



Weekly Precious Metals News Articles: February 6, 2021

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Below is a cross section of relevant news article to the world of Precious Metals:

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

Printable PDF version attached. Enjoy-

Gold

- **India cuts import tax on gold, industry expects drop in smuggling**
 - India slashed import duties on gold and silver on Monday in a surprise move that industry officials say could boost retail demand and curtail smuggling in the world's second-biggest bullion consumer.
 - Higher demand for gold from India could support global prices, which hit a record high last year, although that could increase India's trade deficit and weigh on the ailing rupee.
<https://finance.yahoo.com/news/india-cuts-import-tax-gold-082050593.html>
- **Gold prices slide more than 2% to below \$1,800 as dollar, yields gain**
 - (Thursday) Spot gold was 2.3% lower at \$1,790.92 per ounce
https://www.business-standard.com/article/international/gold-prices-slide-more-than-2-to-below-1-800-as-dollar-yields-gain-121020402091_1.html
- **Easily assembled gold nanoparticle scaffolding serves as molecular probe**
 - Photoaffinity probes can be easily obtained from the probe precursors, preassembled with three types of building blocks, each containing a clickable group, a photoreactive group and a water-soluble spacer group, and then incorporate a small-molecule of interest through 'click chemistry.
 - The fabricated small molecule behaves as a parent molecule that would naturally bind to a protein, and the photoreactive group reacts to ultraviolet light irradiation that activates the probe. Once activated, the probe can capture and isolate a target protein.
<https://phys.org/news/2021-02-easily-gold-nanoparticle-scaffolding-molecular.html>
- **The Webb Telescope (the successor to the Hubble), NASA's Golden Surfer, Is Almost Ready, Again**
 - Thirty years, \$8.8 billion, multiple mishaps and budget crises and a threatened congressional cancellation later, the James Webb Space Telescope is finally ready. NASA now plans to launch it into orbit as early as Oct. 31 aboard an Ariane 5 rocket supplied by the European Space Agency.
 - Assembled in its clean room at Northrop Grumman in LA, the telescope resembles a giant sunflower riding on a surfboard. The flower's petals are 18 gold-plated beryllium hexagons joined to form a dish more than 20 feet across. The telescope is almost three times larger than the vaunted Hubble and seven times more powerful in its ability to discern faint stars and galaxies at the edges of time.
<https://www.nytimes.com/2021/02/02/science/webb-telescope-women-astronomy.html?action=click&module=Editors%20Picks&pgtype=Homepage>



Semiconductor Related Articles (impacting Precious Metals electronics):

- **Auto Industry Chip Shortages Reflect Wider Shortfall**
 - The failure of auto companies to secure supplies of chips reflects widespread shortages in the semiconductor industry, and there's no crystal ball on when equilibrium will return.
 - Two of the world's top-three foundries, Taiwan Semiconductor Manufacturing Co. (TSMC) and United Microelectronics Corp. (UMC) said today that they're running at full tilt, and the best they can do is to reallocate production to meet demand from global automakers like Volkswagen and Toyota, just to name a few. The carmakers will need to take a place in the queue behind big chip buyers like Apple and Qualcomm.
<https://www.eetimes.com/auto-industry-chip-shortages-reflect-wider-shortfall/#>
- **Chip crunch to impact global auto production into third quarter, says HIS**
 - A shortage of auto chips could impact 672,000 units of global light vehicle production in the first quarter. IHS Markit warning that the disruption could extend into the Q3.
 - AutoForecast Solutions forecast production volume impact of 964,000 vehicles in 2021 due to semiconductor shortage.
 - Ford Motor Co, Toyota Motor Corp, Fiat Chrysler Automobiles and Nissan Motor Co had cut output due to the shortage, while VW has said production in February.
 - China will be the most hit in the first quarter at nearly 250,000 units.
<https://www.reuters.com/article/us-autos-chips/chip-crunch-to-impact-global-auto-production-into-third-quarter-says-ih-idUSKBN2A32DU>
- **Global Semiconductor Sales Increase 6.5% to \$439 billion in 2020**
 - The Semiconductor Industry Association today announced the global semiconductor industry sales were \$439.0B in 2020, an +6.5% compared to the 2019 total of \$412.3B.
 - The Americas market stood out, increasing annually +19.8% in 2020. China remained the largest individual market for semiconductors, with sales there totaling \$151.7B, +5.0%. Asia Pacific/All Other +5.3%, Japan +1.0%, Europe -6.0%
<https://www.semiconductors.org/global-semiconductor-sales-increase-6-5-to-439-billion-in-2020/>
 - Second related article: Over the next 10 years, semi manufacturing is going to grow 56%.
<https://www.reuters.com/article/us-usa-semiconductors-idUSKBN2A11AV>
- **2020 Global Silicon Revenue Remains Stable as Wafer Area Shipments Edge Up Despite COVID-19 Disruption**
 - Worldwide silicon wafer area shipments in 2020 increased while revenue remained unchanged from 2019 at \$11,170 million, the SEMI Silicon Manufacturers Group reported in its year-end analysis of the silicon wafer industry. Silicon shipments totaled 12,407 million square inches (MSI), compared to 11,810 MSI shipped in 2019, a rebound in volume of +5% year over year, recovering close to the historic high set in 2018.
<https://www.semi.org/en/news-media-press/semi-press-releases/silicon-shipment-2020>

Silver

- **SILVER hits 8 year high on concerted activist retail buying ...**
 - Silver always seems to have a propensity to surprise ...
 - In an otherwise deeply uninspiring market, silver caught a bid rallying nearly 20% in just 3 days to resistance at an eight year high just shy of \$30/oz - albeit still well short of its all-time high of \$50 seen back in 2011.
<https://www.linkedin.com/pulse/silver-hits-8-year-high-concerted-activist-retail-buying-ross-norman/?trackingId=SIWSOfW%2BmqfMY7NrPTFgg%3D%3D>
- **Silver Futures Soar 8%, Rise Above \$29 As Reddit Hordes Pile In**
 - It was the one print everyone was waiting for, and here it is: silver futures opened up 7%, surging from \$27/oz to a high of \$29.095 following a weekend of speculation that the next big squeeze on WSB's radar is silver. And whether that's true or not, may no longer matter in a world where - as described below - there is virtually no physical silver to be purchased.
<https://www.zerohedge.com/markets/reddit-preparing-unleash-worlds-biggest-short-squeeze-silver>
- **Silver gets the GameStop treatment, rallies by as much as 13%**
 - Silver prices rallied Monday to their highest intraday level since 2013, as a buying frenzy attributed to a post on Reddit last week suggesting a short squeeze on the precious and industrial metal continued.
 - Silver futures for March delivery SIH21, -1.73% SI00, -1.73% climbed to as high as \$30.35 an ounce on Comex on Monday, the highest intraday level since February 2013.
 - Prices settled at \$29.418, up \$2.50, or 9.3%. The most-active contract posted the highest settlement since February 2013. The silver-backed iShares Silver Trust SLV, +7.08%, meanwhile, was up by 7.5% after surging by close to 10% early Monday.
<https://www.marketwatch.com/story/silver-gets-the-gamestop-treatment-rallies-by-as-much-as-13-11612203674>
- **Sprott Asset Management: Silver Headed To \$35, Above That Expect Price Spikes To \$47-\$119**
 - If the gold-silver ratio (*which historically is between 35-85*) still has a function in Reddit-world, this may help to frame the silver price. Using a \$1,900 gold price as a reference, a 40x ratio translates to \$47 silver. Using the Hunt Brothers low ratio of 15.9x, silver would be at \$119.50. The Hunt Brothers attempted to “corner the silver market” back in 1980.
<https://kingworldnews.com/sprott-asset-management-silver-headed-to-35-above-that-expect-price-spikes-to-47-119/>
- **World Business Partner – Silver hits eight-year peak – BBC Sounds**
 - BBC podcast on interview with Ross Norman.
<https://www.bbc.co.uk/programmes/p00fvhj7>

Precious Metals Mining:

- **Amplats beats analyst sales forecasts as makes in-roads on one million oz metal inventory**
 - Anglo American Platinum reported full-year concentrate and refined platinum group metals (PGM) production, as well as PGM sales, ahead of guidance, beating analysts' forecasts.
<https://www.miningmx.com/news/platinum/44932-amplats-ends-2020-ahead-of-analyst-sales-forecasts-but-cash-to-be-hit-by-one-million-oz-inventory/>
- **'We need exploration to grow our industry' – Minerals Council**
 - Greenfield exploration needed - Mgojo decried the fact that in 2019, South Africa accounted for only 1% of global exploration expenditure and only 0.1% of greenfield exploration, which contrasted sharply with Canada and Australia, for example.
<https://www.miningweekly.com/article/we-need-exploration-to-grow-our-industry-minerals-council-2021-02-01>
- **SA mining companies' efforts to be clean and friendly**

- Gold mines do better than the rest of the industry with regards to environmental, social and governance issues. The top 10 ranked ESG mining firms were: Harmony Gold, Gold Fields, Sibanye-Stillwater, Kumba Iron Ore, Glencore, AngloGold Ashanti, Anglo American, African Rainbow Minerals, BHP Group, Exxaro Resources
<https://www.moneyweb.co.za/mineweb/sa-mining-companies-efforts-to-be-clean-and-friendly/>
- **Northam Is Said to Consider Bidding for Bokoni Platinum Mine**
<https://www.bloomberg.com/news/articles/2021-02-05/northam-is-said-to-consider-bidding-for-bokoni-platinum-mine>
- **Mining right granted for PTM's Waterberg project**
 - The Waterberg mining right has been granted in terms of Section 23(1) of the Mineral and Petroleum Resources Development Act and was issued for an initial period of 30 years. It may be renewed for further periods, each of which may not exceed 30 years at a time.
<https://www.miningweekly.com/article/mining-right-granted-for-ptms-waterberg-project-2021-02-03>

E-Waste & Precious Metals Recycle Related:

- **PGMs retain their sheen**
 - Recycling continues to supply more than one-quarter of platinum group metals' demand
 - Demand for platinum group metals (PGMs) in India and China should offset declining demand from slowing western economies.
 - Palladium is expected to continue selling at a premium to platinum.
 - Auto catalyst recycling is the second largest contributor to PGM world supply.
<https://www.recyclingtoday.com/article/platinum-group-metals-commodity-focus/>
- **Apple's colossal e-waste timebomb**
 - An unfortunate yet inevitable side-effect of the popularity of gadgets is e-waste, and it's something that every company has to address. But Apple is facing a literal skyscraper.
 - During Apple's financials earnings call the other day, CEO Tim Cook casually announced that Apple's hardware ecosystem had exceeded 1.65 billion devices by the end of last year.
 - Assuming the ecosystem was made up entirely of iPhones, an iPhone, on average, weighs 150g and are 130mm long. This means that you're looking at a pile of iPhones weighing 250,000 metric tons (the Empire State Building weighs in at roughly 330,000 metric tons), and if laid end-to-end would circle the Earth more than five times.
<https://www.zdnet.com/article/apples-colossal-e-waste-timebomb/>
- **E-Scrap News: Silver prices spike to nearly 8-year high**
 - Silver is a key metal for e-scrap recovery firms. According to E-Scrap News figures, one ton of shredded circuit boards can contain as much as 40 ounces of silver.
<https://resource-recycling.com/e-scrap/2021/02/04/silver-prices-spike-to-nearly-8-year-high/>

Platinum

- **PGMs could be next to attract Reddit crowd**
 - PGMs may prove irresistible to the WallStreetBets crowd having whetted their appetite on silver, John Reade, chief strategist at the World Gold Council said this week.
<https://www.miningnews.net/events-coverage/news/1404105/pgms-could-be-next-to-attract-reddit-crowd>
- **SA PGMs set for strong 2021 after record high prices**
 - South Africa's platinum group metal (PGM) producers expect a strong 2021 amid vaccine rollouts, rising consumption and tightening emissions standards globally. Although it remains to be seen if recent record highs for metals such as rhodium will be sustainable as buyers feel the pinch.
<https://www.argusmedia.com/en/news/2182178-sa-pgms-set-for-strong-2021-after-record-high-prices?backToResults=true>

- **Renewable Energy Expected To Be a Key Driver of Precious Metals in 2021**
 - Silver should have another good year due to increased renewable energy use, along with platinum
<https://smallcappower.com/analyst-articles/renewable-energy-expected-to-be-a-key-driver-of-precious-metals-in-2021/>
- **US Mint Unveils Coin Designs and Releases First Coin in New Platinum Proof Coin Series**
 - The United States Mint announced today that it is launching a new five-year Platinum Proof Coin Program series starting in 2021 and continuing through 2025.
<https://www.usmint.gov/news/press-releases/mint-unveils-coin-designs-and-releases-first-coin-in-new-platinum-proof-coin-series>

Fuel Cells/Hydrogen Economy Related Articles:

- **GM to supply Navistar with Hydrotec fuel cells for electric vehicles while Volvo and Scania highlight their own electrification initiatives**
 - GM will supply its Hydrotec fuel cell power cubes to truck-making giant Navistar for use in its production model fuel cell electric vehicle (FCEV) – the International RHTM Series.
<https://roboticsandautomationnews.com/2021/02/04/gm-to-supply-navistar-with-hydrotec-fuel-cells-for-electric-vehicles-while-volvo-and-scania-highlight-their-own-electrification-initiatives/40201/>
- **Hydrogen trucks in Navistar's plans**
 - In about three years, Navistar plans to start selling low-emission hydrogen-powered heavy trucks under a partnership with General Motors and a small distribution company called OneH2.
 - Trucking company J.B Hunt will use test trucks in a pilot program starting next year. Navistar trucks will be able to go more than 500 miles on a single charge and can be refueled in less than 15 minutes.
 - GM will provide fuel cell "power cubes" to Navistar, while OneH2 will set up fueling stations either by trucking hydrogen to terminals or through small hydrogen generation units.
<https://www.arkansasonline.com/news/2021/jan/31/hydrogen-trucks-in-navistars-plans/>
- **Hydrogen Council Reaches 100+ Members as Hydrogen Industry Enters Next Stage of Growth**
 - Launched by thirteen founding members in 2017, the Council now counts 109 companies from 20+ countries around the world, bringing together an even wider range of sectors along the entire hydrogen value chain.
 - Matt: List includes, Anglo American, Umicore, Johnson Matthey, Mitsubishi, Sumitomo, Toyota Tsusho, and Honda just to name a few IPMI member companies.
<https://hydrogencouncil.com/en/newmemberannouncement2021-1/>
- **IRENA sees renewable hydrogen at least cost-possible within decade**
 - A combination of cost reductions in electricity and electrolyzers, combined with increased efficiency and operating lifetime, can deliver 80% reduction in green hydrogen cost. Source: IRENA
<https://www.greencarcongress.com/2020/12/20201218-irena.html>
- **France's EDF looks to India for EV, battery storage and hydrogen fuel cell tech**
 - EDF, a French utility company, has set its sights on hydrogen fuel cell tech opportunities in India. The utility is also focused on the Indian space for battery storage and EV charging infrastructure technologies.
<https://www.hydrogenfuelnews.com/hydrogen-fuel-cell-tech/8542858/>
- **Renewable hydrogen production in France gets boost**
 - The company has announced a massive investment by way of a 40% stake in H2V Normandy.
<https://www.hydrogenfuelnews.com/renewable-hydrogen-production-in-france/8542905/>

Palladium

- **Supply deficit in palladium may continue to support price**
 - Palladium market continues to be in short supply for 9 straight years. The gap between mine supply and consumption in 2020 was around 1 million ounces of palladium.
<https://www.fxstreet.com/analysis/supply-deficit-in-palladium-may-continue-to-support-price-202101271423>
- **Ceramic Dielectric Materials: World Market Outlook 2021-2025.**
 - A New Market Study on Ceramic Dielectric Materials has been published to the Paumanok Group
 - 81% are BME (Base Metal), and 19% are PGM (Pd/Au)
 - Matt: This is a higher ratio than 2 years ago. It appears that the automotive sector desires the Pd for higher temperature auto applications and reliability. Est. > 445 koz Pd and 1.35 Moz of Au demand in the MLCC market. Recall Pd demand was as high as 2.1 Moz of Pd demand back in the year 2000.
 - Paumanok Group's Dennis Zogbi: The entire MLCC mix was shifted upward in value in a financially significant way due to shortages of MLCC impacting multiple supply chains. The high voltage, high temperature, large case size MLCC for battery operated vehicles are all palladium + silver based designs and are extremely valuable. Meanwhile, patents filed in Japan and Korea by two of my strategic MLCC customers on nickel technology reveals their capability to increase the voltage handling capability of high capacitance MLCC. This is because the voltage is dependent upon the thickness of the ceramic dielectric. The outlook is robust on multiple levels.
<https://gum.co/bigBw>
- **Global Palladium brings four physically-backed metal ETCs to the LSE**
 - The new physically-backed gold, silver, platinum and palladium ETCs will track the spot price of the respective metals they cover. The firm writes that the ETCs have a strong focus on ESG, and LBMA-approved metal will be sourced from producers (including its founder Norilsk Nickel) and suppliers who support the Sustainable Development Goals of the UN 2030 Agenda and other global initiatives in sustainable development and responsible mining.
 - "We are targeting institutional investors, family offices and hedge funds. Investors who believe in metals as underlying assets and who could use the market to increase or hedge their exposures."
<https://www.etfexpress.com/2021/02/02/295286/global-palladium-brings-four-physically-backed-metal-etcs-lse>

PGM Minor Metals (Rhodium, Iridium, Ruthenium)

- **Ruthenium: A mild way to upcycle plastics used in bottles into fuel and other high-value products**
 - In their experiments, ruthenium-carbon nanoparticles converted over 90% of the hydrocarbons into shorter compounds at 392 F. Then, the team tested the new method on more complex polyolefins, including a commercially available plastic bottle. Despite not pretreating the samples, as is necessary with current energy-intensive methods, they were completely broken down into gaseous and liquid products using this new method. In contrast to current degradation methods, the reaction could be tuned so that it yielded either natural gas or a combination of natural gas and liquid alkanes.
<https://phys.org/news/2021-01-mild-upcycle-plastics-bottles-fuel.html>
- **Iridium (on PEM's): Countries Roll Out Green Hydrogen Strategies, Electrolyzer Targets**
 - Air Liquide 20-MW PEM electrolyzer in Becancour, Canada about to ramp.
 - Under construction Shell, ITM Power, and SINTEF's 10-MW PEM Rhineland refinery in Germany.
 - Australian company Infinite Blue Energy secured funding for its AU\$300 million 52.2-MW Arrowsmith Hydrogen Project near Perth, which is slated to begin operating in 2022.
<https://www.powermag.com/countries-roll-out-green-hydrogen-strategies-electrolyzer-targets/>

BEV / LiB Battery Market News

- **The "Battery Fairy" & Other Delusions in the Race to Replace Gas-Powered Cars**

- Analyst: I continue to be amazed that serious people think that gasoline powered vehicles can be completely replaced by electric vehicles in a decade-and-a-half, and that this would be a good thing, even if possible.
- For the longest while I have been asking, “Where do environmentalists and Democrats think all these batteries for our oil-free transportation fleet are going to come from?” It seems they think there is a Battery Fairy out there somewhere who will magically supply the ginormous battery capacity, and additional supply of electricity to charge them, in order to deliver us to our blessed fossil-fuel-free future.
<https://www.zerohedge.com/energy/battery-fairy-other-delusions-race-replace-gas-powered-cars>
- **Tesla hit by battery shortage amid rallying lithium, cobalt, nickel prices**
 - Elon Musk said - “The main reason we have not accelerated new products like the Tesla Semi is that we simply don’t have enough cells built. We could easily go into the production of the Semi, but we don’t have enough cells for it right now.”
 - “We’ve been very clear with our cell suppliers, whether it be CATL or Panasonic or LG that we will take as many batteries as they can produce.”
 - Benchmark Minerals Intelligence said - Prices for lithium carbonate at the factory gate jumped by just under 13%, while ex-works cobalt sulphate and nickel sulphate increased by 3.2% and 6.4% respectively. Graphite (-100, 90-93% C, FOB China) climbed by 13.2%.
 - Matt: The world just past production of 200 GW/year of LiB’s for 2M BEV’s, 2M Hybrids and 0.5M PHEV’s. How do we get past 40M or 50M BEV’s/year?
<https://www.mining.com/tesla-hit-by-battery-shortage-amid-rallying-lithium-cobalt-nickel-prices/>
- **Tesla reports US\$721m earnings in first profitable year**
 - Tesla on Wednesday reported its first annual profit for last year, following a big jump in BEV deliveries despite the COVID-19 pandemic, signaling confidence for more growth this year.
 - The electric vehicle company benefited from scaled-up production at its factories in California and China, as it pushes forward with new plants in Texas and Germany that are expected to begin production this year.
<https://www.taipeitimes.com/News/biz/archives/2021/01/29/2003751373>
- **GM ‘Aspires’ to Sell Only EVs by 2035. Here’s How to Understand What That Really Means**
 - This week's announcement by the largest U.S. carmaker was misreported and misinterpreted. Let's get to the truth.
 - GM said in its press release it “aspires” to eliminate tailpipe emissions and sell only zero-emission light-duty vehicles by 2035, in a press release headlining its plans to be fully carbon-neutral by 2040. That’s a goal, not a commitment. The New York Times got it wrong, headlining the story “GM will only sell zero-emission vehicles by 2035.”
<https://www.thedrive.com/tech/39016/gm-aspires-to-sell-only-evs-by-2035-heres-how-to-understand-what-that-really-means>
- **Biden’s Green Energy Boom Could Send The Electric Car Sector Into Overdrive**
 - One of President Biden’s most important promises is his plan to spend \$2 trillion on reimagining the country’s infrastructure.
<https://oilprice.com/Energy/Energy-General/Bidens-Green-Energy-Boom-Could-Send-The-Electric-Car-Sector-Into-Overdrive.html>
- **Glencore announces cobalt supply partnership**
 - Glencore and FREYR signed a letter of intent for the supply of up to 3,700 tonnes of high-purity cobalt metal cut cathodes produced at Glencore’s Norwegian operations, Nikkelverk.
 - Glencore said its "ethically-sourced cobalt" will be a core component in FREYR’s lithium-ion battery (LiB) cells, which will be produced at planned facilities in Mo i Rana, Norway.
<https://www.kitco.com/news/2021-02-01/Glencore-announces-cobalt-supply-partnership.html>

- **Massive Deposit of Battery-Grade Nickel on Deep-Sea Floor Gets Confidence Boost With New Data**
 - Massive Deposit of Battery-Grade Nickel on Deep-Sea Floor Gets Confidence Boost With New Data
 - The resource is now estimated as 4 Mt measured, 341Mt indicated / 11Mt inferred resources.
 - The world's largest untapped deposit of battery metals, nickel, cobalt, copper and manganese, is contained in polymetallic nodules that sit unattached on the Pacific seafloor in the Clarion Clipperton Zone, between Hawaii and Mexico
<https://www.prnewswire.com/news-releases/massive-deposit-of-battery-grade-nickel-on-deep-sea-floor-gets-confidence-boost-with-new-data-301216822.html>
- **LinkedIn Posting On LiB/EV Market: Roland Zenn**
 - 2020 was a record-breaking year for mobility with battery deliveries for xEV application +30% YoY.
 - More than 190 GWh of batteries were delivered to OEMs in 2020
 - Roughly 140 GWh hit the road in registered HEV, PHEVs and EVs in 2020
 - Key drivers for the increased demand for batteries in 2020 were
 - Europe with ~1.4 million PHEV, EV sold +140% YoY
 - Tesla (globally) with 0.5 million EVs sold +36% YoY
 - China with roughly 1.33 million PHEV, EV sold +12% YoYhttps://www.linkedin.com/posts/roland-zenn_emobility-battery-batteries-activity-6761940777753964544-Wlzs
- **VW's MEB Electric-Vehicle Components Will Power Solar Yachts in 2022**
 - The Silent-Yacht 50 is just the latest of the many ways Volkswagen plans to deploy its modular EV platform.
<https://www.caranddriver.com/news/a35374624/2022-vw-meb-electric-solar-yacht/>
- **Volkswagen Group Components begins battery recycling pilot**
 - VW has opened the Group's first plant for recycling electric car batteries in Salzgitter, Germany.
 - The innovative recycling process does not require energy-intensive melting in a blast furnace. The used battery systems are delivered, deep discharged, and dismantled. The individual parts are ground into granules in the shredder and then dried. In addition to aluminum, copper and plastics, the process also yields valuable "black powder", which contains the important raw materials for batteries such as lithium, nickel, manganese, and cobalt, as well as graphite. The separation and processing of the individual substances by hydrometallurgical processes—using water and chemical agents—is subsequently carried out by specialized partners.
<https://batteryindustry.tech/volkswagen-group-components-begins-battery-recycling-pilot/?utm>

Regards –