



Weekly Precious Metals News Articles: November 13, 2020

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Below is a cross section of relevant news article to the world of Precious Metals:

Markets, Supply & Demand, Investment, and Industrial Applications.

Printable PDF version attached. Enjoy-

Gold

- **It's All Yellow: Even amid a damp sale season, gold's allure refuses to diminish**
 - Jewelers in India may be staring at their worst sales in 12 years in the key festival quarters. The pandemic and weak economic growth are likely to push sales below last year's 194 tonnes to the lowest quarterly numbers since 2008, says Chirag Sheth, a consultant at London-based Metals Focus, which provides data to the World Gold Council (WGC). The October Gold Demand Trends report by the WGC also said that global gold demand declined by 19% during the July-September quarter to 892.3 tonnes, the lowest quarterly total since Q3 of 2009 due to coronavirus. The total global demand during July-September 2019 stood at 1,100.2 tonnes, according to the report.
https://www.financialexpress.com/lifestyle/diwali-with-a-difference-its-all-yellow-even-amid-a-damp-sale-season-golds-allure-refuses-to-diminish/2123201/?utm_source=msn&utm_medium=Referral
- **Gold-catalyzed reaction releases an active drug to kill cancer cells**
 - The team used Ayba to create prodrugs of two amine-containing anticancer compounds. Adding gold to these prodrugs in cancer cells released the active drug to kill the cells, the team showed.
<https://phys.org/news/2020-11-gold-catalyzed-reaction-drug-cancer-cells.html>
- **Monday: Gold plunges 5% as stocks soar on COVID-19 vaccine euphoria**
 - Gold slumped more than 5% on Monday as news of the first successful late-stage COVID-19 vaccine trials prompted investors to dump safe-haven bullion and flock to riskier assets.
<https://www.reuters.com/article/us-global-precious/gold-plunges-4-as-stocks-jump-on-covid-19-vaccine-euphoria-idUSKBN27P1Z5>
- **Tuesday: Gold Price Rallies from \$100 Vaccine Plunge, Nasdaq Slips Again as Bond Yields Reach March Highs**
 - Gold prices regained almost a third of yesterday's \$100 plunge in Asian trade Tuesday before easing back to \$1880 per ounce in London as global financial markets stabilized from the apparent shock of pharma-giant Pfizer announcing successful trials of a Covid-19 vaccine.
<https://www.bullionvault.com/gold-news/gold-vaccine-111020201>

Semiconductor Related Articles (impacting Precious Metals electronics):

- **Capacity constraints ongoing, ASE says**
 - ASE Technology Holding Co's chip assembly and testing capacities are tight, particularly in its (Gold, Silver and Pd on Copper) wire-bonding service, where constraints are expected to continue through the second quarter next year, company officials said on Friday.

<https://www.taipeitimes.com/News/biz/archives/2020/11/02/2003746180>

- **Equipment makers see rising revenue proportions from semiconductor sector**
 - Manufacturing equipment makers have seen rising contributions to revenues from wafer foundry and IC packaging/testing service providers.
<https://www.digitimes.com/news/a20201111PD204.html>

Silver

- **World could add more than 900 GW of solar by 2025 if politicians grasp the nettle – IEA**
 - With the International Energy Agency publishing its latest five-year clean energy forecast today, pv magazine takes a look at the solar content of the 162-page document.
 - The world will add 734 GW of solar over the next five years even in a sub-optimal policy environment, according to the global thinktank.
 - Matt: 734 GW at today's silver loadings = 603 Moz of Silver or average 121 Moz/year through 2025.
<https://www.pv-magazine.com/2020/11/10/world-could-add-more-than-900-gw-of-solar-by-2025-if-politicians-grasp-the-nettle-iea/>
- **Spanish government to allocate over 10 GW of PV in auctions until 2025**
 - For the following five years, including 2025, solar is expected to have a quota of over 1.8 GW per year and wind 1.5 GW.
<https://www.pv-magazine.com/2020/11/09/spanish-government-to-allocate-over-10-gw-of-pv-in-auctions-until-2025/>
- **Mint website is overwhelmed by WWII American Eagle sales**
 - The U.S. Mint recorded the “highest website traffic we have ever experienced” Nov. 5 as sufficient orders were placed to absorb the limited mintages of privy-marked Proof 2020-W End of World War II 75th Anniversary American Eagle gold and silver coins.
 - The 1-oz gold \$50 coin limited release of 1,945 coins at \$2,600 sold out **within seven minutes**. The 1-oz silver coin limited release of 75,000 coins at \$83 each sold out in **90 minutes**.
<https://www.coinworld.com/news/us-coins/mint-website-is-overwhelmed-by-wwii-american-eagle-sales>

Precious Metals Mining:

- **Franco-Nevada's Q3: A Record-Breaking Quarter**
 - Summary: Franco-Nevada's gold equivalent sales grew to 134,817 toz.
 - The revenues, operating cash flow, and net income set new record highs of \$279.8 million, \$212.2 million, and \$153.9 million respectively.
 - The net debt declined to -\$466.8 million.
 - Franco-Nevada keeps on expanding its asset portfolio.
<https://seekingalpha.com/article/4385318-franco-nevadas-q3-record-breaking-quarter>
- **Mexico's Mining Rebound to Be Driven by Metal Prices and the Sierra Madre Occidental Gold Belt**
 - Held back earlier in 2020 by ongoing COVID-19 challenges, Mexico's mining sector is set for a major rebound spurred by a surge in metals prices. Much of the rebound will leverage the strong jurisdictions such as the Sierra Madre Occidental gold belt, which includes major producing mines such as the Mulatos Mine, which produced more than 2 million ounces of gold and generated more than \$400 million in free cash flow since 2005. The Sierra Madre Occidental range also contains a significant silver belt that's attracting investment and further exploration and development.
<https://www.marketwatch.com/press-release/mexicos-mining-rebound-to-be-driven-by-metal-prices-and-the-sierra-madre-occidental-gold-belt-2020-11-10-81975156>
- **PGM's: Northam Platinum's Booyendal operation: Looking true North**
 - Northam Platinum's Booyendal PGM operation, situated on the eastern limb of the Bushveld Complex, continues to fulfil the true definition of being a new age, new generation mine.

- The expansion programme valued at R5.6 billion will see the Booyensdal complex comprising Booyensdal North and South producing a steady-state run rate of 500 000 4E PGM ozpa.
- Part of the expansion programme includes the development of a new mining complex referred to as the Booyensdal South project. (The original operating footprint includes a North UG2 module expanded with its deepening project and North Merensky module).
<https://www.miningreview.com/platinum-group-metals/northam-platinums-booyensdal-operation-looking-true-north/>
- **Nigerian Owner Of Bravura Holdings To Invest \$1bn In Platinum Mining In Zimbabwe**
 - Nigerian billionaire owner of Bravura Holdings Ltd, Benedict Peters, will invest \$1bn in the development of a platinum mine in Zimbabwe, the company said.
<https://thewhistler.ng/nigerian-owner-of-bravura-holdings-to-invest-1bn-in-platinum-mining-in-zimbabwe/>
- **Mining must not come at cost of environmental degradation**
 - Mining is among the most destructive activities in the environment. Although there are some laws in place that are intended to minimize the damage, they are not enough to prevent the irredeemable footprint of mining on nature, especially in cases where the regulations are difficult to enforce.
<https://www.msn.com/en-xl/news/other/mining-must-not-come-at-cost-of-environmental-degradation/ar-BB1aQ7Ke>

E-Waste & Precious Metals Recycle Related:

- **Shell (RDS.A) JV to Evaluate Catalyst Recycling Unit in China**
 - Royal Dutch Shell plc's RDS.A joint venture with specialty metals and minerals producer AMG Advanced Metallurgical Group N.V. signed a Memorandum of Understanding (MoU) with Shandong Yulong Petrochemical Co., Ltd. to assess the construction and operational prospective of a leading spent-catalyst recycling facility in Yantai, China. The joint venture — Shell & AMG Recycling B.V — was formed in 2019 and is designed to expand AMG's clean recycling technology globally.
<https://uk.news.yahoo.com/shell-rds-jv-evaluate-catalyst-155103699.html?guce>
- **Seminar: Closing The Loop on The Global E-Waste Challenge**
 - Registration Link - 18-19 November
<https://www.ewaste-expo.com/>
- **PGM of Texas Announcement**
 - Happy to announce that we will be adding a new location to our company. Opening next week to serve So. California. Would also like to welcome Arran Swift and Peter Chong to our growing family.
<https://www.linkedin.com/feed/update/urn:li:activity:6733033182767169537/>
- **Crystalline Solar PV Recycle R&D: New method to recover silicon from end-of-life modules**
 - Compared to other techniques based on chemical reactors and organic solvents, the proposed method is said to be able to maintain a "good mechanical yield" in the recovered solar cells. According to its creators, this technique allows the reuse of silicon from the recycled panels in the production of new solar cells.
 - Pyrolysis in a fluidized bed reactor is the best technique for an industrial scale recycling process which contains very fine sand particles which act like a liquid due to high temperature.
<https://www.pv-magazine.com/2020/11/09/new-method-to-recover-silicon-from-end-of-life-modules/>

Platinum

- **The Investment Case For Platinum**
 - Platinum's role in the hydrogen economy is crucial as it's often used in fuel cells and to produce green hydrogen through the electrolysis of water using renewable energy, according to research by the WPIC. Limited supply and increased investment demand due to the green hydrogen narrative could be a powerful catalyst for a secular bull market in platinum in 2021.

<https://www.forbes.com/sites/rainermichaelpreiss/2020/11/12/the-investment-case-for-platinum/?sh=43a5e2b75c9d>

- **WPIC: Cool Operator**
 - Although catalysts are used to promote chemical reactions, many catalysts do not work unless they are in a high temperature environment. However, in a world first, a business in Japan, Furuya Metal (Furuya), has developed a platinum catalyst that works at low temperatures. Furuya's 'FT-eco catalyst' is effective within a temperature range of zero to 30 degrees and is even known to operate at subzero temperatures
https://platinuminvestment.com/files/sixtysecs/WPIC_60seconds_Lowtemperature_ecocatalyst_11112020.pdf
- **Fuel Cell Cars: A Commercial Failure, IDTechEx Reports**
 - 1 kW grid power achieves this driving distance: BEV LiB based vehicle 3.7 miles. FCEV 1.17 miles.
<https://www.prnewswire.com/news-releases/fuel-cell-cars-a-commercial-failure-idtechex-reports-301171187.html>

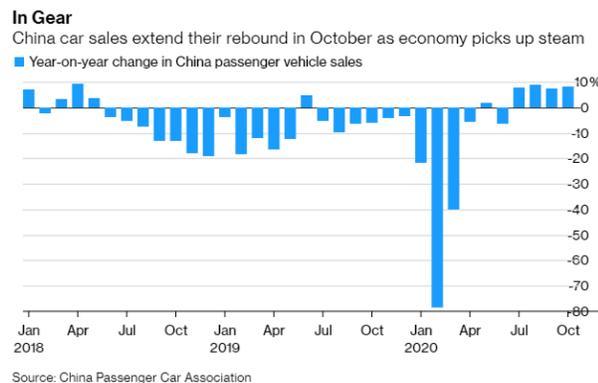
Fuel Cells/Hydrogen Economy Related Articles:

- **Johnson Matthey Ramps Up on Green Hydrogen - Eugene McKenna Appointed as Business Head**
 - JM announces appointment of Eugene McKenna as MD of its green hydrogen activities.
 - Clean hydrogen, produced with low or zero emissions, is vital for decarbonizing long distance transport energy intensive industrial processes.
 - JM technologies already at the heart of clean hydrogen production & fuel cell applications.
 - JM is increasing efforts on green hydrogen, leveraging core science capabilities and market expertise to drive large scale adoption.
<https://fuelcellworks.com/news/johnson-matthey-ramps-up-on-green-hydrogen-eugene-mckenna-appointed-as-business-head/>
- **Japan carbon pledge boosts hopes of ammonia backers**
 - Formed last year, the consortium groups 70 major Japanese firms who hope to use ammonia first at coal power stations and eventually at gas plants too.
<https://phys.org/news/2020-11-japan-carbon-pledge-boosts-ammonia.html>
- **Total Investment Keeps Hyzon Trucking Towards Fuel Cell Goals**
 - Strategic investment from French-based energy giant Total will support Hyzon Motors' global manufacturing & engineering centers including U.S. HQ in Honeoye Falls, N.Y.
<https://www.industryweek.com/technology-and-iiot/article/21146268/total-investment-keeps-hyzon-trucking-towards-fuel-cell-goals>
- **Hydrogen fast-tracking will be much quicker than imagined – Sibanye-Stillwater**
 - The fast-tracking of the hydrogen economy will be much quicker than most people have imagined, Sibanye-Stillwater CEO Neal Froneman said at the Financial Times (FT) Commodities Mining Summit, where he was part of a panel that included Anglo American Platinum CEO Natasha Viljoen and South32 CEO Graham Kerr.
<https://www.engineeringnews.co.za/article/hydrogen-fast-tracking-will-be-much-quicker-than-imagined-sibanye-stillwater-2020-10-18>
- **Cummins, Navistar to develop hydrogen fuel cell-powered heavy truck**
 - Cummins Inc. and Navistar International Corp. announced a partnership to develop a heavy Class 8 truck powered by hydrogen fuel cells. The project will be partly funded through an award from the U.S. Department of Energy. "This vehicle will feature our next generation fuel cell configuration and provides a springboard for us to advance our hydrogen technology for long haul trucks."
<https://www.msn.com/en-us/money/news/cummins-navistar-to-develop-hydrogen-fuel-cell-powered-heavy-truck/ar-BB1aUzlc>

- **California seeks to start a hydrogen economy as soon as possible**
 - Several large companies and automakers such as Royal Dutch Shell and Toyota Motor have made commitments to a range of targets for supplying more H2 fueling stations and fuel cell vehicles. “In past cycles, there was always something missing,” said the global hydrogen product manager at Shell, Matthew Blieske. “There was a policy missing, or the technology wasn’t quite ready, or people were not so serious about decarbonization. We don’t see those barriers anymore.”
https://www.hydrogenfuelnews.com/california-seeks-to-start-a-hydrogen-economy-as-soon-as-possible/8540878/?mc_cid=06dff982a&mc_eid=70c1246d58
- **Hydrogen fuel market to grow to \$11 trillion by 2050**
 - H₂ fuel market will take off, driven by both public & private investments around the globe.
<https://www.industryleadersmagazine.com/hydrogen-fuel-market-to-grow-to-11-trillion-by-2050/>

Palladium

- **China Car Sales Go From Strength to Strength as Virus Eases**
 - Retail sales of cars, SUVs and multiple-purpose vehicles increased 8% from a year earlier to 2.02 million units in October, the China Passenger Car Association said Monday. Wholesales of new energy vehicles, which includes electric cars, more than doubled to 144,000 units.
<https://www.bloomberg.com/news/articles/2020-11-09/china-auto-sales-go-from-strength-to-strength-as-virus-recedes>



- **How Hydrogen Is and Isn't the Future of Energy**
 - Forget powering cars with fuel cells and the like. The killer app for hydrogen is helping to electrify everything.
<https://www.bloomberg.com/opinion/articles/2020-11-09/how-hydrogen-is-and-isn-t-the-future-of-energy-for-the-eu-china-japan>
- **The environment is in trouble. Here's what Biden can do to address it.**
 - Rejoin the Paris Climate Accord, Revoke Permitting for the Keystone Pipeline, and tightened Emission Regulations are all part of a suite of actions Biden will take.
<https://www.nationalgeographic.com/environment/2020/11/what-actions-can-biden-take-on-environment-how-quickly/>
 - **Name the** therefore make our air much cleaner.
<https://stockhouse.com/opinion/interviews/2020/11/09/name-metal-that-s-more-than-tripled-price-since-2016>

PGM Minor Metals (Rhodium, Iridium, Ruthenium)

- **Metal That's More than Tripled in Price since 2016?**
 - But, it's the automotive industry – catalytic converters specifically – that dominates its usage. Today, most palladium demand is for autocatalysts in cars, which scrub toxic emissions from exhaust and

- **Economizing on iridium - iridium is an ideal catalyst for the electrolytic production of hydrogen from water**
 - Iridium is an ideal catalyst for the electrolytic production of hydrogen from water -- but it is extremely expensive. But now a new kind of electrode made of highly porous material does an excellent job with just a hint of iridium.
<https://energycentral.com/c/ec/economizing-iridium-iridium-ideal-catalyst-electrolytic-production-hydrogen-water>
- **JM's leading Low Carbon Hydrogen technology scoops IChemE award**
 - Matt: R&D Award On New Blue Hydrogen Technology That Uses No Iridium or Platinum like above PEM Electrolyzer processes do today. This is dubbed a blue hydrogen generation process because it uses Carbon Capture to dramatically reduce the emissions during hydrogen generation processes. Can be used to split water with even saltwater. Congrat JM.
 - Johnson Matthey, a leader in sustainable technologies, has scooped the Energy Award at this year's IChemE Awards with its Low Carbon Hydrogen technology. The IChemE Global Awards celebrate chemical, process and biochemical engineering excellence and are widely considered to be the world's most prestigious annual chemical engineering awards.
<https://energycentral.com/c/ec/economizing-iridium-iridium-ideal-catalyst-electrolytic-production-hydrogen-water>

BEV / LiB Battery Market News

- **The green revolution is coming! Electric car sales DOUBLE in just one year and hybrids surge - as the popularity of diesel vehicles drops by HALF**
 - Plug-in electric car sales in October 2020 were double the tally for year earlier
 - Petrol car sales dived by 28 per cent as diesel vehicle sales halved in same time
 - Australia's most popular SUVs come with either plug-in or hybrid options
<https://www.dailymail.co.uk/news/article-8915781/The-green-revolution-coming-electric-car-sales-DOUBLED-just-one-year.html>
- **2 Reasons For Higher Nickel Prices - Norilsk Is A Way To Participate**
<https://seekingalpha.com/article/4387507-2-reasons-for-higher-nickel-prices-norilsk-is-way-to-participate>
- **New Li-Ion Battery Research Offers Greater Power**
 - The problem with reducing the particle size of the electrodes is that it decreases the volumetric energy density of the batteries. The buffering intermediate phase makes all the difference, as it supports the development of a longer-lasting Li-ion battery. When an intermediate phase is formed in the phase transition during the charging and discharging, greater power can be produced.
<https://www.electronicdesign.com/markets/automotive/article/21146414/machine-design-new-li-ion-battery-research-offers-greater-power>
- **Great LinkedIn Summary Of The Lithium Market**
 - Li is lightest of all metals and it is highly reactive because it readily loses its outermost electron, making it easy to get current flowing through a #battery.
 - Only ~65% of Li produced goes toward battery production; other industries also consume Li.
 - Argentina, Bolivia and Chile known as "Lithium Triangle" for holding >75% of the world's Li supply.
 - Chile, known as "Saudi Arabia of Lithium", exports 40% of the world Li demand for the past 20 years.
 - Global Li demand expected to rise >>2x from 47,300mln mt in 2020 to 117,400mln mt in 2024.
 - Lithium Carbonate accounted for ~60% of lithium demand in 2018, but demand for Lithium Hydroxide will overtake lithium carbonate by 2022.
 - Lithium hydroxide is used in higher nickel #cathode because of lower synthesis temperatures.
 - Lithium, together with #graphite, #cobalt, and #manganese, are listed as critical minerals by USGS National Minerals Information Center in 2018.

- China is the world's biggest lithium consumer and gets most of its supply from Australia.
https://www.linkedin.com/posts/andyleebuckguan_lithium-battery-spodumene-activity-6729323382179012608-qIOT/

Regards –