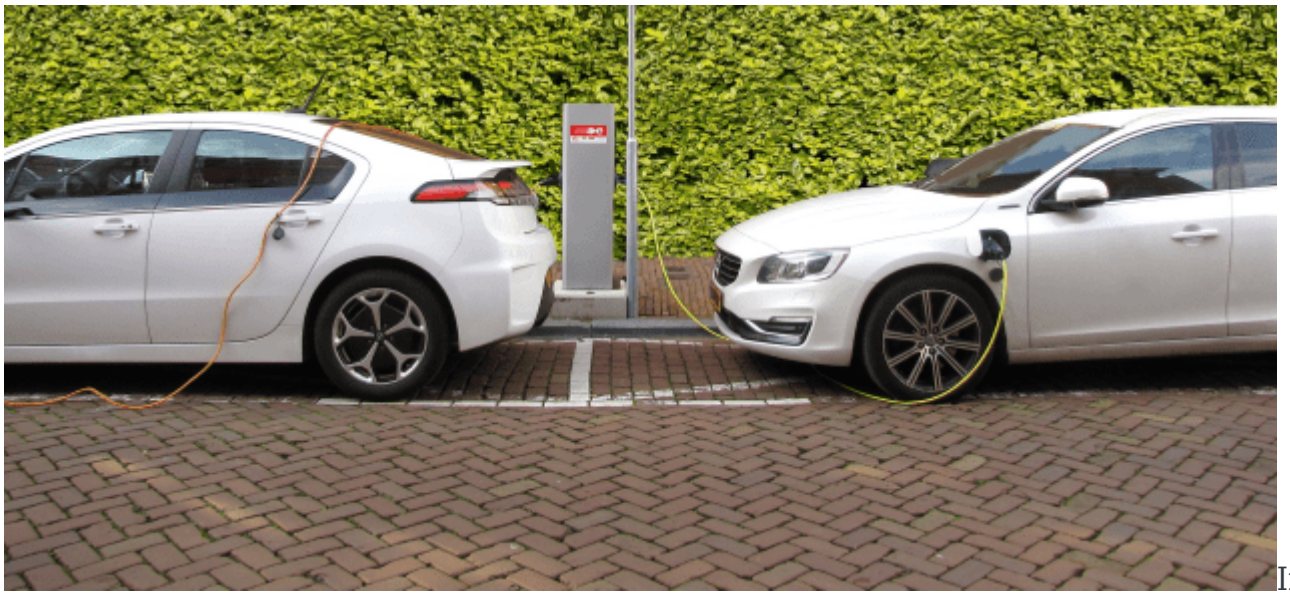
There is a famous video about the reintroduction of a small number of wolves to Yellowstone National Park. It tells of how this intervention triggered a vast chain of unforeseen events, including forests regenerating, rivers becoming more fixed in their course, and soil erosion stopping. This had fundamental implications for the park's ecosystem and very physical geography.

 In many respects, something similar is unfolding in the motor industry, with implications for people, towns, cities, economies, and even geopolitics.

Short-term issues include consumer confidence and the threat of Brexit, and these have been getting a lot of column inches of late.

The former is hitting sales, with 2017 set to see overall new car purchases fall in both Northern Ireland and the UK as a whole. The latter could see duties introduced on our foreign car imports and put the UK's role in the pan-European supply chain of the industry in jeopardy.

Some components currently pass between the UK and other parts of the EU several times

before final assembly. Disruption to the efficiency of the supply chain could be even more damaging than the introduction of tariffs.

The bigger changes in the car business though are technological. The move towards electric cars and automation will be transformational for the industry and could trigger events that will profoundly change economic ecosystems and human geography.

The transition to electric vehicles in particular is gaining speed. In 2011, the Nissan Leaf was the only electric car available in Europe; now there are 20 options. Oxford recently announced that all non-electric cars would be banned from its city centre. Electric car sales are surging at the same time as petrol and diesel car sales are falling. Indeed, the UK government has said that it will ban the latter by 2040, while other countries have announced similar moves. The death-knell of the internal combustion engine has been sounded.

It could be said that the last 100 years have actually been shaped by the internal combustion engine, impacting everything from where we live to how we work and how power has played out in business, countries and continents. So, changes to this hegemony will clearly be far-reaching.

For one, the big car manufacturers, who include some of the largest companies in the world, could be usurped by those who are electric-first. Teslas are now as relatively inexpensive as a 3-series BMW, and can already be seen on the streets of Northern Ireland. China – the largest market in the world – is pouring resource into home-grown electric vehicle manufacturing.

Electric engines are also much simpler and less likely to go wrong. This is clearly good news for owners, but not for mechanics and those who make, distribute and sell engine parts.

This entire sector could become almost obsolete. The convenience retail sector and its vast supply chain could be similarly impacted, such is its strong link to petrol forecourts. 'Charge-stations' will be much less ubiquitous given that people will likely chose to charge at home.

There are also many less obvious potential implications. The UK's public finances could be badly hit as petrol and diesel revenues currently account for almost £30billion in tax receipts per annum. Such an impact would need some deep thinking about the tax system. An end to the internal combustion engine would also create major waves in oil production. Currently around half of the world's oil is used for motor fuel. Turning off this demand would have severe financial repercussions for countries like Saudi Arabia and Russia. We can only begin to imagine the potential geopolitical impact of this in the Middle East and elsewhere.

The coming of autonomous vehicles could bring similarly seismic change. The humble taxi driver could become a thing of the past. The same fate could be bestowed on lorry drivers and a whole host of other driving occupations. The need for car parking could also be significantly reduced, with cars able to leave us to work and return to pick us up in the evening. This would free up huge amounts of land for development, particularly in city centres, helping make housing more affordable.

Accidents could even be reduced – the vast majority are currently caused by human error – meaning less pressure on the health service. Think of the reduction in costs related to legal matters, medical intervention, repairs and disruption. Expensive safety equipment could become surplus to requirements. Lyrca-clad cyclists would thrive in this safer road ecosystem.

It's hard to overstate the role the internal combustion engine and the motor vehicle have

played in shaping the world today. We are therefore at the end of one era and on the cusp of another. Like what happened in Yellowstone, experts predict that this will have far-reaching implications for human existence – some foreseen, but many not. Only time will tell if they are crying wolf

This article appeared in the Irish News today (October 17)

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