



Weekly Precious Metals News Articles: October 9, 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. Enjoy-

Gold

- **India's September gold imports fall 59% to four-month low - government source**
 - India's gold imports in September fell 59% from a year earlier to the lowest level in four months, a government source said on Tuesday, as a drop in prices from a record high failed to lure buyers, which were postponing purchases anticipating bigger drop.
 - The world's second-biggest consumer of the precious metal imported around 11 tonnes of gold in September, down from 27 tonnes a year ago
<https://dailywealth.com/articles/china-is-getting-back-to-normal-and-thats-a-win-for-gold/>
- **Gold firms on U.S. stimulus hopes, awaits jobs data**
 - Gold rose on Thursday on hopes of a partial U.S. coronavirus stimulus deal to support the virus-stricken economy, while investors awaited the weekly jobless claims report from the world's largest economy.
<https://www.nasdaq.com/articles/precious-gold-firms-on-u.s.-stimulus-hopes-awaits-jobs-data-2020-10-08>
- **Russia's weekly gold & foreign currency reserves surge by over \$5 BILLION**
 - The nation's international funds grew \$5.1 billion, or about 0.9%, from September 25 to October 2. The regulator said growth was driven by "positive exchange rate revaluation and higher gold prices."
 - Since Jan. 1, Russia boosted forex reserves by \$31.4 billion. They were up by 18.3% last year.
<https://www.rt.com/business/502949-russia-forex-reserves-growth/>

Semiconductor Related Articles (impacting Precious Metals electronics):

- **Global Semiconductor Sales Increase 4.9 Percent Year-to-Year in August**
 - Global semiconductor sales increased year-to-year in August for the seventh consecutive month, demonstrating the global market so far has remained largely insulated from ongoing global macroeconomic headwinds, but there is still substantial uncertainty for the months ahead. Sales into the Americas stood out in August, increasing by nearly 24% y/y.
<https://www.semiconductors.org/global-semiconductor-sales-increase-4-9-percent-year-to-year-in-august/>
- **Global server shipments to see CAGR of 6.7% from 2020-2025**
 - Global server shipments are expected to see a CAGR of 6.7% from 2020-2025, driven by demand for datacenter, HPC, AI and 5G related applications, according to Digitimes Research's latest five-year forecast for the server industry.

- Developers including Intel, AMD and Nvidia have been keenly developing next-generation CPU and GPU solutions to satisfy demand for high-performance computing (HPC), AI-acceleration and parallel computing applications.
<https://www.digitimes.com/news/a20201007PD213.html>
- **TSMC revenue hits second consecutive record high**
 - STRONG DEMAND: 5G chip sales are expected to grow in the fourth quarter, and revenue might this year show more than 20 percent growth, an analyst said.
<https://www.taipeitimes.com/News/biz/archives/2020/10/09/2003744834>
- **Global smartphone shipments to see double-digit growth in 2021**
 - Following three consecutive years of declines in 2018-2020, global smartphone shipments are expected to grow by a double-digit rate or 150 million units in 2021, bolstered by renewed efforts to build infrastructure and accelerate commercial operations for 5G in Japan, Western Europe and the US.
<https://www.digitimes.com/news/a20201007PD212.html>

Silver

- **Silver Specialist Buoyed by Record Results**
 - For the year to 30 June 2020, Ames Goldsmith UK reported turnover of £67.6m compared to £58.1m the prior period. Sales growth was reported across both new and existing customers.
<https://www.insidermedia.com/news/north-west/silver-specialist-buoyed-by-record-results>
- **Silver ETF Selling Mounting**
 - Silver ETF selling is mounting. Since silver's parabolic surge driven by massive capital inflows from differential SLV share buying peaked, this dominant silver ETF's holdings have been falling on balance.
 - That reveals American stock traders are exiting silver, selling SLV shares faster than silver is being sold. With SLV's holdings remaining super-high, they could have much more yet to do.
 - This potential silver ETF selling overhang is a big downside risk for silver. With silver's high consolidation failing into a correction, downside momentum will accelerate. That will scare SLV shareholders into dumping shares.
<https://seekingalpha.com/article/4377759-silver-etf-selling-mounting>
- **Is There More Upside Ahead for Silver Prices?**
 - Silver is trying to get above the nearest resistance level at \$24.15. In case silver manages to settle above this level, it will gain more upside momentum and head towards the major resistance level at the 50 EMA at \$24.65.
<https://www.etftrends.com/leveraged-inverse-channel/is-there-more-upside-ahead-for-silver-prices/>

Precious Metals Mining:

- **\$11.5 Billion Australian Merger Could Trigger A Global Gold Rush**
 - There's a new member of the world's mining elite with a friendly merger in Australia creating a top 10 gold producer in a move which could potentially act as a trigger for a wave of similar deals.
 - The \$11.5 billion amalgamation of Norther Star Resources and Saracen Mineral Holdings has been expected since last year when the two became joint owners of the Fimiston mine on the outskirts of Kalgoorlie, Australia's gold capital.
<https://www.forbes.com/sites/timtreadgold/2020/10/06/115-billion-australian-merger-could-trigger-a-global-gold-rush/#1b358d611d2c>
- **Barrick CEO touts gold mining industry consolidation**
 - The gold industry needs more consolidation so it can increase exploration to boost depleting reserves, lure more generalist investors and improve efficiencies, Barrick CEO Mark Bristow says.

- The flurry of deals that characterized the sector in the past two years likely will continue, with miners in Australia already "stamping their mark" on the industry and more mergers and acquisitions needed in Canada, the CEO told a virtual South African mining conference.
- "The prospect of a serious reserve crisis is looming," Bristow said, noting a lack of exploration has seen average mine life across the gold mining sector fall from 20 years to closer to 10 years.
- Bristow also reiterated his company's interest in Freeport McMoRan's Grasberg mine in Indonesia, saying Barrick is "single-mindedly focused on tier-1 assets, and so it's got to be of interest to us."
<https://seekingalpha.com/news/3620579-barrick-ceo-touts-gold-mining-industry-consolidation>
- **Tharisa increases 2021 production guidance**
 - Resources group Tharisa has increased its 2021 production guidance from 155 000 oz to 165 000 oz (+6.5%) of platinum-group metals (PGMs), on a platinum, palladium, ruthenium, rhodium, osmium and iridium, or 6E, basis, and from 1.4-million tonnes to 1.5-million tonnes of chrome concentrate.
<https://www.engineeringnews.co.za/article/tharisa-increases-2021-production-guidance-2020-10-08>
- **Anglo investing in South Africa's hydrogen economy -- Cutifani**
 - JOHANNESBURG (miningweekly.com) – As the world's largest marketer of platinum group metals (PGMs), Anglo American is investing in South Africa's hydrogen economy, including through a joint venture with the State-owned Public Investment Corporation (PIC), Anglo CEO Mark Cutifani said on Wednesday.
<https://www.miningweekly.com/article/anglo-investing-in-south-africas-hydrogen-economy-cutifani-2020-10-07>
- **Reyna Silver Expands Mexican Footprint with Acquisition of La Reyna Project, Chihuahua**
 - Reyna Silver announces the acquisition of 100% of Exploradora La Reyna, S.A. de C.V., a Mexican company that holds an option to acquire 100% of the 300 ha La Reyna project in the state of Chihuahua, Mexico. The property has not been drilled.
 - La Reyna lies in the eastern portion of the Cusihiuriachi Silver District ("Cusi"), which produced approximately 80 million ounces of silver from the early 1600s to the 1940s. The majority of district mining occurred in the late 1800's and early 1900's. Sierra Metals Inc. (formerly Dia Bras Exploration Inc.) is currently exploiting several mines in the northwestern part of the district.
<https://finance.yahoo.com/cdn.ampproject.org/c/s/finance.yahoo.com/amphtml/news/reyna-silver-expands-mexican-footprint-145100137.html>
- **Hydrogen can be game-changer for South African economy -- PwC**
<https://www.engineeringnews.co.za/article/hydrogen-can-be-game-changer-for-south-african-economy-pwc-2020-10-06>

E-Waste & Precious Metals Recycle Related:

- **Plasma Arc Recycling of Precious Metals**
 - Ben Messenger looks at how plasma arc technology is helping recyclers to bridge the gap between supply and demand for a number of platinum group and other precious metals.
<https://waste-management-world.com/a/plasma-arc-recycling-of-precious-metals>
- **In New Zealand, microbes are extracting gold from electronic waste**
 - Mint Innovation's system involved taking scrap material and grinding it up into a sand like consistency. The reason we do this is that we need to make sure that we're exposing all the metal contained within to a subsequent chemical leaching process.
 - For instance, when you look at circuit boards, they've got lots of chips on them, a lot of the value is contained within those chips, so we really need to make sure it's exposed.
 - Then they use a biorefining process: chemicals dissolve the powdered waste into a solution, with any materials that haven't dissolved filtered out. Microbes are then added to the mix. Gold atoms latch on to them in a process called "selective biosorption. Next, the microbes coated in gold are filtered, producing a paste which is ashed and then refined into solid, "recycled" gold.

<https://www-cnbc-com.cdn.ampproject.org/c/s/www.cnbc.com/amp/2020/10/01/in-new-zealand-microbes-are-extracting-gold-from-electronic-waste.html>

- **Converter Recycling: Is Selling on Auction, App, or Assay like Playing the Slots?**

- Auction: Physical bidding
- App: Electronic bidding or selling by number
- Assay: The scientific method
- Mass balanced and verified assay the way to go

<https://autorecyclingworld.com/converter-recycling-is-selling-on-auction-app-or-assay-like-playing-the-slots/>

Platinum

- **WPIC: Platinum in the Hydrogen Sweet Spot**

- Not only does platinum facilitate the hydrogen economy due to its use in fuel cells for fuel cell electric vehicles; it is also used in the production of 'green' hydrogen

https://platinuminvestment.com/files/sixtysecs/WPIC_60seconds_Sweetspot_10072020.pdf

- **PLTM: Bullish In The Long Term, Cautious In The Short Term**

- PLTM has enjoyed a rebound since late September, bottoming out at our 1-month min target of \$8.15/share.
- The rebound in platinum prices has been part of a rebound in the broad-based precious metals space. Still, all precious metals (bar palladium) are below their month-ago levels.
- The rebound in PLTM has been partly driven by renewed weakness in the dollar, following a disinflationary hiccup in the first half of September.

<https://seekingalpha.com/article/4377554-pltm-bullish-in-long-term-cautious-in-short-term>

- **Our health: New focus on the synergy effect of nanoparticles**

- The nanoparticles were tested on two types of brain cells: astrocytes and endothelial cells. When the endothelial cells were exposed to nano-platinum, nothing happened. When exposed to nano-silver, their ability to divide deteriorated. When exposed to both nano-silver and nano-platinum, the effect was amplified, and they died in large numbers. Furthermore, their defense mechanisms decreased, and they had difficulty communicating with each other.
- So even though nano-platinum alone does not do harm, something drastic happens when they are combined with a different kind of nano-particle.

<https://phys.org/news/2020-10-health-focus-synergy-effect-nanoparticles.html>

Fuel Cells/Hydrogen Economy Related Articles:

Large Publication For the Hydrogen Economy Hard Core Players

- **Road Map to a USA Hydrogen Economy**

- Published by The Fuel Cell and Hydrogen Energy Association (FCHEA) represents the leading companies and organizations that are advancing innovative, clean, safe, and reliable energy technologies.
- *Matt: No Precious Metals company representation, and my view is they need us. PEM fuel cell vehicle and PEM electrolysis expectations are not realistic based on mineral supply. Pt and Ir scarcity will inhibit. Need incremental PGM mining.*

- Executive Summary (20 pages):

<https://static1.squarespace.com/static/53ab1feee4b0bef0179a1563/t/5e7ca9c03c2524311f3bef36/1585228227720/Road+map+to+a+US+hydrogen+economy+Exec+Sum+Web+Final.pdf>

- Full Report (90 pages):

<http://www.fchea.org/s/Road-Map-to-a-US-Hydrogen-Economy-Full-Report.pdf>

- **Fuel Cells for Ski Slopes: French Ski Stations Turn to Hydrogen in Drive for CO2-Free Snow**

- The ski lobby is working with France's Alternative Energies & Atomic Energy Commission and the three main suppliers of slope-preparation machines, Germany's Kaessbohrer

Gelaendefahrzeug AG, Italy's Prinoth SpA and local producer CM Dupon, and expects the first hydrogen-powered snow groomer on the market in five years.

<https://www.bloomberg.com/news/articles/2020-10-02/french-ski-stations-turn-to-hydrogen-to-meet-zero-carbon-target>

- **Siemens Energy and Mobility sign joint agreement on hydrogen trains**
 - Siemens shareholders voted to spin off the industrial giant's energy business back in July.
 - The last few weeks have seen several interesting developments in the field of hydrogen powered transport.
<https://www.cnbc.com/2020/10/06/siemens-energy-and-mobility-sign-joint-agreement-on-hydrogen-trains.html>
- **Toyota adds to hydrogen bet with North American fuel cell truck**
 - Toyota Motor Corp. plans to develop a hydrogen fuel cell-powered big rig for the North American market with its subsidiary Hino Motors Ltd.
 - Toyota said Monday it will provide fuel cell technology and its truck unit will supply the chassis based on its new XL Series. The automaker did not provide a timeline for beginning sales of the Class 8 truck but said it would debut a prototype in the first half of 2021. This expands on a March agreement to develop a 25-ton fuel cell semi for the Japanese market.
 - Matt: This effort is in direct response to newly passed legislation in California requiring 25% of all HDV vehicles be zero emission by 2025, ramping to 100% by 2035. LiB and Fuel Cells are the only path to meet these new requirements.
<https://www.japantimes.co.jp/news/2020/10/06/business/corporate-business/toyota-hydrogen-north-american-fuel-cell-truck/>
- **Total invests in Hyzon Motors**
 - Deal with hydrogen fuel cell-powered commercial vehicle supplier bolsters Total's clean energy credentials
<https://www.energydigital.com/sustainability/total-invests-hyzon-motors>
- **Hybari fuel cell battery train to draw on automotive technology**
 - East Japan Railway, Hitachi and Toyota Motor Corp are to collaborate to test the use of batteries and hydrogen fuel cell hybrid traction systems adapted from technology used in the road sector.
 - The HYdrogen-HYBrid Advanced Rail vehicle for Innovation trial will use JR East's Series FV-E991 hydrogen test train. Testing is scheduled to start in March 2022 on routes including the Tsurumi and Nambu lines, with the two-car Hybari unit expected to have a maximum speed of 100 km/h and range of around 140 km.
<https://www.railwaygazette.com/traction-and-rolling-stock/hybari-fuel-cell-battery-train-to-draw-on-automotive-technology/57532.article>
- **Blue Ammonia: Another Major Breakthrough For Hydrogen Power** (impacts multiple PGMs)
 - Green hydrogen is the cleanest form of hydrogen, and therefore the most promising for a more climate-friendly energy future. It's made through the exclusive use of renewable and emissions-free energies.
 - Blue hydrogen is the name given to hydrogen made exclusively with natural gas, which has lower carbon emissions and is "cleaner" than most fossil fuels. Ammonia is a chemical compound that contains three hydrogen molecules and one nitrogen molecule, and, like hydrogen, it releases no carbon dioxide when burned in a thermal power plant. The blue ammonia itself can be used as a feedstock for sustainable hydrogen. As the "blue" part of the name would suggest, the ammonia itself is made using natural gas (and in some cases coal), but is still considered to be a greener form of energy production thanks to its potential for carbon capture and sequestration (CCS).

- Gray hydrogen, the most common form of hydrogen currently used in industrial applications, is made with fossil fuels, meaning that the low-carbon application of the hydrogen itself is essentially cancelled out by its production process.
<https://markets.businessinsider.com/news/stocks/blue-ammonia-another-major-breakthrough-for-hydrogen-power-1029642337#>
- **World's first cargo of blue ammonia arrives in Japan for zero-carbon power generation** (impacts multiple PGMs)
 - Aramco provided fresh details of the world's first ever cargo of blue ammonia, with the Saudi energy major confirming the environmentally friendly fertilizer is now in Japan,
 - Comprising just 40 tonnes – ammonia cargoes from the Saudi Arabia fertilizer giants SABIC and Ma'aden, the material was delivered in late September to Japan for zero-carbon power generation.
<https://www.icis.com/explore/resources/news/2020/10/02/10559848/world-s-first-cargo-of-blue-ammonia-arrives-in-japan-for-zero-carbon-power-generation>

Palladium

- **BASF Announces Series of New Product Innovations in its Selective Hydrogenation Catalysts Portfolio**
 - New palladium alumina catalysts offer superior activity and tolerance to sulfur impurities;
 - New PTA catalyst CBA-250 with significantly lower palladium content.
<https://www.newswiretoday.com/news/173777/>
- **Can California force emission-free cars on everyone? Don't bet on it, U.S. automakers say**
 - Carmakers were resisting, saying the changes California wanted were too costly and would hurt consumers in their pocketbooks. Rallying to his hometown industry's defense, a powerful Michigan congressman accused California and its upstart governor, who was in just his second year in office, of ignoring economic and scientific practicalities.
<https://www.msn.com/en-us/money/news/can-california-force-emission-free-cars-on-everyone-dont-bet-on-it-us-automakers-say/ar-BB19PHwD>
- **German Lower House approves tax on greenhouse emissions for fuels, heating, gas**
 - Approved a tax on greenhouses gas emissions to be levied in stages from 2021, raising retail prices of car fuels such as gasoline and diesel, heating oil and natural gas.
<https://www.metro.us/german-lower-house-approves/>

PGM Minor Metals (Rhodium, Iridium, Ruthenium)

- **Ruthenium/Platinum: Seagate Confirms World's Largest Hard Disk Drive on Track for December**
 - Seagate's first HAMR drives will feature a whopping 20TB capacity when they debut in later this year. The Exos 20+ series will be compatible as drop-in drives for 3.5-inch bays. In terms of power consumption, you can count on the HDDs to require less than 12W. They will feature a 7200RPM spindle speed with a read/write speed higher than 261 MB/s.
 - Matt: HAMR uses Zero Ruthenium, and 1.7x loadings of Platinum per media disc.
<https://uk.pcmag.com/hard-drives/128843/seagate-confirms-worlds-largest-hard-disk-drive-on-track>
- **Ruthenium: Scientists find evidence of exotic state of matter in candidate material for quantum computers**
 - Researchers discovered the exciting behavior while studying the so-called electron spins in the compound ruthenium trichloride. Their findings, published today in the journal Nature Physics, show that electron spins interact across the material, effectively lowering the overall energy. This type of behavior — consistent with a quantum spin liquid — was detected in ruthenium trichloride at high temperatures and in high magnetic fields.

<https://news.fsu.edu/news/science-technology/2020/10/05/scientists-find-evidence-of-exotic-state-of-matter-in-candidate-material-for-quantum-computers/>

- **Ruthenium: Taiwanese boffins make MRAM breakthrough**
 - By adding a layer of platinum only a few nanometers thick, their device generates spin current to switch the pinned magnetic moments at will—a task that has never been accomplished before. For faster reading and writing, reduced power consumption and retaining data through a power outage, MRAM is particularly promising.
<https://www.fudzilla.com/news/pc-hardware/51599-taiwanese-boffins-have-mram-breakthrough>
- **Rhodium: VW Drops Engine Revs Slowly On Purpose To Curb NOx Emissions**
 - Rev hang is a term describing an engine revving decreasing slowly
 - Rev hang is used on purpose to curb NOx emissions
<https://sports.yahoo.com/vw-drops-engine-revs-slowly-155900424.html>

BEV / LiB Battery Market News

- **Tesla is in talks with top miner BHP over nickel-supply pact**
 - Talks are held up on pricing, and no final agreement has been reached so far between the automaker and BHP, the world's largest miner, said one of the people. The discussions come as Tesla works to raise the amount of the metal (Ni) used in vehicle batteries to improve performance (Energy Density), and as it makes a push into in-house cell production.
 - Nickel is a key component for the cathodes of EV batteries, and Tesla CEO Elon Musk has expressed concern about supply due to challenges in sustainable sourcing. A deal with Tesla may come as a surprise to some BHP investors since nickel makes up a small part of BHP's business. It would signal real progress in the company's efforts to expand in the space and retool the nickel division to serve battery makers.
<https://www.miningweekly.com/article/tesla-is-in-talks-with-top-miner-bhp-over-nickel-supply-pact-2020-10-07>
- **Government incentives push electric car sales to record high in Germany**
 - The shift to electric cars is gaining momentum in Germany, thanks in large part to government-backed incentives that are encouraging buyers to make the switch to electric and hybrid vehicles.
 - Germany's Federal Motor Transport Authority data show registrations of BEVs have risen and now account for an 8% share of the overall car market, and Hybrids make up just over 20%.
<https://www.yahoo.com/news/government-incentives-push-batteryelectric-car-sales-to-record-high-in-germany-142840674.html>
- **Engineered electrode material moves battery development closer to fast charging**
 - The researchers turned to black phosphorus, a material that has been considered for use in electrodes before but is usually abandoned due to its tendency to deform along its layered edges, making the transfer of lithium-ions deeply inefficient and rendering a lower quality material. By combining black phosphorus with graphite, the chemical bonds between these two materials stabilize and prevent the problematic edge changes.
<https://phys.org/news/2020-10-electrode-material-battery-closer-fast.html>

Regards –