

PROCEEDINGS

of India Silver Conference 2025

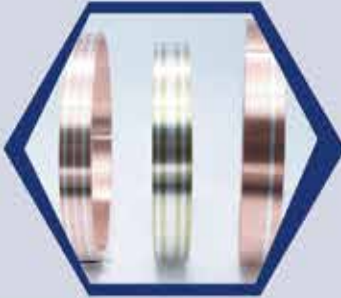
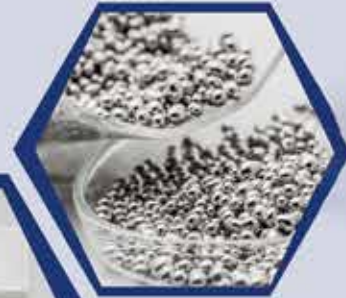


3rd INDIA
SILVER
CONFERENCE
25-27 April 2025
Radisson Blu
Palace Resort & Spa, Udaipur

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PROGRAM SCHEDULE

Day - 1 : Friday, 25 April, 2025 Theme: Sustaining Demand During High Price Regime.

1:00 pm onwards	Delegate Registration & Room Check-in for in-house Guests		
1:30 pm - 3:30 pm	Networking Lunch @ Restaurant		
4:45 pm - 6:15 pm	Inaugural Function		
	H.E. Mr Javier Paulinich Ambassador of the Republic of Peru to India	Mr Rajesh Rokde GJC	Mr Chirag Thakkar Amrapali Gujarat
	Mr Michael DiRienzo The Silver Institute	Mr Arun Misra Hindustan Zinc Ltd	Mr Surendra Mehta IBJA
6:15 pm - 6:30 pm	Keynote Address: "Opportunities for growing Silver jewellery market globally"		
	Dr. Gaetano Cavaliere President, The World Jewellery Confederation (CIBJO) - (Online)		
6:30 pm - 6:45 pm	World Silver Survey 2025: Launch and Summary		
	Mr Chirag Sheth Metals Focus		
6:45 pm - 7:45 pm	Roundtable Discussion: "Sustaining silver demand during elevated prices"		
	Chair: Mr Amar Singh Asia Pacific & Middle East, StoneX Group Inc.		
	Speakers:		
	Mr Chirag Thakkar Amrapali Gujarat	Mr Rajesh Rokde GJC	Mr Ian Harris ICBC Standard Bank
	Mr Surendra Mehta IBJA	Mr Gautam Choksi Hindustan Platinum	Mr Shivanshu Mehta MCX - (Online)
7:45 pm - 8:15 pm	ISC2025 Excellence Awards		
8:15 pm - 10:30 pm	Welcome Cocktail Dinner at Jharoka (next to ballroom) sponsored by Ausho Enterprises Pvt Ltd		

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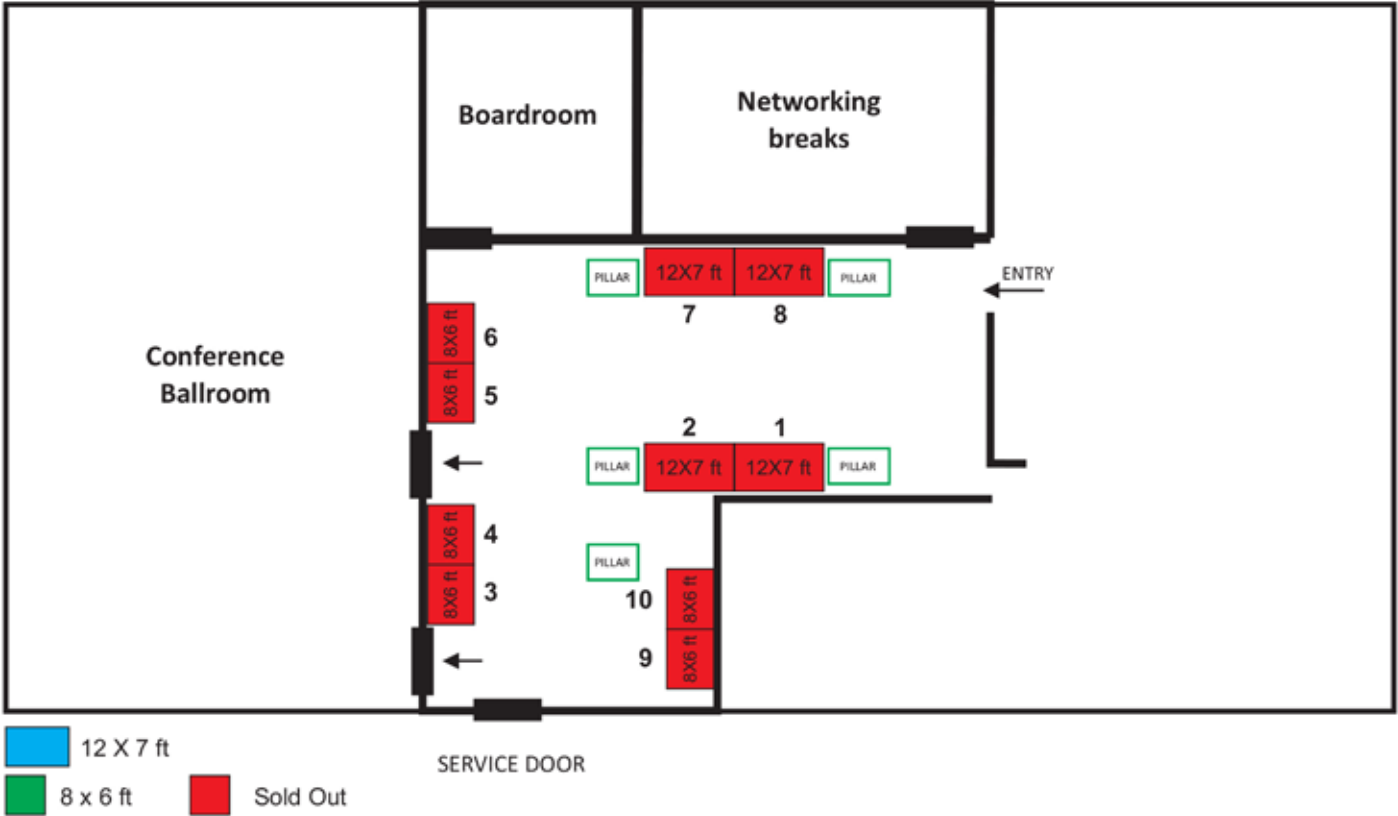
25-27 April 2025
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Palace Resort & Spa, Udaipur

PROGRAM SCHEDULE

1:00 pm - 2:30 pm	Networking Lunch @ Restaurant
2:45 pm - 3:45 pm	Session-4: Silver in Industrial Applications Chair: Mr Ankur Goyal MMTC PAMP India Pvt Ltd Speakers: Dr. Trevor Keel Mr Murli Nikam Dr. Shiwani Pareek The Silver Institute Modison Ltd Adani Solar
3:45 pm - 4:15 pm	Networking Break
4:15 pm - 5:15 pm	Session-5: Update on Research in Silver at Leading Institutions of India Chair: Mr Srivatsava Ganapathy Eventell Global Advisory Pvt Ltd Speakers: Prof. Nikhil Dhawan Dr. Amol A Kulkarni IIT Roorkee CSIR-National Chemical Laboratory
5:15 pm - 5:45 pm	Industry-Institution Connect
5:45 pm - 6:00 pm	Valedictory Function
7:30 pm - 10:00 pm	Gala Dinner & Sponsor Felicitations at Udai Chowk
10:00 pm to 12:00 Midnight	After-party at the Gaming Zone (Adjacent to the dinner venue)

Day - 3 : Sunday, 27 April, 2025 Theme: Sustaining Demand During High Price Regime.

7:00 am - 8:00 am	Walk around Fatehsagar Lake
8:00 am - 10:00 am	Breakfast for in-house guests
11:00 am	Check-out for in-house guests



Exhibitors with Stall Numbers

Hindustan Platinum	1	Amrapali Industries	2	Italimpianti Orafi & Tera Automation	3
Sequel Logistics Private Limited	4	Hindustan Zinc	5	Brinks Global Services	6
Choksi Heraeus	7	Sam Precious Metals	8	AKW Consultants	9
Sovereign Metals Ltd	10				

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India Silver Conference 2025 Speakers



H.E. Mr Javier Paulinich
Ambassador of the Republic
of Peru to India



Phillips Baker
Senior Advisor
San Cristobal Mining



Surendra Mehta
National Secretary
IBJA



Chirag Thakkar
Director
Amrapali Gujarat



Rajesh Rokde
Chairman
GJC



Dr. Gaetano Cavalieri
President, The World Jewellery
Confederation (CIBJO) **(Online)**



Michael DiRienzo
President & CEO
The Silver Institute



Gautam Choksi
Executive Director
Hindustan Platinum



Arun Misra
CEO & Whole-time Director
Hindustan Zinc Ltd



Tarek Shakarchi
Head of Strategic Opportunities
MKS PAMP Group **(Online)**



Rahul Mehta
MD
Silver Emporium Pvt Ltd



Sidharth Gupta
Director
ACPL Exports



Chirag Sheth
Principal Consultant
Metals Focus



Amit Vashisht
Lead - ETF
ICICI Prudential AMC Ltd



Navneet Damani
Sr Group VP | Commodity & Currency
Research Head, Motilal Oswal
Financial Services Ltd



Amit Sajeja
Head - Commodities
Research Alpha Alternatives
Holdings Pvt Ltd



Murli Nikam
Chief Executive Officer
Modison Ltd



Dr. Trevor Keel
Technical Director
The Silver Institute



Ankur Goyal
President - Works
MMTC PAMP India Pvt Ltd



Dr. Amol A Kulkarni
Sr Principal Scientist & Prof (AcSIR)
CSIR-National Chemical Laboratory



Nitesh Jain
MD
Purple Jewels



Ian Harris
Head - Physical Precious Metals
ICBC Standard Bank



Johnson Lewis
MD
FinMet Pte Ltd



Amar Singh
Head of Metals, Asia Pacific
& Middle East, StoneX Group Inc.



Shivanshu Mehta
Head - Bullion, MCX
Director, IIBH IFSC Ltd &
IIBX IFSC Ltd (Online)



Vijay Murthy
CEO - Lead Silver & Minor Metals
Hindustan Zinc Ltd



C P Abidh
General Manager
Ahlaczi Metal Refinery FZCO



Dr. Shiwani Pareek
Manager, Cell Technology
Adani Solar



Kinjal Shah
Head of Asian Development
Responsible Jewellery Council



Neville Patel
HDFC Bank



Vinod Tejwani
Pranda India



Prof. Nikhil Dhawan
Associate Professor
IIT Roorkee

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India Silver Conference 2025 Proceedings

India Silver Conference 2025: Shaping the Future of Silver in India and Beyond

As the world pivots towards sustainability, innovation, and safe living, silver is stepping out of gold's shadow to claim its place as a transformative metal. From powering solar cells and electric vehicles to offering antimicrobial protection and investment security, silver is no longer just a precious metal—it's a catalyst for progress.

Yet in India, only 15% of silver is used for industrial applications, compared to 55% globally. Investment demand still lags behind gold, and silverware remains a cultural symbol more than a commercial opportunity. The India Silver Conference (ISC) was born to change that narrative.

ISC 2025 brings together industrial users, bullion suppliers, refiners, scientists, innovators, investors, and policymakers on one dynamic platform—fostering collaboration, showcasing ground-breaking R&D, and creating momentum for silver-based financial products. From elevating the investment story to bridging innovators with capital, ISC is India's only dedicated forum focused exclusively on unlocking silver's full potential.

Now in its latest edition, ISC 2025 will continue its mission to nurture a thriving silver ecosystem—one that celebrates innovation, drives industrial use, expands financial access, and puts silver at the heart of India's economic transformation.

Inaugural Function



Mr Srivatsava Ganapathy, Eventell Global Advisory Pvt Ltd, **Mr Chirag Thakkar**, Amrapali Gujarat, **Mr Surendra Mehta**, IBJA, **H.E. Mr Javier Paulinich**, Ambassador of the Republic of Peru to India, **Mr Michael DiRienzo**, The Silver Institute, **Mr Rajesh Rokde**, GJC



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H.E. Mr Javier Paulinich
Ambassador of the
Republic of Peru to India

**H.E. Mr Javier Paulinich,
Ambassador of Peru to India**

His Excellency Mr Javier Paulinich, Ambassador of Peru to India, addressed the gathering as the Chief Guest. Highlighting Peru's 3,000-year-old mining legacy and deep cultural reverence for metals, he noted that Peru today holds the world's largest silver reserves—about 20% of the global total—and is the leading silver exporter, having extracted over 3,100 metric tons last year. He emphasized that silver is now more than a decorative metal; it is pivotal to clean energy storage, semiconductors, healthcare technologies, and digital infrastructure.

Mr Paulinich underscored the strengthening trade ties between Peru and India, noting that silver exports to India grew from nearly zero in 2020 to \$32 million in 2024, and that gold exports reached \$4.63 billion, making India the top destination for Peruvian gold. He also shared that mining accounts for over 14% of Peru's GDP and is supported by an investment pipeline exceeding \$54 billion, underpinned by favorable legal frameworks and transparency for foreign investors. He concluded by inviting Indian entrepreneurs to explore opportunities in Peru and announced that both nations are in the final stages of negotiating a free trade agreement, expected to be concluded by the end of 2025.

Mr Rajesh Rokde, Chairman of the Gem & Jewellery

Domestic Council (GJC), expressed his appreciation for being part of the third edition of the India Silver Conference. Attending the conference for the first time as GJC Chairman, he highlighted the growing prominence of silver in India's jewellery ecosystem and noted that GJC had already taken steps by introducing a dedicated silver pavilion at its exhibitions, including at the Jio Convention Centre in Mumbai. He emphasized India's deep cultural, religious, and commercial connection with silver, calling it the ideal entry point for small investors and new jewellers due to its affordability. Mr Rokde stressed the need to promote silver consumption through awareness and advertising, especially around traditional gifting occasions such as weddings and births, suggesting that such efforts could multiply the industry's size tenfold. He also raised the issue of quantifying India's silver reserves, estimating the national holding could exceed 100,000 metric tons. Drawing inspiration from silver's historical presence in Indian heritage, including artefacts at Udaipur's City Palace, he reiterated silver's unmatched role in gifting and daily life. On policy, he advocated for the implementation of mandatory silver hallmarking and acknowledged the current infrastructural limitations, with only around 200 hallmarking centres across the country. He called for industry-government collaboration to expand this capacity, ensuring quality assurance and transparency for consumers—similar to how gold hallmarking was eventually embraced.



Mr Rajesh Rokde
GJC

Mr Chirag Thakkar, Director of Amrapali Gujarat, took the stage next with an energetic and market-focused address. Reflecting on silver's meteoric price rise, he remarked that silver is no longer just a precious metal but the “new gold.” He noted that investors who purchased silver at last year’s conference in Goa had nearly doubled their returns. For small investors, silver remains one of the few accessible precious assets, even as gold becomes increasingly unaffordable. Mr Thakkar raised an important issue around the lack of official data on India’s silver holdings, sharing an informal estimate from Metals Focus that India may be holding between 70,000 to 80,000 metric tons of silver—a value of immense national significance. He highlighted the growing participation of retail investors in digital silver, noting an 80% growth every 15 days on their platform, with over 70,000 clients currently active. However, he warned about challenges in silver purity and unorganized trade, underscoring the urgent need for mandatory silver hallmarking to protect consumers and uphold standards. On a positive note, Mr Thakkar emphasized India’s critical role in the green energy transition, particularly in sectors like EVs and pharmaceuticals, which will continue to support long-term silver demand. He cited India’s consistent silver import trends—rising from around 500 MT in 2005–06 to nearly 5,000 MT per year in recent times—with a record 10,000 MT import in the year 2022, prompting global speculation at platforms like LBMA about India’s bullish stance.



Mr Chirag Thakkar
Director, Amrapali Gujarat



Mr Michael DiRienzo
Executive Director, The Silver Institute

Mr Michael DiRienzo, Executive Director of The Silver Institute, expressed his delight at returning to India, this time to the culturally rich city of Udaipur. Reflecting on the conference’s journey from Jaipur to Goa and now Udaipur. Representing the Silver Institute and its member companies, some of whom were present in the room, he emphasized the vital role of India in the global silver market. Beyond jewelry and silverware, he noted India’s growing involvement in silver mining—highlighting Hindustan Zinc as the world’s fourth-largest silver miner—and in silver investment products. He acknowledged that India’s robust interest in exchange-traded products had cushioned the global decline in silver investment witnessed in 2024, stating that the dip would have been more pronounced without India’s support. While refraining from revealing too much ahead of the upcoming World Silver Survey presentation by Metals Focus, he mentioned that the 35th edition of the report had just been launched to enthusiastic audiences in New York and Mexico. Concluding on a hopeful and gracious note, Mr DiRienzo remarked on silver’s centuries-old appeal and enduring relevance, and thanked the organizers for their continued commitment, expressing his eagerness to return and connect with new peers in the years ahead.



Mr Arun Misra
CEO, Hindustan Zinc Ltd

Mr Arun Misra, CEO of Hindustan Zinc and the first Indian Chairperson of the International Zinc Association, began his address by humorously referencing the media's growing curiosity around silver prices amid gold's rally, stating that a healthy price premium is what keeps precious metals aspirational. He predicted silver could touch \$36–37 per troy ounce, expressing bullish sentiment. He emphasized the importance of silver in India's sustainability roadmap, especially with the push toward achieving net-zero emissions by 2070, which will accelerate demand from industrial sectors like solar, energy transmission, and electronics. He noted that currently, India's silver consumption is 65% domestic and 35% industrial, but this ratio is expected to reverse. Mr Misra shared Hindustan Zinc's expansion plans to double its output, which would increase annual silver production from around 700 MT to 1,200–1,400 MT, helping reduce India's silver import dependency. He also unveiled plans for a Zinc Industrial Park in Rajasthan, offering long-term supply contracts to downstream players using zinc, lead, or silver, with land being allocated on a priority basis by the government. He concluded on a light yet poignant note, stating that unlike AI or lab-grown diamonds, silver and gold cannot be artificial, and committed to supporting both industry and aspirational demand for silver with reliable supply from Rajasthan's mines.

Mr Surendra Mehta, National Secretary of IBSA, continued his keynote by outlining a strategic roadmap to sustain silver demand in a high-price environment. He emphasized the need for innovation in application, particularly in high-growth sectors like photovoltaics, where silver plays a vital role. Silver's growing relevance in renewable energy and healthcare, due to its unique conductive and antimicrobial properties, makes it indispensable. He urged the industry to invest in R&D to unlock further uses of silver, especially in healthcare and clean tech. A second key focus, he said, must be education and awareness. Industry bodies and associations, he pointed out, often underinvest in consumer education. By communicating silver's dual role as both an industrial and monetary asset—offering protection against inflation and currency risk—stakeholders can maintain and even expand demand. Thirdly, Mr Mehta stressed the importance of collaboration across the value chain, urging miners, refiners, fabricators, and users to work together to enhance efficiency and develop sustainable sourcing and recycling practices. He also emphasized the rising importance of responsible sourcing in today's ESG-conscious world. As a response to these needs, which will host three annual silver-focused events in India—in Bengaluru, Delhi, and Mumbai. He invited all participants to join this initiative and contribute to industry growth, policy discussions, and sustainability frameworks. He concluded by reiterating his and IBSA's continued partnership with Eventell for both silver and gold conferences in the future.



Mr Surendra Mehta
National Secretary, IBSA



Mr Srivatsava Ganapathy
Director and CEO,
Eventell Global Advisory Pvt Ltd

Mr Srivatsava Ganapathy,
Director and CEO, Eventell Global Advisory Pvt Ltd

Mr Srivatsava Ganapathy, in his welcome address, set the tone for the third edition of the India Silver Conference held in the historic city of Udaipur. He extended a warm welcome to all dignitaries, delegates, industry professionals, and international guests, expressing deep appreciation for their presence. Acknowledging the current complexities of the global geopolitical landscape—from shifting trade dynamics to climate change challenges—he emphasized how silver, unlike many other commodities, holds unique relevance in today’s world. He described silver as not just a precious metal but also a critical enabler of sustainable development through its industrial and biological applications, contributing to clean water access, climate mitigation, and portfolio diversification. Mr Ganapathy introduced the conference theme, “Sustaining Demand During a High Price Regime,” and outlined the structure of the two-day event, which included five panel discussions and four special addresses. He also introduced the MyEventell app for enhanced delegate engagement, announced the ISC Excellence Awards recognizing 22 outstanding industry contributors, and encouraged interaction with 11 participating exhibitors. He concluded by reinforcing the vision of ISC as a platform for idea exchange, collaboration, and building a stronger silver ecosystem in India.

Keynote Address
Opportunities for Growing
Silver Jewellery Market Globally





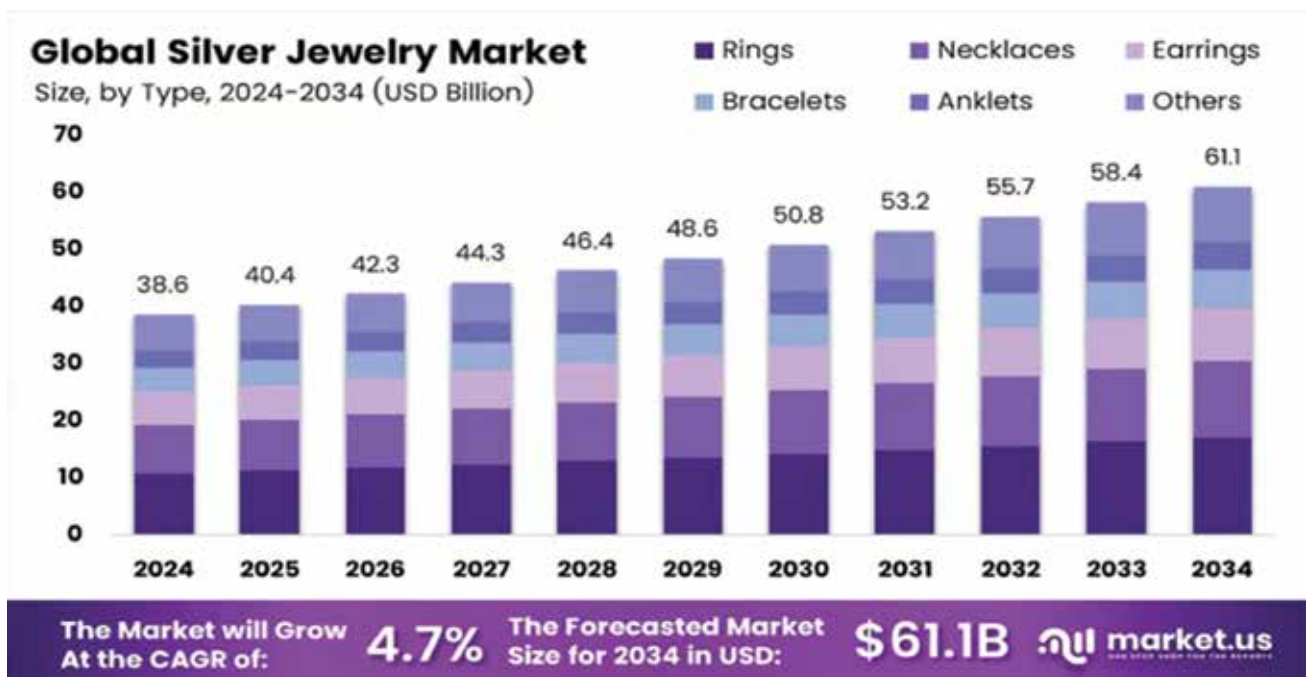
Dr Gaetano Cavalieri
President, The World Jewellery Confederation (CIBJO)

Dr Gaetano Cavalieri, President of the World Jewellery Confederation (CIBJO), delivered an in-depth keynote virtually from Stockholm, outlining key global trends shaping the future of silver in the jewellery industry. He began by challenging the perception of silver as a secondary metal, stressing its growing relevance, especially among younger consumers seeking affordable luxury. He highlighted the exponential rise of fashion jewellery, now a \$37 billion market expected to reach \$66 billion by 2032. Silver has become the metal of choice in this segment, with brands like Pandora producing over 80% of their pieces in silver. E-commerce and social media have accelerated this trend, making silver more accessible and fashionable.

The second major theme was sustainability and responsible sourcing. While applauding brands like Pandora for shifting to recycled metals to reduce carbon emissions, Dr. Cavalieri warned against the unintended consequences of bypassing mined metals. He emphasized that four of the world’s top five silver-producing countries—Mexico, Peru, Chile, and Bolivia—depend heavily on mining for employment and GDP. Severing ties with these communities risks economic destabilization. Drawing from past experience with Section 1508 of the U.S. Dodd-Frank Act and its negative impact on African gold producers, he urged a more nuanced approach to ESG adoption.

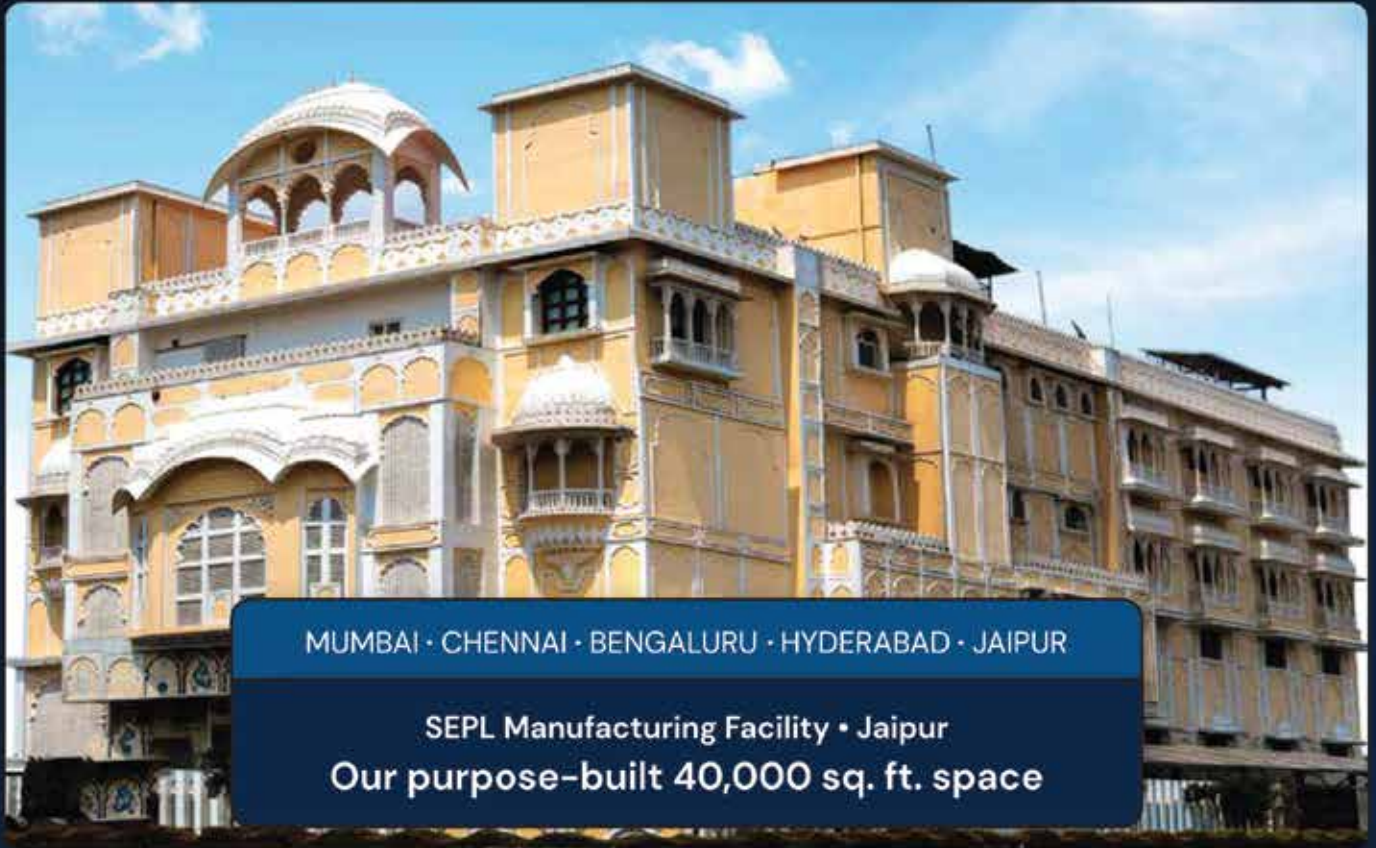
Dr. Cavalieri introduced CIBJO’s initiatives, including the Responsible Sourcing Blue Book, ESG guidelines, and toolkits supporting ethical mineral sourcing. He concluded by underscoring India’s central role in silver production and consumption and urged the industry to align growth with sustainability, equity, and global best practices.

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World Silver Survey 2025: Launch and Summary



Mr Chirag Sheth
Principal Consultant, Metals Focus

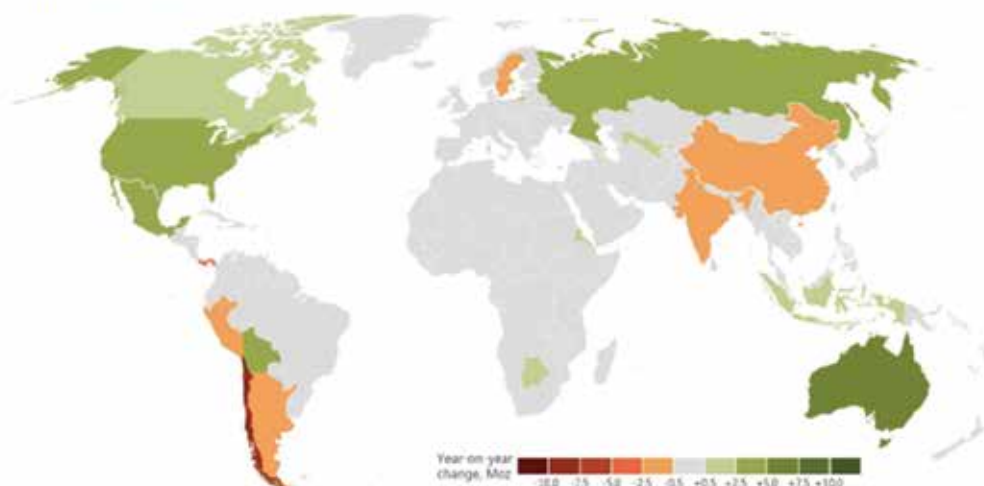
Mr Chirag Sheth, Principal Consultant at Metals Focus, launched the World Silver Survey 2025 with a detailed analysis of silver’s global market trends and future outlook. He noted that silver prices surged by 20% in 2024, and by over 50% from trough to peak, supported by a favourable macroeconomic and geopolitical environment. Despite gold stealing the spotlight, silver recorded its fourth consecutive year of supply deficit, with a 4,500-ton shortfall, or about 15% of total supply, signalling a strong demand-driven market. Investor interest grew globally—especially in India, where retail and family offices increasingly view silver as a strategic portfolio component.

On the mining front, global production rose 1% to 819 million ounces, with gains led by Mexico, the U.S., and Australia, while production declined in Central and South America and Asia. Importantly, silver output from lead and zinc mines rose sharply by 15–20%, becoming a key supply source. Looking ahead, a 2% growth in global mine supply is expected in 2025, primarily from North America.



Global mined silver production rose to 819.7Moz in 2024

Growth in production from Australia, Mexico, Russia and the US outweighed lower supply from Chile and minor declines from other countries.

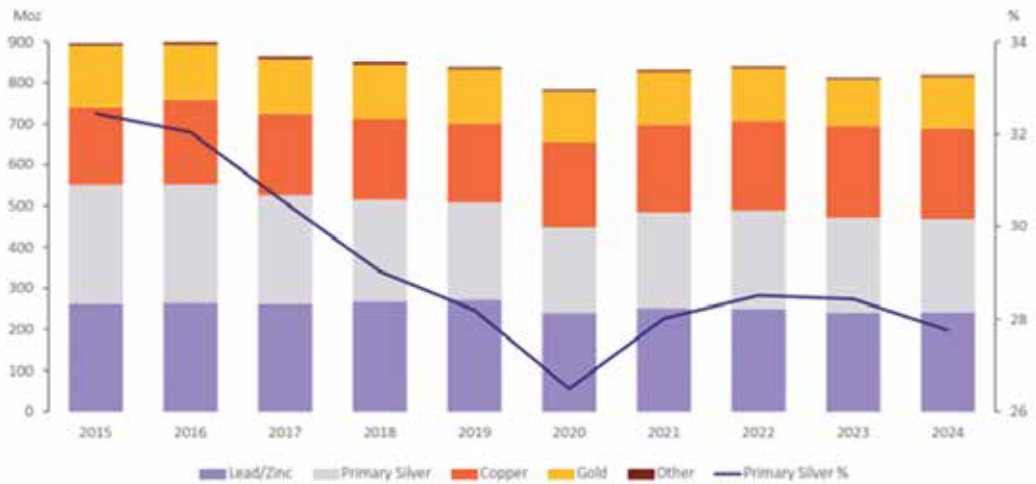


Source: Metals Focus



Production from primary silver mines fell

Output from lead/zinc mines remained broadly flat, but silver production from gold mines increased by 12.3% y/y.



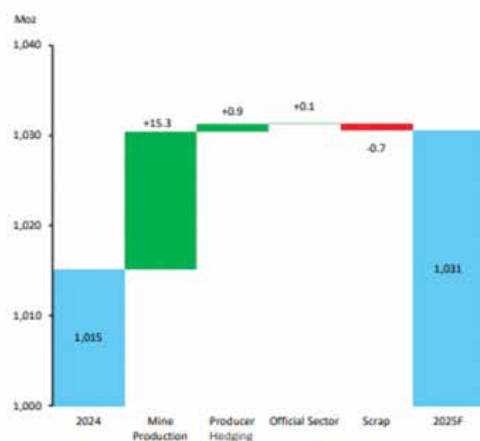
Source: Metals Focus

Industrial demand continued to dominate, driven by photovoltaics, electronics, and electric vehicles, while jewelry demand remained flat globally—propped up only by strong growth in India, where gold-plated silver and sterling silver gained popularity. However, investment demand in the U.S. weakened, and silverware consumption dropped due to price sensitivity. Mr Sheth concluded with a cautious outlook for 2025, citing that while industrial demand remains robust, jewelry and silverware demand may soften if silver prices remain volatile, making price behaviour a critical variable in the months ahead.

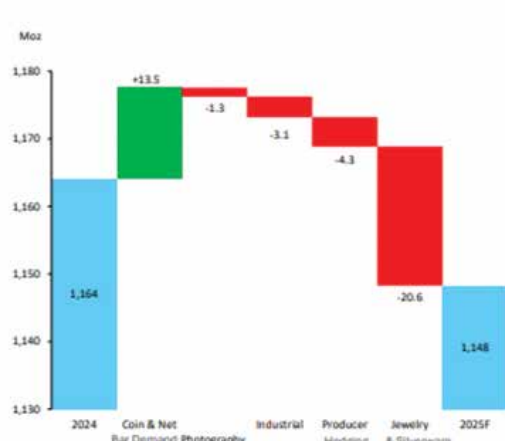


2025 Supply/Demand Outlook

Global Supply: 2025 up 2% to a three-year high



Global Demand: 2025 eases back 1% to a four-year low



Source: Metals Focus

Roundtable Discussion

Sustaining Silver Demand During Elevated Prices



Mr Neville Patel, HDFC Bank, **Mr Ian Harris**, ICBC Standard Bank, **Mr Surendra Mehta**, IBJA, **Mr Rajesh Rokde**, GJC, **Mr Amar Singh**, StoneX Group Inc., Asia Pacific & Middle East, **Mr Chirag Thakkar**, Amrapali Gujarat, **Mr Gautam Choksi**, Hindustan Platinum, **Mr Vijay Murthy**, Hindustan Zinc Ltd, **Mr Richard Trainer**, Silver Star Resources, **Mr Shivanshu Mehta**, MCX - (Online)



Mr Amar Singh
Head, Asia Pacific & Middle East,
StoneX Group Inc.

Session Moderator: Mr Amar Singh
Head, Asia Pacific & Middle East – Stonex Group

Panel Theme: “Perspectives Across the Silver Ecosystem:
From Producers to Policy”

Mr Amar Singh, chairing the roundtable session, opened with a warm welcome and a reflection on silver’s market journey over the past year. Drawing comparisons to the predictions made during the previous conference in Goa, he noted how silver rose from \$21–22 to around \$34 per ounce—though still short of some of the more bullish forecasts. He emphasized the resilience of silver, especially given its history of price suppression during phases of technological disruption, such as during the rise of smartphones and photography alternatives. He highlighted how energy transition, 5G, semiconductors, electric vehicles, and broader industrial applications have now become the primary demand drivers for silver. He described silver as a promising asset class still lagging behind gold and underlined the influence of global geopolitical and trade policy shifts, particularly around taxation and tariffs, which are reshaping bullion flows.

**Question to Mr Ian Harris
(ICBC Standard Bank, London):**

“Can you walk us through the recent structural changes in the local London market and the large dislocation in pricing versus COMEX? How did tariffs and logistics impact silver delivery and financing, and what does this mean for India’s supply chain?”

Response:

Mr Ian Harris explained that recent months saw significant dislocation between COMEX and London silver prices, driven by uncertainty around U.S. tariffs ahead of the elections. Initially, there was concern that gold and silver bullion might be included, causing anxiety over delivery disruptions into COMEX. This fear—similar in impact to COVID-era disruptions—led to a large movement of metal from London to New York, further straining London’s clearing infrastructure. He noted the non-interchangeability of bar sizes and specifications between markets, and the existence of tariffs on certain origin metals, which compounded logistical difficulties. The vaults in London, designed for limited physical movement, were not equipped to handle large outbound volumes, leading to operational bottlenecks and financing pressure, reflected in spiking lease rates. Fortunately, clarity arrived when U.S. authorities announced exemptions for gold and silver bullion in the April tariff document, easing some of the stress.

Question to Mr Neville Patel (HDFC Bank):

“As a bank at the centre of bullion imports into India, how did you experience the fallout from market structure changes and volatility, especially in terms of demand fluctuations and financing risk?”

Response:

Mr Neville Patel described the volatile environment as highly challenging, particularly because India’s silver market is highly price-sensitive. Often, by the time imported metal cleared customs, demand had vanished due to price shifts, leaving traders burdened with elevated lease costs. In response, importers and banks started adopting smaller clip sizes and shorter lease durations. He noted that suppliers, too, adjusted their approach with shorter commitments, and emphasized that the market has shifted from a “comfortable” model to one that prioritizes inventory

and risk management. A notable trend has been the rising inflow of UAE-origin silver in smaller, more manageable quantities, which is helping meet demand in a more flexible, cost-conscious way.

Question to Mr Chirag Thakkar (Amrapali Gujarat):

“From a trader’s perspective, how did the disruptions over the past two quarters affect bullion flows and client servicing? How did you manage the pressure between suppliers, banks, and buyers?”

Response:

Mr Chirag Thakkar candidly referred to the past two quarters as a phase of helplessness, where traders were stuck between suppliers, bankers, and clients—unable to control any link in the chain. Volatility caused severe delays and made it impossible to predict or advice on pricing and delivery. He emphasized that the industry has learned hard lessons from this transition, particularly since the COVID era, and is now better prepared to navigate volatility with new tools like consignment-based models. However, he stressed that global disruptions should not entirely dictate the Indian bullion ecosystem, and called for stronger frameworks from banks and institutions to insulate local trade from uncontrollable external shocks.

Question to Mr Rajesh Rokde (GJC)

“Retailers are the final link to consumers. How have high silver prices—touching ₹100,000/kg—impacted buyer behaviour? Are consumers seeing this as a peak or still a buying opportunity?”

Response: Mr Rajesh Rokde pointed out that despite price increases, consumers do not view current silver prices as unaffordable—especially in comparison to gold, which has reached new all-time highs. He emphasized that silver remains far below its historical peak of \$48/oz, and continues to be seen as an accessible investment and gifting option for Indian households. He underlined that silver is still deeply ingrained in cultural traditions and is regarded as a value-for-money alternative to gold, especially among price-conscious buyers and the younger generation. He remained optimistic about continued consumer participation, provided price spikes remain within tolerable limits.

Question to Mr Surendra Mehta (IBJA):
“Despite the formation of the World Silver Council, why has it struggled to gain traction, and what are the barriers to coordinated industry action on silver, especially in contrast to gold?”

Mr Surendra Mehta's Response:
The World Silver Council, despite being formed three years ago (formed in 2018), has seen poor participation, with fewer than 60 members and no backing from miners or major traders. Unlike the gold industry, which is supported by a powerful global body, silver lacks organized funding, marketing, and purity standards. He warned that unchecked low-purity silver jewellery (as low as 20%) could erode consumer trust and lead to a crisis. He stressed the need for a self-regulatory framework, better industry alignment, and collective marketing to position silver as a store of value and protect long-term demand.

Question to Mr Vijay Murthy (Hindustan Zinc Ltd):
“How are you seeing silver demand evolve between industrial users and jewellers, and what role does Hindustan Zinc foresee in India's energy transition?”

Mr Vijay Murthy's Response:
Silver demand from both investment and industrial sectors remains strong, with jewelry maintaining steady traction—especially in fashion jewellery. As India's push for solar energy, EVs, and electronics accelerates, silver's industrial consumption is expected to rise. Hindustan Zinc sees an opportunity to support this shift by expanding domestic production and encouraging downstream manufacturing. He emphasized the need to promote silver not just as a commodity but as a branded, aspirational product.

Question to Mr Shivanshu Mehta:
“What are the key steps MCX is taking to continue serving as a reliable platform for silver price discovery and risk management in the face of current volatility?”

Mr Shivanshu Mehta: MCX is working closely with industry stakeholders to address GST-related issues affecting EGR (Electronic Gold Receipts) and is also exploring a similar initiative for silver. The exchange aims to establish a domestic price discovery

mechanism for silver via a spot trading window. Moreover, MCX plans to enhance silver contracts along the lines of recent gold options success. Over 460 tons of 1 kg silver bars have changed hands, indicating strong retail interest. The goal is to strengthen financialization and risk management tools for silver.

Moderator's Closing Question to All Panellists:
“Given the current high prices and evolving market structure, what are one or two things that your organization or segment needs to do to build long-term demand and stability for silver in India?”

Mr Vijay Murthy: The focus is on expanding silver production, aiming to double output and meet a larger share of India's demand domestically. Mr Murthy emphasized developing a domestic pricing benchmark (akin to LBMA) and promoting India Good Delivery (IGD) standards. Hindustan Zinc is also committed to 9999 purity silver bars and supports self-regulation and hallmarking to build consumer trust.

Mr Gautam Choksi (Hindustan Platinum):
Mr Gautam suggested that domestic silver loans for industrial users should be allowed, similar to those available for gold jewellers. He also stressed simplifying the process for borrowing silver in local London ounces, which is currently cumbersome and unclear.

Mr Chirag Thakkar: Retail demand drives asset class growth, but awareness is lacking. Chirag emphasized educating consumers, especially younger generations, on silver's long-term value. Without clear messaging on why to buy and hold silver, demand won't sustain.

Mr Rajesh Rokde: Jewellers need to dedicate space to silver jewellery and promote SIP schemes similar to gold. He highlighted recycling as an untapped demand channel and urged jewellers to offer proper buyback and recycling facilities for silver articles.

Mr Surendra Mehta: The key is restoring trust through 100% purity in jewellery and implementing a self-hallmarking mechanism. Mr Mehta also advocated for launching electronic

silver receipts (ESRs), similar to EGRs.

Mr Ian Harris: India's silver demand has remained consistent even as prices rose over the past five years. Silver's dual role as a precious and industrial metal helps balance volatility. India has imported 4,000–7,000 tons annually, showing continued strong appetite.

Mr Neville Patel: Silver should be positioned alongside gold as a formal investment asset. Neville advocated launching silver metal loans (SMLs), allowing entities to warehouse and hedge effectively. Hedging tools will help traders manage volatility and ensure consistent supply.

Audience Question "Why hasn't the World Silver Council initiative gained momentum and what's stopping industry collaboration?"

Mr Surendra Mehta's Response:

The lack of unity across the value chain—refiners, traders, manufacturers—has prevented progress. There's no serious collective effort. Without consistent purity, consumer trust will erode, just as the diamond industry suffered from synthetic contamination. Until there is a shared vision and commitment, silver will continue to lag.

Moderator's Final Note: The consensus is clear: India's vast consumer base, if mobilized through awareness, trust-building, and infrastructure development, can reshape the global silver landscape. Domestic pricing, hallmarking, retail awareness, and financial instruments are the four key pillars for growth.

Day 2 Theme: Sustaining Demand During High Price Regime

Presentation: Study of Silver purity level in Silver Jewellery across India



Mr Ankur Goyal MMTC PAMP India Pvt Ltd

Presentation Summary:

A Nationwide Study on Silver Jewelry Purity in India

Speaker: Mr Ankur Goyal, President – Works, MMTC-PAMP

Objective:

To assess the purity and composition of silver jewelry sold across India, with a focus on the presence of harmful metals such as cadmium and nickel, and to evaluate the need for regulatory reforms and consumer protection mechanisms.

Mr Ankur Goyal
MMTC PAMP India Pvt Ltd

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Key Highlights:

Study Scope and Methodology:

- Total Samples Tested: 50 silver jewelry items sourced online from across North, South, East, and West India.
- Jewelry Types: Chains, earrings, pendants, and locks.
- Testing Process:
 - XRF (X-Ray Fluorescence): For detecting metal composition.
 - Potentiometric Titration: For accurate silver purity assessment.

Findings:

Positive Outcomes:

- 64% (32 samples) met the 92.5% sterling silver standard or exceeded it.
 - Some pieces even reached 93.4% purity.
 - Only copper and zinc were found as alloying elements—no cadmium or nickel in this set.
- Temple scrap from large components (like crowns and idols) generally showed high silver content (~88%).

Silver Purity in Coins

Silver Article results - homogeneous

Silver Samples	Sample-1		Sample-2		Sample-7		Sample-9		Sample-10		Sample-11		Sample-12		Sample-13		Sample-14		Sample-15		Sample-16		Sample-17		Sample-18		Sample-19		Sample-20		Sample-21		Sample-22		Sample-23		Sample-24					
	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant				
Ag	92.89	92.30	93.38	93.89	94.22	93.23	93.14	92.25	92.77	93.76	93.61	92.86	93.60	93.32	93.02	92.84	93.37	92.84	93.77	91.95	94.30																					
Cu	1.6	5.2	5.5	4.1	4.7	5.9	3.5	4.0	4.6	4.1	4.1	4.9	4.7	3.4	4.5	5.2	5.9	4.8	5.3	3.9	3.5																					
Cd											3.7		2.8		1.6																											
Cr	5.5	0.8																																								
Ni																																										
Sn																																										
Zn	0.5	2.1	0.6	1.7	0.9	0.9	5.2	0.1	2.8	2.8		1.8		1.9	2.9	1.9	2.9	0.3	2.5	1.4	4.5	2.9																				
Fe																																										

Silver Samples	Sample-25		Sample-27		Sample-29		Sample-31		Sample-32		Sample-33		Sample-34		Sample-35		Sample-36		Sample-37		Sample-38		Sample-39		Sample-40		Sample-41		Sample-42		Sample-43		Sample-44		Sample-45								
	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant							
Ag	93.18	92.75	93.05	93.07	93.09	93.35	92.86	96.16	91.14	92.79	93.76	94.02	93.60	92.18	97.13	97.07	92.71	91.34	93.21	93.38																							
Cu	5.1	3.5	3.7	5.1	4.5	6.9	4.7	0.1	2.6	5.5	3.6	5.1	4.2	7.1	3.9	2.9	6.0	5.9	3.3	4.5																							
Cd																																											
Cr																																											
Ni																																											
Sn																																											
Zn	1.6	3.1	3.4	1.3	2.5	0.5	2.8	3.4	3.9	1.7	2.9	0.2	2.0				1.5	2.9	3.0	2.7																							
Fe	0.1		0.1	0.3			0.1																																				

Silver Conference, Udaipur, 26th April 2025

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Silver Purity in Coins

Silver Article results – In-homogeneous

Silver Samples	Sample-6				Sample-8		Sample-17		Sample-26			Sample-28		Sample-30	
	Pendant	Lock	Chain	Earing	Lock	Pendant	Lock	Chain	Pendant	Lock	Pendant	Lock	Pendant	Lock	Pendant
Ag	92.39	93.75	80.60	94.06	89.71	58.50	76.03	94.39	86.18	85.93	64.04	32.61	91.64	89.21	
Cu	3.8	5.0	11.3	3.2	6.4	30.5	0.5	5.5	10.4	10.5	2.6	56.7	4.5		
Cd								19.1		0.5	34.4	10.8	2.3	10.1	
Cr															
Ni															
Sn	0.1	0.3													
Zn	3.3	0.4	8.3	2.6	3.6	11.4	3.4	0.2	3.6	2.9	0.6	0.1	1.5		
Fe					0.1	0.1	0.4		0.1	0.2					

Silver Samples	Sample-34		Sample-38			Sample-40			Sample-46			Sample-48			Sample-50		
	Lock	Pendant	Lock	Pendant	Pendant	Lock	Pendant	Chain	Chain	Pendant	Pendant	Lock	Pendant	Chain	Lock	Pendant	
Ag	87.14	89.29	88.13	93.30	93.29	93.39	89.33	93.59	49.60	92.97	92.87	85.85	63.32	89.45	23.87	78.31	
Cu		6.9	12.1	6.8	6.5	5.5	10.1	6.7	1.2	2.5	5.9	6.2	30.3		76.3	14.9	
Cd	11.8	0.1															
Cr																	
Ni									49.7	2.1		6.6	2.1	10.2		4.5	
Sn																	
Zn	1.9	3.5				1.6	1.5	0.3	0.4	2.6	1.2	2.1	5.6	1.4	1.3	3.1	
Fe		0.1				0.1										0.3	

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Areas of Concern:

- 24% of samples showed inconsistent purity across components (e.g., pendant vs. chain). ○ One sample was 97% zinc.
- 8% (4 samples) had elevated cadmium or nickel, with some as high as 50%. ○ Another had 19% cadmium, which poses serious health hazards.
- 12% (6 samples) had no silver at all — entirely made of zinc or cadmium alloys but falsely stamped as 92.5% silver.

Silver Purity in Coins

Silver Article results – Zero Silver

Silver Samples	Sample-4			Sample-5			Sample-19	Sample-37			Sample-45	Sample-47		
	Pendant	Lock	Chain	Pendant	Lock	Chain	Chain	Pendant	Chain		Pendant	chain	kunda	
Ag	0.04	0.10	0.05	0.04	0.04	0.11	0.03	7.04	1.86	7.04	0.00	0.03	0.02	0.04
Cu	89.8	13.8	69.4	63.8	2.6	74.0	7.4	82.8	94.3	62.6	2.8	18.0	17.8	17.2
Cd							24.5							
Cr		16.6			17.7									
Ni		6.6		0.0	7.8	0.1						9.7	8.1	9.1
Sn	0.2	0.1				0.2								
Zn	9.7	0.3	29.2	36.0		25.6	33.0	10.2	5.2	37.2	97.0	2.0	0.3	2.0
Fe		61.6			71.0		35.2					69.8	73.0	71.0

Temple Jewelry:

- A sample set of temple offerings and scrap showed dangerous levels of cadmium (up to 40–50%) especially in chakris, the small offerings bought by devotees. ○ Some British-era coins had as low as 56% silver.
- Others, like older Lakshmi-Ganesh coins, tested as high as 98.8%.
- Cutlery samples tested surprisingly high (~87–89% silver)

Temple Jewelry:

- A sample set of temple offerings and scrap showed dangerous levels of cadmium (up to 40–50%) especially in chakris, the small offerings bought by devotees.

Silver Purity in temple Jewellery

Jewellery Article type -1	Piece 1	Piece 2	Piece 3	Piece 4	Piece 5	Piece 6
Ag	51.05	81.00	71.62	88.95	96.97	86.74
Cu	44.53	15.84	23.93	8.08	1.43	10.61
Cd	0.52	1.18	0.79	1.24	0.16	1.27
Ni	0.14	0.00	0.26	0.14	0.10	0.22
Sn	0.77	0.20	0.00	0.22	0.00	0.00
Zn	2.48	1.57	2.6	1.25	0.4	0.94
Fe	0	0	0.52	0	0.66	0

Jewellery Article type-2	Piece 1	Piece 2	Piece 3	Piece 4	Piece 5	Piece 6	Piece 7	Piece 8	Piece 9	Piece 10	Piece 11	Piece 12	Piece 13	Piece 14	Piece 15
Ag	51.05	81.00	71.62	88.95	96.97	86.74	0.12	57.72	54.2	56.33	75.94	54.31	54.11	75.89	54.1
Cu	44.53	15.84	23.93	8.08	1.43	10.61	86.49	0.7	36.86	36.66	22.4	0.2	0.44	0.28	0.6
Cd	0.52	1.18	0.79	1.24	0.16	1.27	0	41.58	2.29	1.06	0	45.41	45.44	23.32	45.21
Ni	0.14	0.00	0.26	0.14	0.10	0.22	13.23		0.4				0	0	
Sn	0.77	0.20	0.00	0.22	0.00	0.00							0	0	
Zn	2.48	1.57	2.6	1.25	0.4	0.94			5.7	5.46	0.4	0	0	0.5	
Fe	0	0	0.52	0	0.66	0			0.29	0.19	1.09				

Jewellery	(CHATRA) Piece 1	(CHATRA) Piece 2	(CHATRA) Piece 3	(CHATRA) Piece 4	(CHATRA) Piece 5	(CHATRA) Piece 6	(CHATRA) Piece 7	(CHATRA) Piece 8	(CHATRA) Piece 9	(CHATRA) Piece 10	(CHATRA) Piece 11	(CHATRA) Piece 12
Ag	58.71	54.27	62.96	94.99	50.89	54.23	75.42	54.02	76.20	72.13	54.70	99.25
Cu	34.8	0.4	31.1	3.0	40.1	0.5	20.2	0.5	0.3	25.4	0.5	0.6
Cd	1.1	45.4	9.8		2.1	45.1	1.5	45.6	23.4		44.9	
Ni	0.1		0.3		0.4		0.1					
Sn	0.3										0.1	
Zn	5.0		4.8		6.4	0.0	2.6		0.1	1.2		
Fe				2.0	0.1	0.2	0.2		0.1	0.2		



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Health and Environmental Impact of Contaminants:

- Cadmium and Nickel are banned in many countries due to their toxic effects, including skin irritation, cancer risk, and environmental damage.
- Unsafe working conditions for artisans handling high-cadmium alloys were flagged as a major concern.

Conclusions and Recommendations:

1. Encouraging Improvement: The majority of online silver jewelry met purity standards — indicating better awareness and manufacturing discipline.
2. Persistent Gaps Remain:
 - o Misrepresentation of silver content still exists.
 - o Use of banned/toxic metals in some segments is worrying.

3. Need for Action:

- o Mandatory hallmarking for silver jewelry.
- o Regulatory enforcement to ban cadmium and nickel use.
- o Industry-wide education and best practices adoption for raw material sourcing and quality control.

4. Policy Advocacy:

- o Suggests formation of uniform standards and stricter quality protocols.
- o Recommends developing low-cost, innovative testing tools for detecting impurities.

Audience Q&A Highlights:

- **Consumer Tips:** Very difficult to self-check quality; only regulation and hallmarking can protect buyers.
- **Regional Analysis:** The study intentionally avoided naming regions or brands to prevent stigmatization; focus was on industry-wide trends.

Session 1

Silver Jewellery & Silverware – Growing the Market Sustainably



Mr Sidharth Gupta, ACPL Exports, **Mr Vinod Tejwani** Pranda India,
Mr Nitesh Jain, Purple Jewels, **Mr Rahul Mehta**, Silver Emporium Pvt Ltd,
Mr Chirag Sheth, Metals Focus, **Ms Wilasinee**, Bowins Silver



Mr Rahul Mehta
Silver Emporium Pvt Ltd

Session Summary:

The session titled “Silver Jewellery & Silverware – Growing the Market Sustainably” brought together leading voices from the Indian silver industry to explore its evolution, opportunities, and challenges in both domestic and global markets. Moderated by Mr Chirag Sheth, Principal Consultant – South Asia at Metals Focus, the session opened with a powerful reminder of India’s significance in the global silver ecosystem—accounting for 43% of global silver jewellery demand and 70% of silverware demand. Despite this dominance, the sector continues to remain fragmented, unorganized, and largely underserved when it comes to modern retail and branding.

Mr Rahul Mehta of Silver Emporium pointed out that silver has increasingly become the preferred choice for consumers, especially with soaring gold prices. In recent years, silver jewellery design and finish have reached a level that rivals gold, providing both aesthetic and functional appeal at a fraction of the cost. Mr Nitesh Jain of Purple Jewels echoed this sentiment, adding that silver enjoys recognition as a noble metal and is no longer seen as mere imitation. He emphasized the rise in youth-oriented consumption driven by affordability and fashion, and noted the growing potential of lightweight, stylish silver jewellery in the online retail space.

Mr Siddharth Gupta from ACPL Exports provided insight into the export landscape. He observed that while India has the capability to be a global silver leader, the domestic industry’s intense focus on local markets and its lack of exposure to international design preferences have hindered export growth. He underlined the need to adapt silverware and jewellery designs to suit foreign tastes and called for stronger industry participation in international trade fairs and buyer engagement platforms.

One of the most pressing issues discussed was the lack of mandatory hallmarking in the silver segment. The panel agreed that the absence of uniform quality standards is a major roadblock in formalizing the sector. Rahul Mehta stressed that without regulatory enforcement, silver jewellery continues to be sold with inconsistent purity, sometimes as low as 40-60%, despite being marketed as 92.5. Mr Nitesh Jain and Mr Vinod Tejwani supported the call for self-regulation until the government mandates hallmarking. They also pointed out that most silver sold in India still goes untested, and the infrastructure and hallmarking centers do exist—what’s lacking is collective industry push and accountability.



Mr Siddharth Gupta
ACPL Exports



Mr Vinod Tejwani
Pranda India

The conversation also touched upon the branding gap in silver. Unlike gold and diamond jewellery, where brands like Tanishq and Malabar have created strong consumer connect, silver lacks national brands and retail visibility. Mr Nitesh Jain highlighted that branding silver requires long-term commitment, capital, and a shift in distribution models—moving from traditional mom-and-pop jewellers to organized retail and D2C channels. The panel emphasized the need for silver-specific brands to take the lead in awareness campaigns and consumer education, especially around purity and value.

On the manufacturing and export front, **Mr Vinod Tejwani** highlighted that India's lack of large-scale, organized silver manufacturing units is a major deterrent for international buyers. While the skill base and craftsmanship exist, the absence of scale, process control, and consistency limits India's competitive advantage. The panel agreed that setting up modern factories, investing in R&D, and adopting global practices is essential for Indian silver to compete with hubs like Thailand. They also called for the creation of a dedicated Silver Promotion Council to represent the industry's interests across government and trade bodies.

The discussion shifted to financial and risk management aspects. Mr Mehta pointed out that while silver prices are extremely volatile, most manufacturers manage risk through inventory replacement rather than hedging. However, platforms like MCX and IIBX now provide opportunities for price risk mitigation. Access to Silver Metal Loans—currently unavailable like their gold counterparts—was seen as a potential game-changer, both for exporters and domestic players.

Looking ahead, the panel outlined key trends shaping the silver segment in India. There was consensus that gold-plated silver jewellery will grow rapidly as gold prices remain high. Lightweight, fashionable silver jewellery is also expected to dominate online platforms. On the silverware side, innovative blends—such as combining wood or stones with silver—are gaining traction, especially in gifting and home décor categories. Mr Vinod Tejwani and Mr Rahul Gupta emphasized that artifacts and devotional items for the Indian diaspora present huge untapped potential, and aligning design sensibilities to global tastes can open new markets.

The session closed with a strong call to action: the industry must unite under common purpose, commit to ethical manufacturing, push for self-regulation, and invest in building silver as a brand—not just a metal. Participants agreed that while the ecosystem still lacks cohesive representation, forums like the India Silver



Mr Nitesh Jain
Purple Jewels

Conference serve as a powerful platform to seed collective change. With the right vision, leadership, and collaboration, India's silver industry can transition from an unorganized sector into a global benchmark of quality, innovation, and sustainability.

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Session 2

Recent Trend in Silver Recycling



Mr Kinjal Shah, Responsible Jewellery Council,
Mr C P Abidh, Ahlatci Metal Refinery FZCO, **Mr Tarek Shakarchi**, MKS PAMP Group - Online

Mr C.P. Abidh, representing Ahlatci Metal Refinery FZCO, began the session by highlighting the increasing relevance of silver recycling in the global precious metals landscape. He noted that with sustainability becoming central to sourcing practices, especially among top global brands, the shift toward recycled silver is both timely and necessary.

He emphasized that the session was thoughtfully designed to build upon the themes discussed in the previous panel—particularly around ethical sourcing, branding, and consumer trust—and now aimed to explore the supply-side and structural enablers required for sustainable growth in the silver ecosystem.



Mr Kinjal Shah
Responsible Jewellery Council

Mr Abidh welcomed his fellow panellists, Mr Kinjal Shah and Mr Tarek Shakarchi, and positioned the discussion within the larger industry context by stating that many international luxury and lifestyle brands like Prada have already begun mandating recycled silver due to carbon footprint considerations and ESG commitments. He framed the core question of the session around what challenges and opportunities this trend presents for the Indian market and global refiners.

With that, he invited Mr Kinjal Shah to begin the discussion with his perspective on the industry's transition toward recycling, its commercial viability, and how it aligns with broader sustainable development goals.

Key Questions asked by the Moderator

Q1. What is driving the global shift towards recycled silver, and how are brands responding?

Answered by: Kinjal Shah

Mr Kinjal Shah explained that leading global brands, especially in Europe, have begun mandating the use of recycled silver and gold to reduce their environmental impact. This shift is primarily driven by corporate sustainability goals, ESG pressures, and growing consumer preference for eco-conscious products. According to Shah, recycling also offers a commercial edge, as it aligns with global carbon reduction commitments. He emphasized that awareness of net-zero targets and circular economy practices are influencing not just retailers but the entire supply chain, from refiners to manufacturers.

Q2. What challenges exist in promoting recycled silver in the jewelry industry?

Answered by: Kinjal Shah

He stated that the primary challenge is mind-set change within the industry. Many domestic players are still hesitant to adopt sustainable practices, mainly because they are focused on short-term gains and local markets. The lack of awareness, resistance to change, and limited exposure to international sustainability standards pose barriers. However, Shah mentioned that more Indian gold and silver refiners are now seeking RJC's Chain of Custody certification, which includes responsible recycling practices.

Q3. How is the Western perspective on recycled metals different from Asia's?

Answered by: Tarek Shakarchi

Mr Tarek noted that in Europe and the US, consumer demand for responsibly sourced and recycled metals has been building for over a decade. This demand is often driven by consumers themselves, which in turn pressures brands to change. The shift in the West is reinforced by higher purchasing power and a willingness to pay a premium for ethically sourced materials. He emphasized that the process of defining what "recycled" means remains an ongoing educational journey for both brands and consumers.

Q4. What regulatory developments in Europe should Indian stakeholders be aware of?

Answered by: Tarek Shakarchi

Mr Tarek shared that while silver is not yet officially classified as a "critical mineral" by the EU, there is growing recognition of its importance in industrial and green energy applications. He encouraged Indian businesses to watch for potential regulatory shifts, as classification could lead to new subsidies, compliance obligations, and fast-tracked project approvals. Traceability, he added, will become increasingly vital as governments seek transparency in sourcing critical raw materials.

Q5. What is RJC doing to promote consumer awareness about recycled silver in India?

Answered by: Kinjal Shah

Mr Kinjal noted that RJC focuses on building consumer trust through ethical certification, education, and setting global standards. He emphasized that Gen Z and younger consumers are more conscious of traceability and the ethical footprint of their purchases. RJC-certified companies are using recycled silver as a selling point to connect with this demographic. He cited research showing that by 2027, a majority of consumer spending will be led by these aware, values-driven segments.

Q6. Is traceability relevant in India, and how is it being perceived globally?

Answered by: Both Panellists

Mr Kinjal responded that while Indian consumers may not yet prioritize traceability, global markets do. In markets like the US and EU, traceability is an essential selling feature—detailing where materials came from and how they were processed ethically. Mr Tarek supported this view, adding that traceability is crucial not just for consumers but to prevent the outflow of undervalued materials from India. He stressed that traceability is a tool for enabling a circular economy and creating long-term value for refiners and exporters.



Mr Tarek Shakarchi
MKS PAMP Group

How can refiners and the industry capitalize on the opportunity of recycled silver?

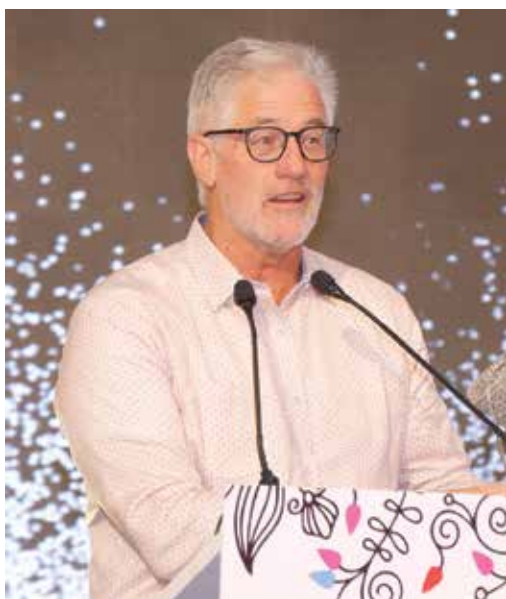
Answered by: Tarek Shakarchi

He stated that refiners must build long-term value by supporting recyclers and investing in traceable, ethical supply chains. As refining technology has remained largely unchanged for decades, the differentiator now lies in transparent sourcing, customer education, and integration with circular economy models. The companies that embrace this early will gain strategic and reputational advantages in the global market.

Closing Remarks:

Both panellists agreed that recycled silver presents a major opportunity for Indian manufacturers, retailers, and refiners. However, success will depend on collaborative efforts to build awareness, adopt certification standards, and prepare for incoming global regulations. The session concluded with a call for early adaptation to secure India's competitive edge in the global silver economy.

Special Address
The Silver Deficit –
Why the Gap Can't Be Filled?



Mr Phillips Baker
San Cristobal Mining

Mr Phillips Baker, with nearly four decades of experience in the mining industry, opened his address by reflecting on the historical silver price trends since his early years—highlighting how silver has evolved from \$5 levels to the present. As former President of Hecla Mining and twice Chair of the Silver Institute, he emphasized his long-standing leadership and firsthand experience in tracking the silver market.

He underscored India's growing significance in the global silver ecosystem, identifying it as one of the top three silver-consuming countries (after China and the U.S.) and a likely leader in industrial silver demand growth. He lauded India's craftsmanship and highlighted the unique cultural understanding of silver as more than flatware—treating it as “art.”

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Key Insights from the Presentation:

- **Persistent Structural Deficit:**
Over the past four years, the silver market has recorded a cumulative deficit of 679 million ounces (21,122 metric tons), equivalent to almost half the annual global demand.
- **Demand Breakdown:**
Industrial demand now represents ~60% of total silver use, driven particularly by photovoltaics. Investment demand has declined (from 24% to 15%).
- **Production Limitations:**
Global silver production is dominated by Mexico, China, and Peru. India contributes around 3%, mainly from a single growing mine.
- **Mining Challenges:**
Silver is largely a by-product metal—72% of global production comes from mining lead, zinc, copper, or gold. This limits scalability, as primary silver mines are relatively small and scarce.
- **Slow Supply Response:**
Despite higher prices, new mines are not being built fast enough—peak global production occurred in 2016, and the industry hasn't reached that level since.
- **Long Mine Development Cycles:**
In the U.S., it can take up to 29 years from discovery to production for a new silver mine due to permitting and regulatory bottlenecks.
- **Limited Role of Recycling:**
Although 150–200 million ounces (4,666–6,221 metric tons) come from recycling annually, no significant increase has been observed despite rising prices.
- **Gap Filler: Above-Ground Stocks:**
Mr. Baker explained that the only source capable of bridging the deficit is the 5.5 billion ounces (171,069 metric tons) of privately held silver. As prices rise, this silver may re-enter the market.

Audience Q&A Highlights:

- **Q: Will mine permitting timelines improve?**
A: Some progress is visible due to policy reforms and project prioritization, but change is slow.
- **Q: What are the implications of the deficit on industrial sectors?**
A: Prices will rise; lightweight silver jewelry may see more adoption, and substitution in applications could increase.
- **Q: Why hasn't silver's price responded like gold's?**
A: Silver's industrial-heavy demand (60%) introduces uncertainty compared to gold's safe-haven appeal.
- **Q: Can increased gold mining help silver supply?**
A: Slightly, yes—but not enough to close a 200 million ounce (6,221 metric ton) annual gap.
- **Q: How will the gap ultimately be addressed?**
A: Via private hoards—as prices climb, individuals (like Indian rural investors) will begin liquidating long-held silver.

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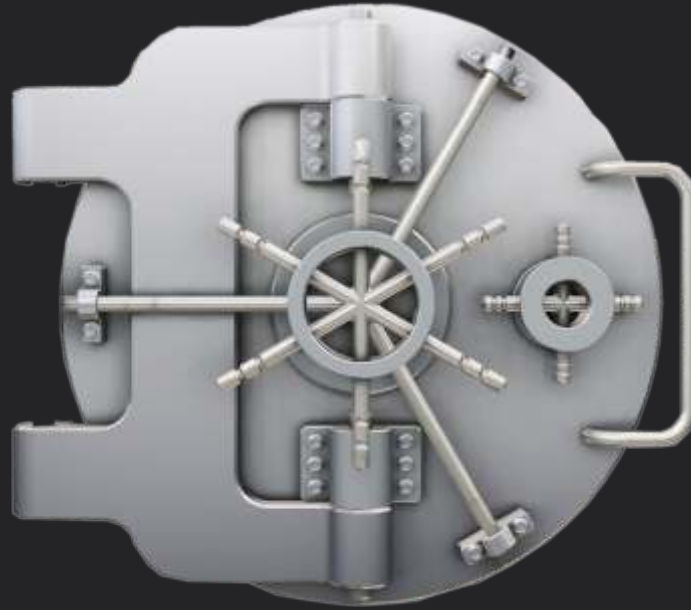
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Session 3 Silver Investment Demand



Mr Chirag Thakkar, Amrapali Gujarat, **Mr Amit Vashisht**, ICICI Prudential AMC Ltd,
Mr Navneet Damani, Motilal Oswal Financial Services Ltd,
Mr Amit Sajeja, Alpha Alternatives Holdings Pvt Ltd, **Mr Johnson Lewis**, FinMet Pte Ltd

Mr Johnson Lewis welcomed the audience and introduced the panel discussion, framing the session around four thematic pillars: demand drivers, product ecosystem, regulatory framework, and investor segments. He emphasized that silver is no longer the “poor cousin” of gold, but is now emerging as a powerful dual-purpose asset with rising relevance in both industrial and investment contexts.



Mr Amit Sajeja
Alpha Alternatives Holdings Pvt Ltd

The Rise of Investment Demand – Mr Amit Sajeja, Alpha Alternatives

Mr Amit Sajeja began with a comparative analysis of silver investment demand across two periods: 2015–2019 and 2020–2024. He highlighted a significant 21% global increase in silver bar and coin demand, growing from 206 million ounces to 252 million ounces. Silver ETF holdings rose sharply as well—from an average of 21 million ounces to 56 million ounces.

India, he pointed out, was a bright spot. In 2023, while global investment demand for silver declined by 22%, India posted a 21% increase. Assets under management (AUM) in Indian silver ETFs surged from ₹3,700 crore in 2023 to nearly ₹15,000 crore in 2024, and the number of folios tripled to 600,000—a sign of growing retail interest.



Mr Navneet Damani

Motilal Oswal Financial Services Ltd

The New Correlation –

Mr Navneet Damani, Motilal Oswal Financial Services

Mr Navneet Damani spoke about how silver's historical correlation with gold is weakening, giving way to a much stronger correlation with copper—now estimated at 85%. He attributed this shift to silver's expanding role in the industrial economy, especially solar energy. India's push for 100 GW of solar installations is a major contributor to this shift.

He likened silver ETFs to digital hoarding mechanisms, akin to the way Indian farmers traditionally store silver. These holdings only re-enter circulation at high price points, reinforcing silver's emerging role as a store of long-term value.

Silver ETFs and Retail Participation –

Mr Amit Vashisht, ICICI Prudential AMC

Mr Amit Vashisht discussed the meteoric rise of silver ETFs in India, which were launched in 2022. In just two years, they have grown to ₹16,000 crore in AUM, enabled by fintech platforms, real-time pricing, and hassle-free storage. More than 50% of this AUM comes through ETF Fund-of-Funds, broadening access to traditional mutual fund investors.

He emphasized how SEBI regulations ensure physical backing of silver ETFs with insured and vaulted inventory, enhancing investor trust.



Mr Amit Vashisht

ICICI Prudential AMC Ltd

Changing Buyer Behaviour –

Mr Chirag Thakkar, Amrapali Gujarat

Mr Chirag Thakkar reflected on the 2011 price peak, when silver hit ₹52,000/kg, noting that investor enthusiasm quickly evaporated after prices crashed. In contrast, the recent rally from ₹60,000 to ₹95,000/kg hasn't triggered proportionate scrap sales, indicating long-term conviction in silver investments.

He also noted a generational shift: over 2,700 of his 35,000 clients are under 20, actively investing in digital silver. The gold-to-silver buyer ratio has reversed on his platform, and demand for physical silver bars has grown. Responding to a question about bullion coins and medallions, Mr Thakkar stated that demand is steady, particularly during festive events like Akshaya Tritiya, but silver coins rarely re-enter the market unless prices surge dramatically. He underlined the storage challenge with physical silver, further justifying the rise of ETFs and insured digital platforms.



Mr Chirag Thakkar

Amrapali Gujarat

Arbitrage and Structured Products –

Mr Amit Sajeja

Delving into structured strategies, Mr Sajeja explained how his SEBI-regulated investment fund uses arbitrage strategies, especially during periods of import tariff asymmetry. He cited the India-UAE CEPA agreement, which briefly allowed discounted silver imports, creating profitable arbitrage windows through calendar spreads and spot-future gaps, yielding double-digit annual returns.

He clarified regulatory constraints: silver exposure is capped at 10% of NAV, leverage is limited to 2x, and only deliverable commodities are permitted in pooled investment strategies.

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Regulatory Evolution –

Mr Amit Vashisht and Mr Chirag Thakkar

Mr Vashisht emphasized that ETFs are tightly regulated by SEBI, with mandatory physical backing and full insurance coverage. Mr Thakkar, representing a private platform, acknowledged the lack of formal regulation for digital silver companies but explained how they maintain voluntary transparency, including vault inspections and robust client disclosures.

Both agreed that a formal framework for digital silver is needed and could strengthen investor confidence further.

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Investor Trends and Demand Outlook –

Mr Navneet Damani

Mr Damani highlighted that retail interest is accelerating, especially through micro (1 kg) and mini (5 kg) contracts. Wealth advisors are now recommending 5–10% portfolio allocation to silver. He also noted that institutional investors are increasingly engaging in arbitrage, with steady 9–10% annual returns through structured commodity strategies.

Future Outlook – All Speakers

Looking ahead, Mr Sajeja projected continued growth in industrial demand, especially from the photovoltaic and defence sectors (e.g., radar, missile systems), driven by multipolar geopolitical shifts. He likened this transformation to how LNG revolutionized the natural gas market, offering price stability and long-term investor engagement.

During the audience Q&A, Mr Thakkar observed that digital investors are more resilient, rarely panic-selling during price dips. He also suggested that high gold prices might shift festive demand toward silver.

On silver monetization, both Mr Thakkar and Mr Vashisht felt it remains premature due to verification and infrastructure challenges, though silver ETFs offer a more practical alternative for now.

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Conclusion by Mr Johnson Lewis

In closing, Mr Johnson Lewis summarized the key takeaways:

- Silver is gaining recognition as a standalone investment asset, not just a proxy for gold.
- Digital platforms and ETFs are unlocking new investor segments, especially millennials and Gen Z.
- Regulatory evolution and ecosystem-wide collaboration will be vital for sustaining momentum.

He concluded on a high note:

“If gold is tradition, silver is innovation.”



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Session 4

Silver in Industrial Applications



Mr Murli Nikam, Modison Ltd, **Dr Shiwani Pareek**, Adani Solar
Dr Trevor Keel, The Silver Institute, **Mr Ankur Goyal**, MMTC PAMP India Pvt Ltd

Mr Ankur Goyal outlined the broader landscape of silver demand, stating that global silver demand stands at approximately 38,000 tons per year, of which India imports around 7,000 tons. The majority of this goes into the jewellery and investment segments, including silver coins. However, he stressed that industrial demand—currently a smaller share—is poised to grow substantially, especially with solar power leading the way. Referencing India’s renewable energy ambitions, he noted Prime Minister Narendra Modi’s vision of achieving 30 GW of solar power and invited Dr. Shivani Pareek to elaborate on solar’s growing demand for silver. Mr Goyal also listed other industrial sectors using silver extensively, such as automobiles, electronics, medicine, water purification, cloud seeding, photography, and encouraged Dr. Trevor Keel to touch upon silver’s antibacterial and antimicrobial properties.

He concluded his opening by pointing to the sharp rise in silver prices, highlighting that from \$20–24/oz in 2020, silver had reached \$33–34/oz in 2025, setting the tone for a session focused on innovation, industrial demand, and managing market volatility.



Dr Trevor Keel
The Silver Institute

Dr Trevor Keel began by commending the organizers and underscoring the importance of the newly released Silver Survey, particularly its insights into industrial silver demand. He shared that in 2024, global industrial demand reached 680 million ounces, close to 60% of total silver demand—a historic high. He emphasized silver’s unique identity as both an industrial and a precious metal, playing vital roles across industries.

He warned that while rising silver prices may please investors, they present challenges for manufacturers, especially in silver-intensive sectors like solar. Cost pressures could drive material substitution or thrift practices. Drawing parallels with gold’s declining use in bonding wire, Dr Keel urged the industry to monitor this trend in silver applications closely.

Nevertheless, silver’s irreplaceable properties—electrical conductivity, antimicrobial strength, and catalytic potential—ensure its sustained relevance. He highlighted ongoing R&D breakthroughs, particularly in coatings, catalysts, and advanced electronics, positioning silver as a metal of the future despite price pressures.

Dr Shivani Pareek – Adani Solar

Dr Shivani Pareek provided a detailed overview of India's solar manufacturing ecosystem, showcasing Adani's fully integrated solar facility in Mundra. The plant manufactures everything from ingots and wafers to solar cells and modules, with current capacity at 4 GW, set to expand to 10+ GW by 2026.

Focusing on silver paste, she explained its crucial role in the metallization process during solar cell manufacturing. Silver is used to form electrical contacts via “fingers” with paste compositions consisting of 90–92% silver powder, glass frit, and organic binders. Dr Pareek highlighted that TopCon technology, which is increasingly favoured over PERC, consumes nearly twice as much silver.

Despite global transitions away from PERC, she noted that India continues to use it due to infrastructure and cost considerations. She projected that India's silver paste demand could grow tenfold within 3–4 years as domestic manufacturing expands and export potential rises.



Dr Shivani Pareek
Adani Solar



Mr Murli Nikam
Modison Ltd

Mr Murli Nikam – Modison Ltd

Mr Murli Nikam shifted focus to silver's role in electrical contacts, where Modison is a leader. The company supplies contacts made from various silver alloys such as silver-nickel, silver-cadmium oxide, silver-graphite, and silver-tin oxide, covering low, medium, and high-voltage applications.

He noted that 36% of global industrial silver demand is from electrical and electronics sectors, yet India contributes just 10%, highlighting a vast opportunity. Silver's superior conductivity and resistance to arcing and oxidation make it ideal for electrical contacts used in relays, circuit breakers, EVs, smart appliances, and power infrastructure.

Panel Discussion and Q&A

The panel explored opportunities from global trade shifts, including U.S.–China tensions. Mr Murli Nikam noted that Indian exporters face pricing challenges but may benefit if companies adopt a job-work model, where silver is imported, processed into contacts, and re-exported.

On recycling, all speakers emphasized its rising importance. Dr Keel and Dr Pareek noted that end-of-life solar panels, many now reaching the recycling phase, contain recoverable silver. However, commercially viable recycling remains a technological challenge. Dr Pareek cited startups exploring local recycling, but emphasized the need for purity standards and better infrastructure.

Mr Goyal encouraged Indian refiners and technologists to collaborate in forming a consortium for silver powder manufacturing, aiming to reduce reliance on imports and capture emerging opportunities in green energy and electronics.

Session 5

Update on Research in Silver at Leading Institutions of India



**Prof Nikhil Dhawan, IIT Roorkee, Dr Amol A Kulkarni, CSIR-NCL,
Mr Srivatsava Ganapathy, Eventell Global Advisory Pvt Ltd**

Session Objective

The session served as a unique engagement between industry and academic institutions, spotlighting recent innovations and research in silver applications. It was designed not as a traditional panel, but as a dialogue platform where industrial stakeholders could explore opportunities for collaboration with research institutions.



Dr. Amol A. Kulkarni
Highlights from CSIR-NCL

Dr Amol A. Kulkarni – Highlights from CSIR-NCL

Focus Area: Development of silver-based conducting inks and nanomaterials.

- **Conducting Inks Overview:**
Dr. Kulkarni introduced various types of conducting inks—metal-based (silver, copper, gold), carbon-based (graphene), and polymer-based—and emphasized their role in flexible, printable electronics, especially in sectors like solar, healthcare, and defense.
- **Silver Nanowires Innovation:**
Highlighted the lab's breakthrough in synthesizing high-purity, cost-efficient silver nanowires with 98% conversion efficiency and reduced reaction time to just 5 minutes. These nanowires enable transparent, printable, conductive films for electronics and smart surfaces.

PROCEEDINGS OF INDIA SILVER CONFERENCE, 25-27 APRIL 2025

- **Cost-Effective Manufacturing:**
CSIR-NCL has brought down silver nanowire production costs from \$140/g to \$8.7/g, enhancing India's potential for import substitution in inks for electronics.
- **New Applications:**
Showcased work on silver-coated silica and carbon for reduced silver usage, and platinum-on-carbon catalysts for hydrogen fuel cells—demonstrating broader potential beyond traditional silver use.

IIT Roorkee Highlights – Prof Nikhil Dhawan:

Focus Area: Recovery of silver, gold, and other precious metals from electronic waste (e-waste).

- **Metal Associations & Challenges:**
Explained how silver and gold recovery is complicated by their alloying with base metals like copper and tin. Emphasized the need for selective, component-wise extraction rather than bulk smelting.
- **Advanced Recovery Methods:**
Presented lab-developed processes for recovering metals from RAMs, capacitors, ICs, solar panels, and keyboards. Notably, 100 grams of gold and 300 grams of silver can be recovered from 1 ton of printed circuit boards (PCBs).
- **Selective Recycling Innovation:**
Shared use of AI and robotics for component-level sorting and processing. Processes avoid smelting, reduce pollution, and improve yield and selectivity of precious metal recovery.
- **Commercial Viability:**
The institute provides end-to-end process development, patent licensing, and supports lab-to-plant scale-up. Their solutions are economically viable and aligned with sustainability goals.



Prof Nikhil Dhawan

Engagement Models & Licensing

Both institutions detailed pathways for industry collaboration:

- **CSIR-NCL:** Offers tech transfer on exclusive or non-exclusive terms, with full documentation, pilot demonstrations, and commissioning support.
- **IIT Roorkee:** Supports consultancy for process development and improvement, with patents available for commercial adoption.

PROCEEDINGS OF INDIA SILVER CONFERENCE, 25-27 APRIL 2025

Audience Q&A Highlights

1. Q: Can industries engage with IIT Roorkee for customizing these technologies?

A (Prof. Dhawan): Yes, we offer complete process know-how through consultancy projects. We also support lab-to-pilot scale transition and help calculate material yields.

2. Q: Are your patented processes commercially viable?

A: Yes, we've assessed economics and confirmed positive cash flows for several processes. The technology is ready for scale-up.

3. Q: How does CSIR-NCL engage with industries and handle licensing?

A (Dr. Kulkarni): Through demonstrations, handover of detailed technology documents, and commissioning support. Licensing can be exclusive or non-exclusive, depending on funding and project origin.

4. Q: Do these technologies comply with pollution and environmental regulations?

A (Both Speakers): Yes, environmental compliance is embedded into process design. We provide end-to-end technology including effluent handling.

5. Q: How is licensing cost determined at CSIR-NCL?

A (Dr. Kulkarni): Based on company's market size, growth plans, and affordability. As a public institute, our goal is wide adoption—not profit maximization.

6. Q: How do you manage technology pricing for Indian companies, considering expectations of lower pricing?

A: We're flexible and willing to discuss. Prices have already dropped significantly due to our innovations. For Indian manufacturers, we aim to encourage adoption, not block it due to cost.

7. Q: For Prof. Dhawan – With decreasing gold content in electronics, is your method still viable?

A: Yes, because we do component-level targeting. By knowing where gold/silver resides (e.g., ICs, MLCCs), we use customized extraction routes without bulk smelting.

8. Q: What about sourcing of e-waste? Is collection a bottleneck?

A: Yes. Lack of buyback programs and public awareness are challenges. Standardization of e-waste channels and policy support are needed for scale.

Closing Remarks

- Mr. Srivatsava Ganapathy thanked both researchers and encouraged attendees to meet them personally for one-on-one discussions, which were arranged at allocated tables after the session.
- The session concluded with a felicitation of both speakers and a reminder of the need for industry-academia collaboration to accelerate innovation in silver-related technologies.



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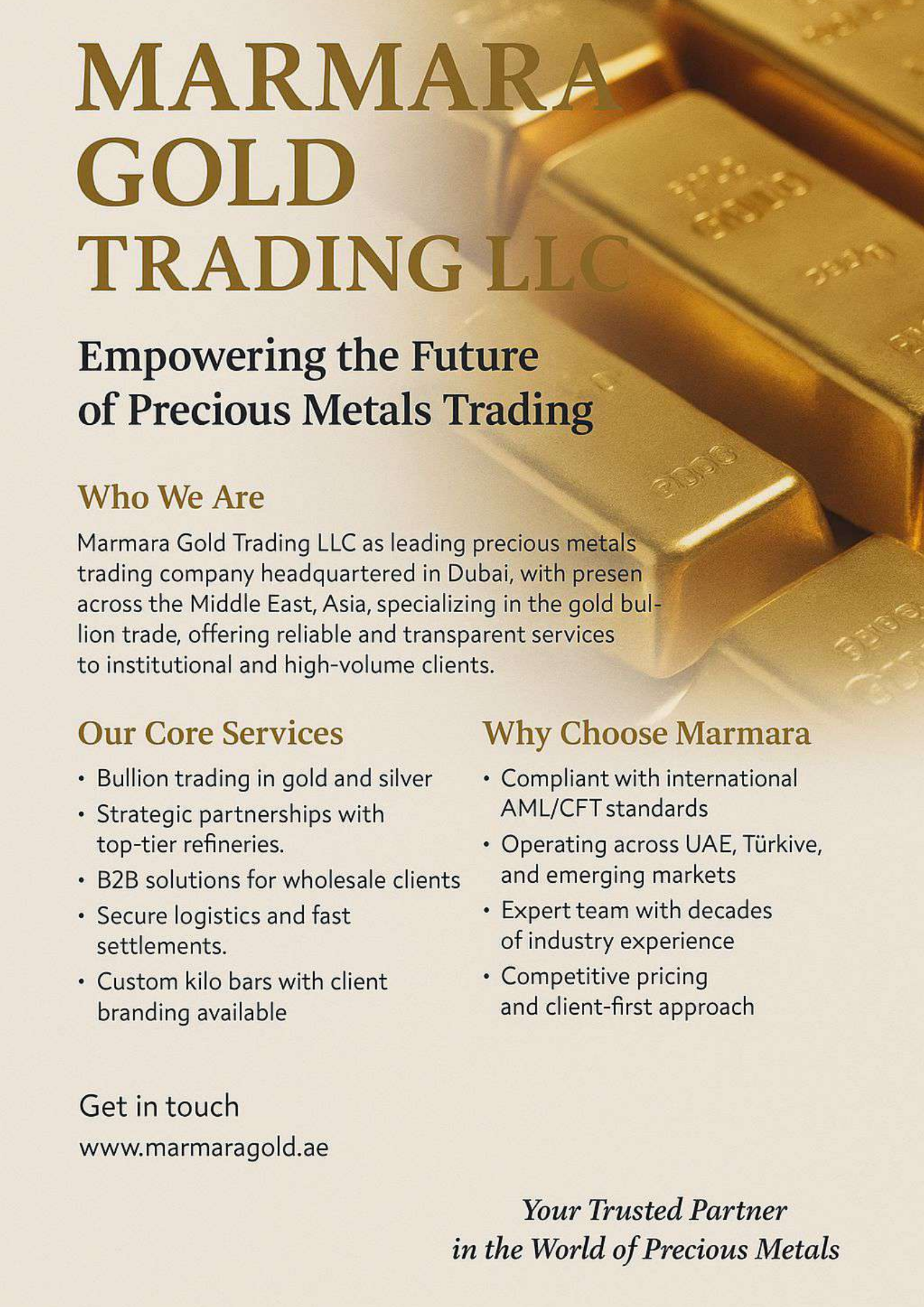








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Sustainability

Driven by growing environmental consciousness and ethical consumerism, the commodities industry is undergoing a fundamental shift towards sustainable sourcing, emphasizing environmental stewardship and social responsibility. This includes integrating eco-friendly extraction and production, fostering community engagement, and implementing transparent supply chain measures to reduce negative impacts and ensure a resilient, ethical future.

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- Silver 1 kg Bars have seen a successful deliveries of **5,00,080 Kgs** of Silver Kilo bars

Recent All Time Highs:

- Bullion Options registered all time high turnover of Rs. 4,23,399 crores on April 30, 2025
- Gold (1 kg) Options recorded all time high turnover of Rs. 4,32,687 crores, volume of 433 MT on April 30, 2025
- Gold Mini (100 gram) Options registered all time high turnover of Rs. 53,952 cr. and volume of 59,791 kg on February 24, 2025 and highest open interest of 7,406 Kgs on April 23, 2025
- Silver (30 kg) Options registered all time high turnover of Rs. 72,089 crores and volume of 7,377 MT on April 24, 2025
- Silver Mini (5 kg) Options recorded all time high turnover of Rs. 16,260 crores, volume of 1,779 MT on November 19, 2024 and highest open interest of 233 MT witnessed on November 19, 2024

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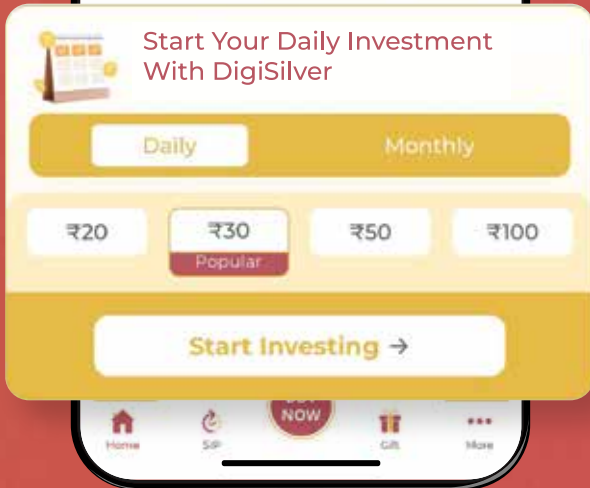
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