



Weekly Precious Metals News Articles: July 15, 2022

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Markets, Supply & Demand, Investment, and Industrial Applications.

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Gold

- [Gold heads toward fifth weekly decline on dollar strength](#)
 - U.S. retail sales beat expectations in June
 - Impact from new EU sanctions on Russia gold seen limited-analyst
 - Silver set for seventh straight weekly dip
- [Gold rebounds sharply from 1-year low as dollar slips](#)
 - Gold rebounded from near one-year low on Wednesday as the dollar retreated following an initial rally, helping bullion stave off pressure from prospects of steep rate hikes after U.S. consumer prices surged.
 - The dollar subsequently gave up gains, boosting appetite for gold among overseas buyers. U.S. Treasury yields also slipped. The CPI print drove the idea that the Fed is more likely than not to hike rates aggressively and probably keep them there for longer, driving gold's initial retreat, said Bart Melek, head of commodity strategies at TD Securities.
- [Gold prices shake off losses to turn higher after June inflation number](#)
 - Gold prices on Wednesday shook off losses from the hotter-than-expected inflation data to turn higher, buoyed by a pullback in the U.S. dollar.
 - Gold futures for August delivery rose \$11.10, or 0.7%, to \$1,736.10 toz, after dropping to as low as \$1,704.50. Before the turn higher, prices based on the most-active contract were on track for the lowest finish since March 31, 2021.
 - Silver futures for September delivery added 1.1% to \$19.16 toz
 - Platinum futures for October delivery rose \$7.40, or 0.9%, to \$835.50 toz.
 - Palladium futures for September delivery fell \$58.10, or 2.9%, to \$1,957.50 toz.
- [How inflation is flipping the economic script, in seven charts](#)
 - Every morning a new headline underscores growing economic concerns: Highest inflation since the 1970s. Central banks aggressively raising rates. Consumer sentiment at record lows. Commodity prices near all-time highs. Clearly inflation has, at a minimum, altered the economic mood, and potentially reset the path of global and national economies worldwide for years to come. McKinsey's experts have examined many of the strategic implications of inflation. Here, we use the best and most recent publicly available data to offer seven charts illustrating inflation's insidious progress.

Semiconductor Related Articles (impacting Precious Metals electronics):

- [Global Total Semiconductor Equipment Sales on Track to Record \\$188 billion in 2022](#)
 - Global sales of total semiconductor manufacturing equipment by original equipment manufacturers are forecast to reach a record \$117.5 billion in 2022, rising 14.7% from the previous industry high of \$102.5 billion in 2021, and increase to \$120.8 billion in 2023..
- [Gartner: Shipments of PCs collapse during second quarter](#)
 - Gartner estimated worldwide PC shipments totaled 72 million computers in Q2'2022, -13% y/y. This was the sharpest decline in nine years of the global PC market.
 - “The decline we saw in Q1'2022 has accelerated in Q2, driven by the ongoing geopolitical instability caused by the Russian Invasion of Ukraine, inflationary pressure on spending and a steep downturn in demand for Chromebooks,” “Supply chain disruptions also continued, but the major cause of PC delivery delays changed from component shortages to logistics disruptions.
- [TSMC raises sales growth forecast after record profits](#)
 - TSMC raised its revenue growth forecast for this year to 35 percent after reporting record-high quarterly net profits. Net profit last quarter hit NT\$237.03 billion (US\$7.93 billion), +76.4% y/y and +16.9% q/q.
 - The sole chip supplier of Apple Inc’s iPhones in April estimated that revenue would expand by a percentage in the mid-to-high 20s in US dollar terms this year, driven primarily by chips used in high-performance-computing applications, such as servers and data centers.
- [Are Micron and the Taiwanese Semi Suppliers the Canaries in the Coal Mine?](#)
 - Micron, the third largest memory supplier in the world, reported its fiscal 3Q results that ended in May. These results were very strong, with the company posting sales of \$8.6 billion, up 11% from the previous quarter and 19% higher than one-year earlier. However, the guidance for its fiscal 4Q sales ending in August was the epitome of a “canary in a coal mine” moment.
- [TSMC revenue soars 44% on resilient tech demand](#)
 - “Robust demand for high-performance computing and automotive chips should prevail, while negative impacts from a weaker smartphone-chip demand outlook may not kick in until 4Q,” Bloomberg Intelligence analyst Charles Shum wrote in a note ahead of TSMC’s announcement yesterday.

Silver

- [Silver and platinum: two precious that metals will be screaming buys when the dollar turns](#)
 - The soaring US dollar has depressed the price of virtually every metal – and none more so than platinum and silver. They may have further to fall yet, says Dominic Frisby. But when the dollar turns, the price of both will take off.
- [Solar power costs continued to fall in 2021, despite rising panel prices](#)
 - The average global price of solar kilowatt-hours fell 13% on 2020’s prices, as around two-thirds of the renewable’s capacity installed last year was cheaper than the lowest-cost fossil fuel alternative.
 - China once again posted the lowest solar LCOE at \$0.034/kWh in 2021.
 - India offered the world’s second cheapest solar power, at \$0.035/kWh.
- [Silver Price Forecast – Silver Markets Fall Yet Again](#)
 - Silver markets have fallen hard during the trading session on Thursday as we are now threatening the \$18 level. Quite frankly, there is nothing positive on this chart and the collapse has been rather brutal. With this being the case, I begin to think of silver as an indicator of what’s going on with the US dollar more than anything else right now.

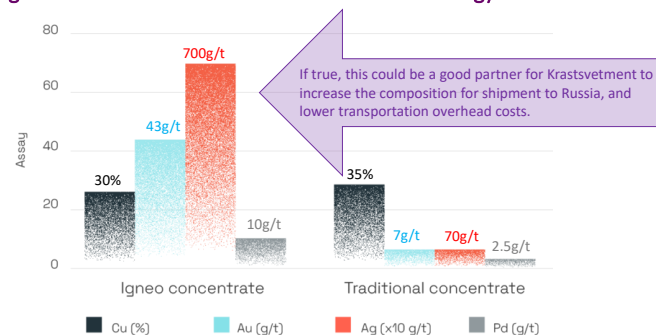
Precious Metals Mining:

- [Pro-China agents posed as activists to protest US, Canada mines](#)
 - Pro-Chinese agents posed as concerned local residents on social media to try and spark protests over the opening of rare earth mines in the US and Canada, cybersecurity researchers said in a new report.
 - The fake Twitter and Facebook accounts were created to give China, the largest producer of rare earth minerals, a competitive advantage, cybersecurity research company Mandiant disclosed on Tuesday.
- [2022 is already South Africa's worst year for load-shedding — with 170 more days to go](#)
 - Data from the popular load-shedding app EskomSePush (ESP) shows that 2022 will either become the worst year of load-shedding within the next few days or already has, depending on how you measure it.
 - Eskom had implemented 46 days of load-shedding by the morning of Monday, 11 July 2022. That is only two 24-hour cycles short of the entire time it implemented load-shedding in 2022.
- [Hecla Mining \(HL\) Q2 Silver Production Up 10% Sequentially](#)
 - Hecla Mining reported silver production of 3.6Moz in the second quarter of 2022, +10% on a sequential basis, primarily driven by solid performance at the Lucky Friday mine that surpassed the 1Moz mark.
- [Redressing mine closure liability through the ESG lens](#)
 - The mining sector continues to battle with mine-related environmental concerns.

E-Waste & Precious Metals Recycle Related:

- [Acquisition deepens Korea Zinc's presence in US](#)
 - Metals giant Korea Zinc is set to control e-scrap recycling and secondary processing operations in the U.S. and Europe, striking a \$332 million deal to acquire a majority stake in Igneo Technologies.
 - Korea Zinc, a publicly traded company based in Seoul, today disclosed to investors a majority investment agreement with Igneo, which operates an e-scrap smelting facility in France and is building an \$85 million smelter in Georgia.
 - The acquisition also includes the e-scrap feedstock arm of Ingeo, evTerra, which is planning to open several e-scrap recycling facilities across the U.S. by the end of this year.
- [Korean smelter takes majority stake in e-scrap major Igneo](#)
 - Electronics recycler Igneo has finalised a majority investment agreement with precious and non-ferrous metals recycler Korea Zinc. The deal sees Korea Zinc acquiring a 73% stake in the US company previously known as Weee Metallica worth US \$332 million (EUR 333 million).
 - *Matt: Recall I like Igneo for developing an alternative concentrating technology that provides this copper smelter with commercial advantage.*

Does Igneo Have A Best-In-Class Concentrator Technology?



IGNEO – e-waste recycling

- [UVA professor harvests silver from solar](#)
 - But using a laser, Gupta says he can salvage the silver for re-use. “We will take a high-power laser and program it so it only exposes the silver lines on the panel, and the laser being high-powered, it will

vaporize.” From that vapor, his lab will collect nano-particles of silver, an especially useful and valuable form of the precious metal. Scott Acton, chair of electrical and computer engineering at UVA, says the process could make recycling worthwhile since it’s cheaper and cleaner than current methods.

- “We use acid to dissolve the photovoltaic components away from the wires,” he explains. “It’s not only an expensive process, but it’s an environmentally dangerous process.”
- [China doesn't want our junk anymore as scrap metal hits the dumps.](#)
 - In early May, China implemented a 30-day ban on all scrap-copper imports, part of wider limits on all sorts of imported waste like paper, plastic and scuttled ships. The government wants to clean up decades of pollution from heavy industry and jump start domestic recycling. But without the world’s biggest buyer, U.S. prices dropped and inventories ballooned. Scrap dealers are offering discounts to spark sales at home and lure new buyers in places like Turkey, India, Japan and Malaysia.
 - At Utah Metal Works in Salt Lake City, where Lewon is president of the family-owned business, stockpiles of unprocessed insulated wire -- both copper and aluminum – have doubled from a year ago to about 3 million pounds (1,360 metric tons). Gone are the days when the company would send 1.3 million pounds a month to China, clearing out almost the entire inventory, he said.

Platinum

- [Platinum Price Forecast As Commodity Supercycle Winds Down](#)
 - Platinum price has moved into a deep bear market as the commodity supercycle ends. Its price has crashed almost 30% from its highest point this year. This performance is also in line with that of other commodities like copper, silver, gold, and palladium.
- [A ‘Liquid’ Platinum Catalyst Outperforms Solids at Low Temperature](#)
 - To make the catalyst system, Pt beads are dissolved in molten Ga at around 400°C, then cooled to the operating temperature of the reaction (typically 40–80°C). In one (of several) reaction studied, the electrochemical oxidation of methanol using the Pt-Ga system as the anode was shown to have an activity of around 2.8×10^7 milliamp per milligram of platinum, which is three orders of magnitude higher than existing solid platinum catalysts.
- [Platinum demand to benefit from green hydrogen uptake in aviation](#)
 - The first stage comprises the use of renewable energy to power electrolyzers, which produce green hydrogen from water. From the combustion process, carbon dioxide is captured and converted into carbon feedstock using direct air carbon capture technology. Carbon feedstocks are then synthesised with green hydrogen to generate liquid hydrocarbons. The hydrocarbons are converted to produce a synthetic equivalent to kerosene.
 - Recent research by the WPIC highlights that supportive hydrogen policies could result in FCEV demand for platinum equalling current automotive demand by 2039, with broad-based commercial adoption of FCEVs potentially bringing this forward to 2033, adding 3+Moz yearly auto Pt demand in 11 years.

Fuel Cells/Hydrogen Economy Related Articles:

- [EU launches 5.4-billion-euro hydrogen project with Alstom, Daimler, others](#)
 - The European Commission on Friday approved a 5.4-billion-euro (\$5.4 billion) hydrogen project jointly funded by 15 EU countries and 35 companies including Alstom and Daimler Truck, seeking to gain the edge in an innovative sector.
- [This global first sees industrial lime produced with clean hydrogen in UK](#)
 - The company Tarmac replaced natural gas in the lime production process, which involves heating calcium carbonate from limestone to about 1,000 degrees Celsius. By burning hydrogen, no carbon dioxide was emitted from burning the fuel, only water vapour.

- Lime production is the second largest source of carbon emissions from industrial processes after cement production. Fuel emissions account for about one third of the CO₂ emissions in lime production, with the remainder coming from the conversion of limestone to quicklime.
- [**Swedish consortium completes rock cavern for green hydrogen storage**](#)
 - Vattenfall, Swedish steelmaker SSAB, and Swedish state-owned miner LKAB have finished building a rock cavern storage facility for green hydrogen near Luleå, northern Sweden.
 - The 100-cubic-meter lined rock cavern was built approximately 30 meters below ground via the so-called lined rock cavern approach. The walls of caverns are covered with a sealing layer.
 - “At a later stage, a full-scale hydrogen gas storage facility measuring 100,000 to 120,000 cubic meters may be required, in which case it will be able to store up to 100 GWh of electricity converted to hydrogen gas, which is sufficient to supply a full-sized sponge iron factory for three to four days,” the companies said.
- [**BNB Renewables considering multiple Texas sites for \\$450M green hydrogen plant**](#)
 - New York-based BNB Renewables wants to build a 400,000-ton-per-year hydrogen plant that uses water and wind or solar power to create the carbon-free fuel, according to documents posted on the Texas comptroller’s website.
- [**Iveco to partner with Hyundai on fuel cells for hydrogen buses in Europe**](#)
 - Truck and bus maker Iveco Group said on Wednesday it would partner with Hyundai Motor's HTWO to equip its future hydrogen-powered buses in Europe with fuel-cell systems designed by the South Korean group hydrogen mobility brand.
- [**New Hydrogen Fuel for a Wider Application of Green Energy**](#)
 - One cause behind such excellent performance was the truth that the new catalyst consists of three various active sites for the reaction, rather than just one in present catalysts.
 - Utilizing a formula consisting of atomically dispersed platinum, iron single atoms, and platinum, iron nanoparticles, the new mix expedites the reaction rate and obtains a catalytic activity that is 3.7 times greater compared to the platinum itself. On a theoretical basis, the higher the catalytic activity, the greater the power it offers.

Palladium

- [**Car Reposs Are Exploding. That’s a Bad Omen.**](#)
 - Most of the loans on recently repossessed cars originated during 2020 and 2021, whereas origination dates are normally scattered because people fall on hard times at different times; loan-to-value ratios, or the amount financed relative to the value of the vehicle, are around 140%, versus a more normal 80%; and many of the loans were extended to buyers who had temporary pops in income during the pandemic. Those monthly incomes fell—sometimes by half—as pandemic stimulus programs stopped, and now they look even worse on an inflation-adjusted basis and as the prices of basics in particular are climbing.

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

- [**Shell to start building Europe’s largest renewable hydrogen plant**](#)
 - The 200MW electrolyser will be constructed on the Tweede Maasvlakte in the port of Rotterdam and will produce up to 60,000 kg of renewable H₂ / day. The renewable power for the electrolyser will come from the offshore wind farm Hollandse Kust (noord), which is partly owned by Shell.
 - The renewable hydrogen produced will supply the Shell Energy and Chemicals Park Rotterdam, by way of the HyTransPort pipeline¹, where it will replace some of the grey hydrogen usage in the refinery. This will partially decarbonise the facility’s production of energy products like petrol and diesel and jet fuel. 74As heavy-duty trucks are coming to market and refuelling networks grow, renewable hydrogen supply can also be directed toward these to help in decarbonising commercial road transport.

- **Iridium/Platinum Catalyst: [‘We’ll deliver 40 times as many hydrogen electrolysers in 2022 as we did last year’: Plug Power CEO](#)**
 - Annual shipments of systems at US company to rise from 5MW in 2021 to 200MW, but order pipeline is a staggering 16GW

Clean Energy General News

- **[Why nuclear energy is on the verge of a renaissance](#)**
 - But the Three Mile Island accident in 1979 and Chernobyl meltdown in 1986 changed the landscape, spurring fear that nuclear energy could not be controlled safely.
 - In more recent times, the Fukushima Daiichi accident in Japan in 2011 — and earlier this year the capture of nuclear power plants in Ukraine by invading Russian forces — have added to public concerns.
 - Since the 1980s, nuclear energy capacity and generation in the U.S. has largely stayed flat. Today, the country’s fleet of nuclear power reactors produces only 19% of the country’s electricity.
 - But despite its fraught origin story and the psychological effect of high-profile accidents, nuclear energy is getting a second look. Its clean and reliable, and very much needed to be a big part of the mix.
 - *Comment: CNBC follows suit with The New York Times in promoting the benefits of nuclear energy. The narrative does seem to be turning, with legacy media stalwarts like The New York Times and CNBC talking about how nuclear could be the key to sustainable clean energy.*
- **[How inflation is flipping the economic script, in seven charts](#)**
 - Every morning a new headline underscores growing economic concerns: Highest inflation since the 1970s. Central banks aggressively raising rates. Consumer sentiment at record lows. Commodity prices near all-time highs. Clearly inflation has, at a minimum, altered the economic mood, and potentially reset the path of global and national economies worldwide for years to come. McKinsey’s experts have examined many of the strategic implications of inflation. Here, we use the best and most recent publicly available data to offer seven charts illustrating inflation’s insidious progress.
- **[Anglo produces first copper from Quellaveco, but comes amid narrowing supply deficits for metal](#)**
 - The copper market in a narrower deficit than previously expected, now forecast to be 119,000 mt, followed by a balanced market in 2023 with a deficit of only 17,000 mt against previous expectations of a 120,000 mt deficit. *This mine ~220 mtpa, or 1.5% global mined production when ramped.*
 - *Matt: For those who follow the copper market, look for mining expansion to catch up to copper demand in 2023, just to go back into eternal deficit after that with exploding electrification demands.*
- **[Europe wants a high-speed rail network to replace airplanes](#)**
 - Imagine a network of modern, super-fast and comfortable trains hurtling between every major city in the European Union, providing a reliable, comfortable and sustainable alternative to air travel.
 - That was the vision outlined by rail industry leaders in Lyon, France, on June 29, amid ambitious European plans to double high-speed rail use by 2030 and triple current levels by 2050.

BEV / LiB Mineral & Battery Market News

- **[Umicore prepares to construct first-of-its-kind battery materials production plant in Canada](#)**
 - Umicore plans to construct a manufacturing facility for cathode active battery materials (CAM) and their precursor materials (pCAM) in Ontario, Canada. Umicore is targeting to start construction in 2023 and operations at the end of 2025 with the potential to reach by the end of the decade an annual production capacity capable of powering approximately one million EVs.
- **[US Says It Will Back Miners to Stop China's Weaponization of Battery Metals](#)**
 - Administration has tools to support key minerals: Granholm
 - Nations wary over China’s dominant role in green supply chains

- China accounts for almost 3/4ths of manufacturing capacity for lithium-ion batteries needed for EVs and renewable energy storage, and dominates steps throughout the supply chain, including the processing of a suite of key metals. The nation is also the world's dominant supplier of solar power equipment, and is seeking to build out its market share in the emerging clean hydrogen sector.
- Our concern is that critical minerals could be vulnerable to manipulation, as we've seen in other areas, or weaponization," Granholm said Wednesday in a meeting in Sydney with companies including BHP Group, Rio Tinto Group and Lynas Corp. "We are very serious about establishing strong relationships with Australia, and with you and with your potential customers for offtake."
- **[China Lithium Giant Expands in Argentina With \\$962 Million Deal](#)**
 - China's top producer plans to buy Lithia Inc. for brine assets
 - Rio Tinto, Zijin Mining are among investors in Argentina
- **[Eye on Lithium: Bolivia's President wants to produce 40pc of the world's lithium by 2030](#)**
 - Bolivia's President wants the country to supply 40% of global lithium by 2030
 - Pilbara Minerals nabs US\$6188/dmt for 5.5% Li₂O cargo of spodumene at latest auction
 - Greenland Minerals expands into lithium with Spanish acquisition
- **[Electric Vehicle Sales Reach Record High Despite Material Shortages, High Costs](#)**
 - Automakers are struggling with semiconductor shortages and soaring costs for lithium and other raw battery materials, as reported by the Times, which notes that even those firms already working to upgrade their factories and supply chains won't be able to meet consumer demand for "several years." Other obstacles include charging infrastructure, sizable costs (electric cars in the US cost an average \$20,000 more than combustion-engine vehicles), and government policy.

Regards –