



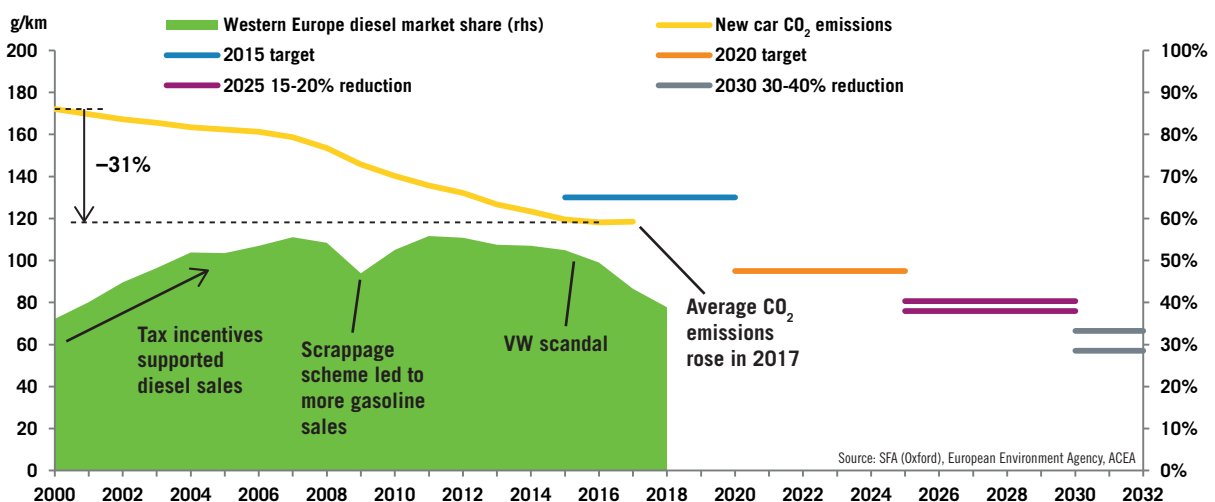
MARKET SPOTLIGHT

EU will struggle to hit CO₂ emissions targets without diesel

Auto manufacturers have been showing off their all-electric concept cars at the Paris Motor Show. Given the prominence of new battery electric vehicles (BEVs), it could seem as if internal combustion engines were no longer needed. However, when it comes to launching new model lines, manufacturers are not only introducing new gasoline models, but also diesel models feature just as prominently. In fact, for several models there are more diesel engine options than gasoline.

CO₂ emissions targets are being tightened. The European Parliament, EU governments and the European Commission have proposed different targets for reducing light vehicle CO₂ emissions. These vary from a 15% to a 20% reduction in 2025 and from 30% to 40% by 2030. Negotiations will continue to finalise the figure. Whichever is agreed, the expectation has to be that BEV sales will need to increase significantly to reach it. However, **for many people BEVs still do not meet their needs** in terms of costs and lifestyle compatibility, so BEV ownership is not a realistic option.

Average EU CO₂ emissions from new cars



EU governments' CO₂ targets appear to be incompatible with cities' local air quality issues. Manufacturers' strategies for meeting CO₂ targets were built around diesel vehicles (which produce less CO₂ than an equivalent gasoline engine), sales of which are now dropping. The threats of banning diesels from cities and concern over second-hand values have discouraged people from buying diesels. This is happening just at the point that more sales are needed if the 2020 CO₂ target is to be met. Diesels will most likely be needed in the medium term too, because BEV charging infrastructure in Europe would need to expand more than tenfold by 2025 to support the necessary increase in BEVs to reach the CO₂ target.

If consumers buy the new diesel models, which meet current emissions standards, then this supports platinum demand in autocatalysts. However, **if the trend towards gasoline vehicles continues, then palladium and rhodium will benefit at platinum's expense.**



PRECIOUS METALS REVIEW

79 Au Gold

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,220	1.55%	1,226	11/10/2018	1,183	08/10/2018
€/oz	1,055	1.04%	1,059	12/10/2018	1,029	10/10/2018

Gold gained on a safe haven bid as stocks and the dollar fell. Stock markets fell sharply worldwide last Wednesday. The NASDAQ Index dropped 4.4%, the largest daily decline in seven years, and extended losses by another 1.5% on Thursday. The CBOE Volatility Index (VIX), widely referred to as the “fear index”, jumped to its highest level since the stock market correction in February. Gold gained \$32/oz (2.7%) across the two days as the dollar index dropped 0.7%. However, the US 10-year Treasury yield has stabilised around 3.15%, above the previous 2018 high of 3.11%. Furthermore, the Consumer Price Index measure of inflation fell to 2.3% year-on-year in September from 2.7% in August and 2.9% in July. This is despite unemployment being at 3.7%, a 49-year low. Low inflation and high yields

are not a favourable combination for gold, but it could still gain if stock market volatility and dollar weakness continue.

The risk of a short-covering rally has grown as shorts on gold increased in a period of flat prices. Short positions held by large speculators have risen by 0.84 moz in the three weeks ending 2 October, to 21.4 moz. Over the same period the gold price was up just \$8/oz to \$1,204/oz, trading in a tight range around \$1,200/oz. The increase in shorts, along with a 0.6 moz reduction in long positions, has resulted in the net position moving to the shortest level in over 17 years. This has increased the risk of sudden, sharp positive price moves as speculators cover their short positions.

47 Ag Silver

	Close	Weekly change	High	Date	Low	Date
\$/oz	14.59	-0.03%	14.71	12/10/2018	14.24	10/10/2018
€/oz	12.63	-0.52%	12.81	12/10/2018	12.34	11/10/2018

A down-graded outlook for the global economy lowers expectations for the silver price. In its October edition of the World Economic Outlook, the International Monetary Fund has reduced its forecast of global GDP growth to 3.7% from 3.9% for both 2018 and 2019. Downwards revisions were made for both advanced and developing economies. The euro area underperformed expectations this year and US GDP is expected to suffer in 2019 from the trade measures being introduced. China, and other Asian nations, are also projected to see weaker growth due to lower world trade volumes, which saw a large

negative revision of -0.6% and -0.5% in 2018 and 2019 respectively. Silver has a wide range of end uses, many of which are impacted by economic conditions. Jewellery demand broadly follows consumer spending which is generally lower when GDP growth is slower. Industrial demand also fluctuates with GDP as companies' performance is dependent on the economy. Overall, lower GDP growth should lead to lower industrial silver demand and prices. However, should the gold price see a strong short covering rally, silver would likely benefit from this move as well.

78 Pt Platinum

	Close	Weekly change	High	Date	Low	Date
\$/oz	839	2.33%	845	11/10/2018	810	08/10/2018
€/oz	726	1.87%	729	11/10/2018	705	11/10/2018

Platinum futures held by large speculators are back in a net long position. The net position has increased 0.95 moz over the last four weeks to reach 0.35 moz on 2 October. Over the same period the platinum price increased \$54/oz to \$833/oz but the last time the large specs net positions was at this level the price was \$897/oz. The rapid rate of unwinding in the shorts compared to the rate they were put on suggests that speculators believe this price move has momentum and will continue to increase.

EU governments agreed on a 35% reduction in passenger car CO₂ emissions by 2030. This is halfway between the 30% target recommended by the European Commission (EC) and the 40% target passed at the European parliament. Seventeen EU nations supported the higher target but lobbying by Germany and Central European nations reportedly led to the compromise. A target of less than 35% in the final agreement is now unlikely. An ambition that will likely benefit EVs but, as discussed in the spotlight, could make Europe realise its need for diesels as well.



PRECIOUS METALS REVIEW

46 Pd Palladium

	Close	Weekly change	High	Date	Low	Date
\$/oz	1,068	-0.49%	1,096	11/10/2018	1,059	08/10/2018
€/oz	924	-1.04%	947	11/10/2018	921	08/10/2018

Palladium auto demand could soften. Trade worries hit Chinese auto sales by European and American automakers in September. VW and Jaguar Land Rover (JLR) have reported a drop in sales in China of 11% and 46%, respectively, last month. GM also reported a fall in sales, down 15% in the third quarter of 2018. VW has said there is an "uncertainty among consumers" resulting from the trade war between China and the US. This follows similar messages issued by Daimler and BMW in the last few weeks. Imported cars are typically larger luxury cars and SUVs which may also be suffering from the higher cost of fuel that is leading consumers to buy smaller cars. These poor results, in addition to a decline in total vehicle sales in July and August, and a potential shift to smaller cars indicate palladium demand may not meet expectations.

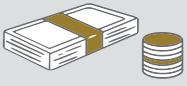
Climate report could force policy to favour BEVs. The Intergovernmental Panel on Climate Change (IPCC), an internationally accepted authority on climate change, has published a report in support of limiting global warming to 1.5°C. It highlights the benefits compared to the 2°C target stipulated as the maximum allowable increase in the Paris Agreement on climate change. The report states that to limit global warming to 1.5°C, global emissions of CO₂ by humans would need to fall by about 45% from 2010 levels by 2030. The findings of the report increase the pressure on governments worldwide to introduce programmes to address climate change and will be a key scientific input for the conference in December when governments will review the Paris Agreement. This increases the likelihood that BEVs, hybrids and small-engine vehicles will be promoted by government policy, reducing demand for palladium if gasoline vehicle sales decline.

45 Rh 44 Ru 77 Ir Rhodium, Ruthenium, Iridium

	Rhodium	Ruthenium	Iridium
Reporting week	\$2,500/oz	\$285/oz	\$1,470/oz
Previous week	\$2,585/oz	\$285/oz	\$1,470/oz

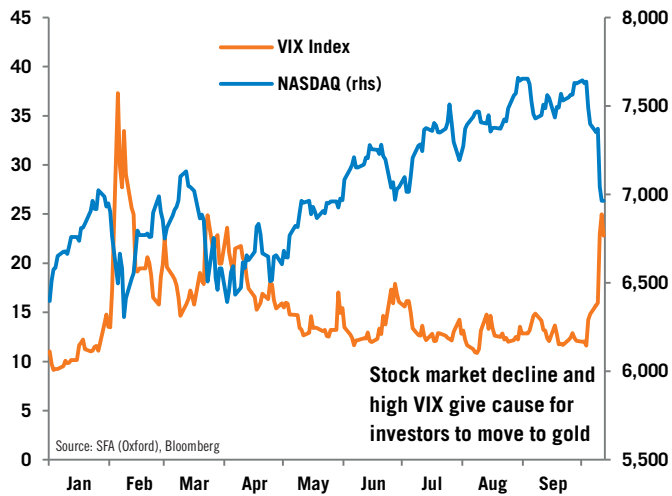
The rhodium price fell \$85/oz (3.3%) last week to \$2,500/oz. This is the largest weekly decline since November of last year when the price dropped from \$1,550/oz to \$1,400/oz. The price then recovered back to \$1,550/oz within a month and this seems likely to happen again. The recent price drop is probably just a correction following the sudden \$160/oz price rise three weeks ago, not an indication of a change in trend. The sell-off was, to some extent, triggered by a liquidation of speculative positions. The market is still nervous as

overall liquidity is tight and the financing rates remain at elevated levels. The rhodium price is expected to continue to rise for the remainder of the year as no relief for the tight market conditions is anticipated. In the longer term, the displacement of gasoline vehicles by BEVs will affect rhodium just as it does palladium, given their combined use in gasoline vehicle exhaust catalysts. Ruthenium and iridium prices ended the week unchanged.

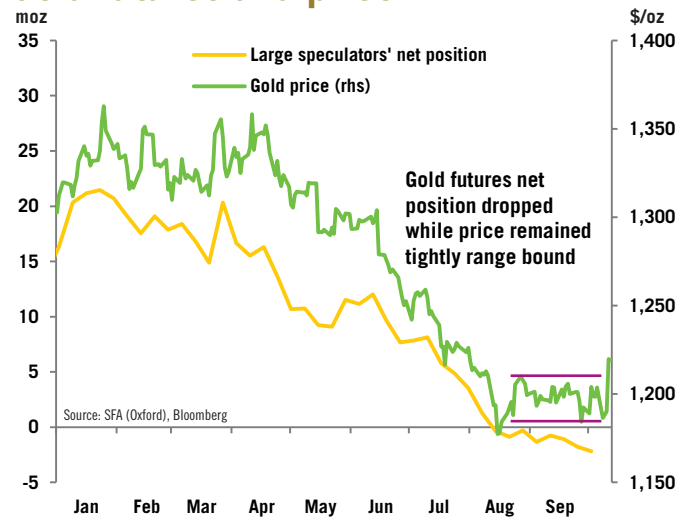


TRENDS AND INVESTMENTS

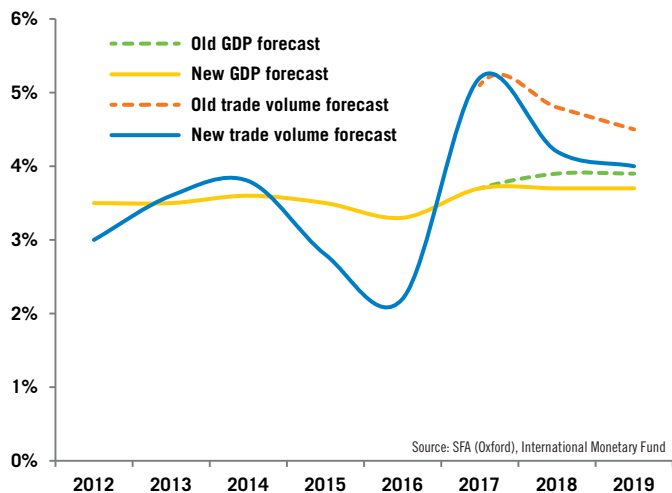
VIX and NASDAQ Indexes



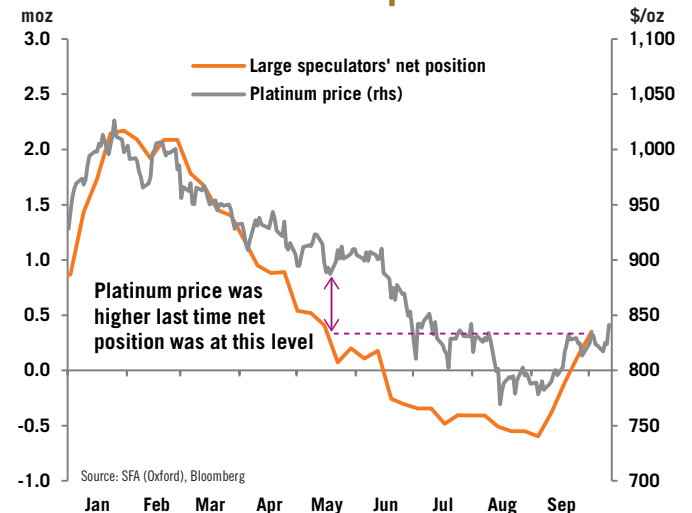
Gold futures and price



IMF global economic growth forecasts



Platinum futures and price



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