



## Weekly Precious Metals News Articles: February 4, 2022

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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 eases as yields, dollar climb after U.S. jobs data**
  - Gold prices slipped on Friday, pressured by a firmer dollar and higher U.S. Treasury yields as upbeat U.S. jobs data bolstered the case for rate hikes by the Federal Reserve.  
<https://www.nasdaq.com/articles/precious-gold-eases-as-yields-dollar-climb-after-u.s.-jobs-data>
- **Gold Imports by India Hit Decade-High as Jewelry Demand Doubles**
  - Gold imports by India accelerated to the highest level in a decade last year as jewelry sales almost doubled, with the demand outlook remaining bright, according to the World Gold Council.  
<https://finance.yahoo.com/news/gold-imports-india-hit-decade-01000072.html>
- **Gold is 'prime candidate' to rally as stocks reverse in 2022 - Bloomberg Intelligence**
  - The sentiment in the gold market has reached its "maximum disdain," which means that gold is primed for a reversal and could be ready to rally past \$1,900/Toz, according to Bloomberg Intelligence. As the Federal Reserve gears up to raise rates & reduce liquidity, the precious metal is a potential top performer this year, said Bloomberg Intelligence Sr. Strategist Mike McGlone.  
<https://www.kitco.com/news/2022-01-31/Gold-is-prime-candidate-to-rally-as-stocks-reverse-in-2022-Bloomberg-Intelligence.html>

### Semiconductor Related Articles (impacting Precious Metals electronics):

- **Global smartphone shipment grew for the first time since 2017, new report says**
  - Annual smartphone shipment grew 4% year on year to 1.39 billion handsets in 2021 even as the pandemic and a worldwide chip shortage hampered supplies. The market research firm's data showed that in 2017, smartphone makers shipped 1.56 billion units and that figure subsequently declined every year from 2018 to 2020.
  - Samsung held on to the pole position as the world's largest smartphone maker by shipment volume despite its Vietnam factories being under a Covid lockdown for some time.  
<https://www.cnbc.com/2022/01/28/global-smartphone-shipment-grew-for-first-time-since-2017-counterpoint.html>
- **New semiconductor fabs in Japan to go online in 2022-2024**
  - With the Japan government stepping up their support for the local IC manufacturing sector, several new wafer fabs, including a joint venture (JV) between TSMC and Sony, will be constructed in Japan. These fabs are expected to go online sometime between 2022 and 2024.  
<https://www.digitimes.com/news/a20220125PD207.html>

- **Gartner Says Top 10 Semiconductor Buyers Increased Chip Spending by 25.2% in 2021**
  - “Semiconductor vendors shipped more chips in 2021, but the OEMs’ demand was far stronger than the vendors’ production capacity,” said Masatsune Yamaji, research/Gartner.
  - The semiconductor shortage prevented OEMs from increasing production not just of vehicles but also various electronic equipment types, including smartphones and video game consoles. However, the chip shortage significantly increased selling prices, which meant OEMs spent much more on semiconductor procurement in 2021 than in prior years. <https://www.gartner.com/en/newsroom/press-releases/2022-02-01-gartner-says-top-10-semiconductor-buyers-increased-ch>
- **The chip shortage won’t be fixed without major federal investment**
  - Intel’s recent announcement that it plans to build a \$20 billion semiconductor plant outside Columbus, Ohio unleashed euphoric headlines, with President Joe Biden calling it a “game changer” that would begin to revive the Midwest’s industrial sector and address supply chain bottlenecks that have led to the current computer chip shortage.
  - But for all the excitement, it bears noting that Intel’s plans are the latest development in a long and often painful saga that is now challenging the U.S. to work out a solution to the nation’s broader chip problems. Addressing those issues will require urgent action, including passage of the pending America COMPETES Act and its important CHIPS for America Fund. <https://www.brookings.edu/blog/the-avenue/2022/02/01/the-chip-shortage-wont-be-fixed-without-major-federal-investment/>

## **Silver**

- **BloombergNEF says global solar will cross 200 GW mark for first time this year, expects lower panel prices**
  - The analyst also forecasts strong growth for the storage business and a significant increase in PPAs for photovoltaic projects in Europe. It also said the newly installed PV capacity for 2021 reached 183 GW. *Matt: I originally had 191GW for 2021 in my model, but both PV price climbs and supply chain issues slowed the rate of 2H2021 installations. But even 2021 at 183 GW vs. 2020’s 127 GW is a 44% growth in demand, offset with some silver design thrifting. I still contend this represents 140 Moz of Ag demand. IRENA final number will be the final arbiter of 2021 actual installations, due in March.* <https://www.pv-magazine.com/2022/02/01/bloombergnef-says-global-solar-will-cross-200-gw-mark-for-first-time-this-year-expects-lower-panel-prices/>
- **Germany deployed 5.26 GW of solar in 2021**
  - The country saw around 421 MW of new PV capacity come online in December alone. Its cumulative solar power reached 56.3 GW. <https://www.pv-magazine.com/2022/01/31/germany-deployed-5-26-gw-of-solar-in-2021/>
- **California Residential Solar PV Net Metering Tariff Changes**
  - New analysis from Wood Mackenzie shows that California’s newly proposed net energy metering tariffs (NEM 3.0) would severely reduce residential solar’s value proposition, and forecast California residential market would be cut in half by 2024. Final changes to California’s net energy metering tariffs are in flux, but final regulations will have major implications for the US solar industry.
  - “Under the terms of the latest PD, NEM 3.0 rates would more than double solar project payback periods. Both the new monthly fixed charges and the lower export rates will reduce economic attractiveness. “Our analysis for the two largest utilities – Pacific Gas & Electric and Southern California Edison reveals payback periods for typical residential solar projects built this year will increase from 5-6 years under current net metering to 14-15 years, depending on the utility. [https://mercomcapital.com/secure\\_pdf.php?pdf=Jan2022/MercomSolarReport31Jan2022.pdf](https://mercomcapital.com/secure_pdf.php?pdf=Jan2022/MercomSolarReport31Jan2022.pdf)

## **Precious Metals Mining:**

- **Long-Abandoned Gold Mines Are Reopening**
  - Gold mines are reopening in places where mining was once thought to be economically unfeasible. <https://undark.org/2022/01/24/the-gold-rush-returns-to-california/>
- **Implats flags cut to refined PGM production as prepares Rustenburg furnace for rebuild**
  - Implats warned of a potentially significant cut in refined PGM production in the FY 2H2022 after deciding to conduct a full rebuild of a furnace. Commenting in an operational update and trading statement for the six months ended December 31, the group said today a Rustenburg furnace had been planned for a partial rebuild. But the stresses of the hard lockdown implemented by the South African government during the early stages of the Covid-19 pandemic in 2020 and inconsistent electricity supply from Eskom had resulted in “accelerated wear” of the furnace.
  - Refined production totaled 1.62 Moz 6E for the first half of the financial year, 4.7% lower y/y. <https://www.miningmx.com/top-story/48621-implats-warns-of-cut-to-refined-pgm-production-as-puts-rustenburg-furnace-in-for-rebuild/>
- **South Africa's Impala Platinum half-year sales volumes drop 5%**
  - South Africa's Impala Platinum on Tuesday said half year sales to December 31 were down 5% as power cuts, industrial action and safety stoppages impacted production. <https://www.nasdaq.com/articles/south-africas-impala-platinum-half-year-sales-volumes-drop-5>
- **PGM market laps up Amplats inventory metal but prices weaken in second half of year**
  - Amplats said in a Q4'21 and 12-month production update today that it had all but removed the build-up of ‘work in progress’ metal inventory, reporting full year refined sales of 5.2 million ounces. <https://www.miningmx.com/news/platinum/48598-pgm-market-laps-up-amplats-inventory-metal-but-prices-weaken-in-second-half-of-year/>
- **Anglo American Platinum to sell stake in Kroondal, Marikana projects to Sibanye**
  - Anglo American Platinum (Amplats) has agreed to sell its 50% interest in Kroondal and Marikana operations in Rustenburg to the north-west of Johannesburg to Sibanye Stillwater. <https://www.nasdaq.com/articles/anglo-american-platinum-to-sell-stake-in-kroondal-marikana-projects-to-sibanye>

## **E-Waste & Precious Metals Recycle Related:**

- **97% of Latin America's e-waste is improperly managed and includes an annual \$1.7 billion in recoverable materials**
  - E-waste in 13 Latin American countries rose by 49% between 2010 and 2019, roughly the world average, but just 3% was collected and safely managed, a fraction of the 17.4% global average.
  - While informal recyclers "cherry pick" some valuable elements from waste electronics and electrical equipment, some 97% is improperly managed; just 3% is known to be collected and treated in facilities using environmentally sound methods. <https://phys.org/news/2022-01-latin-america-e-waste-improperly-annual.html>
- **DARPA Explores Electronics Recycling to Extract Critical Elements**
  - The precious-metals e-waste recovery market is well established. It is expected to grow from \$9.4 billion in 2020 to \$11.8 billion by 2025 – fueled by discarded consumer electronics, according to an August 2021 Markets and Markets report. In 2019, researchers at the Department of Energy’s Oak Ridge National Laboratory invented and licensed a process to extract rare earth elements from the scrapped magnets of used hard drives, about a third of which are shredded due to security concerns. <https://wasteadvantagemag.com/darpa-explores-electronics-recycling-to-extract-critical-elements/>
- **2021 was a very good year for the car recycling industry**
  - Adam Małyszko, CEO of the Association of Car Recycling in Poland provides Auto Recycling World with his opinion of the car recycling industry, and where the industry is headed in 2022.

- The car recycling industry achieved record results in many countries around the world last year, both in sales volumes and profits generated. This is largely the result of huge price hikes for steel scrap, aluminum, copper, chemical elements retrieved from catalytic converters and the increased demand for used parts. The last factor is closely related to the reduced production of new cars.  
<https://autorecyclingworld.com/2021-was-a-very-good-year-for-the-car-recycling-industry/>

## **Platinum**

- **How much higher can platinum and palladium go?**
  - Platinum and palladium have continued to rally since the start of this year. "It looks far more likely for platinum to move towards the palladium price then for palladium to pull back," explained Trevor Raymond, Director of Research at the World Platinum Investment Council. "There are strong indicators that platinum may continue to move north. The questions are, is there enough fundamental demand growth, and where are the suppliers in that dynamic?"  
<https://www.kitco.com/news/2022-02-03/How-much-higher-can-platinum-and-palladium-go.html>
- **New, highly efficient (Pd/Co/In) catalyst for propylene production**
  - One promising technique for producing propylene is a chemical reaction, called oxidative dehydrogenation, that uses CO<sub>2</sub> to convert propane gas into propylene by removing hydrogen.
  - "The challenge is to develop a catalyst that will activate both reactants, propane and CO<sub>2</sub>, without unwanted side reactions. It also needs to be stable and reusable in the long term," explains Hokkaido University molecular engineer, Shinya Furukawa.
  - To achieve this, Furukawa and his colleagues developed a catalyst made from three different metals (platinum, cobalt and indium), each chosen for its specific properties. Platinum was selected as the main active metal because of its ability to break chemical bonds between carbon and hydrogen, enabling the dehydrogenation reaction. Cobalt accelerates CO<sub>2</sub> capture and activation, while indium enhances the catalyst's selectivity. The metals were fixed to a support made from cerium oxide; a compound commonly used in car catalytic converters.  
<https://mail.yahoo.com/d/folders/1/messages/AHM1Vvt1gFkpYftKUAKj2DUCoJc>
- **Vehicle emissions regulations increase platinum, palladium use and demand**
  - Platinum demand from the automotive sector is expected to be +25% in 2020, reaching almost 3 Moz this year, World Platinum Investment Council (WPIC) research director Trevor Raymond says, partly attributing the projected increase to the Euro 6d and China 6a emissions regulations coming into force and being applicable to all vehicles sold in Europe and China respectively.  
<https://www.engineeringnews.co.za/article/demand-for-platinum-and-palladium-in-auto-sector-set-to-rise-as-regulations-tighten-2021-07-02>
- **Johnson Matthey completes sale of glass business for GBP178 million**
  - The London-based chemical and technology company sold the business to Fenzi Holdings SpA for GBP178 million on a cash-free, debt-free basis. The completion follows the satisfaction of customary conditions, including the fulfilment of the works council consultation in the Netherlands. The AGT business provides specialist glass enamels and precious metal pastes mainly to the automotive sector. Fenzi is a manufacturer and supplier of materials for flat glass processing.  
<https://www.lse.co.uk/news/johnson-matthey-completes-sale-of-glass-business-for-gbp178-million-l438yjf6dtpqakw.html>
- **Investor's eyeing platinum while price is lower than gold**
  - Investors are keen to buy platinum while it is trading for less than gold on a per ounce basis, with demand being driven by both investors and industrial offtakers, notes independent bullion dealer ABC Bullion MD Janie Simpson.  
<https://www.miningweekly.com/article/investors-eyeing-platinum-while-price-is-lower-than-gold-abc-bullion-2022-01-28>

## **Fuel Cells/Hydrogen Economy Related Articles:**

- **Chart and Ballard Successfully Test a Fuel Cell Powered by Liquid Hydrogen**



- In December, Masdar and ENGIE announced the formation of a strategic alliance to explore the co-development of a UAE-based green hydrogen hub, and are looking to develop projects with a capacity of at least 2 GW by 2030, with a US\$5 billion investment. <https://www.itp.net/emergent-tech/masdar-engie-to-co-develop-green-hydrogen-for-fertiglobes-ammonia-production>
- **Shell says one of the largest (green) hydrogen electrolyzers in the world is now up and running in China**
  - A 20 MW H<sub>2</sub> electrolyzer described as “one of the world’s largest” has begun operations, energy major Shell said Friday. Located in Zhangjiakou, Hebei Province, China, the electrolyzer will produce green hydrogen for 600 fuel cell vehicles being used at Zhangjiakou’s competition zone during the Winter Olympics, which are due to open on Feb. 4. Once the Games finish, commercial and public transport will use the H<sub>2</sub>. <https://www.cnbc.com/2022/01/28/green-hydrogen-one-of-planets-largest-electrolyzers-up-and-running.html>
- **A third of all flights could run on liquid green hydrogen by 2050, says international body**
  - Renewable H<sub>2</sub> would be a cheaper aviation fuel than blue hydrogen or e-kerosene for trips of up to 3,400km, according to new study by US non-profit ICCT <https://www.rechargenews.com/energy-transition/a-third-of-all-flights-could-run-on-liquid-green-hydrogen-by-2050-says-international-body/2-1-1158441>
- **Hyosung to pour \$835 million into green hydrogen production in Korea**
  - The company will be focusing on green H<sub>2</sub> production using electrolysis, which splits water into its water and H<sub>2</sub>. The facility is expected to have a 10MW capacity for the production of 200,000 mt of clean H<sub>2</sub> per year. The process will be powered by renewable energy so that it will be greenhouse gas emission-free both when it is made and when it is used. [https://www.hydrogenfuelnews.com/green-hydrogen-production-hyosung/8551221/?mc\\_cid=2c41ada0d1&mc\\_eid=70c1246d58](https://www.hydrogenfuelnews.com/green-hydrogen-production-hyosung/8551221/?mc_cid=2c41ada0d1&mc_eid=70c1246d58)
- **We need green hydrogen to actually electrify everything**
  - Half of global greenhouse gases come from sectors we don’t know how to power with renewable electricity. The largest share of those un-electrifiable emissions can be traced to industry, sectors like heavy manufacturing, cement, steel, and fertilizer. These sectors and others like them account for one quarter to one third of global carbon emissions and 40% of global energy demand, and they are integral to our civilization.
  - The most promising answer is green hydrogen. It’s a fuel for high-temperature heat, it’s a chemical input to vital processes, and it’s an energy carrier that can be stored for later use. <https://www.linkedin.com/pulse/we-need-green-hydrogen-actually-electrify-everything-raffi-garabedian>

## Palladium

- **Palladium price highest in four months amid Ukraine-Russia crisis**
  - Palladium price hit the highest in four months, with traders looking to secure supplies amid growing tensions over Ukraine as Russia, the top metal producer, amassed troops near the border.
  - The metal jumped 7.3% to \$2,359.79 an ounce on Wednesday, having hit its highest since Sept. 8 at \$2,382.82, extending this year’s rally to almost 25%. Platinum climbed 2.1% to \$1,047.00. <https://www.mining.com/palladium-price-highest-in-four-months-amid-ukraine-russia-crisis/>
- **Precious Metals Can Be Green**
  - Dr. Hans Donkervoort, global marketing manager for precious metal powder catalysts at BASF, shares some results for newly developed catalysts. Specialty Chemicals Magazine – Jan/Feb 2021 <https://viewer.joomag.com/speciality-chemicals-magazine-jan-feb-2021/0923309001642110848/p36?short&>
- **Palladium rockets, fueled by growing Russian supply anxiety**

- Palladium prices have risen 25% in the past two weeks as fears that a Russia-Ukraine conflict could disrupt exports from top producer Russia triggered buying by consumers and speculators.  
[http://www.reuters.com/article/ukraine-crisis-palladium-idUSKBN2K63SH?utm\\_source=34553&utm\\_medium=partner](http://www.reuters.com/article/ukraine-crisis-palladium-idUSKBN2K63SH?utm_source=34553&utm_medium=partner)
- **January 2022 MobilityNotes: Highest BTE diesel to self-driving tractors**
  - US fuel economy standards for model years 2023 - 2026 light-duty vehicles. The US EPA revised the tailpipe CO<sub>2</sub> standards for 2023 – 2026 passenger cars and light-duty trucks.
  - On average, this will require fleet averaged annual reductions of CO<sub>2</sub> by 7%. Compared to the previous Safer Affordable Fuel-Efficient (SAFE) rule, these new standards will result in 23% fewer CO<sub>2</sub> emissions by MY2026, and result in an averaged 55 miles per gallon fuel economy that year.  
[https://mcusercontent.com/23b16fd0afc4a15543b1e5b53/files/b49c1ade-48f0-4964-93de-8c52a8d10de7/MobilityNews\\_5\\_Min\\_Monthly\\_January\\_2022.pdf](https://mcusercontent.com/23b16fd0afc4a15543b1e5b53/files/b49c1ade-48f0-4964-93de-8c52a8d10de7/MobilityNews_5_Min_Monthly_January_2022.pdf)

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

- **Ruthenium & Platinum: 2021 HDD Industry Market And Projections**
  - HDD shipment in C4Q 2021 Vs. C3Q 2021 q/q.
    - Total HDD shipments -13.6% q/q (57.3M versus 66.2M). -2% y/y.
    - Notebook HDD shipments -25% q/q
    - Desktop HDD shipments - 32% q/q.
    - CE HDD shipments -1%
    - Branded shipments -3.3% q/q.
    - High performance enterprise HDDs -7.9%
    - Near line enterprise HDDs - 4.6% q/q.
    - 3.5-inch HDDs -13% q/q.
    - 2.5-inch HDDs -14.5% q/q.
- **While platinum loses luster, byproduct rhodium shines bright**
  - Major miners Anglo American and Impala shares gain as investors shift focus
  - The market for platinum is in a slump, but this has done little to tarnish the shares of platinum miners that now earn a growing piece of their profits from rhodium, a key element for scrubbing nitrous oxides from emissions for which industrial demand is booming, and other byproducts.  
<https://asia.nikkei.com/Business/Markets/Commodities/While-platinum-loses-luster-byproduct-rhodium-shines-bright>

## **Clean Energy General News**

- **EU to propose green investment label for gas and nuclear energy, source says**
  - The European Commission is set to propose rules on Wednesday to allow some gas and nuclear power plants to be labelled as green investments, with minor changes to a previous draft proposal, a Commission source told Reuters. Brussels has been attempting for more than a year to settle whether gas and nuclear energy should be labelled as green in the EU's taxonomy, a rulebook that defines which investments can be marketed as climate-friendly.  
<https://www.reuters.com/business/energy/eu-propose-green-investment-label-gas-nuclear-energy-source-says-2022-02-01/>
- **Recent Advancements in Nuclear Technology: An Overview**
  - Recent research on SMR (smaller modular reactors) technology enables a bright future because of its high efficiency and mobility. The porous pin arrangement ensures the efficiency of SMR; increased layers decrease reactivity swings, molten salt as coolant decreases the sudden violent reaction and limits the reactivity inside the reactor. Also, the use of nuclear energy to produce hydrogen is proven to be a worthy alternative to fossil fuel-based systems and reduces greenhouse gas emissions.

Therefore, the positive future advantages in utilizing nuclear energy evidently outweigh the negatives and prompt further attention.

<https://www.altenergymag.com/article/2021/12/recent-advancements-in-nuclear-technology-an-overview/36550>

- **Uranium ‘has to be part’ of electrification, says Dev Randhawa**
  - Dev Randhawa, EY Entrepreneur of the Year and CEO of Fission 3.0. a uranium project generator, nuclear remediation and exploration company, believes that zero emission goals through wind and sun power is a ‘cruel joke.’  
<https://www.mining.com/uranium-has-to-be-part-of-electrification-says-dev-randhawa/>
- **Mitsui Mining Ramps Up Zinc Contract Prices**
  - Mitsui Mining & Smelting Co. is increasing zinc prices this year in annual contracts by at least 35% for the Japanese company’s customers in Asia as supply tightens and freight rates soar.  
<https://au.news.yahoo.com/mitsui-mining-ramps-zinc-contract-025018153.html>
- **Pulling fertilizer out of thin air with solar power**
  - Nitricity has put together an experimental plasma reactor that uses solar electricity to produce competitively priced, environmentally clean, nitrogen fertilizer. Their onsite fertilizer production eliminates emissions from transporting fertilizers, and provides a viable alternative to fossil consuming nitrogen fixation methods like the Haber-Bosch process.  
<https://pv-magazine-usa.com/2022/01/18/pulling-fertilizer-out-of-thin-air-with-solar-power/>
- **Torian unearths new WA rare earths discovery**
  - Torian Resources has landed a grab bag of significant rare earths hits at its new Yttria prospect at the company’s Mt Stirling project in the eastern goldfields of WA. The RRE uncovered include **Dysprosium** and also include terbium, europium, **Neodymium** and **Yttrium** with anomalous **Cobalt**, **Scandium**, **Nickel**, **Chromium**, palladium and **Platinum** added to mix. *Matt: Quite a basket of critical minerals.*  
<https://thewest.com.au/business/public-companies/torian-unearths-new-wa-rare-earths-discovery-c-5521597>
- **NdFeB Magnets for Wind and EV’s: Rare earths ore production continues to ramp up at Vital Metals’ Nechalacho Mine**
  - Lead production ramp underway at Nechalacho (June’21) targeting 5,000+ mt REO by 2025. Stage 1 production strategy is crushing and sorting ore before it is sent to a Saskatoon cracking and leaching facility later in 2021 (shipments yet to start) of a high-grade resource of 101,000 tons at 9.01% LREO (2.2% NdPr) and is where mining from a starter pit began in 2021 (Stage 1). Stage 2 will involve the development of the much larger Tardiff deposit.
  - Vital has commenced drilling to define a mine plan for Stage 2 at Nechalacho as it works to develop a larger scale, longer life rare earths project. Vital has an off-take agreement with REEtec in Norway and another with Ucore in the USA.  
<https://investorintel.com/markets/technology-metals/technology-metals-intel/rare-earths-ore-production-continues-to-ramp-up-at-vital-metals-nechalacho-mine/>

## **BEV / LiB Mineral & Battery Market News**

- **Ardea ramps up WA nickel plant by 50 per cent**
  - Minerals explorer Ardea Resources has boosted the scale of its Goongarrie Hub nickel-cobalt project by almost 50% to 3.5 Mtpa annum and flagged a decrease in carbon emissions by adding an atmospheric leach circuit.  
<https://thewest.com.au/business/public-companies/ardea-ramps-up-wa-nickel-plant-by-50-per-cent-c-5441768>
- **The Great Lithium Disconnect**
  - The market intelligence firm’s CEO, Simon Moores, dubbed the market situation as the great lithium disconnect: ‘Right now lithium demand is growing a three times the speed of lithium supply. That’s a big problem that needs to be solved.’  
<https://www.moneymorning.com.au/20220131/the-great-lithium-disconnect.html>

- **Biden cancels Trump-era lease renewals for proposed Minnesota mine**
  - The Biden administration canceled a move by former President Donald Trump to renew mineral rights leases for a proposed Twin Metals copper-nickel mine in northeastern Minnesota.  
<https://www.pbs.org/newshour/economy/biden-cancels-trump-era-lease-renewals-for-proposed-minnesota-mine>
- **The Consequences of a 500% Rally In Lithium Prices**
  - After surging 500% over the past year, lithium prices have continued their meteoric rise in China.
  - Mining.com's EV Battery Metals index has quadrupled since May 2020.
  - Greenflation, is increasing the costs of setting up new green power projects, which could slow down the pace of the transition.  
<https://oilprice.com/Energy/Energy-General/The-Consequences-Of-A-500-Rally-In-Lithium-Prices.html>
- **Global cobalt production hits record in 2021 as mined cobalt output in DR Congo jumps 22.4%**
  - The DRC was the world's largest cobalt producer in 2021, responsible for over 70% of the global mine cobalt supplies. Mine cobalt production in DRC increased by 22.4% to 120,000mt.
  - According to the preliminary data released by the U.S. Geological Survey, estimated global mine cobalt production in 2021 was record high at 170,000mt, +20% over 2020 (142,000mt).  
<https://www.kitco.com/news/2022-02-02/Global-cobalt-production-hits-record-in-2021-as-mined-cobalt-output-in-DR-Congo-jumps-22-4.html>
- **Johnson Matthey Royston: Battery materials division closure**
  - Royston jobs affected by Johnson Matthey division closure plans
  - Out of about 1,500 employees at Royston, the closure affects approximately 100 jobs.  
<https://www.royston-crow.co.uk/news/johnson-matthey-royston-battery-division-closure-8653456>

Regards –