

# Diesel-powered Vehicles Continue to Dominate the Irish Market

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## Key Point

Diesel powered vehicles accounted for 64% of all newly registered vehicles in 2018, petrol for 39%, and electric vehicles, less than 1%. There has been some shift from diesel to petrol, and to petrol-hybrids in new cars. However, diesel cars account for three-quarters of all used cars imported in 2018. Notwithstanding a recent surge in electric vehicles, they still represent less than 1% of new vehicles.

## Trends in Vehicle Registrations

A total of almost 284,000 vehicles were licensed for the first time in the year 2018 in Ireland. The 220,613 private cars account for the lion’s share of vehicles, nearly 78% of the total newly licensed in 2018. The number of used (imported) cars increased over the previous year by 7.5% in 2018 to almost 100,000. This is the highest number of imported used cars licensed on record. The number of new private cars declined by 4.6% in 2018 compared with 2017.

**Table 1: Vehicles Licenced for the First Time, 2018**

	New	Used	All
<b>Private cars</b>	121,157	99,456	220,613
<b>Goods vehicles</b>	25,459	14,859	40,318
<b>Other</b>	11,249	11,559	22,808
<b>Total</b>	157,865	125,874	283,739

*Source: CSO, Vehicles licenced for the first time, December and Year 2018*

Table 2 shows the number of new and used private cars licensed for the first time by fuel type in 2017 and 2018. Overall, nearly 64% of newly licensed cars were diesel-powered in 2018, compared to 29% petrol, 6% hybrid, and less than 1% electric. The number of newly licensed diesel cars fell by about 10% between 2017 and 2018, while the number of petrol cars increased by about 15%. Hybrid cars increased by almost 80% and increased their share from 3.4% to 6%. Electric cars showed a similar growth

trend, albeit from a very low base, and they account for less than 1% of total newly licenced cars in 2018.

**Table 2: Number of new and used (imported) private cars licensed for the first time by fuel type, 2017 and 2018**

	New		Used		All	
	2017	2018	2017	2018	2017	2018
<i>Fuel type</i>	<i>Number</i>					
<b>Petrol</b>	39,391	46,776	16,464	17,837	55,855	64,613
<b>Diesel</b>	82,492	65,814	72,720	75,036	155,212	140,850
<b>Electric<sup>1</sup></b>	623	1,222	469	700	1,092	1,922
<b>Hybrid</b>	4,539	7,345	2,853	5,878	7,392	13,223
<b>Total</b>	<b>127,045</b>	<b>121,157</b>	<b>92,508</b>	<b>99,456</b>	219,553	220,613
	<b>%</b>					
<b>Petrol</b>	31.0	38.6	17.8	17.9	25.4	29.3
<b>Diesel</b>	64.9	54.3	78.6	75.4	70.7	63.8
<b>Electric<sup>1</sup></b>	0.5	1.0	0.5	0.7	0.5	0.9
<b>Hybrid</b>	3.6	6.1	3.1	5.9	3.4	6.0
<b>Total</b>	100.0	100.0	100.0	100.0	100.0	100.0

Source: CSO, *Vehicles licenced for the first time, December and Year 2018*

Note: <sup>1</sup> Includes electric and petrol/plug-in hybrid electric cars

These overall trends conceal important differences between new and used cars<sup>1</sup>. In the new car market, petrol cars are gaining, diesel declining, by about 20% in each instance. As a result, the share of petrol cars in all new cars increased from 31% in 2017 to almost 39% in 2018, while the share of diesel cars declined from 65% to 54% of the total. In the imported used car market, however, the number of diesels increased, from 72,720 in 2017 to 75,036 in 2018, although their share of all used cars fell by a few percentage points. These trends in the used imported car market are thus counteracting the trends in the new-car market, which is beginning to show a shift away from diesel. It should also be noted that over 50% of used cars are 3-5 years old and another almost 30% are over 6 years old. Older cars tend to have higher emissions than new cars, although they also have lower life-expectancy.

## Policy

In the early part of this century diesel was promoted as a more environmentally friendly fuel. Diesel engines generally use less fuel to achieve the same performance as a petrol engine, and CO<sub>2</sub> emissions of diesel cars tend to be lower. In 2008 VRT and motor tax changes were introduced in Ireland to incentivise purchase of more energy efficient

<sup>1</sup> Used cars that are licensed for the first time in Ireland are imported.

cars. Vehicles were categorised in 7 CO<sub>2</sub>-emission-level bands and VRT and tax increased with emission-level. A revised banding structure was introduced with high and low emission bands in 2013. The *National Policy Framework: Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030*<sup>2</sup> notes that these incentives have been “very effective in influencing the purchasing decisions of motorists in favour of more fuel-efficient vehicles but it has undoubtedly contributed to a significant transition to diesel fuelled cars in Ireland.” (p. 21).

**Table 3: Number of Vehicles by Fuel Type, 2007, 2014 and 2017**

<b>Fuel type</b>	<b>Number</b>			<b>%</b>		
	<b>2007</b>	<b>2014</b>	<b>2017</b>	<b>2007</b>	<b>2014</b>	<b>2017</b>
<b>Petrol</b>	1,616,903	1,220,367	1,035,610	66.2	48.5	38.7
<b>Diesel</b>	821,212	1,275,589	1,605,660	33.6	50.7	60.0
<b>Electric<sup>1</sup></b>	0	701	3,784	0.0	0.0	0.1
<b>Hybrid</b>	0	9,073	21,676	0.0	0.4	0.8
<b>Total</b>	2,441,564	2,515,322	2,675,879	100.0	100.0	100.0

Source: DTTAS, various years, *Irish Bulletin of Vehicle and Driver Statistics*, 2007, 2014 and 2017

Note: <sup>1</sup> Includes electric and petrol/plug-in hybrid electric cars

The shift to diesel in the national fleet is evident in Table 3, which shows the total vehicle stock, including all classes of licensed vehicles (cars, goods vehicles, motor cycle, public service vehicles and tractors, etc.) in 2007, 2014 and 2017. In 2007, prior to the introduction of the revised VRT and motor tax bands, petrol vehicles accounted for two-thirds of the entire vehicle fleet in Ireland, diesel for a third. By 2014 diesel accounted for just over half the fleet, petrol for less than half, and hybrid vehicles were beginning to make an appearance. The growth of diesel continued, to 60% of the fleet in 2017, while petrol declined to less than 39% of the total.

The increase in the number of diesel vehicles gives rise to concerns about the health implications of higher nitrogen oxides (NO<sub>x</sub>) and nitrogen dioxide (NO<sub>2</sub>) and fine particulate matter (PM) emissions from these vehicles, particularly in urban areas. The Climate Change Advisory Council (2018) recommends that the excise tax on diesel should be raised to that on petrol to bring about environmental and health benefits as well as to reflect their overall environmental impacts across greenhouse gas emissions (p. 56) and. However, recent Budgets have retained the tax and price differential between diesel and gas fuel, thus continuing to incentivise diesel.

More generally, and over the longer term, Irish policy is to move away from fossil fuelled vehicles: electric vehicles (EVs) are the main alternative. The *National Policy Framework:*

<sup>2</sup> Department of Transport, Tourism and Sport (2017) *National Policy Framework: Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030*.

*Alternative Fuels Infrastructure for Transport in Ireland 2017 to 2030* set a target of 20,000 electric passenger cars by 2020, rising to 250,000 in 2025 and 800,000 by 2030. We are a long way from these targets, with less than 3,800 EVs in the entire national fleet in 2017, and just 1,922 newly licensed private cars added to that in 2018. It should be noted that there are ethical and environmental issues in the production of car batteries, and that the environmental impact of EVs is only as positive as that of the national electricity generating system.

A number of policies have been introduced in recent years to support a transition to electric vehicles. These include VRT relief of up to €5,000 for EVs (both Battery and Plug-in Hybrid Electric Vehicles); purchase grants of up to €5,000 for purchase of new EVs; grants for the installation of EV chargers at home; reduced motor taxes on EVs; reduced road tolls for EVs; and zero benefit in kind tax for company EVs.

Previous policy had the unintended consequence of increasing diesel usage. This at least indicates that consumers do respond to incentives in the transport market and suggests that well-designed policies could lead to desired outcomes in transport. Such measures might include eliminating the price advantage of imported diesel cars and fuel in the short term. In the longer term, further measures to offer strong price incentives, as well as investment in the vehicle-charging infrastructure, are needed to encourage the transition to zero emissions in transport.