Spain

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With a total land area of 498,800 km2 (301,000 miles), 80% of Spain's nearly 47m inhabitants are urban. The country is ranked 30th by world population in 2020. GDP per capita in 2017 was just over \$32,000. Madrid, the capital, has approximately 3.3 million inhabitants.

As a country, Spain has very limited domestic energy resources. Like the rest of Europe, Spain's coal industry is in decline due to higher production costs, cheaper imports, stricter environmental standards and competition from natural gas, LNG and renewables. Subsidies have also been mostly dropped or reduced, resulting in mine closures and conversion of coal-fired to gas-fired power generation.

The vehicle parc, manufacturing and sales

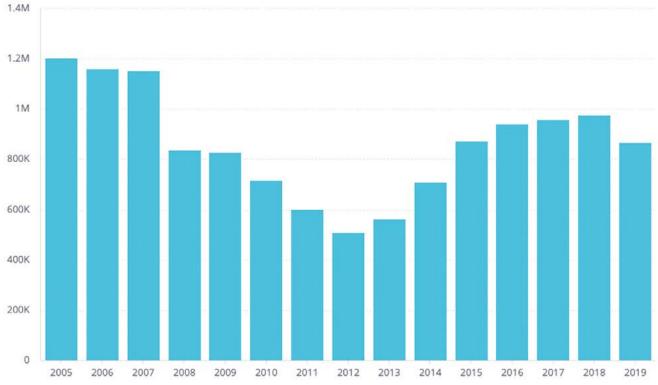
Spain's motor vehicle manufacturing represents a national success story from its early beginnings, with the likes of the La Cuadra classic Hispano-Suiza car from a company founded in 1898 to produce electric

cars. Motor manufacturing ramped up in the 1950's mainly through SEAT (now VW-owned). By 2019, the country was producing some 2.8m vehicles, making it the second largest car manufacturer in the EU and 9th in the world. Being such a large producer of automobiles, Spain's steel industry has also benefitted.

Spain is home to 17 OEM production plants including Daimler AG, PSA, Renault, Nissan, Opel, Ford and Volkswagen AG as well as parts manufacturing. Commercial vehicle production is led by domestic producer, Iveco. From the total output, Spain exports around 80% of its production to more than 130 countries. Of these, Germany, the United Kingdom, and France accounted for 54% of exported vehicles.

Between 2007 and 2012, annual vehicle sales plummeted from 1.6m to just 700k. Since then registrations have picked up but are not close to the pre-financial crisis peak. In 2018, new registrations had risen to 1.33m, dipping again last year to 1.3m.

Passenger car ownership in Spain by year of registration at Dec 2019. Total Parc=~27.2M



Source: OATS

The dominant brand was SEAT, in particular its Leon and Ibiza models, until 2019 when Peugeot overtook the domestic brand's 110.8k registrations to record 113.7k new sales. VW was almost 20k behind in third place, followed by Renault and Citroen. Of the luxury brands, Mercedes ranked 12th, with Audi 14th and BMW in 15th place. As with the rest of Europe, diesel sales have seen a downturn in the Spanish market.

Despite the volatility in new vehicle sales, the overall Spanish vehicle parc has risen more or less continually since 1990. A rapid acceleration over 20 years from the 12m light duty vehicles registered in 1990, saw the parc plateau and dip slightly before rising again to its 2019 level of 27m. In terms of vehicle age, the parc as of December 2019 shows a curve that reflects post-crash sales, with vehicles registered between 2005-7 and then 2015-19 being the predominant cars on Spanish roads.

Commercial vehicle sales have also shown volatility, with a peak of 430k registrations in 2005 to a figure of almost half that number, 243k, in 2019. That said, Spain posted some of the strongest sales growth in the segment across the whole of Europe in 2018, with buoyant light commercial vehicle sales where the Spanish parc is forecast to be around 3.3m by 2022.

Whilst producing EV and hybrid vehicles in its manufacturing mix, consumer take-up for alternative powered vehicles remains slow, even with an increase in EV charging points. But, like many other EU countries, it appears potential buyers remain hesitant until either mandatory regulation is introduced, vehicle prices come down, charging points become more common place, and/or vehicle range improves. The challenge for potential consumers without the benefit of off-street parking and charging is also significant in Spanish cities.

Base oil production

Spain has virtually no natural oil and gas reserves and relies on imports for both these products. Crude imports come primarily from Nigeria (15.2%), Mexico (13.9%), Saudi Arabia (11.1%) and Libya (10.5%) amongst others, with Government regulations limiting the import volumes from any single country to ensure supply diversity. Natural gas is mainly via pipeline from Algeria - which supplies 51% of requirements - followed by Nigeria (12%), Quatar, Norway, Trinidad and Tobago.

However, as with the country's motor industry, Spain's oil refining and finished products industry is well established. Its nine refineries, including one on the island of Tenerife, make Spain the third largest producer in Europe after Germany and Italy, producing about 1.54m b/d as at 2017. This equates to 1.6% of the world's total capacity and 12% of Europe's capacity. The facilities are operated by five companies: CEPSA, ASESA, Repsol YPF, BP and Petronor, with most of the country's refined petroleum products exported.

Spain can call on the very latest base oils to produce high quality lubricating oil for industrial and automotive use. The virgin base oil refinery in Cartagena is one of only two plants in the EU to produce high quality Grp III base oil. With a 13,300 b/d capacity, the facility is owned in a 70:30 split between South Korea's SK Lubricants and Spain's Repsol YPF. As well supplying high-quality oil for finished product to the domestic market, the output is also formulated for OE first-fill lubricants for the country's manufacturing plants.

Cartegena is also home to a Repsol Grp I base oil refinery, producing solvent neutral grades SN 80 to SN 500 and two bright stock products. Spanish-owned CEPSA also produces Grp I base oil at its Gibraltar-San Roque refinery near Algeciras.

Spain is very active in the collection and re-refining of used lubricating oils, providing another source for high-performance finished lubricants.

Sertego, with four plants spanning the country, produces three different high-quality base oils from used oil. They also have a service collecting marine oily waste and bilge products from the marine industry from fishing and ocean-going vessels which are recycled to create fuel which can be reused.

Meanwhile, Cator, based in the Catalonia region at Tarragona with a treatment capacity of 42,000 tonnes/year, additionally collects used oil from other Autonomous Regions of the country. Cator also produce a number of base oils, including an asphaltic type product used for waterproofing fabrics and road asphalt.

It should be noted that the Spanish oil industry is facing stiff competition from the renewable energy sector which has grown significantly. By 2018, the

nation was third in the world in terms of net value for wind power technology exports, just behind Denmark and Germany, employing nearly 23,000 people in R&D alone. As a result, wind energy has become the second largest energy source in the country, with a capacity of nearly 24000 MW in 2018 providing 19% of the country's generated energy mix.

However, with fuel tax accounting for some six percent of Spain's total revenue in 2018, regulators face a challenge when introducing subsidies if renewables are encouraged to replace petroleum products in the future.

The lubricants market

Predictably, the Spanish lubes market has taken a significant hit as a result of the COVID pandemic. The core producers, representing more than 80% of the total market saw 140Kt of product brought to market in the first half of 2020 – some 37Kt less than the same period in 2019, equating to a 21% decline. While the automotive and industrial sectors were worst affected, process and marine lubes were also badly hit, as were greases.

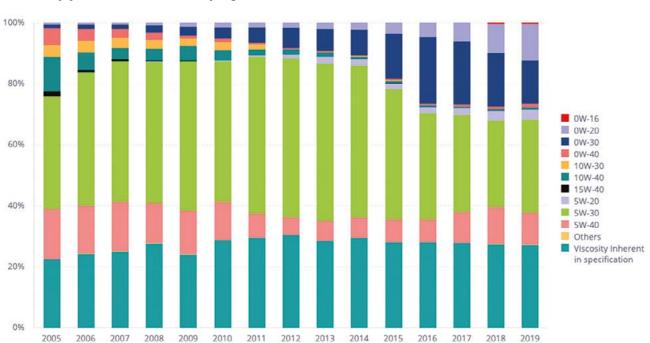
Although there are signs of a bounce-back in the second half of the year, the figures will be worrying news for the country's domestic producers – predominantly Repsol and CEPSA which manufacture finished product across all the key segments from

automotive to industrial and marine. Automotive lubricants dominate the market over industrial – around 73-76,000Kt per half year against 60-67,000Kt – although the gap has narrowed due to the pandemic.

With annual lubes demand standing at around 300,000 tonnes in 2019, imported products rose by almost 70% between 2013 and 2019. Processing lubes took the highest monthly share of the market, also being the last to feel the effects of the pandemic, while greases were already showing a decline towards the end of 2018 as the rest of the sectors were displaying a slight rise. Hardest hit has been the marine sector, which took a dramatic downturn in sales in early 2018 and has failed to recover significantly since.

As with most European countries, demand for high-performance, low viscosity lubricants has increased as the vehicle parc has moved towards newer vehicles. 2015 saw a significant increase in 0W products and this has increased year-on-year, with 0W-30 gradually being overtaken by 0W-20 lubes, and 0W-16 within the last couple of years, all of which have gradually eclipsed demand for 5W-30.

Of those products, the only OEM specifications holding a notable overall percentage share of the domestic car lube market is VW, with the dominant products being independent, non-OEM lubricants.

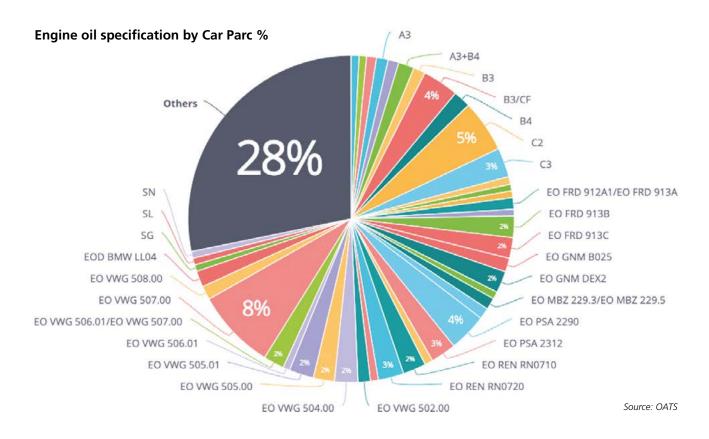


Parc % by year of manufacture by significant viscosities

Source: OATS

In summary

Spain was one of the countries hardest hit by the COVID pandemic in Europe and the picture will clearly take some time to re-focus for the lubes industry. However, it is clear that the major lubes producers as well as the smaller independents face a challenging and volatile market, with a significant demand for imported brands as consumers seek high-performance products. The rise in production and demand for renewable energy, and Spain's apparent leadership in this area, has created a growth industry for recycling of industrial oils. This presents an opportunity for Spain to become a global leader in 'green' energy in general and the lubricants industry in particular.



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