

"THE CHALLENGES OF THE GREEN PLANET"

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PRESIDENT & CEO
FIRST MAJESTIC SILVER



PRESIDENT BIDEN'S "GREEN NEW DEAL"



- President Biden's plan for a 100% clean energy economy by 2050 is to eliminate the United States two largest sources of planet-warming greenhouse gas pollution: internal combustion vehicles and coal burning power plants
- The creation of a "Clean Electricity Standard" a federal mandate requiring that certain percentage of electricity in the US be generated by <u>zero-carbon energy sources</u> like solar, wind and possibly nuclear power
- Proposed <u>spending of up to \$174 billion</u> to encourage the manufacturing and purchase of electric vehicles and funding the construction of up to 500,000 electric charging stations
- The plan also proposes <u>an additional \$46 billion</u> in federal programs for government agencies to buy fleets of electric vehicles





MAJOR GROWTH SECTORS SOLAR & EV'S



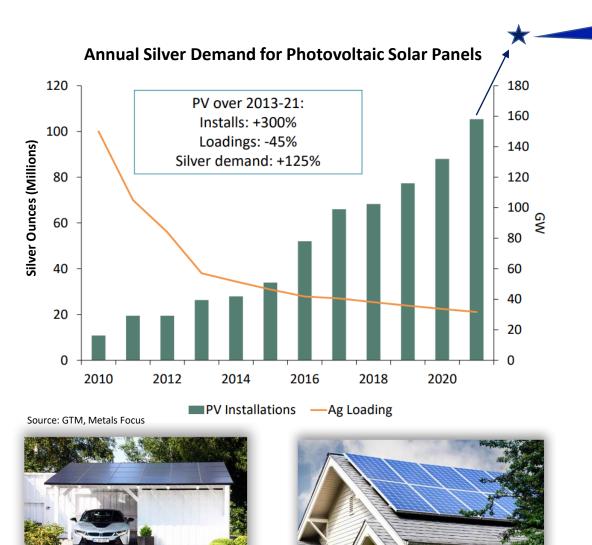
- Solar and wind currently supply ~2.5% of the electricity to the national grid
- President Biden has talked about increasing this power supply to ~45% through solar and wind
- Even achieving 20% of power supply would require **approximately 1.0 Billion** ounces of silver!
- In 2021, 79 million automobiles were manufactured (9.2 million of these were manufactured in the US) and **only 6.5 million of them were electric**
- Electric Vehicles require 2 to 3 times more silver than a regular gasoline vehicle
- President Biden is pushing for EV's to make up half of US auto sales by 2030





GROWING DEMAND FROM SOLAR





Analysts at Heareus project 140 million ounces of silver to be used in 2022 as solar installations are estimated to exceed 200 GW for the first time on record

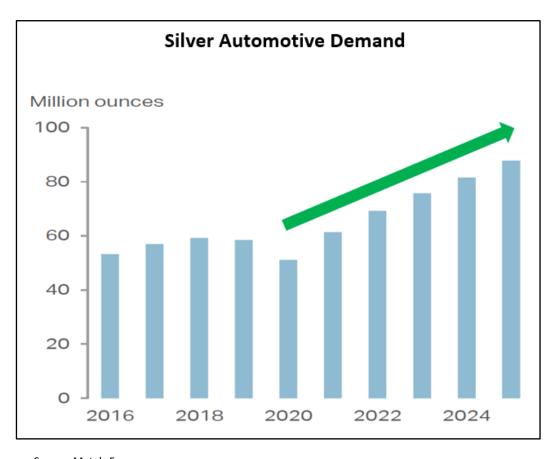
Kitco News

- Solar carports are one of the most viable options for refueling EV's
- Currently in use at a number of Walmart's, Federal & State offices and colleges across the United States
- US Department of Energy's National Renewable Energy Laboratory (NRLE) says about 8,000 solar carport stations would be needed to provide a minimum level of urban and rural coverage nationwide

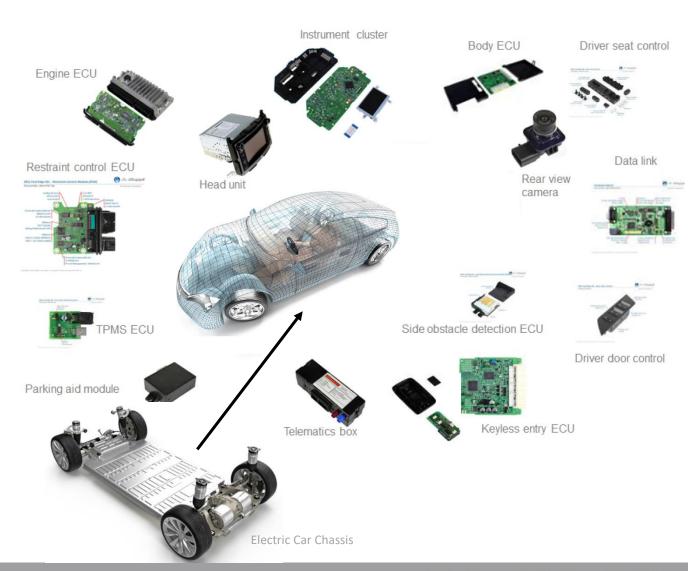


AUTOMOTIVE





Source: Metals Focus



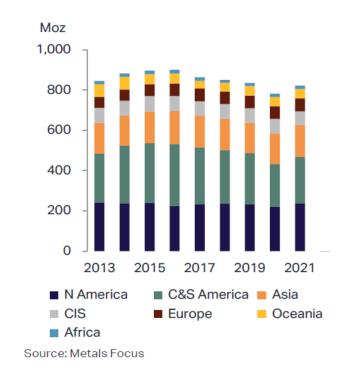


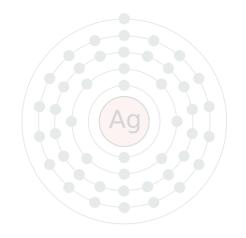
SILVER'S ROLE



- Annual silver consumption is ~1.1B ounces
- 80% sourced from mining, 20% sourced from recycling
- Over past 10 years, the silver industry has been in a 500M ounce physical deficit
- Silver is one of the world's most reflective and best conductors of electricity
- 52% of silver consumption is from industrial applications electronics, medicine, solar, water purification, window manufacturing, etc.
- Demand by sector: 52% industrial fabrication, 25% coins & bars, 18% jewelry, 5% silverware
- Current silver to gold mine supply ratio: 7:1

Mine Production Forecast

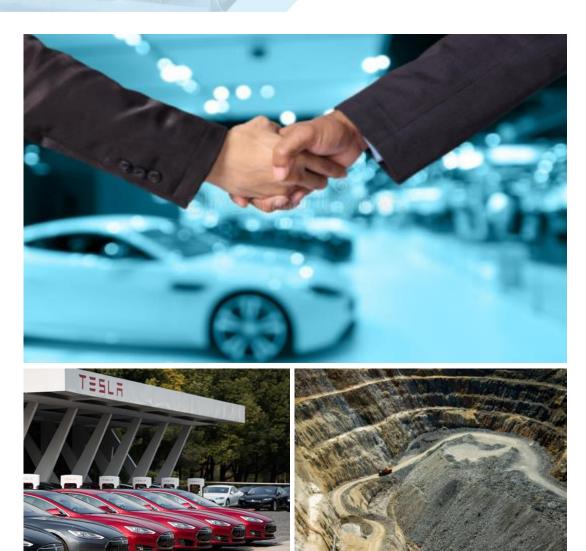




AUTO MAKERS SECURING SUPPLY CHAINS WITH THE MINERS



- December 2021, Volkswagens secures a five-year supply of lithium hydroxide from Vulcan Energy Resources
- July 2021, Tesla signed an agreement with BHP's Nickel West unit to secure nickel from Australia
- October 2021, BHP Group Ltd. has agreed to supply nickel sulphate from Western Australia to a battery-making joint venture between Toyota & Panasonic
- October 2021, Tesla secured a large supply of nickel from Prony Resources, operators of a nickel mine in the South Pacific
- January 2022, Tesla purchased 75,000 metric tonnes of nickel from Talon Metal Metals Corp.
- April 2022, Ford will buy lithium from Lake Resources in Argentina, purchasing up to 25,000 tonnes annually
- April 2022, GM secures a multiyear supply of cobalt from Glencore PLC



THE G7 & WORLD AUTOMAKERS ARE GOING GREEN



Net-Zero Carbon Emissions, by 2040

























On June 14, 2021 the G7 Leaders issued a communiqué which committed to reaching net-zero emissions by 2050







VALUATION INEQUALITY?

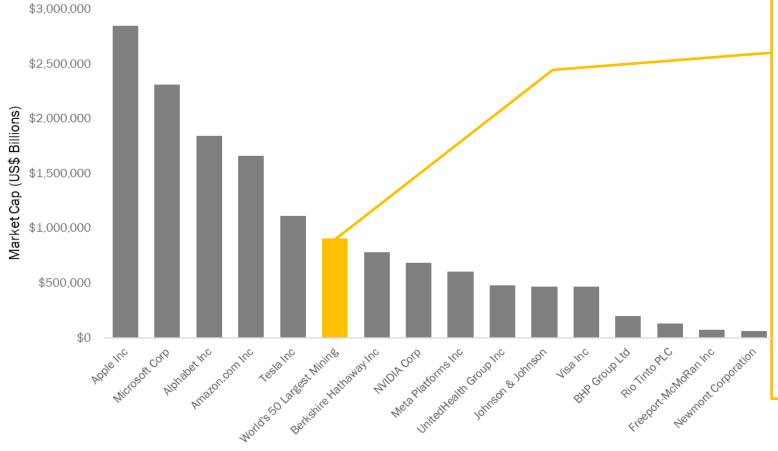


2021 Revenue:

Top 5 Techs = **\$1.32T** Top 50 Miners = **\$314B**

Market Caps:

Top 5 Techs = **\$10.1T**Top 50 Miners = **\$908B**



BHP Group Ltd Rio Tinto PLC

Freeport-McMoRan Inc

Newmont Corporation
Southern Copper Corp

Barrick Gold Corp

Franco-Nevada Corp

Agnico Eagle Mines Ltd

First Quantum Minerals Ltd

Teck Resources Ltd

Wheaton Precious Metals Corp

Alcoa Corp

Aluminum Corp of China Ltd

Gold Fields Ltd

Sibanye Stillwater Ltd

Cameco Corp

Ivanhoe Mines Ltd

MP Materials Corp

AngloGold Ashanti Ltd

Royal Gold Inc

Kinross Gold Corp

Lundin Mining Corp

Endeavour Mining PLC

Turquoise Hill Resources Ltd

Pan American Silver Corp

Lithium Americas Corp

B2Gold Corp

SSR Mining Inc

Hecla Mining Co

First Majestic Silver Corp

Alamos Gold Inc

Harmony Gold Mining Company Ltd

Centerra Gold Inc

Compania de Minas Buenaventura SAA

Nexgen Energy Ltd

Arconic Corp (PITTSBURGH)

NovaGold Resources Inc

Constellium SE

Equinox Gold Corp

Century Aluminum Co

Capstone Copper Corp

Osisko Gold Royalties Ltd

Compass Minerals International Inc

Arch Resources Inc Hudbay Minerals Inc

Eldorado Gold Corp

Alliance Resource Partners LP

Lundin Gold Inc

TSX | FR

Wesdome Gold Mines Ltd

Yamana Gold Inc

^{*}S&P TSX Global Mining Index

TOP FIVE S&P 500 COMPANIES (BY MARKET CAP)





March 10, 2000*	Aug. 1, 2006	Aug. 1, 2011	July 10, 2019	December 31, 2021	March 31, 2022
Microsoft	Exxon	Exxon	Microsoft	Apple	Apple
\$507B	\$413B	\$392B	\$1,050B	\$2,902B	\$2,850B
Cisco	GE	Apple	Amazon	Microsof	Microsoft
\$452B	\$336B	\$368B	\$979B	\$2,525B	\$2,311B
GE	Microsoft	PetroChina	Apple	Alphabet (Google)	Alphabet (Google)
\$432B	\$245B	\$298B	\$926B	\$1,922B	\$1,842B
Intel	Gazprom	ICBC	Alphabet (Google)	Amazon	Amazon
\$402B	\$244B	\$240B	\$781B	\$1,691B	\$1,659B
Vodafone	Citigroup	Shell Shell	FaceBook	Tesla	Tesla
\$371B	\$240B	\$229B	\$569B	\$1,061B	\$1,114B
\$2.16T	\$1.49T	\$1.53T	\$4.26T	\$10.10T	\$11.62T

Top 5

^{*} Nasdaq peak during dot-com bubble

TEN RULES OF SILVER



- 1. Silver is real money
- 2. Physical silver is a hard asset
- 3. Silver is relatively inexpensive
- 4. Silver isn't just cheaper to buy, but it can be more practical when you need to sell, too
- 5. Silver outperforms gold in bull markets
- 6. Silver inventories are falling
- 7. Industrial use is growing
- 8. New supply is falling
- 9. World demand is growing
- 10. The gold/silver ratio favours silver

