

The logo for G50 Corp, featuring the letters 'G50Corp' in a stylized, grey, sans-serif font. The background of the entire slide is a dark space scene with a view of Earth from space, showing city lights and a network of glowing blue lines and dots representing a global communication or data network.

G50Corp

GALLIUM

/LIFEBLOOD OF THE MODERN WORLD

MID YEAR UPDATE
JUNE 2024

ASX:G50

IMPORTANT NOTICES

DISCLAIMER

This presentation and information contained in it is being provided to shareholders and investors for information purposes only. Shareholders and investors should undertake their own evaluation of the information and otherwise contact their professional advisers in the event they wish to buy or sell shares. To the extent the information contains any projections the Company has provided the projections based upon the information available to the Company. The Company does not make any representations as to the accuracy or otherwise of that third party information.

COMPETENT PERSON STATEMENT

The information in this report that relates to Exploration Results is based on information compiled by Bernard Rowe, a Competent Person who is a Member of the Australian Institute of Geoscientists. Bernard Rowe is a shareholder and Non-Executive Director of G50 Corp Limited (previously Gold 50 Limited). Mr Rowe has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Bernard Rowe consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this Presentation that relates to previous mining and/or exploration work is based on information included in the Company's Prospectus dated 21 May 2021. The Company confirms that it is not aware of any new information or data that materially affects the information included within the Prospectus dated 21 May 2021.

FORWARD LOOKING AND CAUTIONARY STATEMENTS

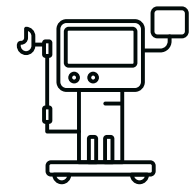
This Presentation contains "forward-looking information" that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the pre-feasibility and feasibility studies, the Company's business strategy, plan, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral resources, results of exploration and relations expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

Forward-looking information is developed based on assumptions about such risks, uncertainties and other factors set out herein, including but not limited to general business, economic, competitive, political and social uncertainties; the actual results of current exploration activities; conclusions of economic evaluations; changes in project parameters as plans continue to be refined; future prices of lithium and other metals; possible variations of ore grade or recovery rates; failure of plant, equipment or processes to operate as anticipated; accident, labour disputes and other risks of the mining industry; and delays in obtaining governmental approvals or financing or in the completion of development or construction activities. This list is not exhaustive of the factors that may affect our forward-looking information. These and other factors should be considered carefully, and readers should not place undue reliance on such forward-looking information. The Company disclaims any intent or obligations to or revise any forward-looking statements whether as a result of new information, estimates, or options, future events or results or otherwise, unless required to do so by law.

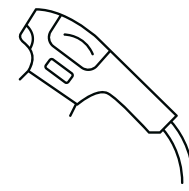
Statements regarding plans with respect to the Company's mineral properties may contain forward-looking statements in relation to future matters that can be only made where the Company has a reasonable basis for making those statements. Competent Person Statements regarding plans with respect to the Company's mineral properties are forward looking statements. There can be no assurance that the Company's plans for development of its mineral properties will proceed as expected. There can be no assurance that the Company will be able to confirm the presence of mineral deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of the Company's mineral properties.

THE GALLIUM OPPORTUNITY

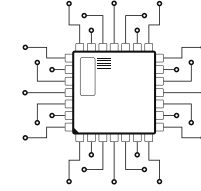
GALLIUM APPLICATIONS



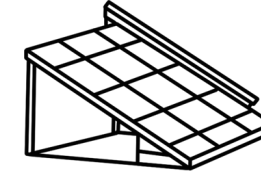
Medical Equipment



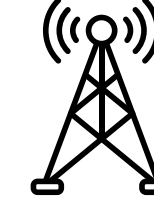
Laser Diodes



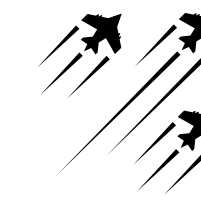
Integrated Circuits



Solar Cells



Telecommunications



Defense

GALLIUM USES¹



Element Ga and is a soft, silvery metal, and Elemental gallium is a liquid at temperatures greater than 29.76C (85.57F) (slightly above room temperature)



Gallium Nitride (GaN) is an important semiconductor material with high critical field strength and electron mobility.

Advantages:

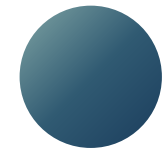
- Higher switching speed and lower ON-resistance.
- GaN contributes to lower power consumption, higher output and reduction in size of equipment
- Applications in light-emitting diodes (**LEDs**), **laser diodes**, **power amplifiers**, **data centres** and **solar cells**.

Effective 1 August 2023 – Gallium and Germanium, along with their chemical compounds, are **now subject to China export controls**



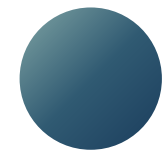
GALLIUM

“THE” STRATEGIC MINERAL²



STRATEGIC VULNERABILITY

A 2022 analysis by experts from the U.S. Geological Survey (USGS) found that a 30 percent supply disruption of gallium could cause a \$602 billion decline in U.S. economic output or 2.1 percent of gross domestic product (GDP)



ADVANCED MILITARY APPLICATIONS

- 2019 Raytheon was awarded a \$383 million contract to build the first six GaN-enabled active electronically scanned array (AESA) radars for the U.S. Army’s Lower-Tier Air and Missile Defense Sensor (LTAMDS).
- Northrop Grumman is developing the AN/APG-85, an advanced GaN-backed AESA radar for the F-35 Lightning II Joint Strike Fighter
- U.S. Marine Corps has deployed Northrup’s AN/TPS-80 ground-based radar system since 2019.
- In 2022 the U.S. Department of Defense (DOD) awarded Raytheon a \$3.2 billion contract to equip up to 31 vessels with GaN-powered AN/SPY-6 system radars.

Critical Minerals Commodity Supply Risk Assessment



Note: The disruption potential (horizontal axis), economic vulnerability (vertical axis), and trade exposure (point size) are the inputs used by the USGS to calculate the overall supply risk.

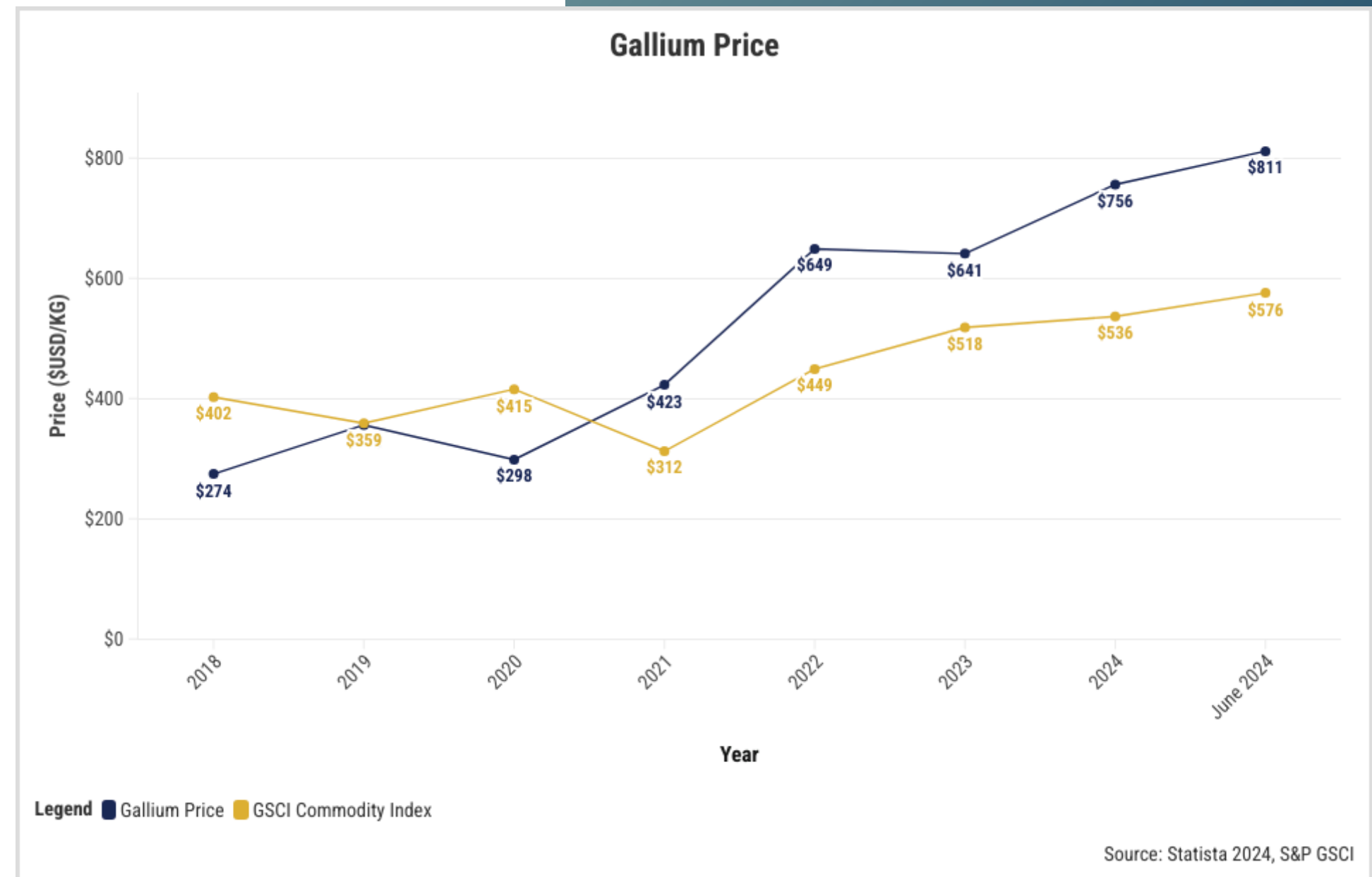
Source: Adapted from Nedal T. Nassar and Steven M. Fortier, *Methodology and Technical Input for the 2021 Review and Revision of the U.S. Critical Minerals List*, Open-File Report 2021-1045 (Reston, VA: 2021, USGS), <https://doi.org/10.3133/ofr20211045>.

GALLIUM PRICES



MARKET FACTORS

- Chinese export controls began in August 2023
- Gallium prices already moving higher leading into controls
- Despite COVID related shutdowns and restrictions, Gallium price has held steady and increased during 2020 - 2022
- Price inelastic demand enters the market in 2023
- Tight bauxite markets in 2024 further restraining supply
- **Gallium is +196% v CMDI Basket +43%**



GLOBAL SEMICONDUCTOR MARKET



KEY DEMAND DRIVERS

- 5G telecommunications
- Artificial Intelligence
- Internet of Things
- Self-Driving Cars

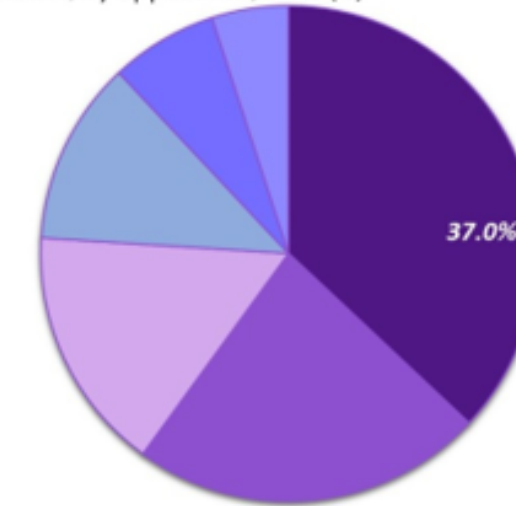


KEY TRENDS

- Increasing Demand for high-performance semiconductor devices
- **New Semiconductor Technology** - New semiconductor technologies, such as 3D NAND flash and gallium nitride (GaN), are emerging to meet the needs of new applications. **These technologies offer improved performance, power efficiency, and cost-effectiveness over traditional semiconductor technologies.**
- Security
- Sustainability

Global Semiconductor Market

Share, by Application, 2022 (%)



- Telecommunications
- Data Processing
- Consumer Electronics
- Industrial
- Automotive
- Other Applications

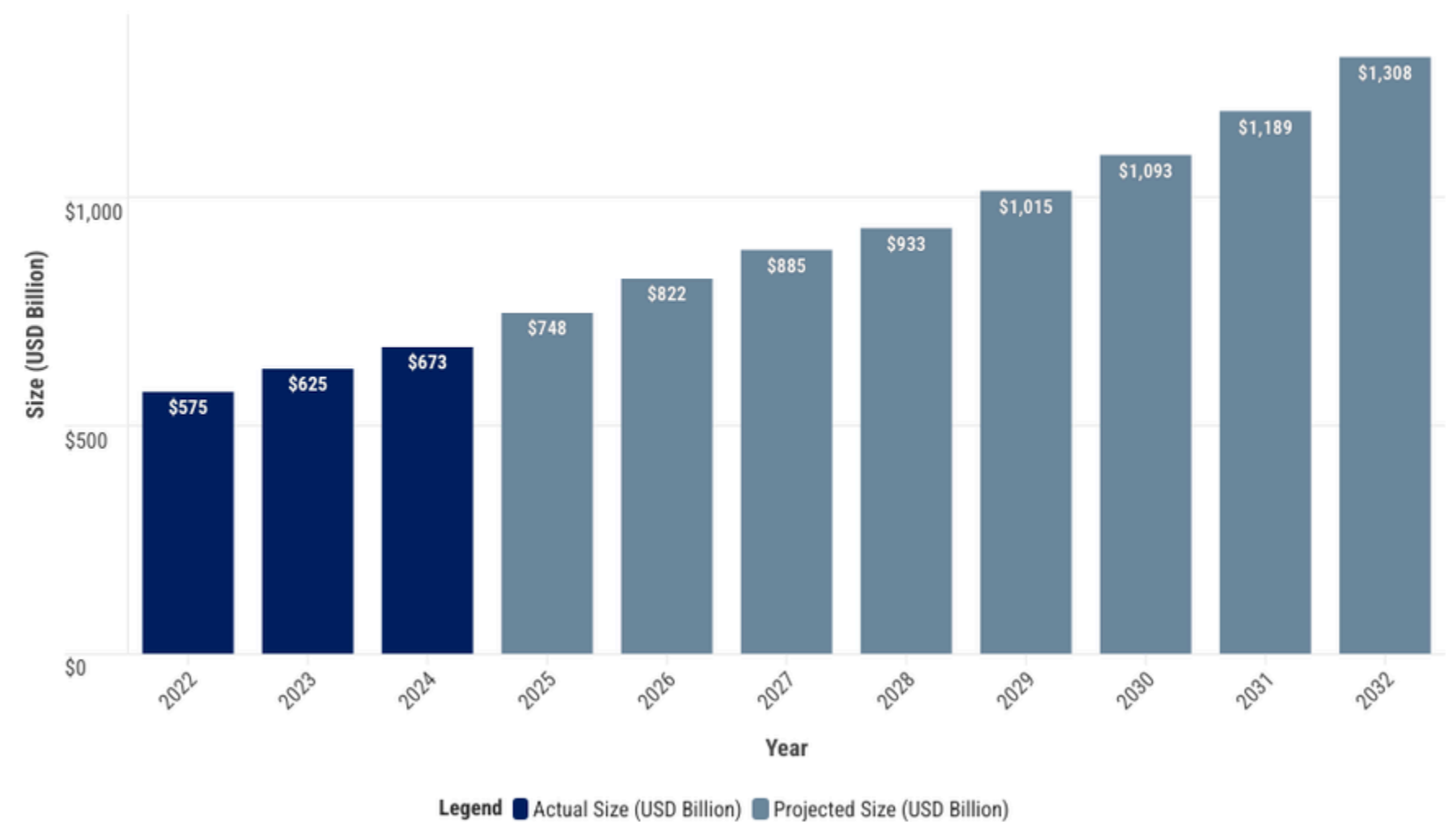
market.us
 THE BEST GROUP FOR THE REPORTS

574.6
 Total Market Size
 (USD Billion), 2022

8.8%
 CAGR
 2022-2032

\$

Global Semi-Conductor Market



Source: market.us

GALLIUM NITRIDE

MARKET ADOPTION

DATA CENTRES

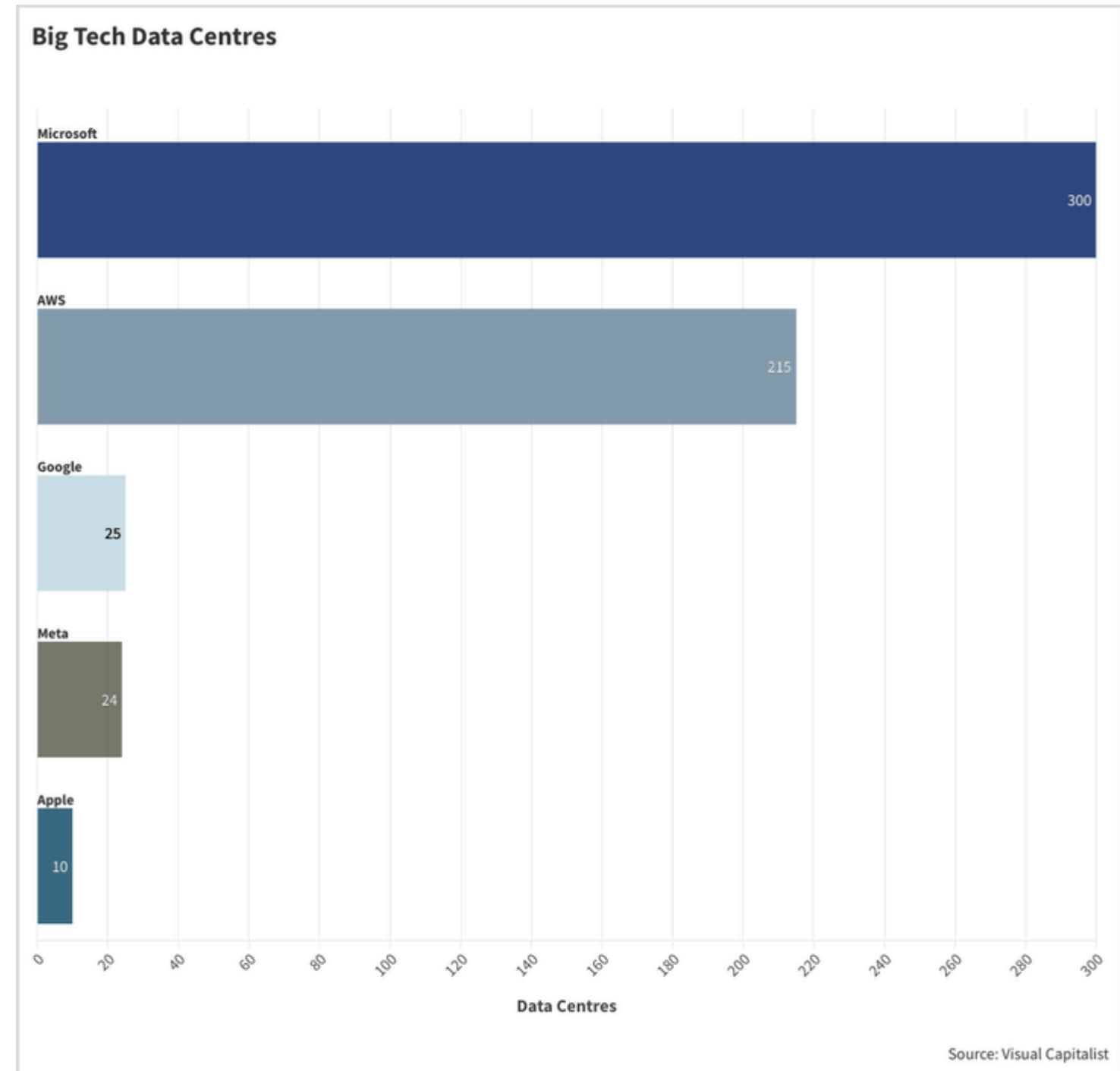
- Demand driven by advances in AI, machine learning, 5G networks and autonomous transportation
- Currently **circa 8 million data centres handle global data load for current data driven activities requiring 450 terawatt hours of electricity**
- The Gorges Dam in China has a capacity of 22,500MW and produces 93.5 TWh per year

POTENTIAL SAVINGS

For a typical major **Tier One Data Centre Operator** assuming **6 smaller** and efficient GaN-based power supplies can perform the work of **10 Si-based units**.

Servers p/rack go from **30 to 34**. (Source: GaN Systems)

- Operational savings from energy: U\$5,600 / server rack saves **U\$241 million pa**
- Additional revenue from greater server density: U\$5,100 / server rack adds **U\$1.1 bn pa**
- Lower capex from postponing construction of further data centers: **\$840 million** in CAPEX saving



AI: Navitas Delivers 3x Power



Train GPT-MoE-1.8T in 90 Days

Blackwell GB200 NVL72
2000 GPUs | 4MW

Up to 120 kW per rack



AI Power Roadmap

3,200W - 4,500W - 10,000W



 **Navitas**
Titanium Plus

- 300% increase in power w/in 18 mo with GaN & SiC
- Over 30 customer projects in development
- 3 major wins at tier 1 power supply customers
- Multiple \$ millions expected 2H24; \$10-20M in '25

End Customer Targets



GALLIUM NITRIDE MARKET ADOPTION



ELECTRIC VEHICLE MARKET

Yole Group believe the medium to long term growth in GaN use will be driven by emerging needs in **EV's (bidirectional onboard charging)** and hybrid **EV's (DC/DC conversion in mild HEV's)**

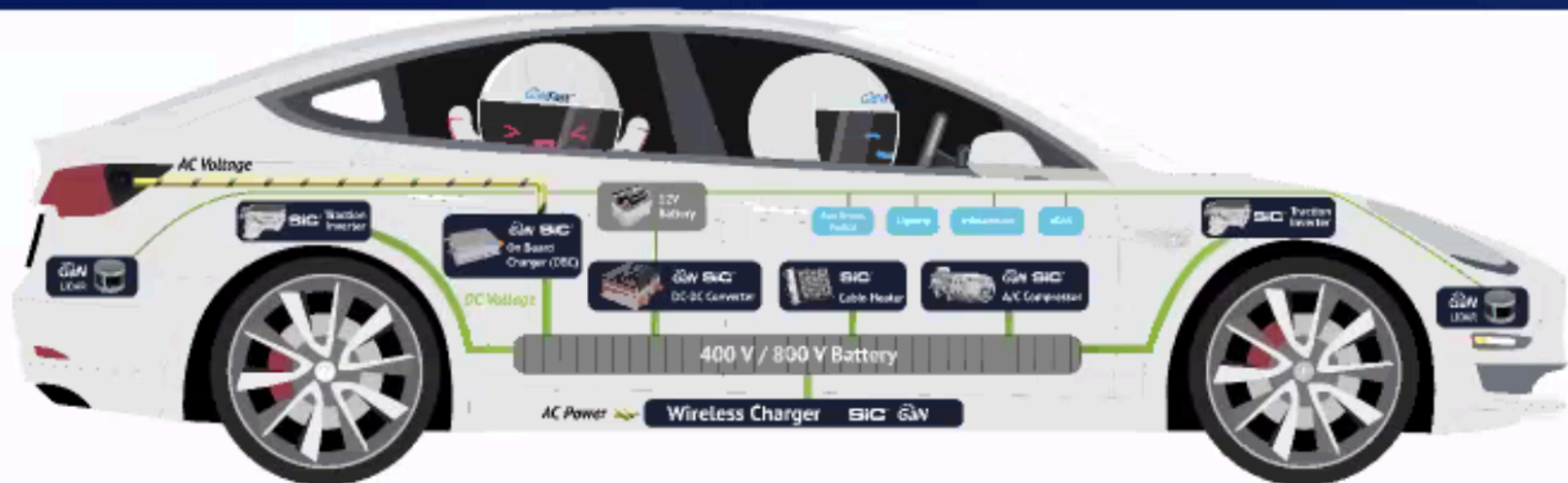
Integrated Device Manufacturers (IDM'S)

- **Power Integrations, Infineon, STMicroelectronics and ON Semiconductor**

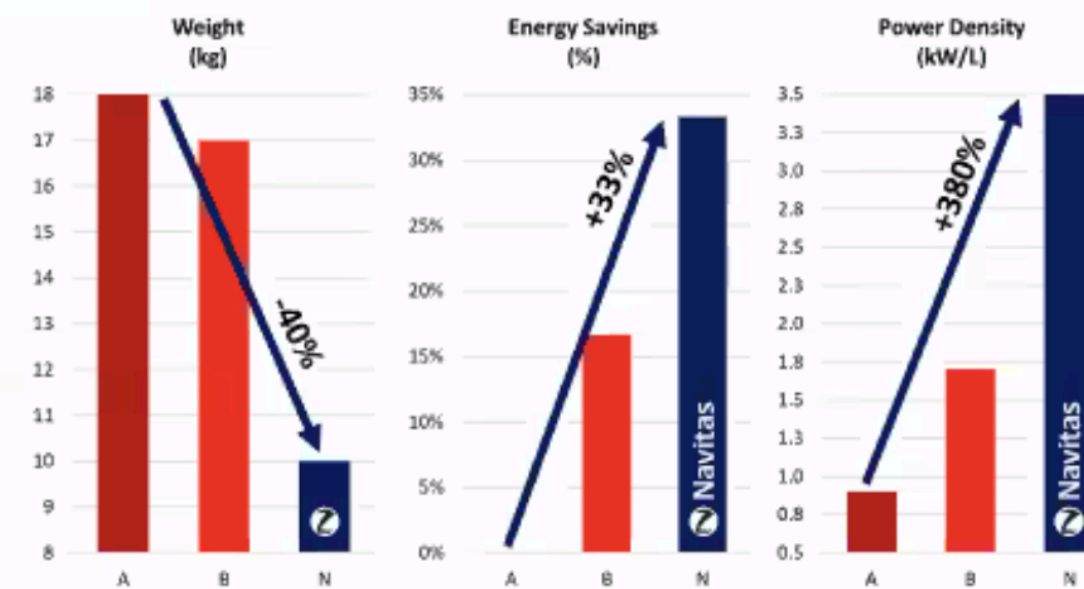
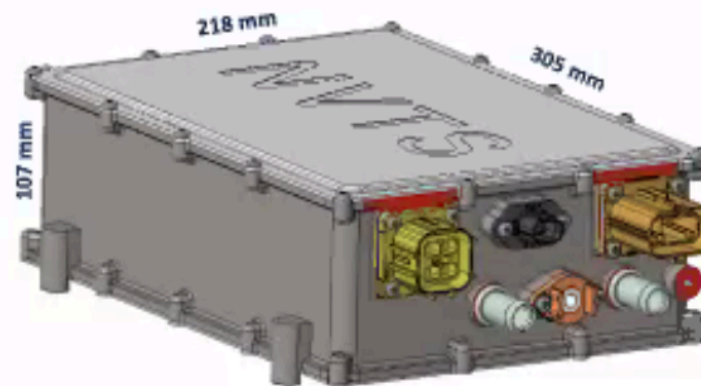
GaN devices are already being produced by fabless and foundry pairings:

- **Navitas-TSMC, GaN Systems-TSMC and EPC-Episil.**

Driving EV: Customer Pipeline +50% to \$600M



22 kW, OBC 3-in-1



- 400V and 800V battery solutions; GaN + SiC
- Up to 3x smaller, 40% lighter, 30% energy savings
- 160 customer projects in development
- 10's of \$ millions new business in '25



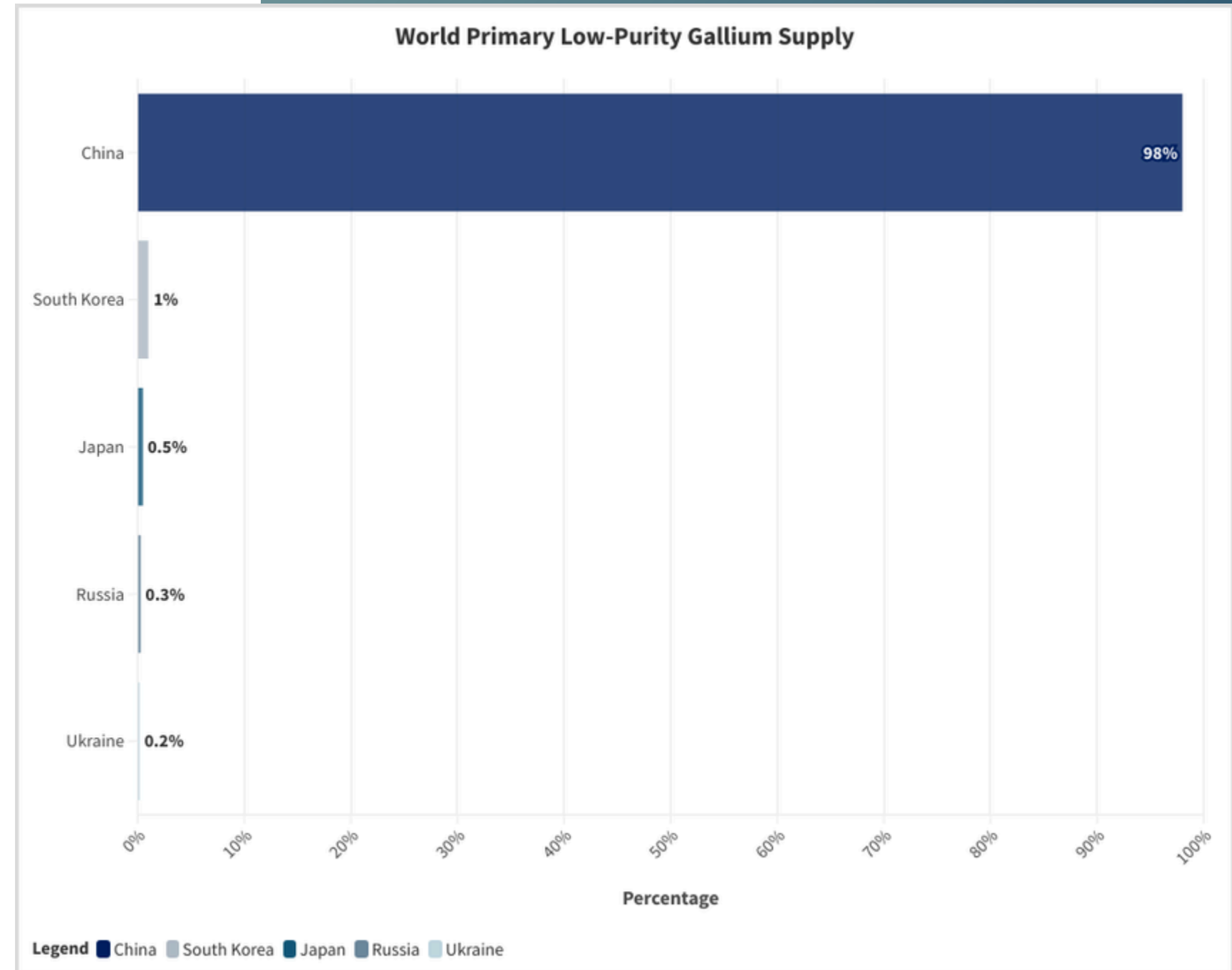
A US PERSPECTIVE

US IMPORTS

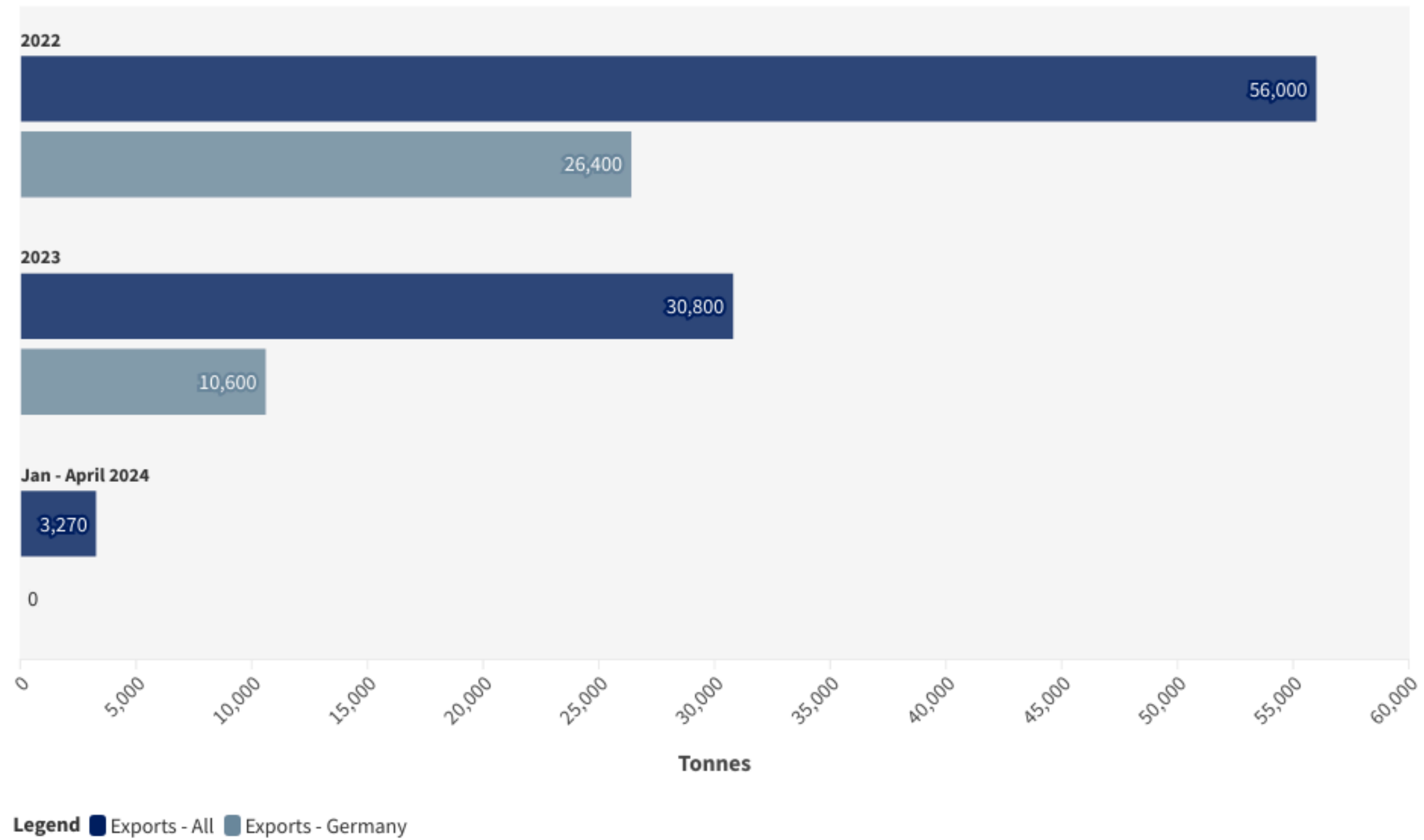
- Circa 77% of the gallium consumed in the United States was in GaAs, GaN, and gallium phosphide wafers
- Uses of Integrated Circuit's included defense applications, high-performance computers, and telecommunications equipment
- **No US Government Stockpiles**

WORLD RESOURCES / SUPPLY

- Some US domestic zinc ores contain up to 50 parts per million gallium and could be a significant resource, although no gallium is currently recovered from domestic ores (US)
- However, less than 10% of the gallium in bauxite and zinc resources is potentially recoverable
- **China is the leading global producer of low-purity gallium**
- Globally, most of primary Gallium is recovered as a by product of processing bauxite and the remainder produced from zinc-processing residues
- **No domestic primary (low-purity, unrefined) Gallium has been recovered in the US since 1987**



China Gallium Exports



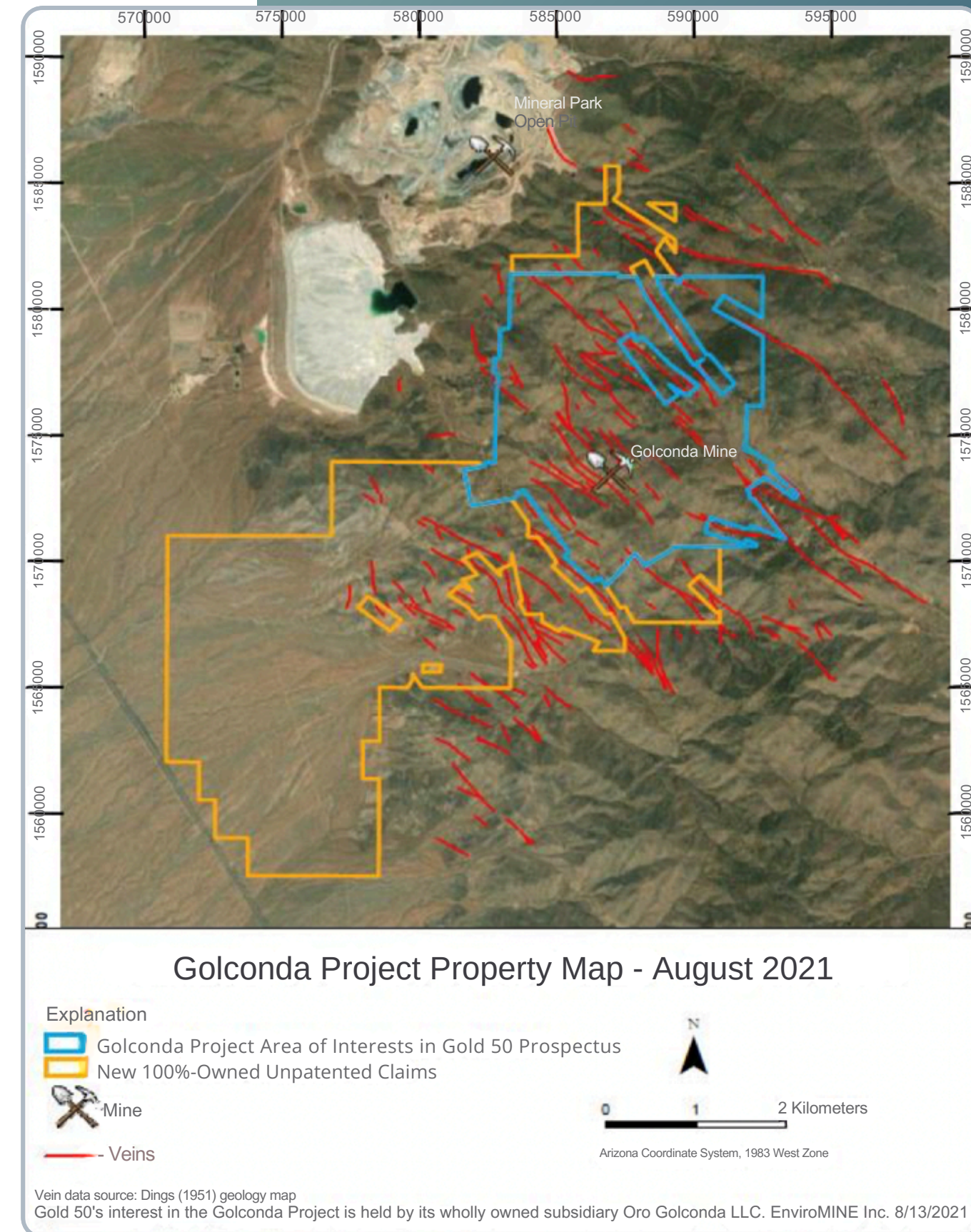
GOLCONDA, AZ

VAST EXPLORATION POTENTIAL TO BE TESTED

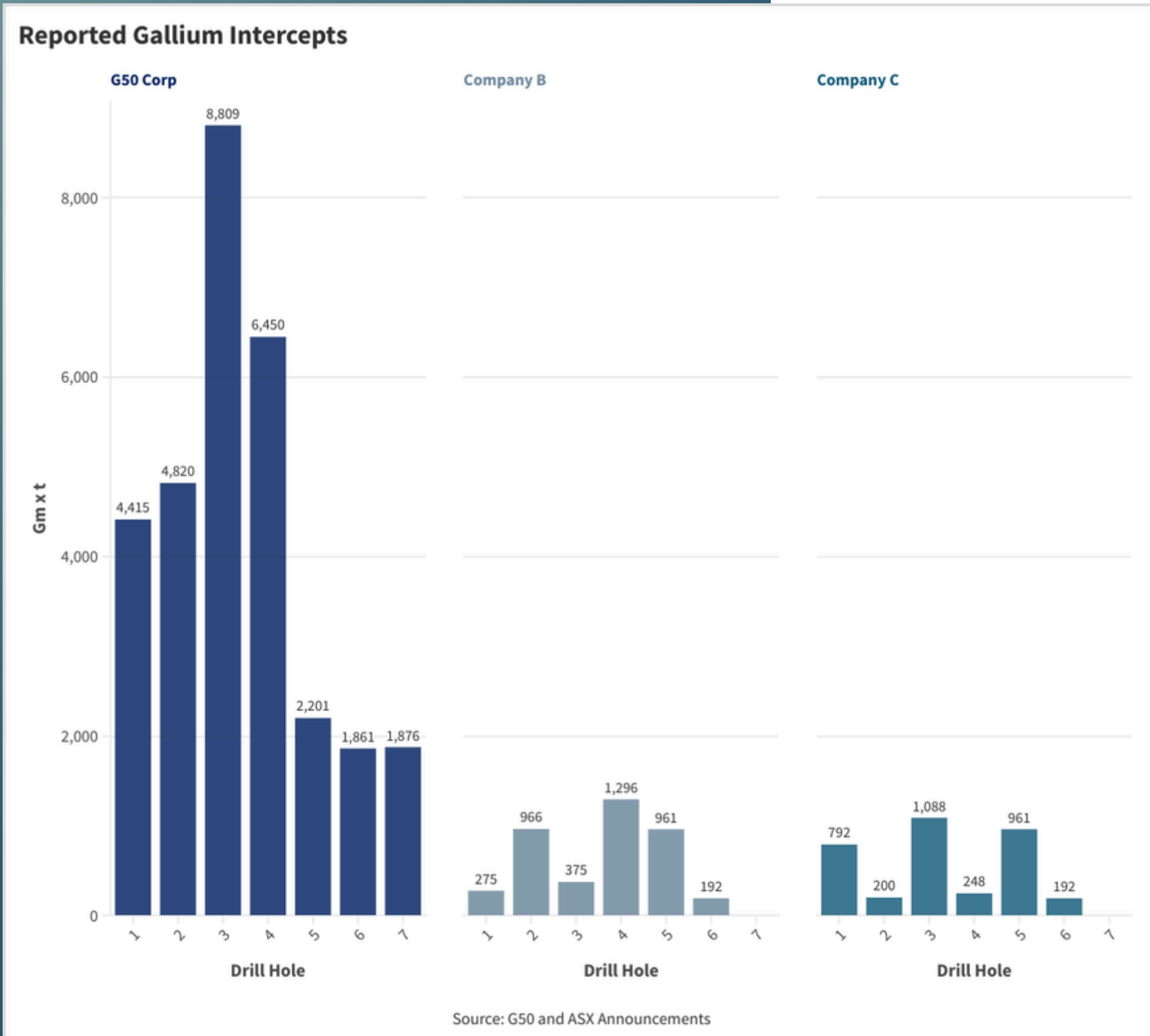


MODERN EXPLORATION, HIDDEN GEMS

- District scale property adjacent to a major porphyry copper deposit
- Multiple vein structures (over 10km), with known Au-Ag mineralization
- Open along strike and at depth including:
 - 2km long Tub-Golden Eagle Vein (priority drill target)
 - 30-130m wide zones of alteration, fracturing, brecciation and veining



GALLIUM “HALO” DISCOVERY



GALLIUM MINERALIZATION

- Wide-spaced drilling at the Golconda Project has intersected **Gallium mineralization in 11 of 14 holes** of G50’s recent diamond and RC drilling program
- G50’s initial drilling program targeted varied structural controls for mineralisation and confirmed particular structures strongly correlate with the high gold grades highlighted by the discovery in hole GRC06. *(See ASX Announcement “35m at 5.2g/t Gold, Discovery at Golconda”, 19 June 2023)*
- Multi-element assaying of our maiden drilling program was critical due to the nature of the polymetallic mineralised system

GEOLOGICAL MODEL EVOLVED

- Recent work has demonstrated that the **base-metal sulfide deposits formed in porphyry Cu/Mo** systems have a great resource potential for **critical metals such as Re, In, Ge, Ga, Se, and Te**. Previous studies have predominantly focused on the genesis of the Pb–Zn(Ag) polymetallic veins. **The spatial distribution of Cd, Ga, and In and their enrichment mechanism is poorly constrained**
- In a **magmatic-hydrothermal environment, the zones of advanced argillic alteration associated with Quartz-alunite (high sulfidation) Au-Ag deposits have the highest Ga contents (max 120 ppm)**. In these Au deposits, Ga is enriched in the zone of alunite±kaolinite alteration and depleted in the zone of quartz-rich alteration within acid-leached rocks

GOLCONDA, AZ

GEOLOGICAL MODEL EVOLVED - GALLIUM

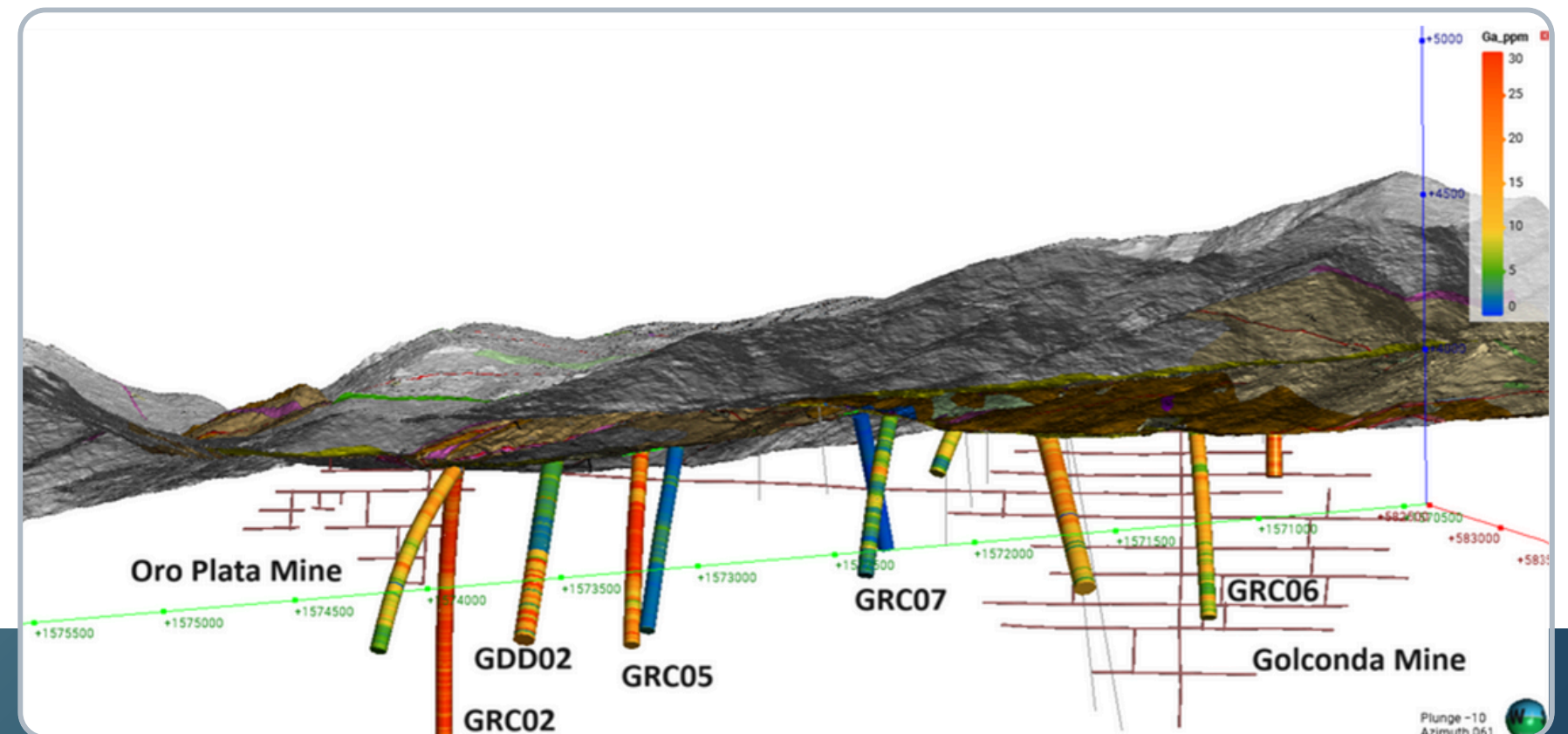


SERENDIPITY

Gallium while known to be prevalent was not an original target of the drilling program. Post drilling analysis indicated that significant Gallium is present in 11 of 14 drill holes.

Gallium grade generally increases from south to north, and the area with the greatest Gallium grade is the area of argillic alteration near the Oro Plata Mine, which is a prolific historic Gold producing mine located at the intersection of the Golconda vein and the large north-striking rhyolitic Bronco Dike.

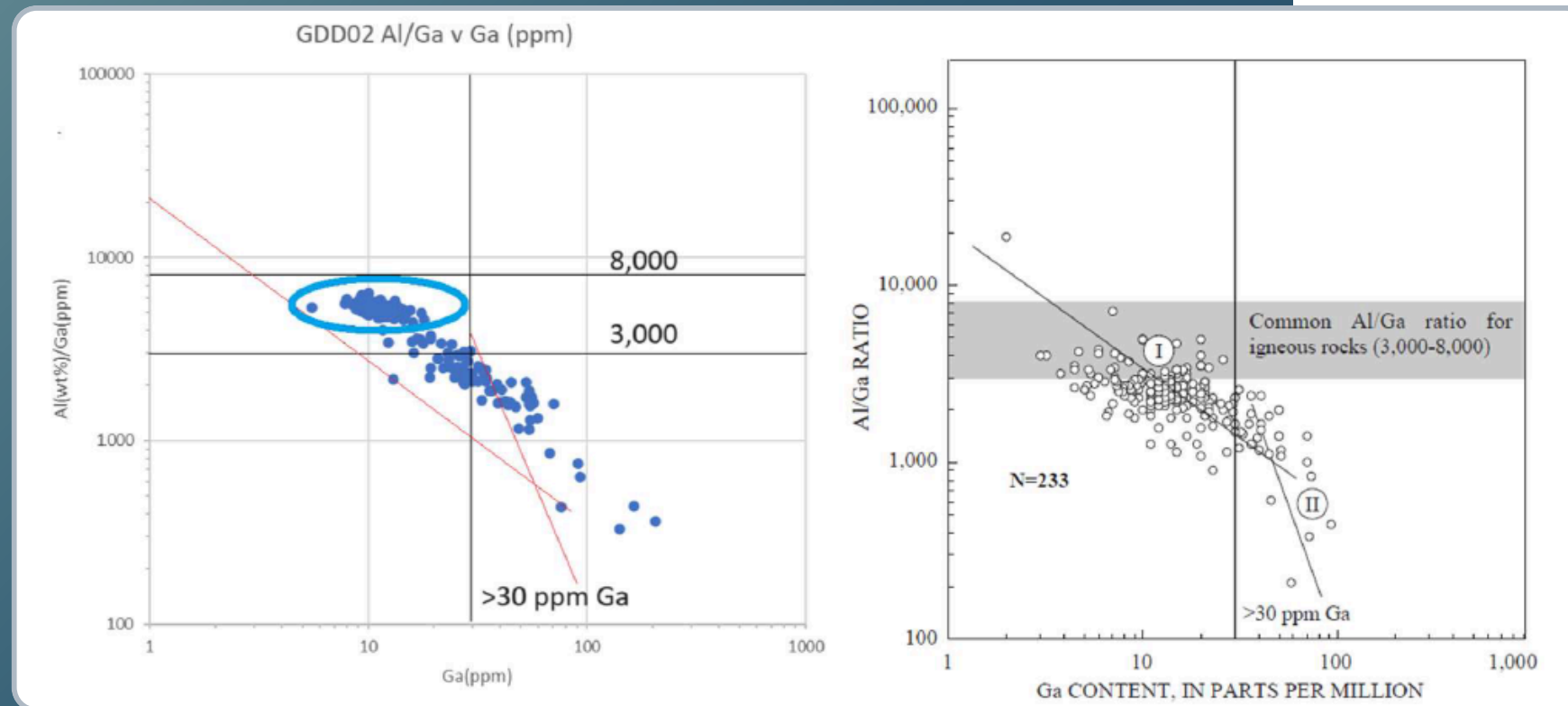
GOLCONDA GEOLOGY MODEL LOOKING NORTHEAST



- Drifts and shafts on the Golconda Vein at the Golconda and Oro Plata mines are shown for orientation.
- G50 drillholes are shown with color contours for gallium grade.
- Bright red is greater than 30 ppm gallium.

GOLCONDA, AZ

GEOLOGICAL MODEL EVOLVED - GALLIUM



Above: Al/Ga v Ga plot for Golconda drill hole GDD02 (left) and McDermitt NV (right)

INITIAL THOUGHTS

It was initially expected that Copper and/or Zinc would have strong correlations with Gallium because it is often included in Chalcopyrite and Sphalerite. **There are no such correlations.** Instead, **Gallium strongly correlates to Barium and Aluminum within argillized rock.** Core drill hole GDD02 demonstrates the preferential enrichment of Gallium in argillic altered rock. The drill hole was collared in the weakly altered Tub vein hanging wall and penetrated the Tub vein foot wall and an intersecting northeast striking fault, at approximately 463 feet downhole. In the shallow hanging wall rock, Gallium is relatively less abundant.

GDD02

Below 463 feet downhole, in argillic altered rock, the ratio of Al/Ga v Ga follows a well-defined trend between the lowest to highest Gallium grades. Values for unaltered rock in the depth interval to 463 feet are circled in blue. The **GDD02 interval 463-784 feet averages 42 ppm Gallium.** The zone I and II trend lines on the McDermitt plot are reproduced as red lines on the GDD02 plot.

SUBSTANTIAL AND HIGH GRADE

For a hydrothermal enriched Gallium occurrence, drill hole GDD02 is relatively high grade, and the Gallium grade does not drop at low Al/Ga ratios, as it does at McDermitt.

The grade at the Golconda Project thus appears to be substantial.

THE CRITICAL METAL = THE CRITICAL OPPORTUNITY

IMMENSE MARKET OPPORTUNITY



- 5G telecommunications
- Artificial Intelligence
- Internet of Things
- Self-Driving Cars

GOLCONDA, ARIZONA



- Infrastructure
- Patented Claims
- Grade x Intercepts
- Well-understood and Advanced Geological Model
- Proximity to End Users
- Strategic Location



MOAT





MARK WALLACE

MANAGING DIRECTOR



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