



Weekly Precious Metals News Articles: January 15, 2021

Distribution: If you no longer wish to be on this mailing list, send me a note. If others want to be added to distribution, again let me know.

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

- **Russia for First Time Holds More Gold Than U.S. Dollars in \$583 Billion Reserves**
 - Gold made up 23% of the central bank's stockpile as of the end of June 2020, the latest date for which data on the breakdown is available, according to a report published late Monday. The share of dollar assets dropped to 22%, down from more than 40% in 2018.
 - <https://www.bloombergquint.com/global-economics/russia-s-583-billion-reserves-now-hold-more-gold-than-dollars>
- **Tuesday: Gold prices attempt back-to-back gain but steadily climbing U.S. bond yields pose headwind**
 - Gold futures on Tuesday were edging up for a second session in a row as investors braced for the prospect of further fiscal stimulus to reflate the economy in the wake of the coronavirus pandemic when President-elect Joe Biden takes office on Jan. 20.
 - <https://www.msn.com/en-us/money/markets/gold-prices-attempt-back-to-back-gain-but-steadily-climbing-us-bond-yields-pose-headwind/ar-BB1cGnnp>
- **Caviar has introduced a luxurious Sony PS5 console made from 20 kilograms of solid gold.**
 - Taking inspiration from the unique geometry of the gold ore, the solid gold console is fused together using 18 karat gold and weighs 20 kilograms and assembled from 8 separate sheets.
 - <https://www.msn.com/en-us/money/markets/gold-prices-attempt-back-to-back-gain-but-steadily-climbing-us-bond-yields-pose-headwind/ar-BB1cGnnp>
- **Deutsche Bank to pay nearly \$125 million to resolve U.S. bribery, metals charges**
 - Germany's largest lender agreed to the payout as it entered a three-year deferred prosecution agreement with the U.S. Department of Justice, and a related civil settlement with the U.S. Securities and Exchange Commission.
 - The payout relates to charges Deutsche Bank violated the federal Foreign Corrupt Practices Act over its dealings in Saudi Arabia, Abu Dhabi, China and Italy, court papers show. Nearly two-thirds of the payout is a criminal fine.
 - <https://www.reuters.com/article/deutsche-bank-corruption-united-states-i-idUSKBN29D200>

Semiconductor Related Articles (impacting Precious Metals electronics):

- **Car Industry Changing Under The Hood**
 - Auto electronics are becoming more centralized, connected, and complex, and the entire supply chain is realigning around those shifts.
 - <https://semiengineering.com/car-industry-is-changing-under-the-hood/>
- **Global semiconductor market rises above US\$120 billion in 3Q20, says Omdia**

- The semiconductor market generated revenue of over US\$120 billion in the third quarter of 2020, up 10.8% sequentially, according to Omdia.
<https://www.digitimes.com/news/a20210106PR201.html>
- **Chip shortages slow vehicle production**
 - A widening global shortage of semiconductors for auto parts is forcing major auto companies to halt or slow vehicle production as they recover from COVID-19 pandemic-related factory shutdowns.
 - Volkswagen AG, Ford Motor Co, Fiat Chrysler Automobiles NV, Toyota Motor Corp and Nissan Motor Co all have been hit by the shortage and been forced to delay production of some models in.
 - “This is absolutely an industry issue,” Toyota spokesman Scott Vazin said in an e-mail on Friday. “We are evaluating the supply constraint of semiconductors and developing countermeasures to minimize the impact to production.”
<https://www.taipeitimes.com/News/biz/archives/2021/01/11/2003750326>
- **Smartphone shipments in China fell 20.4% in 2020: government data**
 - Domestic smartphone shipments in China in 2020 fell 20.4% from the previous year, government data released on Monday showed, as the number of handsets delivered to consumers dropped to 296 million from 372 million in 2019.
<https://www.reuters.com/article/us-china-smartphones/smartphone-shipments-in-china-fell-20-4-in-2020-government-data-idUSKBN29G0ZP>
- **TSMC 2020 sales rise over 25% to new high**
 - TSMC on Friday reported record consolidated sales of NT\$1.33 trillion (US\$46.75 billion) for 2020, which analysts attributed to global demand for the company's high-end processes.
<https://focustaiwan.tw/business/202101090014>

Silver

- **Total corporate funding into the solar sector rose 24% in 2020**
 - Despite a slow start and a downturn in venture capital and private equity funding, total funding saw a significant rise, including the largest number of projects acquired in a single year to date and the largest amount of securitization financing ever in a year.
<https://pv-magazine-usa.com/2021/01/11/total-corporate-funding-into-the-solar-sector-rose-24-in-2020/>
- **Renewables to dominate new U.S. capacity in 2021, with solar leading the way**
 - The U.S. Energy Information Administration also expects utility-scale battery storage capacity to more than quadruple.
 - In a “Today in Energy” report, the agency said it expects nearly 40 GW of new utility-scale capacity to start commercial operation this year. Solar PV 39%, Wind 31%, Natural gas 11%, New Nuclear Reactor at Georgia’s Vogtle site 3%, Battery Energy Storage 11%.
<https://pv-magazine-usa.com/2021/01/11/renewables-to-dominate-new-u-s-capacity-in-2021-with-solar-leading-the-way/>
- **U.S. Mint Sells 2.7 Million Silver Eagles First Week Of 2021**
 - In the first week of 2021, the U.S. Mint sold 2.7 million Silver Eagles. The Mint also sold 45,000 oz of Gold Eagles.
<https://www.silverdoctors.com/silver/silver-news/u-s-mint-sells-2-7-million-silver-eagles-first-week-of-2021/>
- **US Mint RUNS OUT Of 1 Oz American Gold Eagles, Has NO ESTIMATE For When More Can Be Offered**
<https://www.silverdoctors.com/gold/gold-news/us-mint-runs-out-of-1-oz-american-gold-eagles-has-no-estimate-for-when-more-can-be-offered/>

- **Silver Institute: Silver's growing role in the automotive industry**
 - While highly variable across different vehicle types and markets, our research suggests a range of 0.5 to 0.9 ounces (15-28 grams) is consumed in one internal combustion engine (ICE) vehicle, with higher loadings estimated for hybrid and then electric cars.
 - Forecast total of 61Moz (1,900t) for 2021 may be a conservative total. Looking further ahead, this total could approach 88Moz (2,700t) by 2025.
https://www.silverinstitute.org/wp-content/uploads/2021/01/SilverAutomotive_MmktTR2021.pdf

Precious Metals Mining:

- **Group Ten Metals Announces Acquisition of the Stillwater East**
 - Property adjacent to Sybanye-Stillwater's Montana complex.
 - PGE-Ni-Cu-Co + Au Project in Montana, USA; Reports 0.89% Nickel, 0.66% Copper and 0.405 g/t 3E in Initial Rock Samples
<https://www.juniorminingnetwork.com/junior-miner-news/press-releases/677-tsx-venture/pge/90975-group-ten-announces-acquisition-of-the-stillwater-east-pge-ni-cu-co-au-project-in-montana-usa-reports-0-89-nickel-0-66-copper-and-0-405-g-t-3e-in-initial-rock-samples.html>
- **Analysts Predict a Wave of M&A Among Gold Miners in 2021**
 - Analysts predict another round of consolidation for the industry in 2021, although they aren't looking for mega-mergers. Instead, they expect to see a continuation of the trend in 2020 that brought a larger number of smaller deals.
<https://investorplace.com/2021/01/analysts-predict-a-wave-of-mergers-and-acquisitions-among-gold-mining-in-2021/>
- **Hecla Mining Reports Preliminary Full Year Silver And Gold Production**
 - Hecla Mining Company reported 2020 Silver production of 13.5 million ounces, an increase of 7% from prior year. Gold production was 208,962 ounces, down 23% from 2019.
<https://www.nasdaq.com/articles/hecla-mining-reports-preliminary-full-year-silver-and-gold-production-quick-facts-2021-01>

E-Waste & Precious Metals Recycle Related:

- **We dissected nearly 100 devices to study e-waste. What we found is alarming**
 - The big surprise from our research was that U.S. households are producing less e-waste, thanks to compact product designs and digital innovation. For example, a smartphone serves as an all-in-one phone, camera, MP3 player, and portable navigation system. Flat-panel TVs are about 50% lighter than large-tube TVs and don't contain any lead.
 - But not all innovations have been beneficial. To make lightweight products, manufacturers miniaturized components and glued parts together, making it harder to repair devices and more expensive to recycle them. Lithium-ion batteries pose another problem: They are hard to detect and remove, and they can spark disastrous fires during transportation or recycling.
<https://www.msn.com/en-us/news/technology/we-dissected-nearly-100-devices-to-study-e-waste-what-we-found-is-alarming/ar-BB1cGGMf>
- **New 'international-scale' jewelry recycling initiative from Lucille London**
 - The brand, which became a Fairtrade-registered goldsmith last year, has announced that it will now offer a jewelry recycling and refining service "on an international scale".
 - The initiative is in partnership with bullion refining professionals in London's Hatton Garden, the capital's home of jewelry.
<https://www.professionaljeweller.com/new-international-scale-jewellery-recycling-initiative-from-lucille-london/>

Platinum

- **Platinum to outperform other precious metals – ABN Amro**
 - “We think that Pt prices have the largest upside potential this year. First, a positive outlook for gold prices also supports the outlook for platinum. Moreover, some investors buy platinum as an investment alternative to gold if gold prices become expensive. Second, we expect an ongoing recovery in the industrial sector that will probably result in higher industrial demand for platinum. Third, we expect higher consumer demand for cars this year. Fourth, fuel cell technology for cars will continue to get more attention.
<https://www.fxstreet.com/news/platinum-to-outperform-other-precious-metals-abn-amro-202101070804>
- **Regulators gently steer truck sector toward electrification**
 - Tighter emissions targets will mean more zero-emission trucks, although scope remains for diesel and gas engine optimization.
<https://www.automotiveworld.com/articles/regulators-gently-steer-truck-sector-toward-electrification/>
- **SE Asia Consulting PTE Ltd Blog: Precious Metals Commodity Management**
 - Covering a wide range of metals.
<https://seasia-consulting.com/precious-metals-commodity-management/>

Fuel Cells/Hydrogen Economy Related Articles:

- **Johnson Matthey, SFC Energy Sign Agreement for Supply of Membrane Electrode Assemblies**
 - JM said it has won a multi-million-pound agreement to provide 400,000 Direct Methanol MEA fuel cell components to SFC Energy AG. The agreement is starting in February 2021 for a duration of over three years.
<https://markets.businessinsider.com/news/stocks/johnson-matthey-sfc-energy-sign-agreement-for-supply-of-membrane-electrode-assemblies-1029946623>
- **Blue World Technologies acquires manufacturer of fuel cell components**
 - Blue World Technologies, developer and manufacturer of methanol fuel cells, is acquiring Danish Power Systems, a 25-year-old HT-PEM material research company.
<https://sweetcrudereports.com/blue-world-technologies-acquires-manufacturer-of-fuel-cell-components/>
- **Texas well-suited to become leading US producer of low-cost hydrogen: panelists**
 - Texas is well-suited to become the leading producer of low-cost hydrogen in the US due to its existing hydrogen infrastructure and proximity to renewables, natural gas and storage resources, according to several people speaking Jan. 12 on a webinar sponsored by the University of Texas.
<https://www.spglobal.com/platts/en/market-insights/latest-news/electric-power/011221-texas-well-suited-to-become-leading-us-producer-of-low-cost-hydrogen-panelists>
- **Linde unveils plans for new hydrogen plant in Germany**
 - Linde has today revealed plans for a new proton exchange membrane (PEM) electrolyser plant in Germany that the company says will produce enough green hydrogen to fuel approximately 600 fuel cell buses a year, and it's expected to be operational in 2H'2022.
<https://www.gasworld.com/linde-unveils-plans-for-new-hydrogen-plant-in-germany/2020347.article>
- **Renault and Plug Power to develop fuel-cell commercial vehicles**
 - French carmaker Renault and U.S. hydrogen specialist Plug Power have joined forces to develop hydrogen-powered light commercial vehicles (LCV), they said on Tuesday.
 - The companies have signed a memorandum of understanding to launch a France-based 50-50 joint venture by the end of June, targeting a more than 30% share of the fuel cell-powered LCV market in Europe, a joint statement said.
<https://www.reuters.com/article/esgNews/idUSKBN29H2A5>

- **Where Do Hydrogen Fuel Cell Vehicles Fit into Our Future?**
 - Industrial use of hydrogen must increase for end-users like energy power plants, chemical industries, steelmakers, and others if hydrogen is to scale quickly, and realistically. And the scaling of hydrogen is not the only domino that needs to fall in place for hydrogen to be successful in trucking.
<https://www.act-news.com/news/where-do-hydrogen-fuel-cell-vehicles-fit-into-our-future/>

Palladium

- **Chinese auto recovery on track as vehicle sales rise for ninth month**
 - China's vehicle sales rose for a ninth straight month on an annual basis in December as the country continued to lead a recovery in the global automobile industry from the COVID-19 pandemic, despite seeing sales falling for a third year in 2020.
 - Vehicle sales rose 6.4% in December from a year earlier to reach 2.83M vehicles, data from the China Association of Automobile Manufacturers (CAAM) showed, slowing from a +12.6% in November.
 - Full-year sales in the world's biggest auto market fell 1.9% to 25.3M vehicles in 2020.
<https://www.reuters.com/article/china-autos/update-3-chinese-auto-recovery-on-track-as-vehicle-sales-rise-for-ninth-month-idUSL1N2J0ODG>
- **High Voltage MLCCs (Multi-Layer Ceramic Capacitors) for Battery Electric Vehicles: Global Markets and Opportunities, 2021-2025 | TTI Europe**
 - Automotive-grade MLCCs provide design engineers with a product that offer capacitance at high temperatures and that withstand high vibration frequencies and exposure to harsh chemicals from the engine or the road. Four areas in the BEV market where high voltage MLCCs are consumed: inverters, DC/DC converters, onboard charger and the battery management system.
 - According to Murata and Taiyo Yuden, the TESLA Model 3 contains over 9,000 MLCCs and the Model S and Model X each have over 10,000 MLCCs. This number is expected to increase to an average of 16,000 MLCC per BEV by 2025.
 - Also, automotive-grade MLCCs have historically been manufactured with palladium electrodes because of the high temperatures of under-the-hood operations.
 - Materials supply companies that will benefit from the increase in demand for high voltage MLCC materials include Ferro Corp. in the US, and Shoei Chemical of Japan, known for its supply of palladium and silver electrode paste for high voltage MLCC applications.
 - Author's comment: I've noted that some of the MLCC manufacturers are advertising their products offer Pd terminations in addition to electrodes for increased reliability in EVx sub assemblies, known as derivative terminations. We also note PGM loading of the polymer terminations. So palladium will stabilize in electronics as opposed to its continued slide in the wake of BME technology.
<https://www.tti.com/content/ttiinc/en/resources/marketeye/categories/passives/me-zogbi-20201210.html>

PGM Minor Metals (Rhodium, Iridium, Ruthenium)

- **Rhodium: Rhodium roars above \$20,000 in precious metals' biggest rally**
 - Rhodium's rally to record highs shows no sign of stopping, with prices up 19% this month as auto makers that need the metal to meet tightening emissions regulations run into limited supply.
<https://uk.sports.yahoo.com/news/rhodium-roars-above-20-000-112225732.html>
- **Ruthenium in advanced node IC's: Imec's Plan For Continued Scaling**
 - Discusses Buried (Ru) Power Rails at 3nm
 - Key requirements are buried power rail (BPR) instead of putting the main power distribution in interconnect. Buried power rail (BPR) also opens up the possibility of backside power distribution, and eventually other features on the backside such as decaps.
 - Discussed Ru Dual and Semi-damascene processes at 3nm

- And new conductor materials (wiring) at 1nm, with Ru listed as a candidate.
 - For interconnect, today we have dual-damascene copper, but to address via resistance we'll need a hybrid solution with a second metal like ruthenium (and a thinner barrier). For further advancement, we need a semi-damascene process, but copper can't easily be etched so it will need to be some other material. Eventually, we'll need completely new materials. <https://semiengineering.com/imecs-plan-for-continued-scaling/>
- **Ruthenium: FSU Researchers experiment with candidate material for quantum computers**
 - A team of physicists from Florida State University's National High Magnetic Field Laboratory and the Los Alamos National Laboratory have developed a new technique for understanding the magnetism of quantum spin liquids. Using this technique, researchers have been analyzing ruthenium trichloride, a compound theorized to be compatible with quantum computing. <https://www.fsunews.com/story/news/2021/01/10/fsu-researchers-experiment-candidate-material-quantum-computers/6614209002/>

BEV / LiB Battery Market News

- **Swiss-based trader Telf to sell ERG's cobalt in 3-yr deal**
 - Swiss-based commodity trader Telf AG will sell cobalt produced by Eurasian Resources Group's operation in Democratic Republic of Congo, equivalent to 10% of global supply in 2021, three sources with direct knowledge of the matter told Reuters.
 - Under the deal, expected to run from 2021 to 2023, Telf will market 18,000 tonnes of cobalt for Eurasian Resources Group S.à r.l. this year, worth some \$657 million at LME prices.
 - A source with direct knowledge of the matter said most of the cobalt hydroxide produced by ERG's Metalkol operation in Congo would be sold to Chinese companies. https://batteryindustry.tech/swiss-based-trader-telf-to-sell-ergs-cobalt-in-3-yr-deal/?utm_source=mailpoet&utm_medium=email&utm_campaign=the-last-newsletter-total-posts-from-our-blog_1
- **First Cobalt inks cobalt hydroxide feed arrangements for refinery**
 - Cobalt refiner and miner First Cobalt has entered into long-term cobalt hydroxide feed arrangements with diversified miner Glencore and IXM SA – a fully owned subsidiary of China Molybdenum Company to provide 4 500 t/y of contained cobalt to the First Cobalt Refinery from 2022. <https://www.miningweekly.com/article/first-cobalt-inks-cobalt-hydroxide-feed-arrangements-for-refinery-2021-01-12>
- **Rio Tinto enters scandium market with Canada plant**
 - Rio Tinto is investing \$6-million in the construction of a first module of the plant, with an initial capacity to produce 3 mt/year of scandium oxide, or about 20% of the current global market. <https://www.miningweekly.com/article/rio-tinto-enters-scandium-market-with-canada-plant-2021-01-15>
- **Analysis: Tesla's Model Y to emerge disruptor as China EV sales zoom in 2021**
 - New models will help electric vehicle sales in China zoom this year, after tepid business in a virus-riddled 2020, and analysts predict Tesla's Model Y pricing will emerge as a major disruptor in the world's biggest car market. <https://www.reuters.com/article/us-china-autos-tesla-analysis/analysis-teslas-model-y-to-emerge-disruptor-as-china-ev-sales-zoom-in-2021-idUSKBN29G2SB>
- **MINING: Visualizing China's Dominance in Rare Earth Metals**
 - Although deposits of rare earth metals exist all over the world, the majority of both mining and refining occurs in China. The above graphic from CSIS China Power Project tracks China's exports of rare earth metals in 2019, providing a glimpse of the country's dominating presence in the global supply chain. <https://www.visualcapitalist.com/chinas-dominance-in-rare-earth-metals/>

Regards –