



Weekly Precious Metals News Articles: April 16, 2021

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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

- **Gold prices mark highest finish in 7 weeks**
 - Gold futures on Thursday scored their biggest daily gain since March, with prices settling at their highest in seven weeks, as benchmark U.S. bond yields pulled back and rising U.S. tensions with China and Russia boosted the metal's haven appeal.
<https://www.msn.com/en-us/money/markets/gold-prices-mark-highest-finish-in-7-weeks/ar-BB1fGlpK?ocid=BingNewsSearch>
- **Appeal for Gold Bounces Up Amid Weaker Dollar**
 - The bullion asset recorded impressive gains at the fourth trading session of the week with global investors awaiting further signals on the U.S economy as the greenback traded near its three-week lows, further boosted gold bugs in breaking above \$1745 an ounce.
<https://www.nasdaq.com/articles/appeal-for-gold-bounces-up-amid-weaker-dollar-2021-04-15>
- **India gold imports jump to near two-year high as weddings revive demand**
 - Overseas purchases increased more than sevenfold to 98.6 tons last month from 13 tons a year earlier.
https://www.business-standard.com/article/economy-policy/india-gold-imports-jump-to-near-two-year-high-as-weddings-revive-demand-121041200352_1.html
- **Implantable gold sensor can help monitor vital values, drug effectiveness**
 - Scientists at Johannes Gutenberg University Mainz have developed an implantable sensor based on color-stable gold nanoparticles. The sensor can be operated in the body for several months.
 - Embedded into an artificial polymeric tissue, the nanogold is implanted under the skin and it changes its color to report information on vital values and concentrations of substances or drugs.
<https://www.mining.com/implantable-gold-sensor-can-help-monitor-vital-values-drug-effectiveness/>

Semiconductor Related Articles (impacting Precious Metals electronics):

- **Gartner Says Worldwide Semiconductor Revenue Grew 10.4% in 2020**
 - Worldwide semiconductor revenue totaled \$466.2 billion in 2020, an increase of 10.4% from 2019, according to final results by Gartner, Inc.
 - "Memory, GPUs and 5G chipsets led semiconductor growth, driven by hyperscale, PC, ultramobile and 5G handset end-market demand, while automotive and industrial electronics suffered due to lower spending or a pause in spending owing to COVID-19," said Andrew Norwood, research vice president at Gartner.

<https://www.gartner.com/en/newsroom/press-releases/2020-04-12-gartner-says-worldwide-semiconductor-revenue-grew-10-4-percent-in-2020>

- **Intel in talks to produce chips for automakers within six to nine months -CEO**
 - Chief Executive Officer Pat Gelsinger said the company is talking to companies that design chips for automakers about manufacturing those chips inside Intel's factory network, with the goal of producing chips within six to nine months. Gelsinger earlier on Monday met with White House officials to discuss the semiconductor supply chain.
<https://www.reuters.com/article/us-usa-semiconductors-idUSKBN2BZ2C4>
- **Spending \$50B on the Chip Industry is a Challenge**
 - Chip industry executives have a huge collective challenge: deciding how to prioritize the \$50 billion in support promised by President Joseph R. Biden in an executive order.
 - Semiconductor industry executives met virtually with President Biden to discuss the issues around chip capacity and supply chain. Neither the SIA nor the White House readouts of the meeting told us anything new. The President did acknowledge however that the \$50B support package is not likely to be enough, stating, "We are seeking a significant investment in this piece of legislation. It's important, but we know it's not sufficient."
<https://www.eetimes.com/spending-50b-on-the-chip-industry-is-a-challenge/#>
- **China semiconductor imports surge to all-time high in March amid global chip shortage**
 - China imported a record 58.9 billion semiconductor units in March, worth US\$35.9 billion
 - That boosted the country's total first-quarter chip imports to 155.6 billion units, valued at US\$93.6 billion
<https://www.scmp.com/tech/big-tech/article/3129383/china-semiconductor-imports-surge-all-time-high-march-amid-global>

Silver

- **Why Are Solar Projects Becoming More Expensive?**
 - Over the past 10 years, the industry has seen an 80% drop in module prices on a dollar-per-watt basis, from over \$1 per watt peak (Wp) in 2011 to less than \$0.20/Wp free-on-board (FOB) in 2020. This year, however, module costs FOB from China have already risen to above \$0.22/Wp, reversing a seven-year trend. This development was caused by a price hike of key commodities used to make silicon solar cells, including polysilicon, silver, aluminum, and glass, as well as higher shipping costs.
 - One of the key commodities used in solar cell manufacturing is silver, as its electrical properties make it an ideal electrical contact to the front and rear of the cell. Between 2012 and 2016, the industry dramatically reduced the use of expensive silver from over 200 milligrams per cell to around 100 mg/cell.
<https://oilprice.com/Energy/Energy-General/Why-Are-Solar-Projects-Becoming-More-Expensive.html>
- **Solar and silver price hikes**
 - The PV industry has experienced several rounds of price increases since the second half of 2020, from polysilicon to materials such as PV glass and films. Between July 2020 and February 2021, prices quoted for 3.2 mm and 2 mm glass surged by more than 60% per square meter. Prices for EVA and POE encapsulant films skyrocketed by more than 40% and 10%, respectively. Prices for silver paste also rose 7%, and have since remained stubbornly high. PV Infolink Chief Analyst Corrine Lin examines the impact of silver's recent price turbulence on PV cell manufacturing.
<https://www.pv-magazine.com/2021/04/15/solar-and-silver-price-hikes/>
- **Silver Hits Three Week High, Future Outlook Remains Mixed**
 - Silver hit a fresh three week high above the 25.80 level.
 - The metal had hit its lowest point since December at the end of March, around the 24.00 level.
 - Overall, precious metals have struggled in 2021 as US yields have moved higher.

https://www.dailyfx.com/forex/market_alert/2021/04/15/Silver-Hits-Three-Week-High-Future-Outlook-Remains-Mixed.html

- **Demand for silver jewelry will recover**
 - Worldwide, around 23 percent less silver jewelry crossed the counter in 2020. A double-digit recovery is forecast for the current year, with growth of around 13 percent. Covid-19 and higher silver prices put a dent in silver jewelry sales in 2020. According to a report by the Silver Institute, global silver demand in 2020 was around 23 percent lower than in the previous year.
<https://www.resource-capital.ch/en/news/view/demand-for-silver-jewelry-will-recover/>
- **Singapore dealer prepares vault for 15,000 tonnes of silver**
 - The vault that's being built by Silver Bullion Pte Ltd. Will, when completed in the first half of next year, be able to store 15,000 t of silver. It's only holding around 400 tons of the metal at the moment, but the vacant space is an indication that silver appears to be on the cusp of a promising few years.
<https://www.mining.com/web/singapore-dealer-prepares-vault-for-15000-tonnes-of-silver/>

Precious Metals Mining:

- **Norilsk: Production Recovery at Oktyabrsky Mine is Ahead of Schedule**
 - Nor Nickel, the world's largest producer of palladium and high-grade nickel and a major producer of platinum and copper, announces that the Company has resumed production at the Oktyabrsky mine after successfully dealing with the flood. The mine's workings have been drained; mining operations are restarting ahead of schedule.
 - The plan to restore normal operations has been updated. The Oktyabrsky mine (5.0 mtpa of ore) is expected to resume production in full by the end of April. Today, the mine's capacity has already reached 60% of the target level.
<https://www.nornickel.com/news-and-media/press-releases-and-news/production-recovery-at-oktyabrsky-mine-is-ahead-of-schedule/>
- **Anglo American secures 100% renewables across its South American operations**
 - Diversified miner Anglo American has delivered on its commitment to source 100% renewable energy for all its operations in Brazil, Chile and Peru.
 - "Our sourcing of only renewable energy to power our operations across South America marks another step towards our 2030 greenhouse-gas reduction target of 30% that is embedded in our Sustainable Mining Plan and towards our commitment to be carbon neutral across our global operational footprint by 2040," adds Anglo American corporate relations and sustainable impact group director Anik Michaud.
<https://www.engineeringnews.co.za/article/anglo-american-secures-100-renewables-across-its-south-american-operations-2021-04-15>
- **Supporting booming PGMs is government's best shot at boosting growth**
 - Vehicles globally will require higher loadings of metals to meet stringent emissions standards
<https://www.businesslive.co.za/bd/opinion/2021-04-14-supporting-booming-pgms-is-governments-best-shot-at-boosting-growth/>
- **South African COVID variant might evade protection from vaccine, study finds**
 - The South Africa variant of the coronavirus might evade the Pfizer vaccine, according to a new study from Tel Aviv University and Israel's largest healthcare provider.
 - The study looked at 400 individuals who tested positive for the coronavirus despite receiving at least one dose of the Pfizer/BioNTech vaccine and compared the prevalence of the South African variant, B.1.351, with the same number of people who have not yet received a vaccination.
 - "We found a disproportionately higher rate of the S. African variant among people vaccinated with a second dose, compared to the unvaccinated group," said Adi Stern of Tel Aviv University. "This means that the South African variant is able, to some extent, to break through the vaccine's protection."
<https://www.washingtonexaminer.com/news/study-covid-variant-pfizer-vaccinated-unvaccinated>

E-Waste & Precious Metals Recycle Related:

- **Simpler E-Waste Recycling Method Might Be Greener, Too**
 - The new approach can separate different metals in e-waste using only air and high temperatures.
 - In a paper published in the journal Materials Horizons in March, materials scientist Martin Thuo and his collaborators at Iowa State University demonstrated a new method of extracting valuable metals from recycled electronics: one that requires only air and relatively low temperatures of 500-700 degrees Fahrenheit (260-370 degrees Celsius).
<https://www.insidescience.org/index.php/news/simpler-e-waste-recycling-method-might-be-greener-too>
- **Hungary-Serbia connection in e-scrap**
 - Metal processing company Metal Shredder Hungary (MSH) plans to build a factory in Becej, Serbia, by 2023. The company will develop its recycling plant based on a 'zero waste' technology to collect and process electronic waste, as well as X-ray films from the Serbian healthcare sector.
<https://recyclinginternational.com/business/hungary-serbia-connection-in-e-scrap/33253/>
- **In Our Opinion: Safe e-recycling of polychlorinated biphenyls**
 - Electronic recycling facilities handle waste that contains a variety of toxic chemicals such as polychlorinated biphenyls (PCBs) (not to be confused with printed circuit boards), but no comprehensive PCB exposure assessment for workers in the U.S. e-recycling industry has been published. We recently developed best practice guidelines to help e-recycling facility employees safely identify and handle scrap equipment containing these legacy chemicals.
https://resource-recycling.com/e-scrap/2021/04/15/in-our-opinion-safe-e-recycling-of-polychlorinated-biphenyls/?utm_medium=email&utm_source=internal&utm_campaign=April+15+ESN

Platinum

- **France invests €7 billion into hydrogen fuel research**
 - France has launched the Federation de Recherche Hydrogène (FRH₂) to support hydrogen fuel research and has invested an initial €7 billion (\$8.38 billion).
<https://www.hydrogenfuelnews.com/hydrogen-fuel-research/8544184/>
- **Platinum price to rise as green hydrogen emerges as a new demand segment**
 - The rarity of platinum, combined with a decline in supply and overwhelming demand, is a formula for a build-up of a "perfect storm", says independent precious metals consultant Dr David Davis, who says that this will lead to significant upward pressure on the price of platinum, to which investors have already begun to react.
<https://www.miningweekly.com/article/platinum-price-to-rise-as-green-hydrogen-emerges-as-a-new-demand-segment-2021-04-14>
- **Solar-to-Hydrogen Tech Sees "Remarkable" Efficiency Jump - IEEE Spectrum**
 - The researchers sought to improve the efficiency of the BaTaO₂N photocatalyst by depositing the platinum-based co-catalyst. But the conventional methods for doing so weren't initially effective.
 - So the researchers first deposited only a small amount of the platinum co-catalyst using the impregnation-reduction process, and that prevented the particles from aggregating. Then they applied a second layer using photo deposition; this time, the fine particles grew on the widely dispersed "seeds" planted in the first step.
<https://spectrum.ieee.org/energywise/energy/renewables/solar-to-hydrogen-remarkable-efficiency-jump>

Fuel Cells/Hydrogen Economy Related Articles:

- **Beijing sets 10,000 hydrogen fuel cell cars and trucks target for its streets in 4 years**
 - China's capital city of Beijing plans to have over 10,000 hydrogen fuel cell cars and trucks on its streets by 2025 and plans to support them with 74 H₂ filling stations by the same year.
<https://www.hydrogenfuelnews.com/hydrogen-fuel-cell-cars/8544061/>

- **Nikola's Countless Problems Just Got Worse**
 - The startup once valued at \$26B. Those days are long gone. Today \$5B market cap or -81%.
 - Nikola was accused of fraud in Sept. by Hindenburg Research.
 - Nikola founder and chairman Trevor Milton resign.
 - GM exited the just-signed \$2 billion investment deal that would have seen the Nikola Badger truck, a Tesla Cybertruck rival, enter production.
 - GM negotiated a far scaled-down agreement for supply FCI systems for Nikola's semi-trucks.
 - Another deal with garbage removal company Republic Services was also terminated.
 - Reuters now reports Nikola's departure of its fuel-cell development lead, Jesse Schneider.
<https://carbuzz.com/news/nikolas-countless-problems-just-got-worse>
- **Green hydrogen boom to hinge on cost-effective fuel cells**
 - Sky News Video: However, costs will have to be brought down to and production increased for hydrogen power to become a more viable option for a broader range of people.
<https://www.skynews.com.au/details/6248298969001>
- **Equinor, SSE to build the world's first hydrogen power plant in UK**
 - Norwegian energy firm Equinor and British utility SSE have agreed to jointly develop the world's first 100 percent hydrogen-fuelled power plant in Britain. Hydrogen is seen as a potential replacement for natural gas in power and heat generation, helping to achieve global climate goals.
 - Keadby Hydrogen plant would have a peak demand of 1,800 megawatt (MW) of hydrogen, generating around 900 MW of electricity and reduce emissions from Britain's most carbon-intensive industrial cluster in Humber, north-east England.
<https://greentechlead.com/renewable-energy/equinor-sse-to-build-the-worlds-first-hydrogen-power-plant-in-uk-37443>
- **French Nuclear Scheme, Green Hydrogen Theme, Michelin H2 Dream**
 - Michelin Group is leveraging its advanced materials expertise to make a pitch for green hydrogen and fuel cells, with 24 Hours of Le Mans for good measure.
<https://cleantechnica.com/2021/04/11/french-nuclear-scheme-behind-green-hydrogen-theme-of-michelins-le-mans-fuel-cell-dream/>
- **Toyota Applies Diesel-Killing Hydrogen Fuel Cell Muscle To EU Railways**
 - If all goes according to plan, a new hybrid hydrogen fuel cell locomotive will sport Toyota fuel cells and green H2, too.
<https://cleantechnica.com/2021/04/09/toyota-applies-diesel-killing-hydrogen-fuel-cell-muscle-to-eu-railways/>
- **The Potential of Hydrogen Energy**
 - Hydrogen isn't a one-step solution to the climate crisis. It's a part of the multi-faceted solutions. But hydrogen can aid the wider adoption of alternative fuel sources, including renewables, and move us one step closer net-zero emissions.
<https://www.reuters.com/brandfeatures/road-to-a-new-day/the-potential-of-hydrogen-energy>
- **Citroën and Peugeot will offer light commercial vehicles with fuel cell systems**
 - In collaboration with partners Furesia and Symbio, Stellantis has decided to use a medium-performance solution that includes a 45 kWh hydrogen cell system, a 4.4 kg hydrogen tank (located under the floor, 700 bar pressure) and a 10.5 kWh running battery. is.
 - The function of the fuel cell system would be to ensure the return of relatively power, while the battery would provide acceleration and use deceleration (regenerative braking), and would be capable of charging from the mains.
<https://www.sproutwired.com/citroen-and-peugeot-will-offer-light-commercial-vehicles-with-fuel-cell-systems/>

Palladium

- **Palladium Price Analysis: XPD/USD is on course for the all-time high at 2878.04 – Commerzbank**
 - “We expect the current advance to rise above the 2758.00 high towards the 2020 peak and all-time high at 2878.04.”
<https://www.fxstreet.com/news/palladium-price-analysis-xpd-usd-is-on-course-for-the-all-time-high-at-287804-commerzbank-202104141054>
- **Palladium Price Analysis: XPD/USD eyes record highs above \$2800 amid a symmetrical triangle breakout**
 - RSI points north above 50.00, a test of record highs at \$2882 could be in the offing.
 - Deeper supply deficit issues this year propels Palladium towards 14-month highs.
<https://www.fxstreet.com/news/palladium-price-analysis-xpd-usd-eyes-record-highs-above-2800-amid-a-symmetrical-triangle-breakout-202104130959>
- **New research from Global Palladium Fund reveals institutional investors predict an increase in industrial activity will drive precious metal prices higher**
 - The study shows that two thirds of investors (67%) predict industrial activity will increase this year. This will drive the price of metals such as silver, palladium and platinum higher according to 69% of professional investors surveyed. Almost a quarter (24%) predict that prices will increase dramatically.
<https://gpf.global/new-research-from-global-palladium-fund-reveals-institutional-investors-predict-an-increase-in-industrial-activity-will-drive-precious-metal-prices-higher/>

PGM Minor Metals (Rhodium, Iridium, Ruthenium, Osmium)

- **Ruthenium Catalyst - Ammonia decomposition for hydrogen economy, improvement in hydrogen extraction efficiency**
 - The KIST research team has developed a catalyst for hydrogen production from ammonia decomposition in which ruthenium metal particles and zeolite are strongly bound by calcination under vacuum, which results in the containment of sub-nanometer and nanometer ruthenium metal particles in each pore of the zeolite support. This novel catalyst exhibits 2.5-times higher ammonia decomposition performance than conventional commercial catalysts and achieves this efficiency while using only 40% of ruthenium metal. Because nanometer-sized ruthenium metal particles are present and maintain their stability during the ammonia decomposition process even at high reaction temperatures, the use of the proposed catalyst can overcome the problem of low stability, which has been significantly limiting the commercialization of existing catalysts.
https://www.eurekalert.org/pub_releases/2021-04/nrco-adf040621.php
- **(Thick Film Ruthenium) Resistor Markets Tighten as Ruthenium Prices Skyrocket**
 - The variable cost associated with raw materials is the largest single factor associated with the overall cost of producing thick film chip resistors. Variable raw material costs average 44% of the costs to produce for the multibillion worldwide resistor industry.
 - Thick film chip resistors showed a large-scale increase in lead times in March 2021 which affected all EIA case size chips from 0201 to 1206.
<https://www.tti.com/content/ttiinc/en/resources/marketeye/categories/passives/me-zogbi-20210406.html>
- **Resistor Markets Tighten as Ruthenium Prices Skyrocket**
 - Resistor manufacturers are experiencing price increases in the key feedstock metal ruthenium as they enter the June 2021 quarter (April 1 through June 30, 2021). This MarketEYE article correlates the impact higher metals prices are having on mass-produced resistor components consumed in all printed circuit boards, focusing on growing pressure in a critical part of the global high-tech economy.
<https://www.tti.com/content/ttiinc/en/resources/marketeye/categories/passives/me-zogbi-20210406.html>

BEV / LiB Battery Market News

- **GM to announce second U.S. battery plant, in Tennessee, with LG Chem -sources**
 - General Motors and South Korean joint-venture partner LG Chem will announce a second U.S. battery cell manufacturing plant on Friday, revealing plans for a \$2.3 billion factory in Spring Hill, Tennessee, three people familiar with the matter said.
<https://www.reuters.com/business/autos-transportation/gm-announce-second-us-battery-plant-tennessee-with-lg-chem-sources-2021-04-14/>
- **Toxic and radioactive: The damage from mining rare elements**
 - Low wages, water shortage and acidified landscapes: Mining critical raw materials endangers human rights and the environment. Yet the industry is expanding.
<https://www.dw.com/en/toxic-and-radioactive-the-damage-from-mining-rare-elements/a-57148185>
- **CATL takes stake in China Moly cobalt mine for \$137.5 million**
 - Under a strategic partnership agreement, Ningbo Brunp CATL New Energy Co will take 25% in Moly unit KFM Holding Limited, which holds 95% of the Kisanfu mine, CATL said in a statement. CATL has already invested in companies mining other battery metals such as lithium and nickel in a bid to secure supply.
<https://www.reuters.com/article/us-cmoc-catl-mine-idUSKBN2BY0BZ>
- **China's CNGR to make nickel matte in Indonesia as battery demand grows**
 - CNGR last month agreed to buy nickel matte – an intermediate product that can be processed into battery-grade nickel – from Tsingshan Holding Group. The surprise deal sent nickel prices plunging as the market sensed concerns of tight nickel supply could be overdone. Now, Changsha-based CNGR is looking to produce matte itself in a \$243 million smelting project in Tsingshan's industrial park on the Indonesian island of Sulawesi.
 - The project with Singapore-based Riqueza International Pte. Ltd. will produce 30,000 tonnes of nickel matte a year, CNGR said.
<https://batteryindustry.tech/chinas-cngr-to-make-nickel-matte-in-indonesia-as-battery-demand-grows/>
- **GM offers clues to technology aimed at slashing EV battery costs**
 - Reuss, speaking at an investor conference, said GM is experimenting with silicon-rich and lithium metal anodes, solid state and high voltage electrolytes, and dry processing of electrodes for its next generation of Ultium batteries, due around 2025, Reuters reports.
<https://batteryindustry.tech/gm-offers-clues-to-technology-aimed-at-slashing-ev-battery-costs/?utm>
- **Tesla grows frustrated with the 'outdated' approval process for Gigafactory Berlin as production gets closer**
 - Tesla hasn't obtained overall approval to build Gigafactory Berlin, and instead it has been operating the construction project with partial approval permits to keep advancing the project. It has now been 16 months since Tesla applied for the final approval, and the automaker is growing frustrated.
<https://electrek.co/2021/04/08/tesla-grows-frustrated-approval-process-for-gigafactory-berlin-production-gets-closer/>

Regards –