



Weekly Precious Metals News Articles: January 22, 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

- **ROSS NORMAN - Precious Metals Forecasts 2021**

- Gold Average: \$2025 High: \$2285 Low: \$1810
- Silver Average: \$30.26 High: \$36.00 Low: \$24.10
- Platinum Average: \$1316 High: \$1520 Low: \$1000
- Palladium Average: \$2625 High: \$3000 Low: \$2300

<https://www.linkedin.com/pulse/ross-norman-precious-metals-forecasts-2021-ross-norman/?trackingId=BtHo905c%2FQ0wFaEz9M3jSQ%3D%3D>

- **Bullion Lease Rates Suggest Gold And Silver Bull Market**

- A study of lease rates for lending/borrowing gold and silver in the bank bullion market can provide clues to price direction.
- Both monetary metals in a bullish position, although their lease rate patterns are slightly different.
- The COVID-19 economic fallout, with sharply higher federal spending and central bank paper money printing, is supportive of yet higher U.S. dollar pricing for the precious metals.

<https://seekingalpha.com/article/4399557-bullion-lease-rates-suggest-gold-and-silver-bull-market>

- **India Gold prices today rise for 4th day in a row, silver rates move higher**

- Further stimulus plans, if any, from European Central Bank will be gold traders radar. Analysts expect the ECB to keep its easy money policy unchanged today but could signal further stimulus as the second wave of COVID-19 dims an already weak outlook.

<https://www.livemint.com/market/commodities/gold-prices-today-rise-for-4th-day-in-a-row-silver-rates-move-higher-11611197664515.html>

- **Gold ends at a nearly 2-week high on talk of further U.S. fiscal stimulus**

- Gold futures climbed on Wednesday, notching their highest finish in nearly two weeks, as expectations for further fiscal stimulus measures under the Biden administration pressured the U.S. dollar, boosting prices for the dollar-denominated precious metal.

<https://www.marketwatch.com/story/gold-bounces-around-in-final-moments-of-trump-presidency-11611150759>

Semiconductor Related Articles (impacting Precious Metals electronics):

- **TSMC on track to move 3nm process to risk production in 2021**

- TSMC is on track to move 3nm process technology to risk production in 2021 followed by volume production in the second half of 2022, according to the pure-play foundry.

<https://www.digitimes.com/news/a20210115PD208.html>

- **R&D spending by semiconductor companies to hit another record high in 2021**
 - Research and development spending by semiconductor companies worldwide is forecast to grow 4% in 2021 to US\$71.4 billion after rising 5% in 2020 to a record high of US\$68.4 billion, according to IC Insights. It will continue its growth at a CAGR of 5.8% between 2021-25.
<https://www.digitimes.com/news/a20210120PR200.html>
- **China car production hit by semiconductor shortages**
 - More than 90% of automotive semiconductor components used in China are imported, making the country's automakers more susceptible to short supply, the sources indicated. Automotive semiconductor components account for about 40% of total production cost for a fuel car and over 70% for an electric vehicle (EV), the sources noted.
<https://www.digitimes.com/news/a20210121PD209.html>

Silver

- **Silver ETFs Fall on Strengthening Dollar, Biden Stimulus Release**
 - Gold and silver futures prices fell on Friday, prompted partly by a strengthening U.S. dollar index and dipping crude oil prices.
 - In addition to the rallying dollar, President-Elect Joe Biden's stimulus plan was revealed, driving stock markets globally lower on Friday, as it appears markets internalize higher personal and corporate taxes under the Biden administration.
<https://www.nasdaq.com/articles/silver-etfs-fall-on-strengthening-dollar-biden-stimulus-release-2021-01-15>
- **Netherlands deployed 2.93 GW of solar in 2020**
 - At the end of December, the country's cumulative installed solar capacity surpassed 10 GW. PV was able to cover around 6.6% of Dutch electricity demand last year, according to a new report from Dutch New Energy.
<https://www.pv-magazine.com/2021/01/21/netherlands-deployed-2-93-gw-of-solar-in-2020/>
- **Ross NORMAN, CEO at Metals Daily – LinkedIn Posting**
https://www.linkedin.com/posts/ross-norman-61866532_activity-6758000804021456896-6A9U



Past performance does not guarantee future results. **Source:** Bloomberg, U.S. Global Investors

Precious Metals Mining:

- **Russia: Palladium Producer Nornickel Joins IBM's Responsible Sourcing Blockchain Network**
 - Russian nickel and palladium mining and smelting company Nornickel has now officially joined the RSBN with aim to tap the solution for nickel and cobalt. RSBN allows its member entities to share

data with other selected members and gives them a permanent, non-disputable supply chain record of mineral production to trace and verify responsible sourcing practices in mining.

<https://btcmanger.com/russia-palladium-nornickel-ibm-sourcing-blockchain-network/>

- **World's biggest platinum miner (Sibanye-Stillwater) makes another bold call on prices**
 - The world's No. 1 platinum miner said the price of the metal could climb more than 80% over the next four to five years as the global economy recovers and supply dwindles.
<https://www.miningweekly.com/article/worlds-biggest-platinum-miner-makes-another-bold-call-on-prices-2021-01-15>
- **Eastplats, Implats confirm provisional payment terms on offtake agreement**
 - These terms confirm the restart of PGMs revenue for Eastplats after it was solely reliant on chrome tailings retreatment revenue from the Crocodile River mine.
<https://www.miningweekly.com/article/eastplats-implats-confirm-provisional-payment-terms-on-offtake-agreement-2021-01-15>
- **South African mining dealmaker plots M&A push before retirement**
 - "I would like to see the company's size double to a \$20-billion market capitalisation plus before I move on," Froneman said in an interview from his farm in South Africa's Limpopo province. "Two to three years sounds like a good innings and I think we can deliver quite a lot in terms of our strategy."
https://www.miningweekly.com/article/south-african-mining-dealmaker-plots-ma-push-before-retirement-2021-01-19/rep_id:3650
- **Sibanye's South African platinum operations exceed output guidance**
 - Production of platinum group metals (PGMs) from Sibanye-Stillwater's South African operations for the full-year ended December 31 totaled 1.58-million ounces, which includes attributable ounces from Mimosa.
 - This exceeded the upper limit of the revised yearly guidance of 1.35-million to 1.45-million ounces.
 - Sibanye's South African PGM operations produced 918 678 oz in the second half of the year, which was 40% higher than that produced in the first half.
https://www.miningweekly.com/article/sibanye-stillwater-improves-production-in-second-half-of-2020-2021-01-20/rep_id:3650

E-Waste & Precious Metals Recycle Related:

- **U.K. Among Worst Offenders for E-Waste Following Black Friday Binge**
 - According to a study commissioned by British non-profit Material Focus, nearly three million Britons were expected to send at least 2.7 million older, unwanted electrical items such as headphones, laptops and speakers, to landfill in the new year. More than two million were likely to hoard some 2.2 million unused electricals at home. Meanwhile, only 19% of the 2,000 of those surveyed said they intended to donate unused electricals to those in need.
<https://www.forbes.com/sites/davidrvetter/2021/01/21/uk-among-worst-offenders-for-e-waste-following-black-friday-binge/?sh=5b8b5ea62c76>
- **BR Metals: Sharpening edge in precious metal recycling**
 - BR Metals reclaims and returns an estimated 80,000 troy ounces of platinum group metals every year to the circular economy.
<https://www.straitstimes.com/business/companies-markets/br-metals-sharpening-edge-in-precious-metal-recycling>

Platinum

- **Platinum Prices Still 'Rocking', Now with More Hydrogen in The Tank**
 - But what sets Platinum apart now from palladium and other PGMs, which include even less-known 'white metals' such as ruthenium, rhodium, osmium and iridium, is a 28% price gain in just 10 weeks. That's what palladium gained all of last year.

- Platinum also has something else going for it: hydrogen-powered cars. These cars run on hydrogen fuel cells that require platinum as the catalyst.
<https://uk.investing.com/analysis/platinum-prices-still-rocking-now-with-more-hydrogen-in-the-tank-200452276>
- **Climate targets force trucks into race to clean up transport**
 - While our roads are increasingly abuzz with electric cars and scooters, low-emission trucks are conspicuous by their absence. But this is about to change as new climate targets force sharp emission cuts in heavy duty transport.
<https://www.cleanenergywire.org/news/climate-targets-force-trucks-race-clean-transport>
- **Sibanye-Stillwater's Neal Froneman says platinum could surge through \$2,000/oz**
 - The platinum price could gain as much as 80% over the next four to five years, said Bloomberg News citing Neal Froneman, CEO of Sibanye-Stillwater. "Platinum has only just started to re-rate and it will continue," Froneman said. "There is no reason why platinum will not eventually trade at \$2,000 an ounce and probably even higher." The metal has gained 30% in the past six months. Froneman said substitution of palladium with platinum in autocatalysts would help drive the metal's price. "Substitution has taken off very well in China and the regulatory environment there is a lot more flexible," Froneman said.
[https://markets.businessinsider.com/commodities/news/sibanye-stillwaters-neal-froneman-says-platinum-could-surge-through-\\$2-000-oz-9698981](https://markets.businessinsider.com/commodities/news/sibanye-stillwaters-neal-froneman-says-platinum-could-surge-through-$2-000-oz-9698981)
- **WPIC: Boots on the Moon**
 - Platinum's ability to unlock hydrogen technologies could help achieve sustainable space exploration goals
https://platinuminvestment.com/files/sixtysecs/WPIC_60seconds_Bootsonthemoon_20012021_JAN.pdf
- **Hyundai's Diesel Engines Are Dead**
 - Hyundai is no longer developing new oil-burners as it transitions to EVs.
<https://carbuz.com/news/hyundais-diesel-engines-are-dead>

Fuel Cells/Hydrogen Economy Related Articles:

- **£100m of Scottish funding to realise hydrogen potential**
 - Scotland's recently-published Hydrogen Policy Statement sets an ambition to become a leading hydrogen nation, generating 5GW of renewable and low-carbon hydrogen by 2030, or enough to power the equivalent of 1.8 million homes. To support this, £100m will be pumped into the hydrogen sector over the next five years, helping to drive a green recovery and Scotland's just transition to net zero.
<https://www.e4tech.com/news/2065-100m-of-scottish-funding-to-realise-hydrogen-potential.php>
- **Want a fuel cell, you need platinum – analysts**
 - If you want a fuel cell, you need platinum, is one of the multiplicity of points Bernstein investment company makes in a major work just released, which shows growing and ongoing demand for platinum group metals (PGMs) and provides ample reason why metals and mining matter more than ever.
https://www.miningweekly.com/article/want-a-fuel-cell-you-need-platinum-analysts-2021-01-18/rep_id:3650
- **Platinum group metals playing role in Switzerland's green hydrogen roll-out**
 - The choice of PGM-catalysed PEM electrolyzers are the result of their greater operational flexibility: "You can turn them on and turn them off more quickly," Freymueller said.
https://www.miningweekly.com/article/platinum-group-metals-playing-role-in-switzerlands-green-hydrogen-roll-out-2021-01-19/rep_id:3650
- **Nikola locks in a special APS (Arizona Public Service Company) electricity rate for hydrogen fuel production**

- Matt: As I have presented on several times, excess daytime renewables that routinely get curtailed or shut off out of an inability to quickly throttle on/off the conventional power grid will be sold at a price below \$0.06/kWh to enable Electrolyzer technologies (Alkaline, PEM, SOFC, or DMFC) to achieve at least \$6/kg in Hydrogen costs.
https://www.hydrogenfuelnews.com/aps-electricity-rate/8542738/?mc_cid=8bd2fbfa8a&mc_eid=70c1246d58
- **Johnson Matthey to raise capacity for green hydrogen**
 - Johnson Matthey has set out plans to capitalise on the emerging market for green hydrogen by producing electrolyser components at its Swindon plant.
 - The FTSE 100 chemical technology group said it had established new manufacturing capacity at the plant to make catalyst-coated membranes used in electrolysis and intended to expand this facility as demand grew.
<https://www.thetimes.co.uk/article/johnson-matthey-to-raise-capacity-for-green-hydrogen-08mhhhr2r>
- **Platinum group metals demand set to overwhelm supply balance – Davis**
 - Davis, who has spent several months carrying out a ‘deep dive’ into the future of PGMs for precious metals researchers in Singapore, Australia and the UK, has concluded that PGMs demand will overwhelm the balance in as few as two to three years.
https://www.miningweekly.com/article/platinum-group-metals-demand-set-to-overwhelm-supply-balance-davis-2021-01-21/rep_id:3650
- **Green ammonia breakthrough a potential boon for solar-powered exports**
 - The current Ru based Haber-Bosch method produces more CO₂ than any other chemical-making reaction; consuming about 2% of the world’s energy while making 1% of its CO₂.
 - By using plasma researchers were able to convert air into an intermediary called NOx (either NO₂ or NO₃) which is more reactive than N₂ in the air.
 - Once we generated that intermediary in water, designing a selective catalyst and scaling the system became significantly easier. The breakthrough of our technology was in the design of the high-performance plasma reactors coupled with electrochemistry.
<https://www.pv-magazine.com/2021/01/21/green-ammonia-breakthrough-a-potential-boon-for-solar-powered-exports/>

Palladium

- **How Palladium Became a Really, Really Precious Metal**
 - Palladium is the most valuable of the four major precious metals, with an acute shortage driving prices to records in recent years. A key component in pollution-control devices for cars and trucks, the metal’s price has been on a tear, more than tripling in the four years through the end of 2020 -- lifting it above the price of gold.
<https://www.bloomberg.com/news/articles/2021-01-14/how-palladium-became-a-really-really-precious-metal-quicktake>
- **Norilsk Nickel becomes first miner to launch metals ETPs**
 - Norilsk is launching a range of exchange traded products that will track the price of gold, silver, platinum and palladium.
<https://www.ft.com/content/a18a4bd5-d118-4694-989a-26a33fa8a186>
- **China auto sales set to grow in '21, trade group predicts**
 - China's new-vehicle sales will grow 4 percent to more than 26 million in 2021 as the world's No. 2 economy continues to recover from disruptions caused by the coronavirus, the China Association of Automobile Manufacturers predicted last week.
 - Matt: This is a full 2M more than LMC Auto predicts
<https://www.autonews.com/china/china-auto-sales-set-grow-21-trade-group-predicts>
- **Biden returns US to Paris climate accord hours after becoming president**

- Biden administration rolls out a flurry of executive orders aimed at tackling climate crisis.
- Biden is expected to convene an international climate summit in the spring to help accelerate emissions cuts and will probably submit a new US emissions reduction goal to help it reach net zero emissions by 2050.
- Matt: Like the EU, a flurry of PHEV's, and Hybrids using small LiB's will be most effective at meeting the CO2 emission targets. Also expect California Air Resource Board (CARB) emission standards to be adopted nationally soon.
https://www.theguardian.com/environment/2021/jan/20/paris-climate-agreement-joe-biden-returns-us?utm_term=.285e6e106d5e42246a0e923d2e2b0cb0&utm_campaign=GreenLight&utm_source=esp&utm_medium=Email&CMP=greenlight_email

PGM Minor Metals (Rhodium, Iridium, Ruthenium)

- **CPM Group YouTube Video on Rhodium**
 - CPM - Who Should Be Investing In Rhodium? - Jeffrey Christian
<https://youtu.be/sK-K96qJLh8>
- **INTERVIEW: Rhodium base price pace slackens: Heraeus**
 - In the short-term, there might be some upside potential but what we have seen over the last few days is things are slowing down a little bit, it's not at the pace that it has been in the last 4-6 weeks. I do see some upside potential in the short-term but we also believe that perhaps the threshold of \$22,000/oz, maybe a little more, might trigger some investors to give back some liquidity, and maybe that is happening already and the reason for the slight slow-down.
<https://www.spglobal.com/platts/en/market-insights/latest-news/metals/012121-interview-rhodium-base-price-pace-slackens-heraeus>
- **Iridium & Platinum: Awarded Iberdrola contract for 20 MW green fertilizer project in Spain**
 - "We are excited to finalize the agreement with Iberdrola for a PEM electrolyser solution for this landmark green fertilizer project. It is a true testament to our PEM platform, which has been deployed all over the world for several decades. We look forward to work with Iberdrola to scale our PEM platform into a 20 MW solution and the partnership represents an important step towards our common vision of enabling green hydrogen competitive to fossil hydrogen. "
 - Matt: PEM Electrolyzer projects still on track for 100koz of new Iridium demand through 2025 vs 280koz/year mined volume. This is significant incremental demand to a very thin market.
<https://news.cision.com/nel-asa/r/awarded-iberdrola-contract-for-20-mw-green-fertilizer-project-in-spain,c3268057>

BEV / LiB Battery Market News

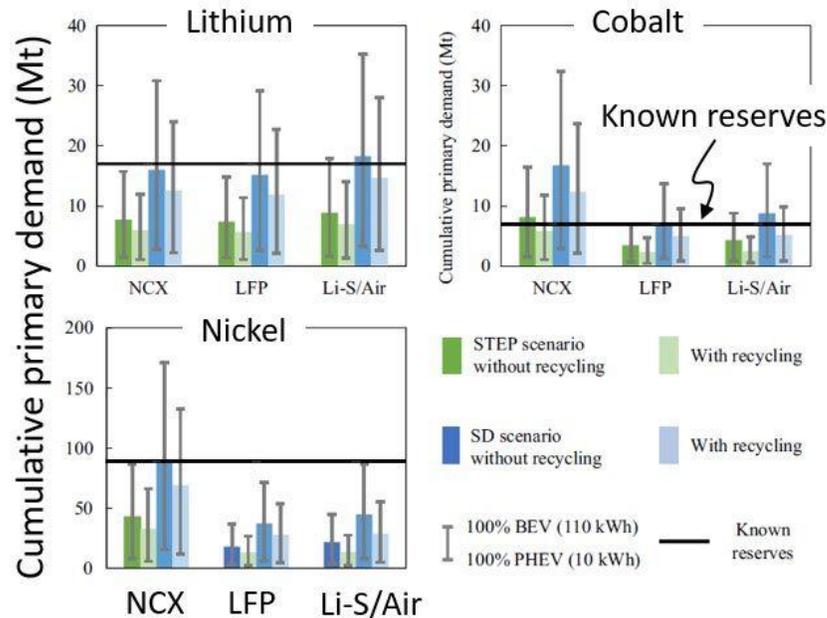
- **India reports finding of 1,600-ton lithium deposit**
 - Initial surveys by the Atomic Minerals Directorate for Exploration and Research (AMD), an arm of India's Department of Atomic Energy has shown the presence of a lithium deposit of about 1,600 tons in the southern province of Karnataka.
<https://batteryindustry.tech/india-reports-finding-of-1600-ton-lithium-deposit/>
- **Global sales of electric cars accelerate fast in 2020 despite pandemic**
 - Sales of electric cars rose by 43% while overall car sales slumped by a fifth last year.
 - Global sales of electric cars accelerated fast in 2020, rising by 43% to more than 3m, despite overall car sales slumping by a fifth during the coronavirus pandemic.
 - Tesla was the brand selling the most electric cars, delivering almost 500,000, followed by Volkswagen. Sales of electric cars more than doubled in Europe, pushing the region past China as the world's biggest market for them, according to data published on Tuesday by EV-volumes.com, a Sweden-based consultancy.
<https://www.theguardian.com/environment/2021/jan/19/global-sales-of-electric-cars-accelerate-fast-in-2020-despite-covid-pandemic>

- **European scientists want to develop hybrid vanadium redox flow battery with supercapacitor**

- European scientists are designing a new type of redox flow storage system aimed at flexibly balancing power grids in the event of critical conditions. Funded by the EU, the research project is being coordinated by the Landshut University of Applied Sciences and runs until 2023.
<https://www.pv-magazine.com/2021/01/22/european-scientists-want-to-develop-hybrid-vanadium-redox-flow-battery-with-supercapacitor/>

- **Ameya Joshi – Director Emerging Technologies and Regulations at Corning**

- LinkedIn Posting: Do we have enough raw materials to support the transition to electric vehicles globally?
<https://lnkd.in/eRUdhmY>
https://www.linkedin.com/posts/joshiav_do-we-have-enough-raw-materials-to-support-activity-6758092896114675712-8UDM



- **Platinum group metals take another step closer to use in battery electric vehicles**

- The new patent, Battery Cathodes for Improved Stability with patent number US 10,862,103 B2 was issued on December 8, 2020. It covers a preparation method using PGM catalysts in carbon materials for use as cathodes in LiB's, including lithium-ion, lithium-air, and lithium-sulphur batteries.
- The new patent broadens protection for US patent 10,734,636 B2 issued to FIU in August, covering the composition of carbon cathodes containing PGMs.
<https://www.miningweekly.com/article/platinum-group-metals-take-another-step-closer-to-use-in-battery-electric-vehicles-2021-01-19>

- **Electric car batteries with five-minute charging times produced**

- Batteries capable of fully charging in five minutes have been produced in a factory for the first time, marking a signif step towards EV's becoming as fast to charge as filling up petrol or diesel vehicles.
- The StoreDot battery replaces graphite with semiconductor nanoparticles into which ions can pass more quickly and easily. These germanium nanoparticles, which is water. However, StoreDot's plan is to use silicon, which is much cheaper, and it expects these prototypes later this year.
- Wang noted that fast charging must also be repeatable at least 500 times without degrading the battery to give it a reasonable life and that the EC power battery can do so 2,500 times. Myersdorf said the StoreDot battery could be recharged 1,000 cycles while retaining 80% of original capacity.
<https://www.theguardian.com/environment/2021/jan/19/electric-car-batteries-race-ahead-with-five-minute-charging-times>

- **China eyes bolstering control of rare earths as national strategy**

- China has unveiled a draft bill designed to strengthen control of rare earths, vital to the production of high-tech goods such as hybrid cars and mobile phones, officials have said.
- The draft bill, released to the public on Friday, said the Chinese government will manage the process from mining to exports of rare earths as a national strategy, as tensions with the United States have been escalating over state-of-the-art technologies.
<https://www.japantimes.co.jp/news/2021/01/17/business/china-rare-earths/>
- **Australian industrial precinct to host 28 MW/56 MWh grid-balancing battery**
 - The battery will serve the industrial precinct of Newcastle in the Australian state of New South Wales. It will not be directly linked to solar or wind generation but will be intended to charge and discharge directly from the grid in response to disturbances or market signals.
<https://www.pv-magazine.com/2021/01/11/australian-industrial-precinct-to-host-28-mw-56-mwh-grid-balancing-battery/>

Regards –