Developing a new source of industrial minerals in Nevada
Important Notice

The content of information contained in these slides and the accompanying verbal presentation (together, the “Presentation”) has not been approved by an authorised person within the meaning of the Financial Services and Markets Act 2000 (“FSMA”). Reliance upon this Presentation for the purpose of engaging in any investment activity may expose an individual to a significant risk of losing all of the property or other assets invested. If any person is in any doubt as to the contents of this Presentation, they should seek independent advice from a person who is authorised for the purposes of FSMA and who specialises in advising in investments of this kind.

This Presentation is being supplied to you solely for your information. This Presentation has been prepared by, and is the sole responsibility of, Sunrise Resources plc (the "Company"). The directors of the Company have taken all reasonable care to ensure that the facts stated herein are true to the best of their knowledge, information and belief. This Presentation does not constitute, or form part of, an admission document, listing particulars or a prospectus relating to the Company, nor does it constitute, or form part of, any offer or invitation to sell or issue, or any solicitation of any offer to purchase or subscribe for, any shares in the Company nor shall it or any part of it, or the fact of its distribution, form the basis of, or be relied upon in connection with, or act as any inducement to enter into any contract therefor.

The information in this Presentation is provided as at the date of this presentation and as such is preliminary in nature, has not been fully verified by the Company and is subject to material amendment, updating and change. The Company undertake no obligation to provide the recipient with access to any additional information or to update this Presentation or any additional information or to correct any inaccuracies in any such information which may become apparent. This document sets out certain features of the Company and does not purport to provide a complete description of the Company or the shares in the Company.

No reliance may be placed for any purpose whatsoever on the information contained in this Presentation or on its completeness, accuracy or fairness thereof, nor is any responsibility accepted for any errors, misstatements in, or omission from, this Presentation or any direct or consequential loss however arising from any use of, or reliance on, this Presentation or otherwise in connection with it. By accepting this Presentation you confirm, represent and warrant that you have consented to receive information in respect of securities of the Company and other price-affected securities (as defined in the Criminal Justice Act 1993 ("CJA")) which makes you an “insider” for the purposes of Part V of the CJA, and you agree not to deal in any securities of the Company until such time as the inside information (as defined in the CJA) of which you have been made aware has been made public for the purposes of the CJA.

This Presentation may not be reproduced or redistributed, in whole or in part, to any other person, or published, in whole or in part, for any purpose without the prior consent of the Company. The contents of this Presentation are confidential and are subject to updating, completion, revision, further verification and amendment without notice.

The Presentation is being distributed on request only to, and is directed at, authorised persons or exempt persons within the meaning of FSMA or any order made thereunder or to those persons falling within the following articles of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (as amended) (the “Financial Promotion Order”): Investment Professionals (as defined in Article 19(5)) and High Net Worth Companies (as defined in Article 49(2)). Persons who do not fall within any of these definitions should not rely on this Presentation nor take any action upon it and should return it immediately to the Company. This Presentation is exempt from the general restriction in section 21 of FSMA relating to the communication of invitations or inducements to engage in investment activity on the grounds that it is made only to certain categories of persons.

Neither this Presentation, nor any part of it, nor anything contained or referred to in it, nor the fact of its distribution, should form the basis of or be relied on in any connection with or act as an inducement in relation to a decision to purchase or subscribe for or enter into any contract or make any other commitment whatsoever in relation to any such securities. Recipients of this Presentation who decide to subscribe for the new ordinary shares in the Company are reminded that any application to so subscribe may only be made on the basis set out in the formal placing letters. In particular, details included in this Presentation are subject to updating, revision, verification and amendment and refer to events as having occurred which have not occurred at the date of this presentation but which are expected to happen in the future. This Presentation does not constitute a recommendation regarding the securities of the Company. By receiving and/or attending this Presentation, you agree to be bound by the restrictions in this disclaimer. If you are in any doubt about the investment to which this Presentation relates, you should consult a person authorised under FSMA who specialises in advising on the acquisition of shares and other securities.

Neither this Presentation nor any copy of it should be distributed, directly or indirectly, by any means (including electronic transmission) to any persons with addresses in the United States of America (or any of its territories or possessions) (together, the "US"), Canada, Japan, Australia, the Republic of South Africa or the Republic of Ireland, or to any corporation, partnership or other entity created or organised under the laws thereof, or in any other country outside the United Kingdom where such distribution may lead to a breach of any legal or regulatory requirement. The recipients should inform themselves about and observe any such requirements or relationship.

The Company’s ordinary shares have not been, and are not expected to be, registered under the United States Securities Act 1933, as amended, (the "US Securities Act") or under the securities laws of any other jurisdiction, and are not being offered or sold, directly or indirectly, within or into the US, Canada, Japan, Australia, the Republic of South Africa or the Republic of Ireland or to, or for the account or benefit of, any US persons or any national, citizen or resident of the US, Canada, Japan, Australia, the Republic of South Africa or the Republic of Ireland, unless such offer or sale would qualify for an exemption from registration under the US Securities Act and/or any other applicable securities laws.

Forward-looking Statements

This Presentation or documents referred to in it contain forward-looking statements. These statements relate to the future prospects developments and business strategies of the Company and its subsidiaries (the ‘Group’). Forward-looking statements are identified by the use of such terms as “believe”, “could”, “envisage”, “estimate”, “potential”, “intend”, may”, “plan”, “will” or the negative of those, variations or comparable expressions, including references to assumptions. The forward-looking statements contained in this Presentation are based on current expectations and are subject to risks and uncertainties that could cause actual results to differ materially from those expressed or implied by those statements. If one or more of these risks or uncertainties materialises, or if underlying assumptions prove incorrect, the Group’s actual results may vary materially from those expected, estimated or projected. Given these risks and uncertainties, potential investors should not place any reliance on forward-looking statements. These forward-looking statements speak only as at the date of this Presentation. No undertaking, representation, warranty or other assurance, expressed or implied, is made or given by or on behalf of the Company or any of its directors, officers, partners, employees or advisers or any other person as to the accuracy or the completeness of the information or opinions contained herein and to the extent permitted by law no responsibility or liability is accepted by any of them for any such information or opinions. Notwithstanding the aforesaid, nothing in this paragraph shall exclude liability for any representation or warranty made fraudulently. This Presentation contains statements regarding the past performance of the Company’s ordinary shares. Past performance cannot be relied upon as a guide to future performance.
Strategic Plan - on Track

• To generate cash flow from development of its CS Pozzolan-Perlite project in Nevada, USA.

  *Industrial minerals projects have the greatest potential to achieve an early cash flow as these typically have fewer permitting issues enabling production to advance more quickly than base or precious metal projects.*

• To valorise the Company’s legacy portfolio of drill-ready precious and base metal projects retaining participation in the value of new mineral discoveries – by drill testing and/or joint venture.

  *Significant value creation for shareholders in junior mining companies comes from early drill-discovery of mineral deposits.*

  e.g. Junction Copper-Silver-Gold Project.
Directors

Patrick Cheetham
Executive Chairman
A geologist with 38 years in exploration management and 33 years as executive director of publicly traded companies. Currently Executive Chairman Tertiary Minerals plc.

David Swan
Non-Executive Director
Chartered Accountant. Former Group Leader in Mining and Resource Group, Ernst & Young, Sydney and former CFO of Oriel Resources. Currently a director of Central Asia Metals plc.

Roger Murphy
Non-Executive Director
Formerly CEO Power Metal Resources plc and MD Investment Banking, Dundee Securities Europe Ltd. Worked as a geologist for various companies, including Anglovaal Mining and British Petroleum.
Key Advisers & Consultants

**Buster Hunsaker (Hunsaker Inc.)**
A geologist engaged in exploration and evaluation of mineral deposits since the 1980’s. Hunsaker Inc. has been providing full-service geological consulting and project management to minerals exploration companies since 1995, primarily in the western United States.

**Joe Thomas (Magmatics Inc.)**
An acknowledged expert on the application of natural pozzolans and is a voting member of both the ASTM1 and ACI2 pozzolan committees. 20 years’ involvement in the development of natural pozzolan products for market including over 16 years as Vice President – R&D at Hess Pumice Products, a leading producer of natural pozzolan in Idaho.

**Tom Adams (KMR Collaborative)**
A geomaterials engineer with strong technical and marketing focus on construction aggregates, industrial minerals and cementitious materials including natural pozzolan. Formerly with Nevada Cement Company providing technical support to the development of its natural pozzolan business. President of the Sierra Nevada Concrete Association.

**In.Mat-Lab**
A specialist company providing testing and consulting services for a range of industrial minerals with an emphasis on perlite. Company principals have technical and managerial backgrounds with S & B (now part of Imerys) in perlite mining and processing operations.
About Pozzolan

**Pozzolan** is a silica or silica and aluminium rich material which will, in the presence of moisture, chemically react with lime at ordinary temperatures to form compounds possessing cement-like properties.

Pozzolans can be:

- *Industrial by-products* e.g. coal-fired power station fly ash, blast furnace slag, etc.
- *Natural* – various glassy volcanic materials such as tuff, tephra, pumice & perlite (e.g. CS Project deposits)

The Romans were the first to use natural pozzolan on a grand scale to construct public buildings, monuments, & infrastructure such as roads and ports, many of which have endured for over 2,000 years

… in contrast, modern concretes using Portland cement without the addition of pozzolan are susceptible to “concrete cancer” (alkali-silica attack) after just a few tens of years

Pozzolans are used to partially replace ordinary Portland cement in mortars and concrete mixes in amounts up to 35% and can improve the strength and chemical resistance of concrete
Production of Portland cement is responsible for 5% of the global man-made carbon dioxide emissions. One tonne of cement = one tonne carbon dioxide (CO₂) generated.

Traditionally fly ash has been the main pozzolan used in cement and concrete mixes. However,..........

Fly ash supply in the US is reducing due to the rapid closure of coal-fired power plants across the country resulting from:

1. Increasingly difficult-to-meet federal and local environmental regulations - Mercury and Air Toxics Standards (MATS), Clean Power Act and Interstate pollution regulations, etc.

2. A concurrent rapid decline in the cost of natural gas and renewables.

Since 2010, 289 coal-fired power stations in the US (50% of total) have closed or have scheduled retirement plans, leading to persistent shortages of fly ash in the USA since 2012.

Natural Pozzolan is filling the fly ash supply gap.

Existing producers of natural pozzolan are experiencing rapid growth of their business e.g. Hess Pumice, CR Minerals.

Pozzolan’s **Green Credentials**
Perlite – A Growing Market

Perlite is a glassy volcanic raw material which, when heated in a furnace, pops like popcorn and expands up to 20 times in volume into a white or pale coloured, low density material used in various household and industrial applications such as:

- A potting medium in gardening and horticulture to aid water retention and aeration.
- Insulation.
- Paint texturing, plaster and concrete fillers.
- Fire proofing.
- Filter aids.
- Industrial cryogenic storage vessels.

Perlite is a favoured growing medium for cannabis.

The legalisation of cannabis in the US and Canada is driving very strong growth for horticultural grade perlite.

The global legal cannabis market was worth an estimated $12.2 billion in 2018 and is projected to grow at a compound annual rate of 26.7%.
California and Nevada are the most affected states in the fly ash supply crisis as:

- Most distant from main power plant sources in mid-west and eastern states (no significant fly ash production in N. California or Nevada).
- Supplies from Navajo power plant in Arizona, the largest plant west of the Mississippi and 3rd largest emitter of CO$_2$ in US, ceased as plant closed in late 2019.
- More coal plants announced for closure in early 2020 in Colorado and New Mexico.

Current market for pozzolans in Nevada and California is approx. 1.4 million tons.

Natural pozzolan pricing estimate $90-120 as fly ash replacement depending on market location.

Location:
- Adjacent to County maintained road
- Adjacent to 120KV power line
- 9 miles off Highway 6
- 20 minutes from Tonopah (regional town)
• World production 4.6 million tonnes (2018) : China 41%, Turkey 22%, Greece 21%, USA 12%

• US Consumption 680,000 tons consumed, 25% imported (2018)

• Only 6 Mining Companies producing perlite, only three large mines – all now downstream integrated with their own expansion plants

• 60 expansion plants in 27 states. Many are independent with no captive mine supply

• Last large mining company now moving downstream to compete with its customers

• Open opportunity to supply raw perlite to independent expanders

• Raw perlite (horticultural grade) : c $90-100/ton ex-mine

• Expanded Perlite average $350/t >$850/t for filter grade

Imports into eastern states from Greece $108/t landed
Drilling & Trenching

- 34 drill holes in Main Zone, Tuff Zone & Northeast Zone
- 11 trenches completed in and around Main Zone demonstrating potential extensions and link to Northeast Zone
In the Main Zone large deposits of pozzolan form hills and extend below the level of the plane for at least 150ft.
In the Tuff Zone large deposits of pozzolan extend along the hillside and to depths of at least 200ft in drill holes.
To qualify as a natural pozzolan a material has to meet the specifications of ASTM Standard C618 which applies to both natural pozzolans and coal fly ash. Requires:

- minimum content of combined silica, alumina and iron oxide (reactive compounds).
- minimum strength requirements for mortars made with partial substitution of Portland cement by natural pozzolan.

Chemical analysis of a range of CS samples met the chemical specification of ASTM C618.

Over 150 surface samples, composite drill samples and trench samples have been “pre-certification” strength tested by independent laboratory, Magmatics Inc. All but three of these samples passed the strength requirements of ASTM.

Materials from all three zones are quality natural pozzolans competitive with natural pozzolans available on the market today.

Testing of concrete blocks has now been carried out by a major international cement and ready-mix concrete company under ASTM standard C39 and compares favourably with commercially available pozzolan.

Company testing under ASTM C1567 shows that CS natural pozzolan can mitigate the effects of concrete cancer.

Compressive strength (SAI) testing of (above) mortar block ASTM C618 & (below) concrete block ASTM C39
100-ton bulk sample mined and submitted to potential customer (cement company).

Bulk sample ground in production clinker mill, to produce a finished ground pozzolan product.

Tested for compliance with ASTM C618.

Scale up from lab results confirmed.

 Samples out for testwork at a number of additional cement and concrete companies.
Perlite expansion testing in New Mexico & Greece:

- Over 110 samples from the surface, drill holes and trenches have been subjected to basic testing, mostly from the Main Zone.

- Results show different areas having potential for the production of perlite for different industrial applications.

- Application specific testing now complete. Results define the target markets, provide information for potential customers and provide a basis for the mine development plan.
Bulk samples of graded perlite submitted to two separate potential customers where offtake MOUs already in place.

Short commercial scale test runs completed.

Expanded horticultural grade perlite produced with good yields in good agreement with laboratory tests.
Perlite:

**Low Capital Cost Start up Option** - Produce only coarse horticultural grade raw perlite using contract mobile crushing and screening operation (pay per ton).

- Low risk, lower cost single perlite product with by-product pozzolan for sale to cement companies.

**Investment Option** - Build a fixed perlite processing plant to produce a range of perlite products for horticulture and industrial applications. Preliminary plant design completed.

- Require capital investment (est. <$10 million) but achieves higher utilisation of the perlite resource.
CS Project – Production Options

Pozzolan:

**Low Capital Cost Start up Option** - Sell run of mine ore to cement companies (e.g. commercial trial now completed).

- Low risk, lower cost but lower value product.

**Investment Option** – Build a grinding facility (off site) to produce a fine ground pozzolan for sale to the cement and ready-mix concrete markets.

- Require capital investment (under evaluation) for higher value product with larger market.
27-year mine plan includes four-phase pit design targeting production of:

- 14.5 million tons of pozzolan starting at rate of 100,000t per year climbing up to 500,000t per year.
- 1.3 million tons perlite starting at minimum rate of 20,000t per year climbing up to 100,000 t per year (for 15 years).

Low strip ratios: 0.25 tons waste per ton ore in Main Zone, 0.16 in Tuff Zone, most waste mined after Year 8.

The Mine Plan does not include the extensive areas of pozzolan in northern Main Zone, Northeast Zone and western Tuff Zone.
CS Project – Mine Design
Major Mine permitting work completed

- Project is on Federally owned land - Lead regulatory authority is US Bureau of Land Management (BLM).
- EA Completed - Finding of No Significant Impact
- Mine Plan authorised by BLM
- Reclamation permit issued by Bureau of Mining Regulation & Reclamation.
- Air Quality Operating Permit out for public comment.
- Road use/indemnity and maintenance agreement in place with County.
- Transmission use Agreement in place with NV Energy.
- Right of Ways granted for water well development.
- Water rights leased from Liberty Moly.
- Water permit in application, temporary permit granted by NDWR.
- Minor short lead-time permits to be obtained prior to mine start-up.

18 August 2020
NewPerl Perlite Project

A future source of feed for the CS Project?

• Located 85 miles from CS Project.
• Company prospecting discovery following up anomalous areas identified using in-house exploration technique that led to discovery of CS Project deposits.
• Large hills of outcropping perlite discovered. In two areas – NewPerl and Jackson’s Wash.
• Initial application testing suggests NewPerl perlite is suitable for production of horticultural grade expanded perlite.
• Drill programme planned and permitted
CS Project – Summary

- Perlite and Pozzolan – valuable industrial minerals with green credentials.
- Large deposits demonstrated by drilling and trenching.
- Mineable by long life open-pit with low strip ratio targeting:
  - 20,000 -100,000 tpa perlite (sales value up to c. $10m per annum at mine gate)
  - 100,000-500,000 tpa pozzolan (sales value up to c. $50m per annum when ground and delivered)
- Extensive laboratory testing and first commercial scale trials completed.
- Low capex development options under evaluation.
- Major mine permitting completed July 2020.
APPENDIX
Company holds a diverse exploration project portfolio targeting:

- Gold & Silver (Nevada & Australia).
- Copper (Nevada).
- Industrial minerals (Nevada).

The Company’s strategy is to sell, JV or otherwise valorise these projects whilst it focuses management and financial resources on advancing the CS Pozzolan-Perlite project through to production.

**Junction Copper Project**

Sold to VR Resources Ltd (TSX:VRR):

- Cash and share consideration.
- Further shares to be issued on certain exploration milestones.
- 3% NSR Royalty retained.
- Scout drilling carried out in Autumn 2018 – VRR announced discovery of new porphyry style mineralised system.
Clayton Silver-Gold Project, Nevada

Drill Ready Target

Significant silver intersections in historic drilling with a number of holes ending in mineralisation:

- Hole CC-2: 6.1m at 4.5 ounces/ton (155 grammes/tonne) silver from 30.5m depth.

- Hole CC-6: 3.0m at 4.8 ounces/ton (165 grammes/tonne) silver from 16.8m depth.

- Hole CL-15: 7.6m grading 4.8 ounces/ton (165 grammes/tonne) silver from 82.3m depth to the base of hole.

A number of holes ended in mineralisation or did not reach the target depth. Grades were likely understated due to loss of fine silver-bearing sulphide minerals during the RC drilling programme.

18 August 2020
Newark Gold Project, Nevada

Drill Ready Target

- Targeting Carlin-style gold mineralisation which includes some of the largest gold deposits in the world.

- Favourably located at intersection of the Alligator Ridge and Battle Mountain-Eureka gold trends.

- Freeport surface sampling returned anomalous gold with high values of Carlin-style geochemical indicator elements arsenic, antimony, thallium and barium.

- A major silicified structure is associated with favourable north-south striking anticline “trap”.

- 16 reconnaissance holes drilled by Freeport in 1986-87:
  - Hole NWK8 intersected 47 m of gold-anomalous jasperoid containing an average 0.14 ppm gold from 75m to the end of hole at 122 m.

- A number of the follow-up holes failed to reach target.

Deeper drilling planned to test the favourable target horizons.

18 August 2020
Drill Targets:

1. Beneath Dicky’s pit
   - excavated in 1980s after gold nuggets found associated with quartz vein stockwork in dolerite by metal detectorists.
   - Records indicated 106 ounces of gold recovered by metal detecting of 4,050 tonnes of excavated material (0.8g/t recovered).
   - Sampling of dumps average—0.5g/t gold.
   - Suggests grade of excavated material at least 1.3g/t gold

2. Gold in soil geochemical anomaly (DLR)$ target on adjacent licence to be drill tested.

Drill permits in place subject to aboriginal heritage clearance.

18 August 2020