor engine lubrication all contribute to higher fuel usage and repair bills.

Action!

Get your car serviced and keep a service record to ensure that it is serviced regularly.

Why act?

Buy and use a tyre gauge

Under-inflated tyres can add 4% to your fuel consumption. The air gauges on garage forecourts are often very inaccurate and so it makes sense to have your own.

Why act?

Keep your car aerodynamic

Ever tried walking into the wind? It takes much more energy! Modern cars are designed to create less wind resistance but this can be disrupted by the way we use the car. These actions will keep your car as aerodynamic as possible:

Action!

Roof racks can increase fuel consumption, for instance a bike rack with 2 bikes on can add 10-15%. Take off the roof rack when not needed.

⇒ An open sunroof can add 4% to your fuel bill. Open windows can add 5 to 10%. Use the internal vents instead.

Why act?

Remove unnecessary weight from your car and don't fill up the tank

The heavier the car is, the more fuel it uses to drag that weight up hills and the more the brakes must work to slow it down.

Action!

Check that you are not carrying heavy, unnecessary items around in the boot of your car. For example, if you need tools for work take them out at the weekends. If you need golf clubs at the weekend take them out during the week.

⇒ Petrol is almost as heavy as water. You can safely keep the tank between $\frac{1}{4}$ and $\frac{1}{2}$ full - just keep an eye on the gauge!

Why act?

Turn off non-essential electrical items and don't use the air conditioning

Like any other generator, your car's engine must work harder and use extra fuel to make electricity. The air conditioning unit will add at least 5% to your fuel consumption and the rear screen heater will add a further 3-5%

Why act?

Plan your journeys and experiment with different routes

A little time spent looking at a map can often reveal a better way from A to B. Don't assume this is only true for new routes, you might be driving a certain way for a reason that is not relevant anymore. There might be a new road that you haven't tried yet. Often you will have a choice of routes. If one route involves queuing in traffic, then a slightly longer route might be more fuel-efficient.

Why act?

Share lifts

When you share a lift with someone else instead of taking one car each, you halve the use of our scarce petrol which means you halve the pollution caused. You also halve the wear and tear on your cars, halve your fuel bill, reduce the need for parking spaces and reduce traffic congestion. Also one of you gets to relax by not having to drive!

Action!

You can use apps and websites to arrange car sharing otherwise get to know who travels the same journey amongst friends or neighbours and carpool together. See www.carpoolworld.com/carpool_IRELAND.html

86% of car journeys in Ireland are driver only.

Why act?

Keep your old car as long as possible and use second hand parts

Whilst it's true that modern cars are more efficient and cause less pollution, the energy that goes into making a car is colossal. When its life is over, more energy must be used to scrap and recycle it. If your car is good enough to pass the NCT then it is better for the environment to keep it on the road than to create the need for a newer one.

Car dismantlers are providing an excellent service by facilitating the reuse of perfectly good parts (remember reuse is second only to refuse on the waste hierarchy)

Action!

Hang on to your car a little longer than you might have previously. Wherever you are on the scale from brand new to banger, you are reducing the overall demand for new cars to be produced.

⇒ Before buying new car parts try to get second-hand parts from a reputable dismantler.

Why act?

Do you really need a car?

A car costs a lot of money just to purchase, maintain, tax, insure and NCT even before you put any petrol in it. This might be outweighing the advantages of having one. If you have a relatively low usage, In 2019 the AA survey found the average yearly running cost for a family car was €10,590 . A cheaper alternative could be to not have your own car and use a car club or take the occasional taxi when public transport or your bicycle will not suit. It would certainly be better for the environment.

Action!

Calculate the true cost of owning your car including replacing it. Assess what lifestyle changes you would need to make in order to not own a car. Would having the money saved by not running a car compensate for these changes? Could you consider sharing a car with a friend or neighbour?

Why act?

Park and ride or park and walk

Town driving uses more fuel than open road driving and parking in town tends to be expensive. Using Park and Ride schemes or just parking a little further out than normal and walking will therefore save you money.

Other actions:

Why act?

Avoid flying

For the same amount of fuel to fly one person, 80 people could take a ferry. Flights are now very cheap and so convenient but the cost to the environment is really very high. Increased air travel is another way in which people from the richer nations who are already using most of the world's energy are taking an even bigger share.

Action!

When making travel plans consider the options available to you and choose not to fly if possible.

ACTION	I WILL TAKE THIS ACTION BEFORE THE NEXT MEETING	ACTION TAKEN
Discuss these transport actions with the rest of your household		
Make a list of all your regular journeys		
Mend/purchase a bicycle		
Avoid one car journey by cycling or walking		
Avoid one car journey by using public transport		
Combine journeys		
Work/shop/relax closer to home		
Drive efficiently. Slow acceleration, correct gear, correct speed 80-90 kph		
Calculate the true cost of running your car		
Have your car serviced		
Buy and use a tyre gauge		
Keep your car aerodynamic (Take off roof & cycle rack. Use vents instead of opening windows & sunroof)		
Remove unneeded weight from the car		
Keep the fuel tank between ¼ and ½ filled		
Turn off the rear screen heater when not needed		
Avoid using the air conditioning		
If you have two cars use the most efficient one most		
Switch off the engine in queues and at traffic lights, etc.		
Use a ‘Park and Ride’ service or park and walk into town		
Plan your journeys and try to find the best (not always shortest) route		
Substitute a physical journey with an online conversation		
Share lifts		
Buy used car parts rather than new ones		
Plan to holiday nearer to home		
Choose an alternative to flying		
Talk to someone about the Greener Living course		
Take a community action		
Thank you for participating in this course. You can find links to other resources and further information from each session at www.cef.ie/projects/greenerliving/		