



Weekly Precious Metals News Articles: April 9, 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

- **India, China ramp up gold purchases as market starts recovering from pandemic pain**
 - India imported 160 tons of the yellow metal in March, 5.7x more than in the same month a year ago, when the country was under strict lockdown. Gold purchases in the country practically stopped in April and May 2020, but started growing again since the end of the year. In India, gold is a highly valued status symbol, offered at weddings and other festivities. A large part of the population keeps their savings in gold jewelry.
 - Purchases of jewelry were also up in China, 2.6x y/y in February, data showed. The beginning of last year saw demand in the world's biggest gold consumer tumbling to multi-year lows.
<https://www.rt.com/business/520543-china-india-gold-imports-surge/>
- **“Invisible Tattoo” Made of Gold Nanoparticles Revolutionizes Medical Diagnostics**
 - Gold nanoparticles embedded in a porous hydrogel can be implanted under the skin and used as medical sensors. The sensor is like an invisible tattoo revealing concentration changes of substances in the blood by color change.
<https://scitechdaily.com/invisible-tattoo-made-of-gold-nanoparticles-revolutionizes-medical-diagnostics/>
- **Turkey sells gold amid currency crisis**
 - Turkey bucked the upward trend as it sold 11.7 tons according to a report from the World Gold Council. “Central banks tipped back into net purchases during February,” said Krishan Gopaul, market intelligence manager at the World Gold Council. “Buying from India, Uzbekistan, Kazakhstan and Colombia outweighed the only notable sale of gold by Turkey. Our expectation remains that central banks will be net purchasers in 2021, but the immediate outlook for central bank demand remains finely balanced.”
<https://www.arabnews.com/node/1839031/business-economy>
- **Stark 2020 vs 2021 gold price contrast: 'Tailwinds turning into a headwinds' – RBC Capital Markets**
 - However, gold's decline came sooner than expected, Louney pointed out. "Our most recent revision to prices is actually bringing forward some of the weakness that we had expected to happen later in the year." The reasons are the global growth dynamics, higher U.S. dollar, rising yields, and risk-on sentiment, which are all weighing on gold.
<https://www.kitco.com/news/2021-04-06/Stark-contrast-between-2020-vs-2021-for-gold-price-Tailwinds-turning-into-a-headwinds-RBC-Capital-Markets.html>
- **U.S. Mint sells 412K ounces of gold coins in Q1; best start to the year since 1999**

- U.S. Mint sees its best start to the year and the best quarterly sales in more than 20 years.
- Sales data compiled by the U.S. mint shows that 412,000 ounces in various denominations of American Eagle Gold bullion coins were sold in the first quarter of 2021, up more than 88% from the first quarter of 2020.

<https://www.kitco.com/news/2021-04-06/U-S-Mint-sells-412K-ounces-of-gold-coins-in-Q1-best-start-to-the-year-since-1999.html>

Semiconductor Related Articles (impacting Precious Metals electronics):

- **Global Semiconductor Sales Up 14.7% Year-to-Year in February**
 - The Semiconductor Industry Association today announced global semiconductor industry sales were \$39.6 billion for the month of February 2021, +14.7% over the February 2020 total of \$34.5 billion, but -1.0% less than the January 2021 total of \$40.0 billion.
<https://www.semiconductors.org/global-semiconductor-sales-up-14-7-year-to-year-in-february/>
- **Chip shortage shows no signs of abating, may drag into 2022**
 - It's not just manufacturing capacity—wafer and packaging remain constrained.
<https://arstechnica.com/tech-policy/2021/04/global-chip-shortage-may-drag-into-2022/>
- **CEO of US chip foundry explains why semiconductor shortage could last through 2022**
 - A shortage of semiconductor microchips is causing havoc around the world.
 - "Right now all our fabs are not only more than 100% utilized, we are adding capacity as fast as we can," Caulfield said. A shortage of semiconductor microchips is causing havoc around the world, delaying car production and affecting the operations of some of the largest consumer electronics manufacturers.
 - The shortage has highlighted the role of a handful of foundries, which are the factories contracted by semiconductor firms to build chips. Many, like GlobalFoundries, are investing billions in new production lines and upgraded equipment to keep up with the surge in demand and shortfalls in supply.
<https://www.msn.com/en-us/news/other/ceo-of-largest-us-chip-foundry-explains-why-semiconductor-shortage-could-last-through-2022/ar-BB1feEnR?ocid=uxbndlbing>
- **Chip threat dampens rise in US auto sales**
 - "Consumer confidence and spending will continue to increase due to stimulus, rising vaccination rates and the progressive reopening of the economy," GM chief economist Elaine Buckberg said. "Auto demand should remain strong throughout the year."
 - However, while demand is healthy, there are questions about the supply picture as all four companies have announced production cuts due to the global semiconductor shortage.
 - Just a week ago, FCA's parent company, Stellantis NV, announced that it was suspending production at five North American auto manufacturing plants due to the chip crunch.
<https://www.reuters.com/article/us-usa-semiconductors/global-chip-supply-chain-increasingly-vulnerable-to-massive-disruption-study-finds-idINKBN2BO4TV?edition-redirect=in>
- **Semiconductor Units Forecast To Exceed 1 Trillion Devices Again in 2021**
 - A 13% increase is expected to lift total semiconductor shipments to a new record high.
 - Total semiconductor unit shipments, which include integrated circuits as well as optoelectronics, sensor/actuator, and discrete (O-S-D) devices, are forecast to rise 13% in 2021, to 1,135.3 billion (1.1353 trillion) units to set a new all-time annual record, based on data presented in the 2021 edition of IC Insights' McClean Report.
<https://www.icinsights.com/news/bulletins/Semiconductor-Units-Forecast-To-Exceed-1-Trillion-Devices-Again-In-2021/%20%20>
- **TSMC to spend US\$100 billion on expansion over next 3 years**
 - TSMC, the world's largest contract chipmaker, is planning to invest US\$100 billion over the next three years to expand operations. TSMC said the massive investment will aim to use

more resources for research and development and upgrading technologies, to maintain the company's lead over its peers on the global market.

<https://focustaiwan.tw/sci-tech/202104020009>

Silver

- **Silver Price Forecast – Silver Markets Recapture 25 USD**
 - Silver markets have rallied a bit during the trading session on Tuesday to recapture the \$25 level and threatened the recent selloff. We have recently bounced from the 200 day EMA, so that of course is a bullish sign. The 200 day EMA does in fact tend to attract a lot of attention, and with that being the case I think it is only a matter of time before we may get more “hard money” going back into the marketplace.
<https://finance.yahoo.com/news/silver-price-forecast-silver-markets-154343427.html>
- **Silver Is About to Awaken the Giant Within**
 - growing chorus of market observers are wagering that silver and assets such as the Sprott Physical Silver Trust are poised for more upside following a disappointing first quarter.
<https://www.nasdaq.com/articles/silver-is-about-to-awaken-the-giant-within-2021-04-02>
- **Solar PV driving green hydrogen to undercut gas, says BloombergNEF**
 - BloombergNEF has shown that solar PV is the key driver of declining green hydrogen costs. The forecast shows costs falling by 85% by 2050, undercutting natural gas and blue and gray hydrogen production.
<https://www.pv-magazine.com/2021/04/08/solar-pv-driving-green-hydrogen-to-undercut-gas-says-bloombergnef/>
- **Industrial demand can drive silver prices to \$30 an ounce**
 - Rising momentum in the U.S. dollar and the resilient uptrend in bond yields are taking their toll on precious metals, particularly with silver prices seeing weakness, falling more than 2% on the day.
 - However, one bank is not giving up on the precious metal as they expect rising industrial demand to keep the fundamental supply and demand picture relatively balanced through 2021. In a report published Monday, commodity analysts at Bank of America said that they continue to see silver prices averaging the year around \$29.28 an ounce.
<https://www.kitco.com/news/2021-03-29/Industrial-demand-can-drive-silver-prices-to-30-an-ounce-Bank-of-America.html>

Precious Metals Mining:

- **Barrick accepts reduced ownership stake in deal to restart Papua New Guinea gold mine**
 - Under the renegotiated agreement, the 95% stake in the mine held by BNL drops to 49% and the government's ownership jumps from 5% to 51%, although BNL will still be the operator.
<https://www.thestar.com/business/2021/04/09/barrick-accepts-reduced-ownership-stake-in-deal-to-restart-papua-new-guinea-gold-mine.html>
- **Anglo American to spin off South African coal assets**
 - Anglo American is moving forward with its plans to exit coal by announcing it will separate its South African coal assets into a new business this year amid growing investor pressure to abandon the polluting commodity.
 - The demerged company, Thungela Resources, will list on the Johannesburg and London stock exchanges, Anglo said on Thursday. Investors will receive one Thungela share for every ten Anglo American shares they hold. Anglo executive July Ndlovu has been named chief executive officer.
<https://www.mining.com/anglo-american-to-spin-off-south-african-coal-assets/>
- **PGM bumper profits tipped by SA's PIC to continue "for some time"**

- S Africa's Public Investment Corporation (PIC) expected bumper profits from the country's platinum group metal (PGM) companies to keep rolling owing to tighter emissions rules, said Bloomberg News.
- "The cycle should continue for some time," Mdu Bhulose, the PIC's portfolio manager for mining and resources, told the newswire. "The supply and demand dynamics are quite solid and they are talking to a tightening market which should be supportive of prices."
<https://www.miningmx.com/trending/45745-pgm-bumper-profits-tipped-by-sas-pic-to-continue-for-some-time/>
- **Is battery recycling environmentally friendly?**
 - Researchers have investigated the environmental effects of a hydrometallurgical recycling process for electric car batteries. Using simulation-based life-cycle analysis, they considered energy and water consumption, as well as process emissions.
 - 'Battery recycling processes are still developing, so their environmental footprints haven't yet been studied in detail. To be beneficial, recycling must be proven to be more ecological than producing raw materials – we can't just assume recycling is automatically better, even though we know mining the raw materials has large environmental impacts, like high energy and water consumption.'
 - Battery recycling often uses smelting, which typically loses lithium and other raw materials. Novel hydrometallurgical processes, which separate battery metals from waste by dissolution, enable the recovery of all metals but consume large amounts of energy and chemicals, and often produce contaminated wastewaters.
 - According to the results, the carbon footprint of the raw material obtained by the recycling process studied is 38% smaller than that of the virgin raw material. The difference is even greater if copper and aluminum recovered during mechanical pre-treatment are included.
<https://www.newswise.com/articles/is-battery-recycling-environmentally-friendly>

E-Waste & Precious Metals Recycle Related:

- **Photocatalytic process picks out precious metals from waste electronics**
 - Retrieving precious metals from waste electronics is difficult for one of the same reasons the materials are so valued: they are generally unreactive. Current recycling methods therefore involve strongly corrosive and toxic reagents such as dissolving in aqua regia, and proposed alternatives are usually complex and difficult to scale up.
 - Now, Zhenfeng Bian of Shanghai Normal University and colleagues in China and the US have developed a simple method of sequentially leaching multiple precious metals using photocatalysis. The process uses TiO₂ in acetonitrile solvent in the presence of oxygen. Irradiating the solution with UV light photoexcites the TiO₂, forming electron hole pairs that go on to produce superoxide and cyanomethyl radicals from the oxygen and solvent respectively. These radicals then oxidise the metal atoms and the metal ions are dissolved into solution.
<https://www.chemistryworld.com/news/photocatalytic-process-picks-out-precious-metals-from-waste-electronics/4013472.article#/>
- **Missouri bill puts onus on scrap metal dealers to blunt wave of catalytic converter thefts**
 - Mayhew's House Bill 1153 would classify unlawfully acquiring a catalytic converter as a theft and mandate scrap metal dealers require proof sellers of catalytic converters are a "bona fide automobile repair shop" or sign an affidavit that the converter was lawfully acquired to be maintained for four years by the state Department of Public Safety.
 - Under HB 1153, transactions involving catalytic converters must occur at the primary place of business of the scrap metal dealer, who must maintain the catalytic converter for five days "before modifying it in any way."
<https://www.washingtonexaminer.com/politics/missouri-bill-puts-onus-on-scrap-metal-dealers-to-blunt-wave-of-catalytic-converter-thefts>
- **Curbing thefts of catalytic converters**

- St. Paul police clinic to mark the devices is smart public service.
<https://www.startribune.com/curbing-thefts-of-catalytic-converters/600043792/>
- **As precious metals prices soar, so do catalytic converter thefts**
 - Thieves have been stealing more and more catalytic converters across the country over the past year, from St. Paul to Los Angeles to Dallas, as the value of the precious metals they contain skyrockets.
<https://www.marketplace.org/2021/03/22/as-precious-metals-prices-soar-so-do-catalytic-converter-thefts/>

Platinum

- **Platinum jewellery is going to make a comeback this year - Times of India**
 - As per the PGI Global Study done in 2020, we have found that Indian jewellery buyers, predominantly millennials, are looking to build value through their resources and reinforce their close relationships and self-affirmation. There is a strong willingness to spend on precious jewellery and this sentiment offers an ideal opportunity to reinforce the power of platinum as a metal to build and uplift life. Another interesting insight is that 66% of consumers, 'want to purchase something that maintains its value, and 64% want to buy something 'personally meaningful', which gives jewellery a distinct advantage over other discretionary categories.
<https://timesofindia.indiatimes.com/life-style/fashion/luxury/expert/platinum-jewellery-is-going-to-make-a-comeback-this-year/articleshow/81913843.cms>

Fuel Cells/Hydrogen Economy Related Articles:

- **China's capital envisages 10,000 fuel cell vehicles by 2025**
 - The city of Beijing aims to have over 10,000 fuel cell vehicles on the road and build 74 hydrogen filling stations by 2025, as the Chinese capital maps out an ambitious plan to develop the low-carbon fuel, state media reported on Thursday.
<https://finance.yahoo.com/news/chinas-capital-envisages-10-000-105239217.html>
- **Work begins on green hydrogen storage cavern in Sweden**
 - Vattenfall, SSAB and LKAB are building a rock cavern storage facility in a coastal city in northern Sweden. The 100-cubic-meter facility will be built 30 meters below ground and will begin storing green hydrogen next year.
<https://www.pv-magazine.com/2021/04/08/work-begins-on-green-hydrogen-storage-cavern-in-sweden/>
- **Nikola Loses Key Executive Heading Fuel-Cell Development**
 - Nikola Corp., the troubled hydrogen-powered and battery-electric truck startup, lost a key member of its executive team with the departure of the former head of its fuel-cell development program.
 - The company said Jesse Schneider, executive vice president of technology, hydrogen and fuel cells, left the company April 1. He had led its engineering teams working on fuel-cell systems, a planned hydrogen-fueling station network and storage technology.
<https://www.bloomberg.com/news/articles/2021-04-07/nikola-loses-key-executive-in-charge-of-fuel-cell-development>
- **Green hydrogen infrastructure project launches in France and Spain**
 - The Spanish Green Crane project's Lacq Hydrogen will now be a part of an industrial green hydrogen infrastructure effort for producing and exporting renewable H₂ through some considerable pipeline developments.
 - The goal of this project is to have deployed about 6,800 km of pipeline for H₂ by 2030.
 - That said, the green hydrogen infrastructure project doesn't end that year. This will connect the French and Spanish "hydrogen valleys." By the completion of the following decade, in 2040, the goal is to have established a 22,900-kilometer H₂ network across Europe.

https://www.hydrogenfuelnews.com/green-hydrogen-infrastructure/8544047/?mc_cid=dd98aed737&mc_eid=70c1246d58

- **First Mode building hydrogen fuel cell to power one of the biggest zero-emission vehicles on Earth (300 t mine haul trucks)**
 - In a few months, First Mode will take the generator to South Africa, where it will be retrofitted into a massive, 300-metric-ton haul truck to create “one of the biggest zero-emission vehicles on the planet,” said Chris Voorhees, the company’s president and chief engineer.
 - It’s part of a three-year, \$13.5 million deal First Mode signed with global mining giant Anglo American in 2019, and part of a new direction for a company that got its start working on spacecraft and Mars rovers.
 - Matt: It’s estimated that the 2 MW fuel cell stack would need some 18-25 Toz of Platinum. Opportunity to reduce CO2 emission equivalent of 10k diesel light duty vehicles.
<https://www.geekwire.com/2021/first-mode-building-hydrogen-fuel-cell-power-one-biggest-zero-emission-vehicles-earth/>

Palladium

- **Remember Palladium? A Close Look at the Other Precious Metal**
 - Sometimes the most rewarding strategies are found away from all the shouting. Palladium could be one of these opportunities.
<https://realmoney.thestreet.com/investing/basic-materials/remember-palladium-a-close-look-at-the-other-precious-metal-15618639>
- **Gold to see further downside pressure while palladium stands out – CE**
 - “The largest move was in the price of palladium, which surged by 14% after Nornickel revised down its 2021 PGM production guidance by 15-20%. We think that the price of palladium will outperform the price of platinum over the next few years.”
<https://www.fxstreet.com/news/gold-to-see-further-downside-pressure-while-palladium-stands-out-ce-202104071445>
- **New (USA) car sales rose last quarter despite ongoing chip shortages**
 - Automakers on Thursday reported a rebound in first-quarter U.S. sales from a coronavirus-induced slump last year, but numbers were dulled by a global chip scarcity that forced many companies to cut production.
<https://www.yahoo.com/now/car-sales-rose-last-quarter-185400009.html>
- **Prepare for the P's: Platinum, Palladium, and 'SPPP'**
 - Palladium could be on the cusp of a dramatic leg higher, increasing the allure of the Sprott Physical Platinum and Palladium Trust SPPP.
<https://etfdb.com/gold-silver-investing-channel/prepare-ps-platinum-palladium-sppp/>

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

- **Value of iridium in electrolysis could top R90bn mark in years ahead – HySA**
 - The value of iridium for proton exchange membrane (PEM) water electrolysis technology alone could exceed R90-billion in the next ten to 20 years.
 - This is the view of Professor Dmitri Bessarabov, the director of the Department of Science and Innovation's (DSI's) National Centre of Competence: Hydrogen South Africa (HySA) Infrastructure.
<https://www.engineeringnews.co.za/article/value-of-iridium-in-electrolysis-could-top-r90bn-mark-in-years-ahead-hysa-2021-04-07>
- **Why rhodium has stretched a rally that saw prices for the metal nearly triple last year**

<https://www.marketwatch.com/story/why-rhodium-has-stretched-a-rally-that-saw-prices-for-the-metal-nearly-triple-last-year-11617376809>

- **Alloy formed that can slash price for auto exhaust purifiers**
 - Researchers are trying to develop an alternative substance with a purification ability similar to rhodium. The research team has been involved in the development of a substance made up of ruthenium and palladium. The material could remove nitrogen oxides from exhaust gas, but it was too fragile to be used repeatedly.
 - In the latest endeavor, the scientists added an element known as iridium to ruthenium and palladium to create an alloy consisting of the three rare metals. They confirmed the alloy can be repeatedly used in a stable manner for exhaust purification.
<http://www.asahi.com/ajw/articles/14279445>

BEV / LiB Battery Market News

- **Booming electric vehicle sales drive surge in cobalt prices**
 - Demand and prices for battery material cobalt are soaring as EVs stream out of showrooms in China & Europe, as drivers and governments move to cut carbon emissions.
 - The price of the metal stands at \$53,000 per tonne, up 65% this year and around its highest since December 2018, having been as low as \$25,000 in 2019 due to a global market surplus.
 - Payables - a reference to the percentage of the cobalt metal price used to price hydroxide, a feedstock for electric vehicle (EV) batteries - are up at around 93-94% from about 63-69% a year ago, analysts from Benchmark Mineral Intelligence said.
<https://www.reuters.com/article/us-cobalt-prices-graphic-idUSKBN2B41YB>
- **Nickel: Ambatovy produces first briquettes following re-start**
 - The Ambatovy nickel-cobalt refinery in Madagascar has produced its first nickel briquettes following the plant's re-start. The company said that following a shut-down of ~1 year, class I material had been produced on Tuesday 23 March.
 - The Ambatovy plant was stopped in March'20 because of the COVID pandemic. In the last full-year of operations, Ambatovy produced 34kt of nickel. Maximum annual production was 47kt in 2015.
<https://roskill.com/news/nickel-ambatovy-produces-first-briquettes-following-re-start/>
- **Strong growth ahead for storage**
 - Annual battery storage installations will exceed 10 GW/28 GWh in 2021, following a particularly strong year in 2020, despite the challenges created by the global pandemic, writes IHS Markit analyst Mike Longson. Combined solar and storage will be a core focus for new deployment in 2021, as the front-of-the-meter and behind-the-meter energy storage markets are both expected to grow significantly in the months ahead.
<https://www.pv-magazine.com/magazine-archive/strong-growth-ahead-for-storage/>
- **US electric car incentive is rumored to increase to \$10,000 in program reform - Electrek**
 - It's unclear how the money will be spent, but we are now hearing that the electric car tax credit could increase to \$10,000. Last week, the Biden administration released an outline of its infrastructure plan, including a summary of a planned \$174 billion investment in electrification. It's part of the summary, the administration confirmed that they are planning to reform the EV incentive program, which today consists of a \$7,500 tax credit on new electric vehicles up to a 200,000-unit limit per manufacturer.
<https://electrek.co/2021/04/06/us-electric-car-incentive-program-reform/>
- **Lex in depth: a solid case for the next generation of batteries**
 - Solid-state batteries are safer and use fewer raw materials. Are they the answer to technology's power problem and a threat to Tesla's dominance?
<https://www.ft.com/content/c4e075b8-7289-4756-9bfe-60bf50f0cf66>

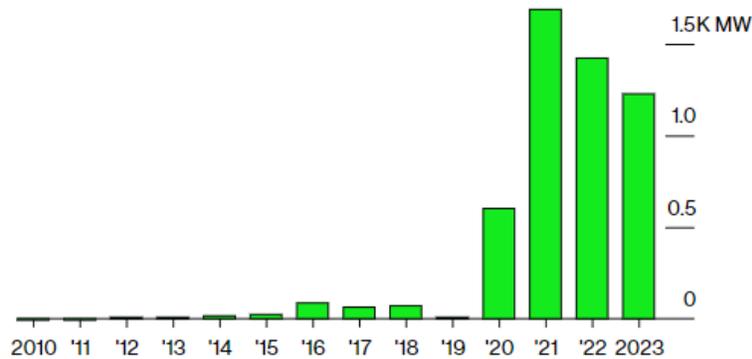
- **California to Test Whether Big Batteries Can Stop Summer Blackouts**

- Giant versions of the same technology that powers smart phones and cars are being plugged into the state’s electrical grid at breakneck speed, with California set to add more battery capacity this year than all of China, according to BloombergNEF.
- By this August, the state will have 1,700 megawatts (equivalent of 20k Tesla’s) of new battery capacity, enough to power 1.3 million homes and, in theory, avert a grid emergency on the scale of last year’s.

<https://www.bloomberg.com/news/articles/2021-04-01/to-avoid-blackouts-california-s-installing-more-big-batteries-than-all-of-china>

California's Battery Buildout

The state plans to install 1.7 gigawatts of battery storage in 2021



Source: BloombergNEF

Regards –