



Weekly Precious Metals News Articles: September 18, 2021

Distribution: If you no longer wish to be on this mailing list, send me a note. If others want to be added to distribution, again let me know.

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

- **AISC up 10% year-on-year in Q2'21**
 - Global average All-in Sustaining Costs (AISC) in the gold mining industry increased by 10% y-o-y in Q2'21, reaching US\$1,067/oz. This was also the third consecutive quarter in which AISC has risen. This cost inflation is being driven by several factors, both at the mine site and at the macroeconomic level. <https://www.gold.org/goldhub/gold-focus/2021/09/aisc-10-year-year-q2-21>
- **Gold retakes \$1,800 as investors weigh U.S. inflation report**
 - Gold futures turned higher on Tuesday even though data showed U.S. inflation rising in August at the slowest pace in seven months.
 - The consumer-price index climbed 0.3% in August, compared to a rise of 0.5% in July, the government said Tuesday. Economists polled by the Wall Street Journal estimated the cost of living, as measured by CPI, rose 0.4% in August. <https://www.msn.com/en-us/money/markets/gold-retakes-dollar1800-as-investors-weigh-us-inflation-report/ar-AAOqtRN>
- **PRECIOUS-Gold climbs as U.S. inflation miss clouds Fed taper bets**
 - U.S. CPI cools in August
 - Palladium slides to over one-year low
 - Federal Reserve's Open Market Committee meets Sept. 21-22 (Updates prices) <https://www.reuters.com/article/global-precious-idUSL4N2QG2UH>
- **Bullion product sales exceed last year's figures**
 - American Eagle gold bullion coin sales in 2021 through Aug. 31 total 857,000 ounces. Authorized purchasers ordered another 10,000 ounces on Sept. 7. Sales in 2020 reached 824,000 ounces for the entire year.
 - American Buffalo gold coin sales to U.S. Mint authorized purchasers in 2021 total 234,500 coins through Aug. 31, compared to 184,000 coins in 2020 for the same eight-month period.
 - American Eagle platinum bullion coin sales total 75,000 coins in 2021, the same number as in 2020.
 - The U.S. Mint in 2021 is offering only Proof versions of the American Eagle palladium coins.
 - At the end of the first eight months of calendar year 2021, U.S. Mint sales of American Eagle 1-ounce silver bullion coins already exceeded its sales for all of 2020 by more than 800,000 coins. <https://www.coinworld.com/news/us-coins/bullion-product-sales-exceed-last-year-s-figures>

Semiconductor Related Articles (impacting Precious Metals electronics):

- **Samsung Is Building a \$17 Billion Chip Factory Right On Tesla's Doorstep**
 - The Korean corporate giant is set to meet with Taylor City authorities this week to discuss details surrounding the massive project which is expected to cost \$17 billion. According to Teslarati, an anonymous source told reporters that "so far, (Samsung Electronics) has thoroughly reviewed four to five locations for the 'Star Project.' What I learned is that (Samsung) finally chose Taylor after taking into account investment incentives and geographic conditions." The sheer size of the new plant is astonishing: at over 51 million square feet, it will be over four times the size of the company's factory in Austin, Texas. <https://carbuz.com/news/samsung-is-building-a-17-billion-chip-factory-right-on-teslas-doorstep>
- **Second Quarter 2021 Global Semiconductor Equipment Billings Surge 48% Year-Over-Year to Record High of \$24 Billion, SEMI Reports**
 - <https://www.semi.org/en/news-media-press/semi-press-releases-second-quarter-2021-global-semiconductor-equipment-billings-surge-48%25-year-over-year-to-record-high-of-%2424-billion-semi-reports>
- **EETimes - It Shouldn't Be Just Chips**
 - The U.S. Congress and the Biden Administration are hurtling down the track toward investing billions of dollars in the domestic semiconductor manufacturing industry. But there is a flaw in their approach because they are ignoring the broader manufacturing infrastructure that is needed to combine semiconductors with other parts to create reliable electronic systems. <https://www.eetimes.com/it-shouldnt-be-just-chips/>
- **The iPhone 13 lineup and everything else just announced: Our Apple event recap**
 - At Tuesday's Apple's event, we got a new iPhone 13 with more storage and a new Cinematic mode. Plus, we saw major iPad Mini changes and the new Apple Watch Series 7. <https://www.cnet.com/tech/mobile/the-iphone-13-lineup-everything-else-just-announced-our-apple-event-recap/>
- **Chip shortage will drag on 'for some time', Chinese ministry warns, as country looks to boost semiconductor support**
 - The Ministry of Industry and Information Technology said the chip crunch remains 'quite serious' despite China's efforts to help buyers get components
 - The ministry blamed the pandemic for creating a supply and demand imbalance, which has taken an especially heavy toll on the automotive industry <https://www.scmp.com/tech/trends/article/3148576/chip-shortage-will-drag-some-time-chinese-ministry-warns-country>

Silver

- **Solar energy will power 40 percent of US by 2035, says DoE**
 - The report provides a number of steps the country can take in order to achieve the 40 percent target for this form of power. Among them includes the installation of 30 gigawatts per year of photovoltaic cell capacity between 2021 and 2025, and an additional 60 GW from then to 2030.
 - Matt: This equates to 240 Moz of Silver with current design thriving trajectory between 2021-2030. <https://www.hydrogenfuelnews.com/solar-energy-us-2035/8548339/>
- **Silver Price Forecast – Silver Gets Hammered for the Second Day in a Row**
 - Silver markets have broken down again after initially trying to recover on Friday, as the \$23 level now is starting offer significant resistance. The silver market is very volatile, and very sensitive to risk appetite. Furthermore, you also have to pay close attention to the US Dollar Index, as the US dollar has a major negative correlation to this market. That being said, the \$22 level underneath is a major support level that we have to pay close attention to due to the fact that it has been important more than once.

<https://finance.yahoo.com/news/silver-price-forecast-silver-gets-163734317.html>

- **Solar Industry Sees Prices Rise For The 1st Time In 7 Years Amid Supply-Chain Disruptions**
 - The price increase in the second quarter was led by the utility-scale segment at about 6% year-over-year and many solar developers, despite sufficient inventory, will continue to see price increases in 2022, the report titled "U.S. Solar Market Insight" said.
 - Matt: The headline is misleading. The true cause is China Polysilicon Solar PV module prices have risen from \$0.21/wat to \$0.29-\$0.31/watt driving increases in installation costs in spite of their huge installation and Balance Of System costs. Silver, Back sheet, Glass, and Polysilicon price increases are all cited as key issues driving the reported module \$/watt price climb.
- **Top 6 Silver ETFs to Invest in 2021**
 - 1. Aberdeen Standard Physical Silver Shares ETF (SIVR)
 - 2. Global X Silver Miners ETF (SIL)
 - 3. Invesco DB Silver Fund (DBS)
 - 4. ETFMG Prime Junior Silver Miners ETFs (SILJ)
 - 5. iShares Silver Trust (SLV)
 - 6. ProShares Ultra Silver (AGQ)

<https://innov8tiv.com/top-6-silver-etfs-to-invest-in-2021/>

Precious Metals Mining:


- **Unki powers platinum rebound**
 - ZIMBABWE'S platinum output increased by 17% to 128 000 ounces (oz) during the second quarter of this year compared to last year after processing matte backlogs from Unki mine, the World Platinum Investment Council (WPIC) said at the weekend.




<https://www.newsday.co.zw/2021/09/unki-powers-platinum-rebound/>
- **S.African miner Impala Platinum more than doubles its annual earnings**
 - Annual profits at South African miner Impala Platinum rose by 123%, the company said on Thursday, boosted by higher prices of platinum group metals and increased output.

https://www.sharenet.co.za/news/SAfrican_miner_Impala_Platinum_more_than_doubles_its_annual_earnings/bb629cc4de7c8893ded79de52f396375
- **Sibanye-Stillwater grabs 50% of Nevada lithium project for \$490 million**
 - South African precious metals miner Sibanye-Stillwater (JSE: SSW) (NYSE: SBSW) has taken a 50% stake in ioneer Ltd's (ASX: INR) lithium-boron project in Nevada for \$490 million.
 - The deal is one of the largest ever in the US lithium market and comes amid rising concerns that, without more investment, demand for the metal could far outstrip supply and delay efforts to combat climate change. It marks Sibanye's third battery metal investment this year, following its acquisition of a 30% interest in the Keliber lithium mine in Finland and the purchase of a nickel processing plant in Normandy from France's Eramet.

<https://www.mining.com/sibanye-stillwater-grabs-50-of-nevada-lithium-project-for-490m/>

E-Waste & Precious Metals Recycle Related:

- **Elemental Holding Acquires Legend Smelting and Recycling to Further Strengthen its Position in the U.S. Strategic Metal Recycling Market**
 - Another strengthening of the Elemental Holding Group in the American strategic metals recycling market!
 -  Legend Smelting and Recycling (LSR) is one of the market leaders in the recycling of strategic metals in #USA. The company has a strong position in the AMERICAN market of sourcing and green production of metals, confirmed by 40 years of experience and a recognized reputation.

-  This is our next investment in the American #urbanmining segment. The total value of our investments in the USA reaches USD 100 million, which puts our Group among the largest private Polish investors in the United States.
-  By integrating entities operating all over the world, the Elemental Holding SA Group invests in the latest technologies that make the production process of strategic raw materials fully sustainable and based on the best practices of #ESG.
-  The transaction was carried out in cooperation with the Foreign Expansion Fund, managed by PFR TFI S.A.
- Matt: There is one news article in Waste Advantage Magazine on this topic, but the link and its server was non-functional today. Nothing yet on Elemental Holding website about this, yet mentioned in LinkedIn.
https://www.linkedin.com/posts/pgm-of-texas_elemental-holding-wyda%C5%82-w-usa-100-mln-usd-activity-6844744003062181888-QUoL
- **International E-Waste Day to Focus on the Role of Consumers in Improving Rates of Reuse, Refurbishment and Recycling**
 - A recent study shows that a European citizen disposes of up to 1.4kg of old or broken electronics in the mixed waste bins. For a standard household this means nearly 4kg a year. The situation is not much better in the US, where approximately 416,000 mobile phones each day are binned according to the United States Environmental Protection Agency. That means more than 151 million phones are thrown away every year. All this e-waste is then managed with mixed waste and ends up either incinerated or landfilled. It is estimated that even up to 40% of the heavy metals in U.S. landfills come from discarded electronics.
<https://wasteadvantagemag.com/international-e-waste-day-to-focus-on-the-role-of-consumers-in-improving-rates-of-reuse-refurbishment-and-recycling/>
- **EnviroMetal Technologies Provides Corporate Update**
 - The Company continues to develop its unique, cost-effective, and patented precious metal extraction and recovery processes for use in the mining and recycling industries. The closed-loop process effectively dissolves the contained precious metals into solution using EnviroMetal's eco-friendly, sustainable lixiviant or reagent. The precious metals are then recovered from the solution using conventional technologies.
 - EnviroMetal's closed-loop process also includes a proprietary electrochemical water treatment process that recovers the residual reagent chemicals from process residues and rinse water. This ability to recover and reuse reagents results in a comparatively high-recovery, low-cost, low-emission alternative to the cyanide and smelting processes commonly used today.
<https://www.nasdaq.com/press-release/envirometal-technologies-provides-corporate-update-2021-09-16>
- **Column: Rising theft of catalytic converters is criminal**
 - The crime is becoming more prevalent. It cost Patterson \$1,000 to pay her insurance deductible to replace the missing converter and another \$500 to buy and install a metal theft guard on the replacement catalytic converter. Plus she missed a week of work because her SUV was out of commission.
<https://www.sandiegouniontribune.com/columnists/story/2021-09-16/column-theft-of-catalytic-converters-is-criminal>

Platinum

- **Platinum to see 190K surplus this year as supply normalizes - World Platinum Investment Council**
 - The platinum market is facing growing bearish momentum as the price trades near its lowest level since November. According to the latest quarterly report from the World Platinum Investment Council, although demand has picked up, the precious metal is seeing rising supply as mines and a

major refiner in South Africa comes back online. In its report for the second quarter, the WPIC said that the platinum market is expecting to see a modest surplus for 2021 as mines operate at 97% capacity. The report said that the platinum market saw a surplus of 161,000 ounces in the second quarter. That could grow to 190,000 by the end of the year.

- The platinum market is facing growing bearish momentum as the price trades near its lowest level since November. According to the latest quarterly report from the World Platinum Investment Council, although demand has picked up, the precious metal is seeing rising supply as mines and a major refiner in South Africa comes back online. In its report for the second quarter, the WPIC said that the platinum market is expecting to see a modest surplus for 2021 as mines operate at 97% capacity. The report said that the platinum market saw a surplus of 161,000 ounces in the second quarter. That could grow to 190,000 by the end of the year.
<https://www.kitco.com/news/2021-09-15/Platinum-to-see-190K-surplus-this-year-as-supply-normalizes-World-Platinum-Investment-Council.html>
- **'Recovery Candidate' Platinum Sinks to New 9-Month Low as Gold, Silver Stall Before 'Taper or Wait' US Inflation Data**
 - Platinum Prices hit 9-month lows on Monday after experts predicted a supply surplus for the industrial-precious metal in 2021, while gold and silver prices remained subdued ahead of tomorrow's US inflation data, writes Atsuko Whitehouse at BullionVault.
 - Platinum's industrial uses account for two-thirds of its demand, led by auto-catalysts in diesel engine systems. The metal fell 0.6% to \$955 per ounce Monday morning, its lowest level since December 2020.
<https://www.bullionvault.com/gold-news/platinum-price-091320211>
- **Platinum jewellery demand held up well in the second quarter**
 - Platinum jewellery unit sales from PGI's strategic partners doubled, while ounce sales also jumped by 48% compared with the same quarter last year, driven by considerable growth in gemstone fashion jewellery and bridal jewellery
 - Japan remains a consistently strong market for platinum, with unit sales of all price points for platinum jewellery having soared against last year's lows and platinum jewellery continues to be well-placed as price polarisation continues.
 - In India, the second wave of Covid-19 cases has caused another lockdown that disrupted the overall economy and the jewellery market in the second quarter of the year, for the second year in a row.
<https://www.miningweekly.com/article/platinum-jewellery-demand-held-up-well-in-the-second-quarter-2021-09-07>
- **Making catalytic surfaces more active to help decarbonize fuels and chemicals**
 - The process involves adding a layer of what's called an ionic liquid in between a gold or platinum catalyst and a chemical feedstock. Catalysts produced with this method could potentially enable much more efficient conversion of hydrogen fuel to power devices such as fuel cells, or more efficient conversion of carbon dioxide into fuels.
<https://news.mit.edu/2021/electrochemical-reaction-catalyst-efficiency-0908>

Fuel Cells/Hydrogen Economy Related Articles:

- **Johnson Matthey announces new Hydrogen Technology business**
 - Johnson Matthey (JM) has today (September 9) announced the formation of a brand-new hydrogen technologies business to accelerate both company growth and scale-up of its innovations.

- Formed through the combination of its green hydrogen and fuel cell entities, the new company will take advantage of technical and manufacturing synergies and build on the company's experience in manufacturing fuel cell components.
<https://www.h2-view.com/story/new-hydrogen-technology-business-launched-by-johnson-matthey/>
- **Linde to construct \$17.3m electrolyser plant in New York**
 - In a move that will help New York achieve its climate goals, Linde has said it will construct a proton exchange membrane (PEM) electrolyser plant in Niagara Falls to produce green hydrogen for the state – and the company says it will be operational in 2023.
<https://www.gasworld.com/liinde-to-construct-173m-electrolyser-plant-in-new-york/2021690.article>
- **Zero-Emission Hydrogen Fuel Cell Ferry Hits The Water**
 - The vessel is equipped with a hydrogen fuel cell power package provided by Zero Emissions Industries (formerly Golden Gate Zero Emission Marine), comprised of 360 kW of Cummins fuel cells and Hexagon hydrogen storage tanks with a capacity of 246 kg. This system is integrated with 100 kWh of a lithium-ion battery provided by XALT and a 2x 300 kW electric propulsion system provided by BAE Systems.
<https://gcaptain.com/zero-emission-hydrogen-fuel-cell-ferry-hits-the-water/>
- **Hyzon Motors to supply 154-ton fuel cell-powered hydrogen trucks to Australian subsidiary of Korea Zinc, world's largest zinc producer**
 - After an initial agreement in July, Hyzon has received a definitive order for five trucks from Ark Energy
 - Hyzon is the only supplier of ultra-heavy-duty hydrogen trucks with in-house fuel cell technologies
<https://finance.yahoo.com/news/hyzon-motors-supply-154-ton-113100855.html>
- **California Air Resources Board predicts 100 hydrogen stations in state in 2 years**
 - The California Air Resources Board (CARB) used its annual report to predict that California will be able to meet its goal of installing 100 hydrogen stations by the close of 2023.
 - CARB also predicted that by 2026, the state will have opened 176 retail H2 refueling locations.
 - If California does indeed reach that target by 2026, it will have adequate capacity at its public hydrogen stations for about 250,000 fuel cell vehicles to operate there.
<https://www.hydrogenfuelnews.com/hydrogen-stations-california/8548352/>
- **Hydrogen War in Europe: Blue and Green Lock Horns**
 - Although hydrogen is generally accepted as a mainstay of the future net zero emission energy system in Europe, there still is considerable debate on whether – and to what extent – this hydrogen will be “blue” or “green”. Environmentalists are clamouring for green only, but most experts and the European Commission say we need blue as well. Analyst Cyril Widdershoven suggests the creation of a blue-and-green hydrogen bridge between Europe and the MENA region.
[Hydrogen war in Europe: blue and green lock horns \[Gas in Transition\] \(naturalgasworld.com\)](https://www.naturalgasworld.com/hydrogen-war-in-europe-blue-and-green-lock-horns-gas-in-transition/)
- **Australian generator teams with Japanese on 3 GW green hydrogen project**
 - Stanwell, an electricity generator in the Australian state of Queensland, will work with Japan's largest hydrogen supplier, Iwatani Corp., on a AUD 10.4 million (\$7.6 million) feasibility study to investigate the commercial viability of developing a 3 GW electrolysis plant at Gladstone, with the view of producing green hydrogen for export to Japan and use in local industry.
 - <https://www.pv-magazine.com/2021/09/16/australian-generator-teams-with-japanese-on-3-gw-green-hydrogen-project/>
- **From Hyundai to SK, top Korean companies join hands on hydrogen**

- Fifteen of South Korea's best-known companies, including Hyundai Motor, SK Group and Posco, launched a business council Wednesday to promote the domestic hydrogen industry and tap the growing global movement toward decarbonization.
- The council, called the Korea H2 Business Summit, will discuss challenges facing the industry and offer policy recommendations to the South Korean government. Members will invest 43.4 trillion won (\$37.3 billion) by 2030 to build supply chains and other infrastructure for hydrogen in a range of uses, from fuel cell vehicles to power plants.
<https://asia.nikkei.com/Business/Energy/From-Hyundai-to-SK-top-Korean-companies-join-hands-on-hydrogen>
- **18mt of liquid hydrogen could get an A320 plane from Stuttgart to Melbourne, f-cell hears**
 - Hydrogen is revolutionising the aviation sector in a number of different ways. Not only is it a solution for zero-emission flight, but it can also support the industry in extending its travel distance, with Mark Farquhar, Chief Training Captain at easyJet, telling f-cell delegates that 18 tonnes of liquid hydrogen could get an A320 plane from Stuttgart to Melbourne.
<https://www.h2-view.com/story/18-tonnes-of-liquid-hydrogen-could-get-an-a320-plane-from-stuttgart-to-melbourne-f-cell-hears/>

Palladium

- **Palladium Price News: XPD/USD risk reversal on the way to snap three-week downtrend**
 - One-month risk reversal on Palladium (XPD/USD), a measure of the spread between call and put prices, not only reversed the previous week's upside momentum but also rises for the third straight day, according to data source Reuters.
<https://www.fxstreet.com/news/palladium-price-news-xpd-usd-risk-reversal-on-the-way-to-snap-three-week-downtrend-202109160559>
- **Palladium prices drop to their lowest finish in more than a year**
 - Both platinum and palladium are getting "hit hard yet again," said Edward Meir, analyst at ED&F Man Capital Markets, in a Tuesday note. "The ongoing difficulties by automobile producers are surely weighing on both these complexes."
<https://www.msn.com/en-us/money/markets/palladium-prices-drop-to-their-lowest-in-more-than-a-year/ar-AAOrdrfr?ocid=BingNewsSearch>
- **New type of catalyst may help protect supply of precious metals – study**
 - New research published in the journal Nature Communications showcases a new type of catalyst that may lead to new, sustainable ways of making and using molecules and protecting the supply of precious metals.
 - Based at the University of Nottingham, the authors of the study demonstrate that the behavior of nanoclusters of palladium does not conform to the orthodox characteristics that define catalysts as either homogeneous or heterogeneous.
<https://www.mining.com/new-type-of-catalyst-may-help-protect-supply-of-precious-metals-study/>

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

- **Iridium: New catalyst employs single atoms for splitting water**
 - To make the new catalyst, the scientists first made a porous structure to support the iridium atoms that would catalyze the reaction, and then exposed this foam-like structure to a solution containing iridium compounds. By quickly freezing this solution, they created a thin, iridium-rich layer of ice on the surface, and then conducted additional processing to create well-distributed sites where individual iridium atoms were snugly anchored on the supportive surface.
<https://www.materialstoday.com/surface-science/news/new-catalyst-single-atoms-splitting-water/>
- **Auto industry's chip troubles spoil platinum group metals' party**

- That means the longer the shortage takes to resolve, the less likely palladium and rhodium are to return to their record levels, said Nicky Shiels at MKS PAMP GROUP, an industrial and trading services company.

<https://www.reuters.com/business/energy/auto-industrys-chip-troubles-spoil-platinum-group-metals-party-2021-09-17/>

Clean Energy General News (New Section)

- **Energy Prices in Europe Hit Records After Wind Stops Blowing**
 - Heavy reliance on wind power, coupled with a shortage of natural gas, has led to a spike in energy prices
<https://www.wsj.com/articles/energy-prices-in-europe-hit-records-after-wind-stops-blowing-11631528258>
- **Climate measures in budget bill could cut nearly 1 billion tons of emissions per year by 2030, analysis finds**
 - Six major climate provisions in congressional Democrats' massive budget bill could slash US greenhouse gas emissions by nearly 1 billion tons per year by 2030, a new analysis from the nonpartisan Rhodium Group found.
 - It would be comparable to removing all passenger vehicles from the road, or the yearly greenhouse gas emissions of Texas and Florida combined, according to the analysis.
<https://metro.newschannelnebraska.com/story/44736508/climate-measures-in-budget-bill-could-cut-nearly-1-billion-tons-of-emissions-per-year-by-2030-analysis-finds>
- **Green ammonia: The rocky pathway to a new clean fuel**
 - Indeed, in many ways, ammonia does a better job of storing hydrogen than hydrogen gas itself; H₂ is notorious for leaking away through the metal walls of containers, for embrittling steel it comes into contact with, and for taking a lot of energy to liquefy at cryogenic temperatures. And then there's density: it may sound weird, but there's one and a half times more hydrogen in a gallon of ammonia than there is in a gallon of hydrogen, all else being equal.
<https://newatlas.com/energy/green-ammonia-primer-clean-fuel/>
- **Aluminum Hits \$3,000 for First Time in 13 Years on Supply Snarl**
 - Aluminum reached \$3,000 a ton in London for the first time in 13 years amid expectations that supply disruptions are here to stay, while demand keeps rising.
 - The metal has surged about 14% over the past three weeks as supply risks increase throughout the industry, from bauxite mining in Guinea and alumina refining in Jamaica to aluminum smelting in China and beyond.
<https://www.bloomberg.com/news/articles/2021-09-13/aluminum-powers-toward-3-000-as-supply-snarl-supercharges-rally>
- **Can Deep-Sea Mining Solve The Battery Metals Supply Crisis?**
 - Deep seabed mining is years away from commercial operations, at best, due to a lack of international regulations and concerns about the environmental impact of mineral extraction from the seabed in areas and ecosystems that are yet to be studied by marine biologists.
 - Some companies are betting on starting deep-sea mining in a couple of years. The Metals Company, for example, which just began trading on the NASDAQ, said last week it is working to “move the world’s largest estimated source of battery metals into production.”
<https://oilprice.com/Energy/General/Can-Deep-Sea-Mining-Solve-The-Battery-Metals-Supply-Crisis.html>
- **Magnora plans hydrogen-based marine fuel project in Norway**
 - Norwegian renewable energy investor Magnora ASA (OSE:MGN) on Thursday announced plans for the development of a green maritime fuel project in the Tromso area in northern Norway.
 - The project will include large-scale production of green hydrogen and its conversion into green ammonia and/or liquid organic hydrogen carriers.

<https://renewablesnow.com/news/magnora-plans-hydrogen-based-marine-fuel-project-in-norway-754329/>

BEV / LiB Battery Market News

- **BASF and Shanshan form battery materials joint venture in China**
 - The new joint venture will focus on the rapidly growing electric vehicle segment in the world's largest battery materials market China
 - The combined technology expertise and market access will provide superior customer value, rapid innovation and cost competitiveness
 - BASF advances its strategic roadmap towards a compelling global supply chain for battery cell manufacturers and OEMs in all key markets
<https://catalysts.basf.com/news/basf-and-shanshan-form-battery-materials-joint-venture-in-china>
- **Moscow to raise tax on metal mining firms in 2022 to tackle raw material shortage – Putin**
 - Russian authorities will raise a mineral extraction tax (MET) on metals producers next year to tackle shortages of metal produce in the domestic market, President Vladimir Putin said.
<https://www.rt.com/business/531403-putin-raise-tax-metal-producers/>
- **The government helped Tesla conquer electric cars. Now it's helping Detroit, and Elon Musk isn't happy.**
 - President Biden held a splashy event on the White House's South Lawn last month to announce an ambitious goal: to make half of new passenger vehicle sales electric, plug-in hybrid or fuel-cell electric vehicles by 2030. But a key player in the industry was nowhere to be seen. Elon Musk and the country's leading electric-car manufacturer, Tesla, had been left out of the festivities.
 - For Tesla, it may have signaled the end of a long honeymoon period with the government, when the company was bolstered by federal tax incentives that drove growth and sales, emissions compliance credits that ushered in profitability and relatively hands-off oversight that allowed it to put new technology in the hands of customers without much fear of regulators stepping in.
 - The latest blow came this month. House Democrats unveiled a proposal to allow an extra \$4,500 in consumer incentives to buy a new electric vehicle — provided it was union-made in the United States. Tesla is the only major American automaker whose production is not unionized.
<https://www.washingtonpost.com/technology/2021/09/15/tesla-biden-administration/>
- **Surge in electric vehicle sales power lithium prices as shortages loom**
 - Lithium prices have jumped to their highest in more than three years thanks to an upsurge in electric vehicle sales, depleting stocks of the battery material in top consumer China.
 - "Right now it's very simple: the market is so tight that players are fiercely competing for any spot tonnage available," said Max Deudon, a trader at Transamine in Geneva.
<https://www.msn.com/en-gb/money/other/surge-in-electric-vehicle-sales-power-lithium-prices-as-shortages-loom/ar-AAOomr7?ocid=BingNewsSearch>
- **Lithium Market Balance**
 - This morning I received the mid-month lithium pricing assessment from Benchmark Mineral Intelligence (please contact them directly for more details) and for the past two weeks in September the price EXM China lithium carbonate battery grade has gone up 22% on average to RMB 126,500/t or almost US\$20,000/t. At the same time premiums to hydroxide are disappearing.
 - As many say, and I agree, the price is not the same or entirely correct on all regions and for all products but the trend is what is important. I believe we are seeing a real and long-term imbalance between demand/supply that will affect pricing on unprecedented levels.
https://www.linkedin.com/posts/carlosvicensjubes_neolithiumcorp-lithium-activity-684393492787136384-qvBP
- **China's booming electric car market prompts lithium producer and battery assembler to raise funds for expansion**

- One of the world's largest producers of lithium, as well as its biggest customer in the assembly of lithium-ion battery packs, have announced separate fundraising plans to expand their production amid soaring worldwide demand for the renewable energy source in the booming EV industry.
- Tianqi Lithium Corporation, based in the Sichuan provincial capital of Chengdu, was given the go-ahead by its seven-member board to offer 20 per cent of its enlarged capital in an initial public offering (IPO) in Hong Kong, reviving a plan that was shelved three years ago. Based on the 190 billion yuan (US\$29.5 billion) value of Tianqi's yuan-denominated A shares listed on the Shenzhen Stock Exchange since 2010, the Hong Kong offering could be valued at US\$850 million.
- Contemporary Amperex Technology (CATL), the world's biggest assembler of lithium-ion battery packs and a Tianqi customer, said last month that it was planning to raise 58.2 billion yuan through a private share placement to finance the construction of new battery plants.
<https://finance.yahoo.com/news/chinas-booming-electric-car-market-093000283.html>
- **Sibanye Stillwater buys half of ioneer's Nevada lithium project in \$490 million deal**
 - Sibanye Stillwater Ltd SSWJ.J is buying half of ioneer Ltd's INR.AX Nevada lithium mine project for \$490 million, one of the largest deals ever for U.S. supply of the electric vehicle battery metal as demand is poised to soar later this decade.
<https://www.nasdaq.com/articles/sibanye-stillwater-buys-half-of-ioneers-nevada-lithium-project-in-%24490-million-deal-2021-0>
- **Shanghai nickel hits record high on low inventories, solid demand**
 - Nickel prices leaped to a record high in Shanghai and surpassed a seven-year high in London on Friday on upbeat demand and dwindling inventories.
<https://www.nasdaq.com/articles/metals-shanghai-nickel-hits-record-high-on-low-inventories-solid-demand-2021-09-10>
- **BASF and CATL have signed a framework agreement to accelerate the achievement of global carbon neutrality goals**
 - As the largest chemical supplier to the automotive industry, BASF has established a strong position in the CAM market including a global manufacturing and R&D footprint, and a broad portfolio of mid- to high-nickel, manganese-rich, cobalt-free CAM. In Europe, BASF is introducing CAM production with an industry-leading carbon footprint through its advanced process technology, a secured local raw materials supply chain, a favorable energy mix for production, as well as short and effective logistics along the supply chain.
https://www.basf.com/in/en/media/news-releases/asia-pacific/2021/09/joint_press_basf_catl_collaboration.html

Regards –