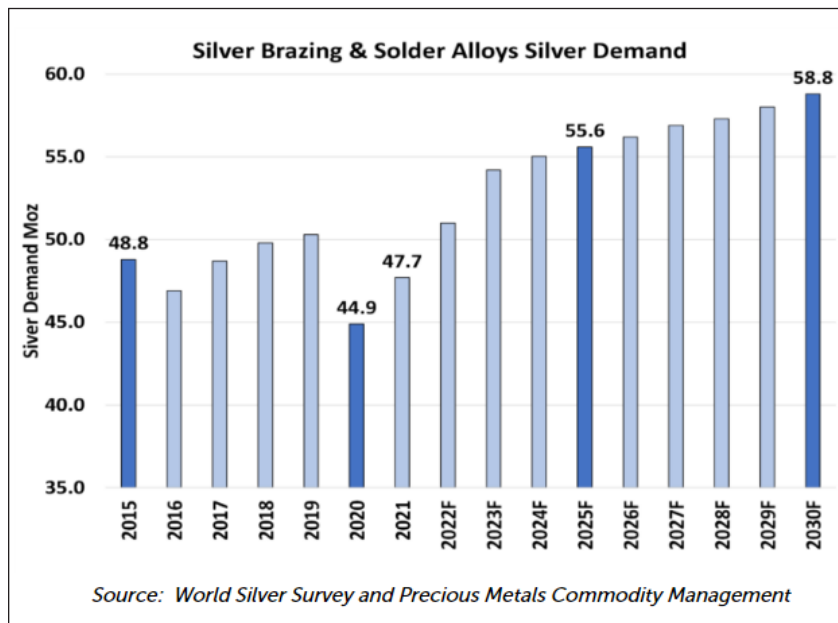


Silver News

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Silver’s Use in Brazing and Soldering Applications Forecast to Grow 23 Percent Through 2030



The main growth for silver used in brazing and soldering will come from global infrastructure applications including plumbing, vehicles, electronics, and heating, ventilation and air conditioning systems.

While often underappreciated, brazing and soldering alloys used an impressive 47.7 million ounces (Moz) of silver in 2021, representing 9.3 percent of the total industrial demand for silver last year. Silver’s use in these sectors is forecast to rise 23 percent to 58.8 Moz by 2030, according to a *Market Trend Report, Silver in Brazing and Solder Alloy Materials*, published in June by the Silver Institute.

Over the last decade, nearly a half-billion ounces of silver have been consumed in brazing and soldering, which are centuries-old ways of joining metals together. Brazing and soldering each use different temperatures and are used in dissimilar applications. In general, soldering uses lower temperatures and is used in electrical, jewelry and other lighter weight applications. Brazing is done at higher temperatures and is most often used to join heavier materials like pipes.

The report notes that the main growth in silver’s use in these applications will come from “future global infrastructure growth, including increasing plumbing and pipe joining, strong vehicle demand (both internal combustion engine and electric vehicles).” Increased demand will also come from the electronics market, heating, ventilation, and air conditioning systems.

The differences between brazing and soldering, how each is done, pros and cons of each, and video links showing actual soldering and brazing, are included in the report.

[To read the press release go here.](#)

[Click here to download a copy of *Silver in Brazing and Solder Alloy Materials*](#), which was authored for the Silver Institute by the consultancy [Precious Metals Commodity Management](#).

New Member: Andean Precious Metals



The Silver Institute welcomes another new member company, Andean Precious Metals, based in Vancouver, BC, Canada. Since 2020, nine new member companies have joined the Silver Institute.

Andean Precious Metals (TSX-V: APM) (OTCQB: ANPMF) is a growth-focused silver producer that owns and operates the San Bartolomé mine located in the department of Potosí, Bolivia. San Bartolomé has been operating since 2008 and is one of the largest primary silver mines in the world, averaging more than five million ounces of silver per year. The company has more than US\$100M in cash to finance growth plans that include exploration, project development and mergers & acquisitions. Andean Precious Metals is committed to fostering safe, sustainable, and responsible operations, according to company officials. For more information, please visit www.andeanpm.com.

Automated Method Produces Large Batches of Silver Nanoparticles Could Lead to Even Greater Uses and Applications

Silver nanoparticles are a highly sought-after material because of their antibacterial properties, use in sensors, and as catalysts for chemical processes, among other applications. One impediment to their even greater usage, however, is that producing large amounts of silver nanoparticles with uniform size and shapes is a challenge.

To meet that challenge, German engineers have designed a way to automate the production of silver nanoparticles between 3 and 5 nanometers with consistent size and shape, to within 100 billionths of a meter.

The engineers, from [Germany's Federal Institute for Materials Research and Testing \(BAM\)](#), [Max Planck Institute of Colloids and Interfaces](#), and [Humboldt-Universität zu Berlin's Department of Chemistry](#) used a so-called 'Chemputer' that employs software to repeat an automated process that produces silver nanoparticles from silver ions on a consistent basis. This new approach can be used to produce other nanoparticles, such as gold, but silver was chosen for its development because of silver nanoparticles' numerous applications. The Chemputer's software ensures a high rate of reproducibility along with a log that documents the processes.

Details of this work were published in the journal [Scientific Reports](#).

Global X Opens First ETF in Europe Focused on Silver Mining

New York-based [Global X](#) has launched the first [ETF](#) in Europe to provide investors an opportunity to target the silver mining industry, company officials say. Many mining company members of the Silver Institute are included in the ETF.

The Global X Silver Miners UCITS ETF is listed on the London Stock Exchange in US dollars (SILV LN), pound sterling (SILG LN) and the Deutsche Börse Xetra in euros (SLVR GY).

In a prepared statement, Morgane Delledonne, Global X's Head of Investment Strategy in Europe, said: "Precious metals such as silver often have a unique appeal for investors in periods of rising geopolitical instability given their potential as defensive assets due to their low correlations to traditional risk assets. In addition, silver has a wide range of applications as well as its precious metal qualities, driving potential adoption. With the launch of our silver miners UCITS ETF, we are providing European investors with the opportunity to invest in this key sector at a time of heightened geopolitical risks, historical central bank actions, and side-lined silver output."

The fund's benchmark is the [Solactive Global Silver Miners Total Return v2 Index](#), which includes companies with market capitalizations above US\$60 million and average daily trading volumes greater than US\$250,000. From this group, 40 companies -- all involved in the exploration, mining, or refining of silver -- are chosen based on largest average daily trading volume and other criteria. Currently, Canadian stocks account for about two-thirds of the index weight. US, South Korea and UK stocks follow.

New Book Bullish on Silver

Former portfolio adviser and 20-year veteran of the resource market Peter Krauth decided to publish his book, [The Great Silver Bull: Crush Inflation and Profit as the Dollar Dies](#), when he saw that governments were rolling out stimulus packages in response to the COVID-19 pandemic.

“I knew then that it would be highly inflationary. This was a multiple of the money-printing binge we saw in the wake of the 2008 Great Financial Crisis. In early 2020, silver was up 150% from its \$12 low to peak near \$30. At that point I realized silver was moving into the acceleration phase of its current bull market,” Krauth told *Silver News*.

He added: “Silver is in a generational bull market thanks to sustained high inflation and rapidly growing industrial demand from industry, including solar panels, electric vehicles, electronics, medicine and a host of other applications.”

The book is presented in five parts: a brief history of silver, why silver matters today, how it’s an irreplaceable metal, why it’s unique, and how to build the ideal silver portfolio. Krauth, who also publishes the [Silver Stock Investor](#) newsletter, concluded: “My goal was for this book to be a reference guide that readers can consult to understand what drives the silver market and how they can mitigate risk while profiting.”

Tennessee Latest U.S. State to Drop Bullion Coin Sales Tax

Eight States and DC Still Tax Sales

Tennessee has become the latest U.S. state to eliminate sales tax from silver bullion coins as the list of state exemptions grows. In May, Governor William Lee signed a bill that also excludes sales tax on gold and platinum bullion coins and makes Tennessee the 42nd state to pass such a law. (See [Ohio Latest State to Remove Sales Taxes on Silver Bullion](#), August 2021 *Silver News*.)

The jurisdictions that continue to tax bullion coins include: Hawaii, Kentucky, New Jersey, New Mexico, Maine, Mississippi, Wisconsin, Vermont and the District of Columbia.

“I’ve been working to free gold and silver from sales taxes in Tennessee since my kids were in elementary school,” said state Representative Bud Hulsey, in a prepared statement. Hulsey was the bill’s lead sponsor. “The Sound Money Defense League, in-state dealers, and folks all across Tennessee made their voices heard and helped get this bill across the finish line.”

There is no federal sales tax on bullion coin sales, so states have the say-so over sales taxes in their jurisdictions.

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