







An Emerging Copper **Producer in** Montana,

Slide: 1

Important Information and Disclaimer



<u>Written Disclosure</u>: The written disclosure contained in this presentation is further described in the independent technical report prepared under National Instrument 43-101 entitled "Sandfire Resources America Inc., Black Butte Copper Project, Feasibility Study (Johnny Lee Deposit) and Mineral Resource Estimate Update (Lowry Deposit) – Technical Report NI 43-101" dated December 8, 2020, which was filed on Sandfire Resources America Inc.'s SEDAR profile at www.sedar.com on December 10, 2020.

Qualified Person: The technical information contained in this presentation related to the Johnny Lee Deposit has been reviewed and approved by Erik Ronald, M. Eng., P.Geo, RM-SME, Principal Resource Geology Consultant, SRK, Brad Evans, MAusIMM, CP(Mining), and Deepak Malhotra Ph.D. RM-SME, Resource Development Inc. The technical information contained in this presentation related to the Lowry Deposit has been reviewed and approved by Messrs. Ronald and Malhotra. Messrs. Ronald, Evans and Malhotra are qualified persons, as such term is defined in NI 43-101 for Mineral Resources, Mineral Reserves and metallurgical processing respectively.

Forwarded Looking Statements: In making these forward-looking statements, the Company has applied certain factors and assumptions that the Company believes are reasonable, including those assumptions previously set out in this presentation and the following assumptions: that the Company will receive required regulatory approvals, the Company's successful advancement of the Black Butte Copper Project, the expected positive results from the Project based on the estimates and findings contained in the Feasibility Study, that the Company will continue to be able to access sufficient funding to execute its plans, that the Company is able to procure equipment and supplies in sufficient quantities and on a timely basis, that the Company's exploration and development activities on the Black Butte Copper Project will not be affected by actions of environmental activists or other special interest groups, that the results of exploration and development activities will be consistent with management's expectations, the assumptions underlying internal rates of return and net present value are valid, that capital costs and sustaining costs will be as estimated, that the assumptions underlying Mineral Resource and Mineral Reserve estimates are valid, that no unforeseen accident, fire, ground instability, flooding, labor disruption, equipment failure, metallurgical, environmental or other events that could delay or increase the cost of development will occur, that the current price and demand for copper and other metals will be sustained or will improve; that general business and economic conditions will not change in a materially adverse manner; and the continuity of economic and political conditions and operations of the Company.

However, the forward-looking statements in this document are subject to numerous risks, uncertainties and other factors, including factors relating to the Company's operation as a mineral exploration and development company and the Black Butte Copper Project, that may cause future results to differ materially from those expressed or implied in such forward-looking statements, including those risks previously set out in this presentation and the following risks: the risk that any of the assumptions on which the forward looking information is based prove to be incorrect or invalid, the risk of unexpected variations in Mineral Resources and Mineral Reserves, grade or recovery rates, the possibility of cost overruns or unanticipated costs and expenses, uncertainties relating to the availability and costs of financing needed in the future, that actual costs of restoration activities are greater than expected and that changes in Project parameters as plans continue to be refined result in increased costs, results of exploration and development activities will not be consistent with management's expectations, uncertainties involved in the interpretation of drilling results and geological tests; delays in obtaining or inability to obtain required government or other regulatory approvals or financing, failure of plant, equipment or processes to operate as anticipated, the risk of accidents, labor disputes, inclement or hazardous weather conditions, unusual or unexpected geological conditions, ground control problems, earthquakes, flooding; interference with the Company's exploration or development activities by environmental activists or other special interest groups; inability to procure equipment and supplies in sufficient quantities and on a timely basis; the risk that estimated costs will be higher than anticipated and the risk that the proposed mine plan and recoveries will not be achieved, the risks disclosed in the Company's most recently filed Management Discussion and Analysis and the Company's other continuous

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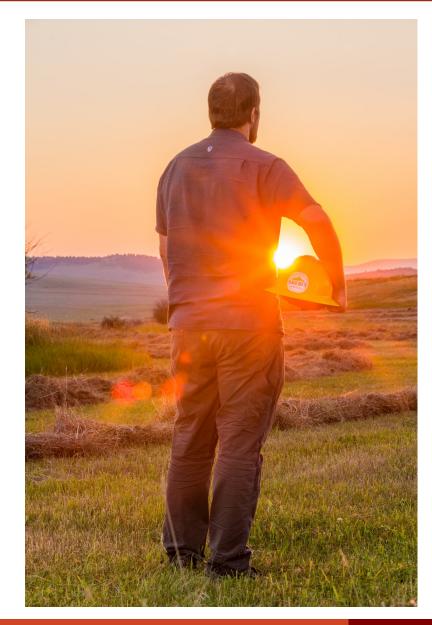
<u>CAUTIONARY NOTE TO US READERS</u>: As a Canadian reporting issuer, the Company is subject to rules, policies and regulations issued by Canadian regulatory authorities and is required to provide detailed information regarding its properties including mineralization, drilling, sampling and analysis, security of samples and Mineral Resource and Mineral Reserve estimates. In addition, as a Canadian reporting issuer, the Company is required to describe Mineral Resources associated with its properties utilizing Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") definitions of "indicated" or "inferred", which categories of resources are recognized by Canadian regulations but are not recognized by the United States Securities and Exchange Commission ("SEC"). The SEC allows mining companies, in their filings with the SEC to disclose only those mineral deposits they can economically and legally extract or produce. Accordingly, information contained in this presentation regarding our mineral deposits may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements under the United States federal securities laws and the rules and regulations of the Commission thereunder. Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

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Our Story



- ► Throughout the 1970's, there was a push for more exploration effort to find "Sullivan-type" Zn-Pb-Ag deposits in Belt Basin.
 - One of the companies that joined in the exploration surge was Cominco
 American Inc. In 1985, they discovered the Johnny Lee copper deposit. Because
 they were originally searching for zinc, the company dropped the exploration
 leases.
- ▶ In 2008, the landowners where the Johnny Lee deposit was discovered were approached by many companies that wanted to lease their property.
 - These local landowners and ranchers sought out Jerry Zieg, a geologist and Meagher County local. He had been on the Cominco team all those years ago and was now working for a company named NovaGold. NovaGold investors helped to create Tintina Resources to continue exploration, with Jerry Zieg as part of the team. The landowners knew they could trust a local to have the same Montana values, so they leased the land to Tintina in spring of 2010.
- Tintina began drilling again in fall of 2010.
 - The results were great very high-grade copper was added to the resource!
- ► Tintina applied for a Mine Operating Permit to the Montana Department of Environmental Quality (DEQ) in December of 2015 and received the permit in April of 2020.



Modern Mining at its Best

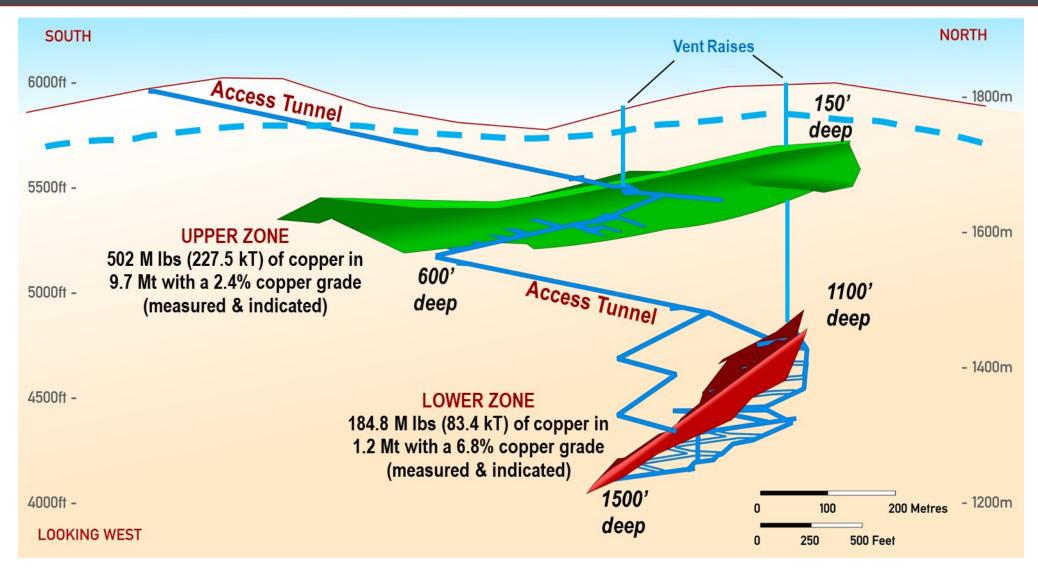


- ▶ This project will be a highly engineered <u>underground</u> mine.
 - Black Butte Copper has signed a Memorandum of Understanding (MOU) with the Meagher County Stewardship Council, committing to no open pit mining in the district.
- All water quality and quantity will be protected with no perpetual water treatment needed.
- ▶ The project has been fully bonded for all reclamation.
 - The land will return to agricultural use after reclamation.
- ▶ Black Butte Copper will provide 240 top paying jobs for 11 years at minimum.
 - The average annual salary for a Black Butte Copper project employee will be \$71,000.
- ▶ The community and its sustainable growth is at the forefront of the project's mission.
 - Through the Hard Rock Mining Impact Act, Black Butte Copper has put \$437,000 into escrow for the community.



Johnny Lee Deposit





Black Butte Copper is one of the highest-grade copper deposits being developed in the world.

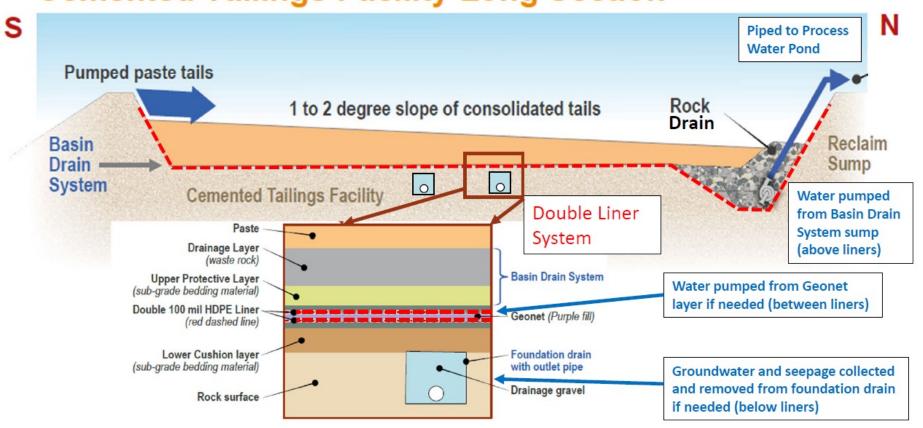
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World Class Designed Cemented Tailings Facility



Schematic Cemented Tailings Facility Sections with Lining System

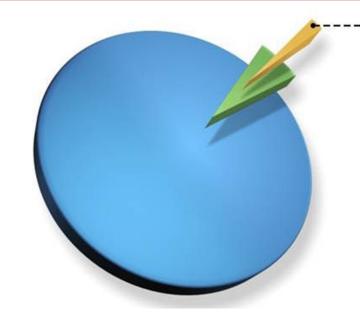
Cemented Tailings Facility Long Section



- The surface facility is designed for:
 - 10,000 year maximum earthquake event
 - 1.5 times average annual precipitation in a single storm
 - 22 inches rainon 11 inchesof wet snow inone storm

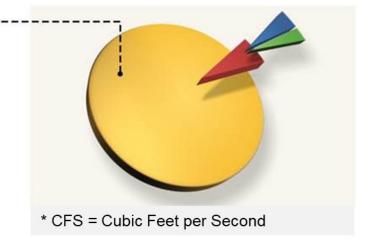
Mitigation of Ground Water Supplementing





Sheep Creek flow over a year:

- Maximum Flow 825 CFS
- Average Flow 56 CFS
- Dec-March Base Flow 15 CFS



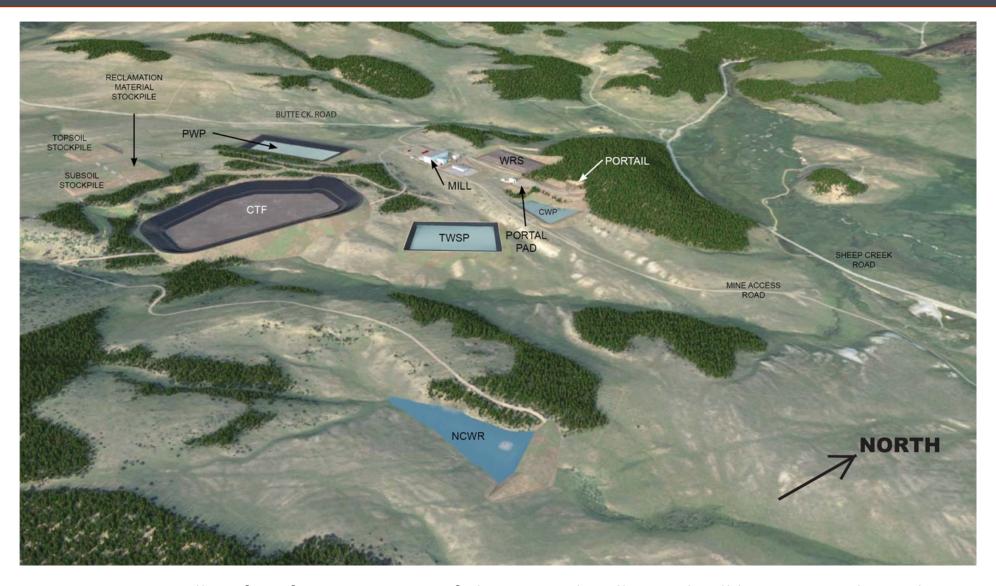
Sheep Creek base flow (low flow) compared to Black Butte Copper project use:

- Dec-March Base Flow 15 CFS
- Maximum from Mine 1.12 CFS
- Consumed during mining; mitigated with retired irrigation rights 0.47 CFS = 210 GPM
- ➤ Treated by Reverse Osmosis and returned directly to ground water system up to **0.65 CFS**

0.47 CFS is equivalent to a small sprinkler irrigation system. This groundwater amount used in the mining process is less than 3% of Sheep Creek's low flow during winter months and is completely mitigated by retiring the same amount of irrigation rights further up Sheep Creek.

Compact Surface Footprint





Our very small surface footprint is out of Sheep Creek Valley and will be 100% reclaimed.

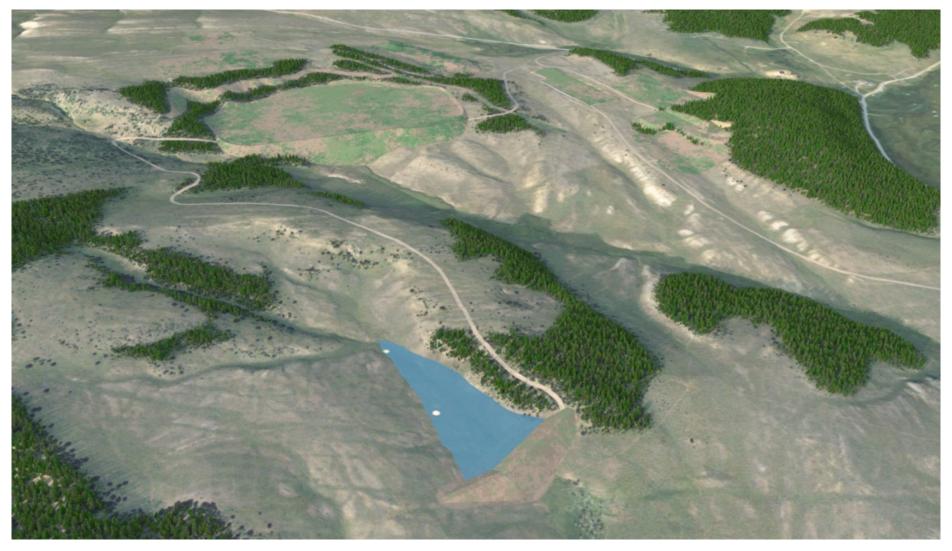
Process Plant Rendering





100% Reclamation – Returned





Modern mining restores the site to original land uses and water flows, fully protecting our water and landscapes long term.

Construction





Hard Rock Mining Bonds in Montana

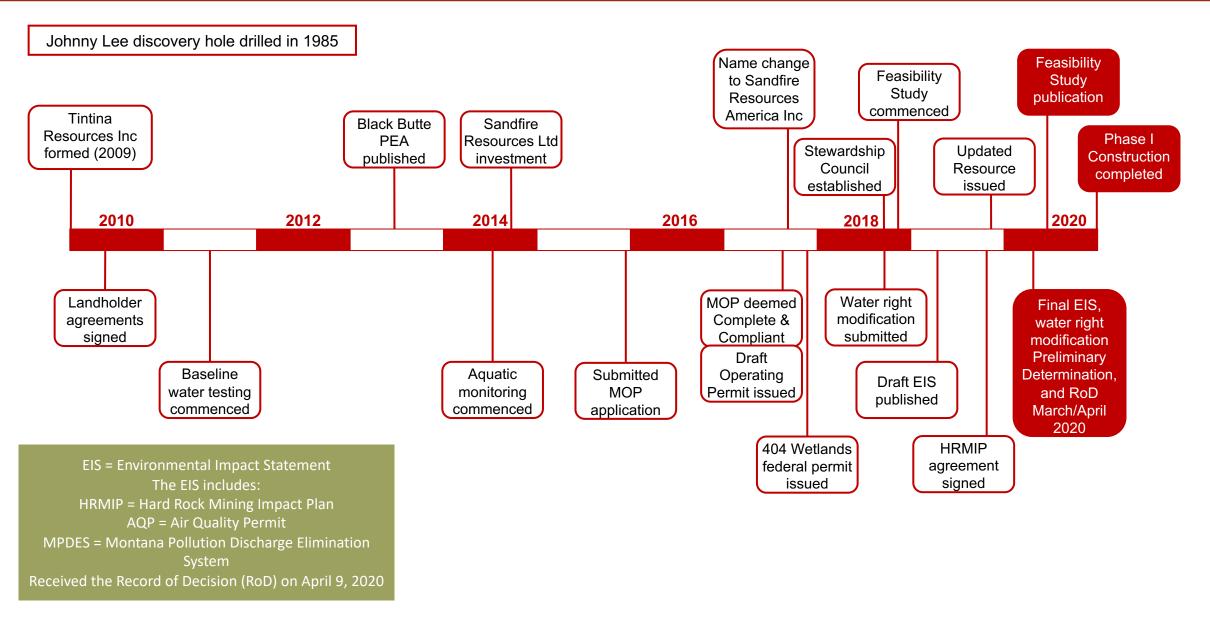


- Black Butte Copper will be required to post a reclamation bond with the State of Montana before construction commences.
- Bonding calculations include:
 - Direct Reclamation Costs
 - Indirect Reclamation Costs
 - Mobilization
 - Contingencies
 - Engineering and Design Updates
 - Third Party Contracting Cost
 - Reclamation Management
- ► The bond remains in place until reclamation is complete and the MT Department of Environmental Quality releases the bond.
- Phase I construction bond was set at \$4.7M.
 Phase II construction has not yet been set.
- ► In Montana, bonds are reviewed every year and recalculated every 5 years to protect our public and the environment from legacy mining issues.



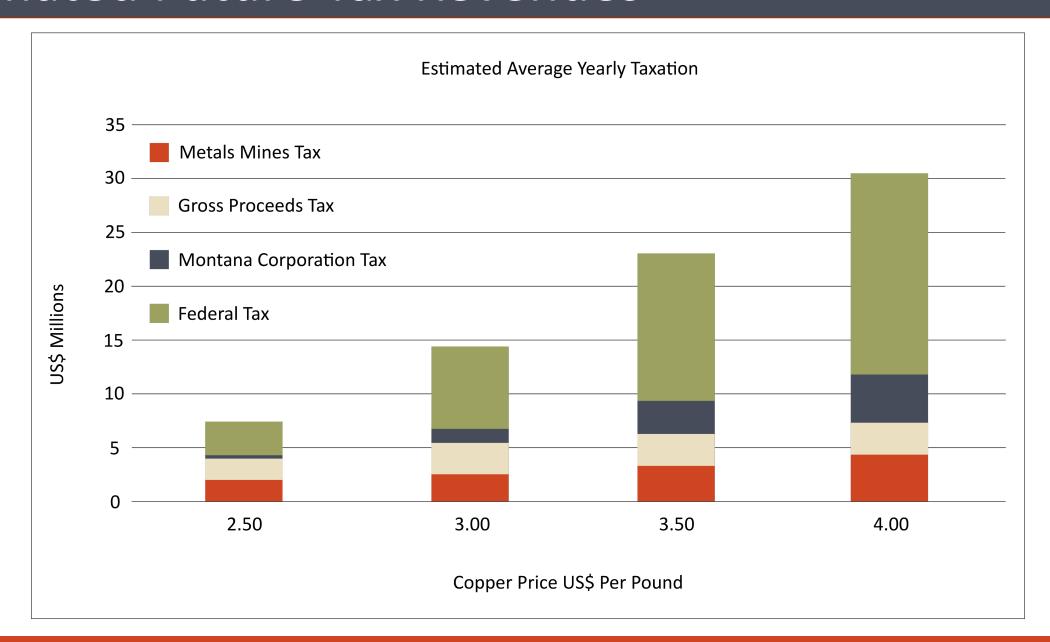
Past Project Timeline





Estimated Future Tax Revenues





Jobs and the Economy



Average Meagher County 2019 <u>household</u> income: \$46,607 Average <u>individual</u> Black Butte Copper employee income: \$71,000+

Construction:

- 2 years
- About 200-400 workers

Mine Life:

- 8-10 YEARS
- About 240 employees
- About 24 full time contractors

Reclamation:

- 1-3 years
- About 25 employees

Current:

 There are 24 employees currently on payroll.



Community Involvement



- Meagher County Stewardship Council (MCSC)
 - This council gives stakeholders an independent voice with the goal of sustainable positive net impact environmentally, socially and economically past the life of the mine.
- ► Hard Rock Mining Impact Act
 - \$437k has been placed in escrow to be drawn on by the local community.
- Site Tours
 - Black Butte Copper provides monthly summer tours and gives presentations statewide upon request. (*Private tours post COVID-19.)
- Transparency Library
 - A full transparency library is available to the public and can be found on the project's website.
- Social Media
 - Black Butte Copper strives to maintain educational outreach through an active social media presence.
- Volunteer in the community and sponsor local/statewide events.
 - Black Butte Copper and the entirety of its staff try to stay engaged wherever they can in the community. We are lucky to have a town/state with so much opportunity!

Black Butte Copper is building a showcase mine for Montanans to be proud of before, during and after the mine life.







Montana's Hard Rock Mining Impact Act



- ▶ Under Montana's unique Hard Rock Mining Impact Act, the developer of each proposed new large-scale hard-rock mine in Montana is required to prepare an impact plan identifying the local government services and facilities needed as a result of the mineral development.
 - This information is used to formulate an amount the developer MUST place into escrow before any work can begin.
- ▶ Black Butte Copper has placed \$437,000 into escrow. This money goes to Meagher County in lieu of future taxes and can be used for many things, such as:
 - County/City infrastructure improvements and support staff.
 - School district needs due to increases in public school enrollment.
 - Post-mine transition preparation.
- ► The 2020/21 allocation has been received by Meagher County and the city of White Sulphur to be used for the salary of an additional Sheriff's Deputy, Deputy Vehicle, and County/City planning.



The Future is Copper





▶ Trends

 There are many trends currently driving growth in copper demand and they aren't expected to change in the coming decades. These trends include increased use of electronics, an uptake in electric vehicles, and increased interest in renewable and efficient energy sources – all requiring significant amounts of copper.

► Recycling

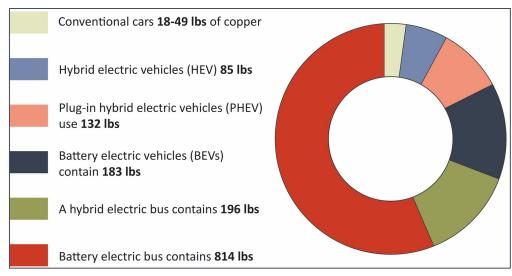
 Copper is a circular material, meaning it does not lose quality when it is reused. Recycling more copper will help to meet demand but recycling alone will not be enough to ensure a stable supply of copper into the future.

► Renewable Energy

 Numerous countries, including the U.S., are championing renewable energy and zero emission, spurring shifts to electric vehicles and sustainable energy development. In order to meet the copper demand that these rising trends will require, it is necessary to continue learning how and where copper deposits are located.



The demand for copper due to electric vehicles is expected to increase by 1.7 million tons by 2027.



Graphic and above quote from *Copper Drives Electric Vehicles,* published by Copper Development Association Inc.

"Copper prices have lifted above US\$4.00/lb for the first time since 2011, with the positive outlook on the global economic recovery and the rise in renewable power and electrification driving the demand outlook." – Bloomberg, Macquarie Research, February 2021

Sandfire Resources Degrussa Solar Project

