Electric cars won't shrink emissions enough - we must cut travel too

By Adam Vaughan, *New Scientist* (weekly magazine), print issue of Mar 30, 2019

Everyone knows that changing the way we get around could reduce climate emissions: cycle and walk rather than drive, take the train, not the plane, and if you must use a car make it an electric one. Now a European Union body is pushing a more controversial solution for decarbonising transport: travelling less.

The EU's position since 2011 has been that "curbing mobility is not an option". On Wednesday, the European Academies' Science Advisory Council (EASAC), which represents the EU's national science academies, published a major report on transport emissions, urging the EU to reverse its stance.

It is high time we at least started the discussion. In 2016, the transport sector overtook energy as the UK's biggest source of greenhouse gas emissions, a milestone the rest of the EU could hit in the 2020s.

It is increasingly clear that even a rapid switch to electric and other low-carbon vehicles won't be enough to meet the goals of the Paris climate agreement, which aims to limit global warming to 2°C.

"Even if you did all the good things, there is still no way to meet the targets, particularly in freight," says William Gillett, director of the EASAC's energy programme.

In the EU, almost three-quarters of transport emissions comes from cars, buses and heavy goods vehicles. The bloc supports electric cars, which are getting cheaper but still accounted for just 1.5 per cent of the EU's new car sales in 2017.

Running out of time

Transport can't be decarbonised in time to meet the 1.5°C warming target outlined by the UN climate science panel last year, says Kevin Anderson of the Tyndall Centre for Climate Change Research in Manchester, UK. "There is a very clear message – if we are serious about Paris we have to reduce the demand for transport too."

But how? Anderson says public transport and other forms of shared transport, such as ridesharing apps, are helping, and believes electric bicycles could be a gamechanger to get people out of cars for short journeys.

Simply putting up taxes on transport is unlikely to help, says Gillett. Instead, he believes we need innovative ideas that don't hamper trade and damage economic growth. The carbon footprint of electric cars could be reduced, he suggests, by building more battery factories in Europe, rather than importing batteries from Asian countries with fossil fuel-heavy power supplies.

Personal carbon allowances, where everyone has a fixed quota for how much they can emit, could be an idea worth considering, says Tina Fawcett of the Environmental Change Institute at the University of Oxford.

Capping personal travel would be the fairest way to address the problem, because it is the wealthiest who travel the most and therefore pollute the most. "We already have demand management, it's called the cost of public transport, the price of petrol. A small cohort travel as much as they want [because they can afford to]," says Anderson.

In a world where transport emissions were rationed, some poorer people in society would be able to travel more. The wealthiest would see a reduction in their mobility.

But political challenges mean any curb in transport is likely to be a long way off. Children are striking for action on climate change and tens of thousands of people took part in a climate protest in Paris on 16 March. But it was the ongoing, months-long backlash against France's plans for a fuel tax to cut carbon emissions that dominated the nation's news coverage last weekend.