POTEN TANKER OPINION

Growing At Ludicrous Speed?

Electric cars will impact future gasoline demand

Gasoline and diesel demand are the mainstay of the oil markets worldwide, as the transport sector accounts for more than half of all of global oil demand. Worldwide population growth and rapid economic progress in developing countries are expected to underpin further growth in transportation fuels. In their latest Medium Term Oil Market Report, the IEA forecasts that non-OECD gasoline demand will rise by 4.0% per annum in 2015-2021, while in the OECD countries it declines by 1.1%. In the OECD, strong efficiency gains offset an only modestly expanding vehicle fleet. Some of these efficiency gains come from the implementation of stricter Corporate Average Fuel Efficiency (CAFE) Standards in the United States. In this opinion, however, we focus on another development that will have an impact on long-term demand for transportation fuels: the increasing penetration of plug-in electric vehicles (PEVs).

While electric cars still only represent a very small percentage of car sales worldwide, demand is growing in leaps and bounds. By mid-September 2015, over one million highway legal plug-in electric passenger cars and light utility vehicles had been sold worldwide. As of the end of 2015, the United States was the biggest market for electric cars with 410,000 units, China ranks second (258,000 cars) and Japan third (approximately 130,000 units). In Europe, over 419,000 plug-in electric vehicles were registered as of the end of last year, with the Netherlands and Norway as the largest markets.

While the U.S. is the biggest market in terms of existing stock of PEVs, sales in China and Europe are growing much faster and these regions are likely to overtake the U.S. this year. While the market share of PEVs in the U.S. stabilized at around 0.7% in 2015, their share of sales in China increased from 0.23% in 2014 to 0.84% in 2015. The countries in the world where PEVs have the highest penetration are in Europe. In the Netherlands almost one in ten cars sold are PEVs and in Norway, an astounding 22% of cars sold in 2015 were electric.

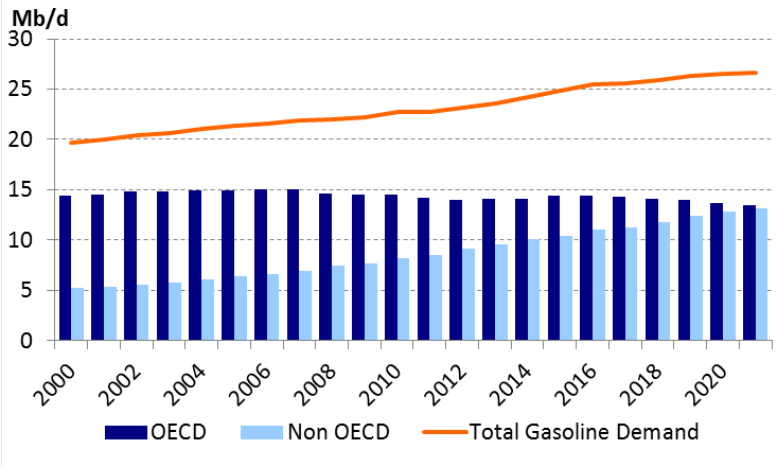
The success of electric cars in Norway has a lot to with government (tax) incentives and investments, such as the build-out of a nationwide charging station infrastructure to eliminate 'range-anxiety' – the fear of running out of electrical charge prior to reaching your destination. However, owning a PEV in Norway gives you other perks: PEVs can use bus and taxi lanes, PEV's do not pay road tolls and they go on ferries for free, among other things. The goal of the Norwegian government is that by 2025 close to 100% of new cars sold will be emission-free PEVs. This is part of Norway's plan to reduce its carbon footprint by 40% over that period.

While Norway's circumstances are unique and cannot be easily translated to other countries in the world, the trend towards cleaner energy and away from fossil fuels is also gaining momentum in other parts of the world. In China, for example, sales of PEV's more than quadrupled in 2015 compared to 2014, most of them modestly priced models from domestic carmakers. Despite this growth, regular cars still outsell PEVs 99 to 1 in China, but this could change in the future. China's goal is to create a world-leading electric car industry and, in the process, decrease its dependence on imported oil and reduce urban air pollution.

Battery prices are falling and prices for electric cars are expected to approach those of their internal-combustion counterparts within 10 years. This could be the point of liftoff for sales. Oil demand in developed mature markets, such as Europe, may decline as a result, further reinforcing the shift of oil and tanker demand towards Asia where gasoline demand growth will continue for the foreseeable future, despite the penetration of PEVs.

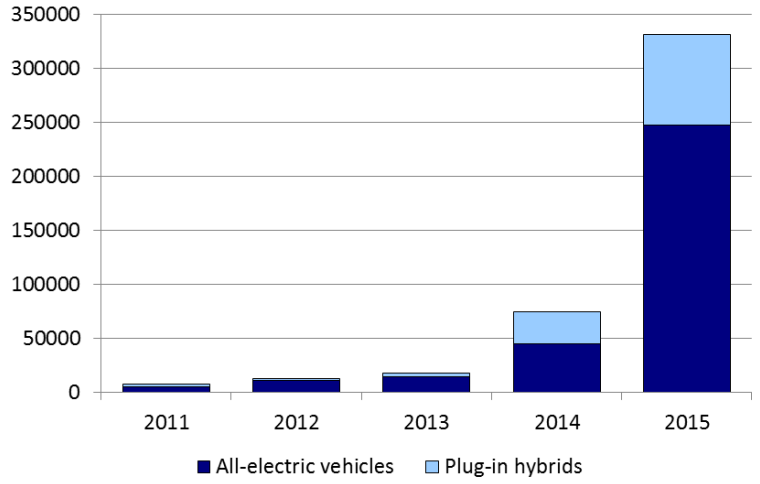
The bottom-line is that the gasoline market may look very different 15-20 years from now. This may seem like a long time from today, but the tankers that are currently under construction will still be sailing the oceans.

Fig. 1: OECD vs Non OECD Gasoline Demand



Source: IEA

Fig 2: Sales of Electric Cars in China (2011-2015)



Source: China Association of Automobile Manufacturers