



Draft  
**IRELAND'S  
CYCLE  
NETWORK**  
Why a Wider  
Cycle Network  
is Needed



# Why a Wider Cycle Network is Needed

## 1. Our Health (& Safety): Cycling can contribute to improved physical and mental health.

Exercising, including cycling, releases endorphins which helps reduce stress and triggers 'good' feelings. These help to increase happiness and reduce feelings of anxiety. Research studies have shown that people who cycle regularly have a lower risk of feeling stressed. The *Cycling Ireland Big Bike to Work 2021* Poll notes that 65.9% of respondents feel happier after cycling, 65.5% of people feel a mood boost and more positive after cycling and 56.3% feel calmer and more mindful [1].

The *2022 World Happiness Report* ranked Denmark, Finland and the Netherlands as being among the top 5 happiest countries in the world [2]. All of these countries have a populace where 25% or more cycle at least once a day. The countries are ranked based on statistical analysis of data from the Gallup World Poll surveys from 2019 and 2021. Happiness is linked to social equality and community spirit in reports such as the *World Happiness Report 2022* [2]. Cycling is a large part of the lives of people from these countries, with 34% of Dutch people listing cycling as their main mode of transport in the *European Commission Quality of Transport Report 2014*. In 2019 in Copenhagen in Denmark, 44% of all work and education trips were made by bike according to the *Copenhagen Municipality Bicycle Statement 2020*. Ireland, by the same metric only has 6.8% of its populace cycling at a number of times a week according to the *National Travel Survey 2019* [3].



Figure 1.0.1: Health Benefits of Cycling

Health benefits of regular cycling include improved cardiovascular fitness, increased muscle strength and flexibility and decreased body fat levels [4]. Some studies have noted a relationship between cycling and increased exercise, and reduced levels of bowel cancer. Research in Finland found that people who cycled for more than 30 minutes per day had a 40% lower risk of developing diabetes. The *Cycling Ireland Big Bike to Work 2021* Poll noted other physical benefits such as helping to keep fit, improving joint mobility, and helping to improve posture. Respondents also noted that cycling aids regulating their weight and helps them to sleep better [1].

## 2. Climate Impacts:

As of 2018, Ireland was importing 67% of energy, in comparison to the EU average of 50%. Figure 2.1 shows that of Ireland's energy imports, almost all of it was fossil fuels. Ireland imports all of its oil, the majority of this which is used for transport. Ireland also imports cars and electricity on grid. According to the SEAI the estimated annual cost of energy imports in 2018 was €5 billion, with oil accounting for €4.3 billion.

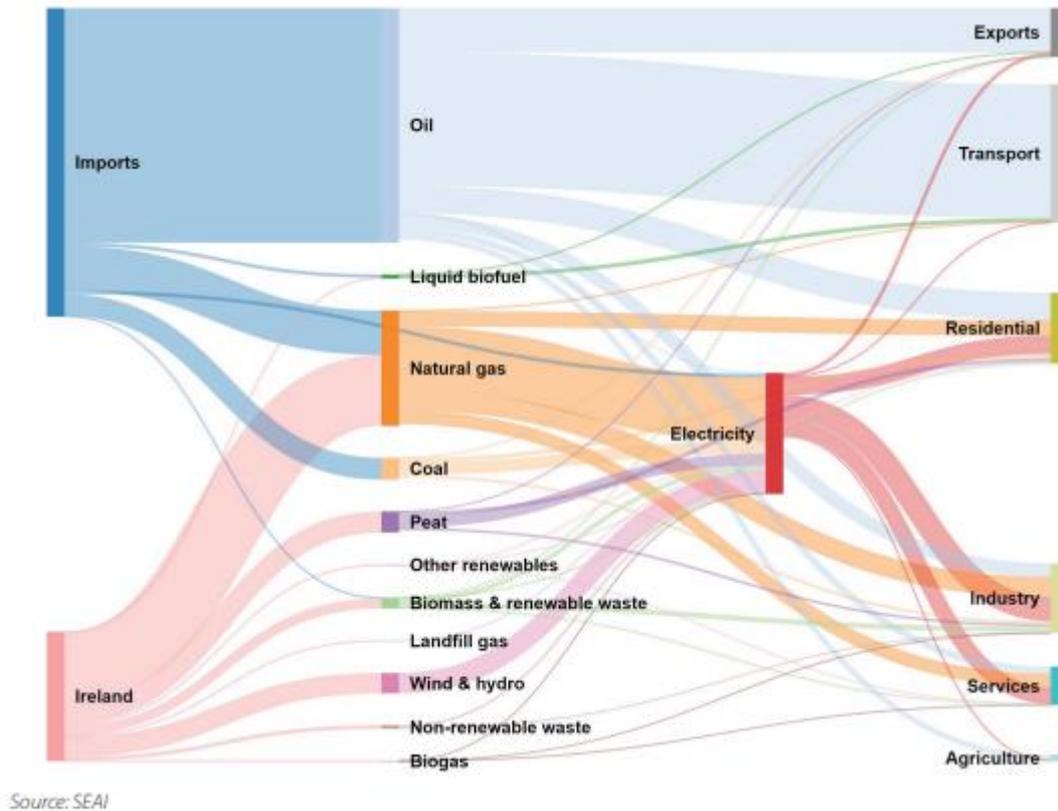


Figure 2.1: Ireland's Fossil Fuel Imports 2018 ([seai.ie](http://seai.ie))

According to the *Dutch Cycling Vision*, published by the Dutch Cycle Embassy, carbon dioxide emissions per passenger per kilometre are 271g for cars in comparison to 21g for cycling. Switching from a car to a bike can reduce up to 65% of NOx emissions [5]. Increased cycling numbers and reducing the numbers of private cars will have a positive impact on air pollution.

Ireland is highly dependent on the use of private cars. According to the Department of Transport, 3 of 4 transport journeys were made by car. Furthermore, 40% of trips are taken to be less 10km. The Cycling Ireland survey found that 35.6% of responders cycle between 5-10km. Of trips done by car, 40% could be transferred to cycling and walking. The distance of these vehicle trips is suitable for many cycling trips. There is also a reduction in noise pollution with increased cycling numbers.

**Figure 2.2 Road transport emissions as a share of EU transport GHG emissions and share of road transport emissions by mode in the EU-27, 2019**



**Note:** \*Including international bunkers (international aviation and international maritime transport).

### Figure 2.2: Transport Emissions Summary

### 3. Equality & Equity:

Access to bikes and bike lanes give people options in how to travel. Levels of car dependency tends to be higher in rural areas [6]. This tends to be related to a lower level of public transport accessibility and a need to travel longer distances. Cycling provides a more cost effective mode of travel compared to the private car [6]. Whilst cycling may not be preferable for long distance trips in rural areas, it can offer a viable alternative to replace trips that are less than 5km in distance. Cycling can improve quality of life, with bike friendly towns and villages being cleaner, quieter and safer. The reduction of vehicular traffic can also lead to safer roads and a reduction in collisions.

#### Women

The TII Travelling in a Woman’s Shoes Report noted that women cycle considerably less than men [7]. According the Sustrans *Bike Life “Women: reducing the gender gap”* report, in the UK twice as many men cycle than women (24% and 12% respectively) [8], with 55% of trips in the Netherlands undertaken by women [7]. The Netherlands is known for high quality cycle infrastructure. However, globally women are deterred from cycling, primarily due to safety concerns [7].

Despite lower levels of car ownership, women use the car at a higher rate than men and travel more locally [8]. Their choice to use the car is often driven by caregiving factors, lack of public transport, safety concerns when walking and cycling, and a lack of cycling infrastructure. The TII report notes that cycling is perceived as being the least safe and least child friendly mode of transport [7].

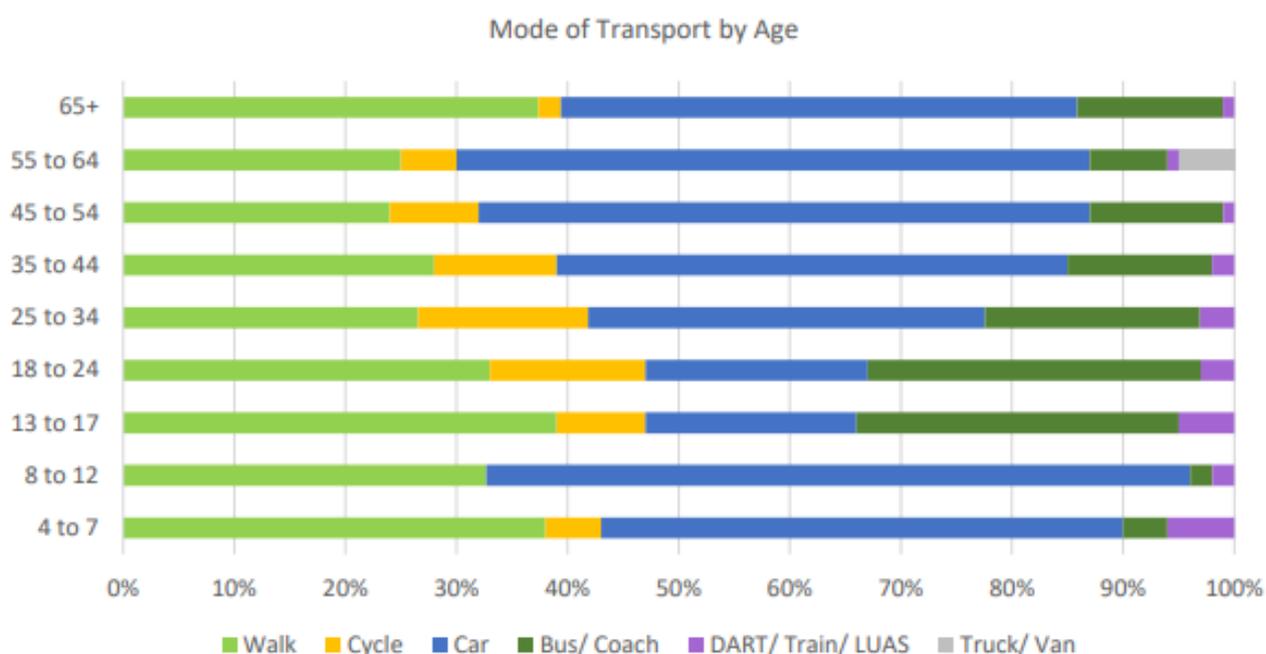
RANK OF MODE BY ASSOCIATION FOR ALL WOMEN IN IRELAND							
	Pleasant way to travel	Good for my health	Less stressful	Time to myself	Safe	Child friendly	I can rely on it
most	Car	Walking	Car	Walking	Car	Car	Car
	Train	Cycling	Walking	Car	Walking	Walking	Walking
	Walking	Car	Train	Train	Train	Train	Train
	Cycling	Bus	Bus	Bus	Bus	Bus	Bus
	Bus	Train	Cycling	Cycling	Taxi	Taxi	Cycling
least	Taxi	Taxi	Taxi	Taxi	Cycling	Cycling	Taxi

**Figure 3.1: Ranking of modes of transport by women (TII Travelling in a Woman’s Shoes)**

**Pensioners**

Patterns seen in high-cycling countries show a roughly equal gender balance and more than one-in-four commuting over-65-year-olds still doing so by bicycle as noted in an article by Cycling UK, “Pedalling toward equality in cycling”. It notes that in the Netherlands, Denmark and Germany it is normal for older people to cycle. In comparison, in the UK cycling declines rapidly at older ages, in high-cycling countries, cycling levels drop down in young adulthood but often then increase at older ages.

According to the National Household Travel Survey in 2017 [9], there is a decrease in the number of cycle trips taken above the age of 34. There is a particularly evident reduction in cycle trips above the age of 65. The graph in Figure 3.2 indicates that Irish people over the age of 65 prefer walking to cycling as an active mode of transport.



**Figure 3.2: Mode of transport by age (National Household Travel Survey 2017 )**

## Children

There are many benefits to children cycling. A Sustrans report noted that children who walk and cycle to school are more alert and ready to learn than those who arrive by car. It also notes that children can develop a knowledge of their local area from cycling. [10]

Encouraging cycling in children allows them to develop a healthy habit and skill at a young age. Many children find cycling fun and enjoyable, which in turn leads to increased happiness. Cycling can boost a child's confidence and sense of independence [10].

Cycling with children can be a bonding experience and a way to spend time together as a family. It can boost both parents and children's moods and relieve stress [10].

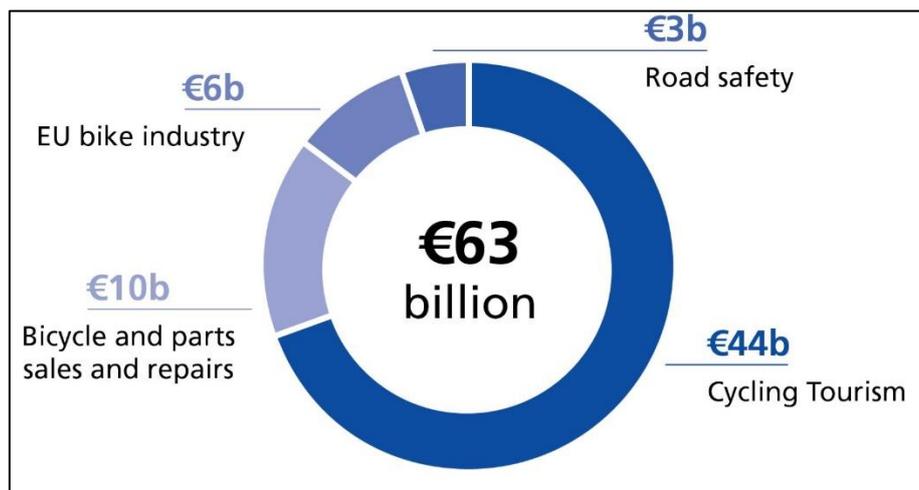
## 4. Economic Benefits

The Dutch Cycling Embassy estimates that the annual cost of riding a bike is €300, in comparison to the annual cost of driving a car being €8,500. It also estimates that a kilometre covered by bike yields a social benefit of €0.68, where cars cost society €0.37 and buses cost €0.29 [5].

The *National Cycling Policy Framework (2009-2020)* estimated that for every €100 million invested in cycling in Ireland, a return of €400 million could be obtained [11]. A study conducted in 100 European cities during the Covid 19 pandemic found that the increased cycling infrastructure provision during covid led to a growth of 11-48% in cycling figures. It was calculated that this may lead to €1-€7 billion [12]. Financial gains come in the form of reduced healthcare expenditure, reduced car related expenditure and increased tourism revenue.

## 5. Tourism

According to the *EU Cycling Economy* study, there are an estimated 2.3 billion cycle tourism trips in Europe every year with a value in excess of €44 billion [11]. "20.4 million cycle tourists stay one or more nights en-route, and these 'overnight' tourists spend around €9 billion annually." Cycling tourism is also linked to 500,000 jobs in the EU.



**Figure 5.1: Cycling as part of the EU economy ([eurovelo.com](http://eurovelo.com))**

Cycling offers many tourism opportunities for Ireland, including cycling tours and increased footfall in local towns and villages. According to Failte Ireland, cycling is the second biggest activity market in Ireland, with the numbers of cyclist trebling in the past 8 years [12]. Mainland Europe has always been the most important market for cycling in Ireland. Europeans demand

specific cycling services and infrastructure. On their holidays, they like to follow cycling routes or tracks [13]. The demand for cycling tourism has increased due to the COVID-19 pandemic.

In Ireland there are 2 EuroVelo routes, EuroVelo 1- Atlantic Coast Route and EuroVelo2- Capitals Route. These routes run along some of the existing greenways in the country such as the Waterford Greenway, Limerick Greenway and the Great Western Greenway for EuroVelo 1, and the Royal Canal Greenway and the Old Rail Trail Greenway for EuroVelo2.

Figure 5. shows the status of the constructed infrastructure of the EuroVelo networks in Europe. As of 2020, only 40% of the total network has dedicated cycle paths or cycle lanes.



**Figure 5.2: Percentage of EuroVelo construction as of 2022 ([eurovelo.com](https://www.eurovelo.com))**

Older cyclists and young cyclists are the most important target groups for cycling tourism. Younger cyclists are more active, with older cyclists having more time to go on longer trips. Family cycling trips have also increased due to the COVID 19 pandemic. Family cycling holidays often require shorter distances and benefit from stops.

Many County Development Plans and Local Area Plans across the country have emphasised cycling as an important element of tourism to be promoted. The policies and objectives highlighted have included the introduction of cycling trails and routes, the development of cycling infrastructure such as greenways and blueways, and the implementation of cycle facilities such as rest stops and e-bike charging.

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