



## Weekly Precious Metals News Articles: August 14, 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-

Sorry for the delayed distribution this week. I have been managing a family health emergency.

### Gold

- **Gold jumps over 1% as dollar retreat hastens rebound**
  - Spot gold rose to \$1,772.80 per ounce by 10:26 a.m. ET, after hitting its highest in more than a week at \$1,774.30, in a sharp recovery from over four-month lows touched on Monday.
  - U.S. gold futures rose 1.4% to \$1,775.80.  
<https://www.cnbc.com/2021/08/13/gold-markets-dollar.html>
- **Gold gains on virus woes but set for weekly fall**
  - Gold prices climbed on Friday on concerns over rising cases of the Delta variant, although uncertainties over the US Federal Reserve's tapering timeline kept bullion on course for a weekly drop.  
<https://www.nasdaq.com/articles/precious-gold-gains-on-virus-woes-but-set-for-weekly-fall-2021-08-13>
- **European investors pour nearly \$1bn into gold ETFs in July**
  - Inflows stand in marked contrast to continued net selling from US funds suggesting a divergence in sentiment  
<https://www.ft.com/content/a65a1afb-fd22-4789-a410-4abbc88ddd26>

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

- **Automotive MCU Sales to Surge 23% in 2021 Despite Shortages**
  - 32-bit designs are expected to generate almost 77% of auto microcontroller revenues this year, followed by 18% from 16-bit and 6% from 8-bit, says Mid-Year Update report.
  - The huge market for automotive microcontrollers, which accounted for about 40% of total MCU sales over the last decade, has been on an uneven ride in the past several years. After climbing 12% in 2017, worldwide automotive MCU sales slowed to a crawl in 2018, rising just 1%. A borderline global recession stalled demand for new vehicles in 2019, and then came the outbreak of the Covid-19 pandemic, which wrecked the worldwide economy in 2020.  
<https://www.icinsights.com/news/bulletins/Automotive-MCU-Sales-To-Surge-23-In-2021-Despite-Shortages/>
- **Chip Shortage Keeps CIOs and Other Tech Leaders Scrambling**

- Across the economy, corporate tech leaders are dealing with dwindling supplies of the physical building blocks of IT  
<https://www.wsj.com/articles/chip-shortage-keeps-cios-and-other-tech-leaders-scrambling-11628538919>
- **Foxconn says watching for impact from worsening COVID-19 in Asia**
  - Foxconn, which assembles Apple's iPhones, reported a consensus-beating 30% surge in quarterly profit on Thursday but cautioned it would have to "wait and see" if the worsening COVID-19 crisis in Asia would hurt its supply chain.
  - The world's largest contract electronics maker has benefited from strong demand for technology products as people continue to telecommute amid the pandemic - a trend smartphone and laptop sellers such as Samsung and Lenovo say is likely to persist.
  - For the Taiwanese company, demand for smartphones has been the main driver of record high net profit and revenue in the first half of the year, Chief Financial Officer David Huang said on a conference call to discuss second-quarter results.  
<https://www.reuters.com/technology/apple-supplier-foxconn-q2-profit-beats-estimates-2021-08-12/>
- **Intel wants to build mega-fab site – but does New York have space?**
  - If New York economic development officials are going to convince computer chip giant Intel to build its next U.S. computer chip factory in the Capital Region or somewhere else upstate, then they are going to have to have a lot of land, water and power to offer the world's largest chipmaker.
  - The big question is, does New York state have what it will take?  
<https://www.timesunion.com/business/article/Intel-wants-to-build-mega-fab-site-but-does-NY-16374761.php>
- **NY says it can handle Intel's request for mega-fabrication site**
  - Intel, the world's largest computer chipmaker, has launched a nationwide search to build a \$100 billion chip manufacturing campus somewhere in the United States — a site envisioned as a small "city" that would include six to eight factories employing 10,000 workers.  
[https://www.oleantimesherald.com/news/ny-says-it-can-handle-intels-request-for-mega-fabrication-site/article\\_f8d9aa55-c62a-528b-a27c-41b4fb7bb3bf.html](https://www.oleantimesherald.com/news/ny-says-it-can-handle-intels-request-for-mega-fabrication-site/article_f8d9aa55-c62a-528b-a27c-41b4fb7bb3bf.html)

## Silver

- **Silver Price Forecast – Silver Markets See Short Covering Into the Weekend**
  - Silver markets have rallied a bit during the course of the trading session on Friday, perhaps in a bit of short covering as the market had been beaten down so severely. The US dollar did soften up just a bit, so that also could have a little bit to say about where we go next as well, but ultimately, I think this is a market that still has plenty of resistance above that will cause major issues. That being the case, I am paying close attention to the candlestick from the Monday session, because if we cannot break above the top of that level, I would not be interested in trying to get long.  
[https://finance.yahoo.com/news/silver-price-forecast-silver-markets-161910388.html?fr=sycsrp\\_catchall](https://finance.yahoo.com/news/silver-price-forecast-silver-markets-161910388.html?fr=sycsrp_catchall)
- **The Chinese PV Industry Brief: Tongwei raises solar cell prices – pv magazine International**
  - Polysilicon supplier and solar cell maker Tongwei announced its new solar cell prices for August. Overall, all the prices for its monocrystalline PV products were raised. The manufacturer priced its PERC 158.75 mm cell at CNY1.12 (US\$0.17) per W, with an increase of 3.7%, and its PERC 166 mm cells at CNY1.03 per W, with an increase of 3%. Furthermore, the company increased the price of its PERC 210 mm cells by 2% to CNY1.02 per W. The price of polycrystalline cells remained flat at CNY 0.73 per W.  
<https://www.pv-magazine.com/2021/08/13/the-chinese-pv-industry-brief-tongwei-raises-solar-cell-prices/>

## **Precious Metals Mining:**

- **Gates and Bezos invest in EV mineral mining in Greenland**
  - Critical minerals needed for electric vehicles are in high demand and world renowned billionaires are now funding an exploration project in Greenland.
  - Mineral exploration company KoBold Metals, backed by Bill Gates, Jeff Bezos, Michael Bloomberg, and Ray Dalio, has signed a joint venture with British mining firm BlueJay in search for nickel, copper, cobalt, and platinum.  
<https://thenextweb.com/news/gates-and-bezos-invest-bluejay-ev-mineral-mining-greenland>
- **Wheaton Precious Metals Announces Record Revenue, Cash Flow and Sales Volume for the First Half of 2021**
  - "Wheaton once again delivered strong results in the second quarter and remains well on track to achieve 2021 guidance of 720,000 to 780,000 gold equivalent ounces. With record sales volumes in the first half of 2021, Wheaton generated both record revenue and cash flow of \$655 million and \$449 million, respectively. This solid performance reflects the underlying strength of our diversified, high-quality portfolio, and has resulted in an increase to our dividend for the fourth quarter in a row, an increase of 50% over the prior year  
<https://stockhouse.com/news/press-releases/2021/08/12/wheaton-precious-metals-announces-record-revenue-cash-flow-and-sales-volume-for>

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

- **Targets set for raw materials saved from e-waste**
  - SINGAPORE - Recyclers here have a duty to recover at least 50 per cent of raw materials from the e-waste they receive each year. While the weight of the raw materials salvaged from batteries must be at least 50 per cent of the total weight of the batteries collected, this target increases to 70% for information and communications technology equipment and solar photovoltaic panels. The goal is 80% for large appliances and lamps.  
<https://www.straitstimes.com/tech/tech-news/targets-set-for-raw-materials-saved-from-e-waste>
- **Bacteria Can Help To Recycle EV Batteries – AirQualityNews**
  - Researchers at the University of Coventry have established a new method to use bacteria to recover precious metals from electric vehicle (EV) batteries. The method, called bioleaching, also known as bio-mining, uses microbes to oxidise metals as part of their metabolism. The bacteria and other non-toxic species can target and recover the individual metals in electric vehicle (EV) batteries. These purified metals constitute chemical elements, and so can be recycled indefinitely back into multiple supply chains. The process has been widely used in the mining industry, where micro-organisms are used to extract valuable metals from ores.  
<https://www.londonreconnections.com/2021/bacteria-can-help-to-recycle-ev-batteries-airqualitynews/>
- **How the Metropolitan Cemeteries Board is recycling precious metals from the dead**
  - Cemetery recycling sounds like something Dr Frankenstein had a penchant for when embarking on a DIY human project — but it is very real and it is happening right here in Perth.
  - Metropolitan Cemeteries Board chief executive Peter Deague confirmed cemetery recycling was alive and well in WA and told The West Live it was a nice little earner.
  - "I went to a conference back in 2011 or 2012 and I met a representative from a Netherlands company called Orthometals and they talked about recycling (precious) metals after the cremation process, which sounded a bit strange," Mr Deague admitted.  
<https://www.perthnow.com.au/news/perth/how-the-metropolitan-cemeteries-board-is-recycling-precious-metals-from-the-dead-ng-b881965351z>

## **Platinum**

- **Beginner's Guide to Platinum Investment**

- Platinum, a precious metal, is used in the industrial and manufacturing markets, particularly in vehicle pollution control devices. As the global economy rebounds from the pandemic, platinum's price is likely to rebound since it is used in manufacturing. It also has a future in the renewable energy market. As an investment, platinum may be useful in a variety of ways, including hedging and speculating. If you want to include platinum or any of the precious metals in your portfolio, it may be wise to speak with a financial advisor and keep up with the platinum market.

<https://finance.yahoo.com/news/beginner-guide-platinum-investment-174545628.html>

- **Platinum: Good News On The Horizon**

- Platinum offers significant upside for long-term investors.
- US Platinum import statistics show platinum imports have been rising over previous years.
- Platinum is increasingly being used as a substitute for more expensive palladium which is bullish.
- Speculative money flows show that investors are increasingly shorting platinum which provides a nice entry-point for long-term investors.
- The Biden infrastructure plan will force auto-manufacturers to curb emissions further and use more PGMs in catalytic converters.

<https://seekingalpha.com/article/4448064-platinum-good-news-on-the-horizon>

- **Platinum Slumps to Seven-Month Low as Virus Spread Saps Demand**

- Platinum dropped to a seven-month low as the spread of the coronavirus dents the outlook for industrial commodities, while a Federal Reserve official indicated the central bank is on course to taper stimulus.

<https://finance.yahoo.com/news/platinum-slumps-seven-month-low-180924636.html>

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

- **Hyzon Motors has begun shipping hydrogen fuel cell trucks to customers | Automotive World**

- He also said that the company is on track to deliver 85 fuel cell vehicles by the end of this year, with the company's first revenue coming next quarter. Orders and memoranda of understanding under contract has grown to \$83 million from \$55 million as of April, but many of the MOUs are non-binding. An agreement with Austrian grocer MRPEIS for 70 trucks next year is one such example. Similarly, Hyzon faces a slightly uphill battle in terms of technological adoption, as many of their customers have never seen or used a hydrogen fuel-cell vehicle.

<https://www.automotiveworld.com/news-releases/hyzon-motors-has-begun-shipping-hydrogen-fuel-cell-trucks-to-customers/>

- **Korean researchers extend hydrogen fuel cell lifespan with new nanoelectrode**

- A joint research team from the Korea Institute of Science and Technology (KIST) and the Korea Advanced Institute of Science and Technology (KAIST) announced that they have used a new nanoelectrode based on platinum to lengthen the lifespan of a hydrogen fuel cell.
- This could present an important step in lowering the overall cost of using H2 as a power source.
- The use of platinum is already commonplace as a catalyst in electrolyzers used for producing the H2 used in the cells. It is a precious metal that shows adhesiveness and when it has a nanometer size, it is considered to be unstable. Therefore, it is not a material that can be used on its own as a catalyst for these processes. Currently, platinum nanoparticles between two and five nanometers are used by attaching them to carbon particles in order to ensure that the catalyst will be stable.

<https://www.hydrogenfuelnews.com/hydrogen-fuel-cell-nanoelectrode/8547840/>

- **UK plan to replace fossil gas with blue hydrogen 'may backfire' | Green politics**

- The government's plan to replace fossil gas with "blue" hydrogen to help meet its climate targets could backfire after US academics found that it may lead to more emissions than using gas.

- In some cases blue hydrogen, which is made from fossil gas, could be up to 20% worse for the climate than using gas in homes and heavy industry, owing to the emissions that escape when gas is extracted from the ground and split to produce hydrogen.  
<https://www.theguardian.com/environment/2021/aug/12/uk-replace-fossil-gas-blue-hydrogen-backfire-emissions>
- **The Role of Solid Oxide Technology in the Hydrogen Economy: A Primer**
  - 16-page deep dive into SOFC technologies.  
[https://f.hubspotusercontent30.net/hubfs/5242085/BE21\\_22%20Hydrogen-white-paper\\_D.pdf?](https://f.hubspotusercontent30.net/hubfs/5242085/BE21_22%20Hydrogen-white-paper_D.pdf?)
- **Panasonic Takes Japan's Bet on Hydrogen Power to a New Level**
  - Panasonic Corp. is turning a fuel-cell factory in the lakeside city of Kusatsu in central Japan into what could be the world's first hydrogen-based plant powered entirely by renewable energy.
  - Prime Minister Yoshihide Suga's October pledge to make Japan carbon-neutral has been a "tailwind" for Panasonic's hydrogen-factory project, and the company intends to commercialize the system by fiscal 2023 and sell it globally, said Norihiko Kawamura, manager of Panasonic's hydrogen business promotion office.  
<https://www.bloomberg.com/news/articles/2021-08-10/panasonic-takes-japan-s-bet-on-hydrogen-power-to-a-new-level>
- **BP points to Australia as a top green hydrogen production location**
  - The energy major released a statement pointing to Western Australia as "an ideal place" for developing "large scale renewable energy assets that can in turn produce green hydrogen and/or green ammonia for domestic and export markets," as quoted by a CNBC report.
  - The International Energy Agency described H2 as a "versatile energy carrier" and can be used for a wide spectrum of applications in a broad number of sectors such as transport and industry.  
<https://www.hydrogenfuelnews.com/green-hydrogen-production-bp/8547842/>

## Palladium

- **Palladium Rally Threatened by Automakers' Pivot to Platinum**
  - A rally in palladium that's seen it more than triple in value since mid-2018 looks to be nearing its end as demand headwinds build.
  - Around 85% of global supply of the silvery-white metal is used in pollution-reducing catalytic converters in gasoline engines. The surge in prices coupled with advances in technology, however, are making it more attractive for automakers to use the much cheaper platinum. Further out, palladium faces an existential threat as electric vehicles gradually replace those using gasoline, meaning the current rally could well be its last.  
<https://finance.yahoo.com/news/palladium-rally-threatened-automakers-pivot-210000037.html>
- **Biden administration announces clean car standards modeled after CA**
  - California Gov. Gavin Newsom applauded clean car standards announced Aug. 5 by U.S. President Joe Biden's administration, which will build on the California Framework Agreements to reduce emissions in the state.
  - The standards include an "ambitious" goal to make zero-emission vehicles half of all new vehicles sold in the United States in 2030, according to a White House press release. In addition, the president plans to invest in electric vehicle charging stations and domestic manufacturing, working with California as a "leading" state in reducing emissions.  
<https://www.dailycal.org/2021/08/10/biden-administration-announces-clean-car-standards-modeled-after-ca/>
- **Biden fuel efficiency proposal sets stage for emission cuts**
  - EPA also rolled out its corresponding plan, which would increase the average fuel economy of new passenger cars and trucks 10% in 2023 and then 5% each year after that, totaling 25% by model year 2026. Because of certain legal requirements, NHTSA's proposal does not include model year 2023,

which is why the percentage increase differs from the EPA rule. The overall savings, however, would be the same, analysts agreed.

<https://www.eenews.net/articles/biden-fuel-efficiency-proposal-sets-stage-for-emission-cuts/>

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

- **Ruthenium: New mechanisms of activity improvement on bimetallic catalysts for hydrogen generation and fuel cells**
  - A group of researchers at the Hong Kong University of Science and Technology (HKUST) and Xiamen University has revealed new understandings of how surface ruthenium atoms can improve the hydrogen evolution and oxidation activities of platinum. This discovery opens a new venue for rational design of more advanced catalysts for electrolyzer and fuel cell applications.  
<https://phys.org/news/2021-08-mechanisms-bimetallic-catalysts-hydrogen-fuel.html>
- **Ruthenium: UT Arlington chemists develop a new drug to fight bladder cancer**
  - Scientists at the University of Texas at Arlington have developed a new drug that may help patients whose bladder cancer no longer responds to traditional treatments. The drug is a type of treatment called photodynamic therapy. It contains the transition metal ruthenium and generates molecules that kill cells. But this process only occurs in the presence of both light and oxygen.  
<https://www.msn.com/en-us/health/medical/ut-arlington-chemists-develop-a-new-drug-to-fight-bladder-cancer/ar-AAncFII?ocid=BingNewsSearch>
- **Iridium Crucible 5G Demand: The Search For 5G MmWave Filters**
  - The filter technologies in current use for cellphones may not scale up to the full millimeter-wave (mmWave) range planned for 5G. “MmWave will happen,” said Mike Eddy, vice president, corporate development at Resonant. “But the earth exploration satellite service is at 23.8 GHz, just below the mmWave bands that are being deployed for 5G, so you’re going to have to do some good filtering.”
  - So far, that isn’t happening. “The SAW devices or BAW devices don’t scale beyond 10 gigahertz,” said Anthony Lord, director, RF segment business development at FormFactor.  
<https://semiengineering.com/the-search-for-5g-mmwave-filters/>
- **Ruthenium and Platinum in Non-Volatile Memory Products: Three Key Memory Technologies Driving Data Management**  
<https://www.enterprisestorageforum.com/hardware/three-key-memory-technologies-driving-data-management/>

## **Clean Energy General News (New Section)**

- **Grim new climate report triggers calls on China to slash carbon emissions sooner**
  - China is responsible for more than one-quarter of the world’s annual carbon dioxide emissions, yet it has lagged other big emitters in pledges to reduce its output. Whether China can begin to slash its emissions significantly in the next 10 years will play a large role in determining the magnitude of the global climate crisis, they say.
  - “We know China is [currently] the main contributor of carbon dioxide emissions, so that is why China is devoted to decreasing our contribution,” says Wang Wen, a hydrologist at Hohai University and one of the lead authors of the report’s chapter on the regional impacts of climate change.  
<https://www.sciencemag.org/news/2021/08/grim-new-climate-report-triggers-calls-china-slash-carbon-emissions-sooner>
- **Copper price rises as supply worries return**
  - Copper prices advanced on Friday after workers at Codelco’s Andina copper mine in Chile went on strike, raising supply disruption risks.
  - Copper for delivery in September rose 1% from Thursday’s settlement price, touching \$4.431 per pound (\$9,748 per tonne) on the Comex market in New York.

<https://www.mining.com/copper-rises-as-supply-worries-return/>

- **Another Industrial Metal Hits Record High Prices: Aluminum Billet | ZeroHedge**
  - With central banks and governments flooding the world with stimuli, supercharging the global economy, along with tight supplies due to supply chain disruptions, prices of aluminum billet have leaped to all-time highs, according to Bloomberg data.
  - Aluminum spot prices are up more than 30% on the London Metal Exchange this year. Buyers are paying an even higher premium over futures to obtain aluminum billets. Bloomberg shows in the chart below that combined price and premium for buyers in Europe now exceeds \$3,750 a ton, the highest ever, taking out the highs in 2007-08.  
<https://www.zerohedge.com/commodities/another-industrial-metal-hits-record-high-prices-aluminum-billet>
- **China Restarts Coal Mines To Keep Up With Power Demand**
  - Operations at 53 shuttered coal mines in China will once again come to life, as China struggles to keep up with increased power demand, according to a statement by the National Development Reform Commission in China.
  - Last week, China announced it would restart 38 coal mines in Inner Mongolia. Now, China has announced it will resume operations at 15 more coal mines, in the regions of Shanxi and Xinjiang. The mines will operate for a year and will produce as much as 44 million tons of coal, which China hopes will satisfy the growing calls for power amid an intense heatwave and tick up in industrial activity.  
<https://oilprice.com/Latest-Energy-News/World-News/China-Restarts-Coal-Mines-To-Keep-Up-With-Power-Demand.html>
- **India hits 100 GW renewables milestone – pv magazine International**
  - Solar's share in the installed 100 GW renewable energy capacity stands at around 44%, and wind at 40% as per the data available from India's Central Electricity Authority.  
<https://www.pv-magazine.com/2021/08/13/india-hits-100-gw-renewables-milestone/>

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

- **Lithium-sulfur battery with shorter charging time, longer lifespan – pv magazine International**
  - Japanese scientists have developed a new lithium-sulfur battery by using titanium oxide and titanium nitride to prevent the formation of polysulfides during the fabrication process. This allows the battery to retain 85% of its capacity after 500 cycles at 2 C.  
<https://www.pv-magazine.com/2021/08/12/lithium-sulfur-battery-with-shorter-charging-time-longer-lifespan/>
- **Lithium-metal battery with capacity retention of 88% over 1,000 cycles – pv magazine International**
  - German scientists have applied a new combination of cathodes and electrolytes to improve the stability of lithium-metal batteries. They fabricated a device with an energy density of 560 watt-hours per kilogram and a Coulombic efficiency of 99.94%.  
<https://www.pv-magazine.com/2021/08/13/lithium-metal-battery-with-capacity-retention-of-88-over-1000-cycles/>
- **Why Lithium is the Decisive Growth Factor for the European E-Mobility Market**
  - Currently, three of the world's five biggest electric mobility markets are European. Additionally, while the U.S. sold over 330,000 electric vehicles in 2020, that was only a four percent growth compared to the previous year. However, this growth is now starting to affect other industries. Lithium is becoming more and more expensive, and there is a geopolitical aspect to this situation. European countries, which are seeing the biggest growth, have to rely on countries like China to supply them with the much-needed lithium and lithium hydroxide.  
<https://www.msn.com/en-us/money/other/why-lithium-is-the-decisive-growth-factor-for-the-european-e-mobility-market/ar-AANfiCv?ocid=BingNewsSearch>

- **Tesla, Re|Source to launch final pilot in DRC to trace cobalt from mine to EVs**
  - Re|Source, a solution to trace responsibly produced cobalt from mine to electric vehicle (EV), is moving forward with a pilot project in the Democratic Republic of the Congo (DRC) jointly developed with EV giant Tesla.
  - The program is being tested in real operating conditions at multiple on-site pilots, including the DRC and Europe, Re|Source said, with further pilots in Asia and the US planned to start later this year.
  - The final pilot across the entire Tesla supply chain is expected to take place in the fourth quarter. The launch of the final industry solution, supported by boutique blockchain technology studio, Kryha, will follow in 2022, it said.  
<https://www.mining.com/tesla-resource-to-launch-final-pilot-in-drc-to-trace-cobalt-from-mine-to-evs/>
- **Nickel climbs on higher risk appetite and demand boost**
  - Nickel rose to its highest in two weeks on Thursday on renewed risk sentiment after U.S. inflation figures cooled talks of Fed tapering, while strong consumption and falling stocks underpinned the metal's appeal.  
<https://www.nasdaq.com/articles/metals-nickel-climbs-on-higher-risk-appetite-and-demand-boost-2021-08-12>
- **Shanghai nickel up 5% on supply worries**
  - Shanghai nickel prices jumped 5% on Thursday on Chinese supply worries, while cooling U.S. inflation data tempered fears of policy tightening and weakened the dollar.  
<https://www.nasdaq.com/articles/metals-shanghai-nickel-up-5-on-supply-worries-2021-08-12>

Regards –