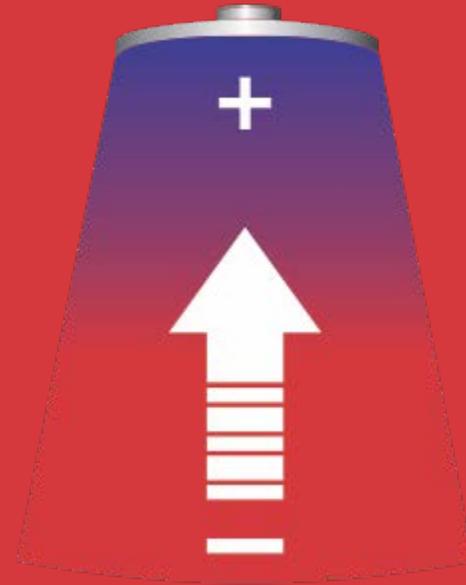




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VULCAN PROJECT ZERO CARBON LITHIUM

July 2019

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Competent Person Statement

The information in this presentation that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr Francis Wedin, who is a member of the Australasian Institute of Mining and Metallurgy. Dr Wedin is joining KRX as a full time employee and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a competent person as defined in the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves" (JORC Code). Dr Wedin consents to the inclusion in this presentation of the matters based upon the information in the form and context in which it appears.

Summary



Potentially Very Large,
Lithium-rich Brine Project

Unique Zero Carbon Lithium
Production through dual-purpose
wells

Secure Domestic Lithium
Supply for EU

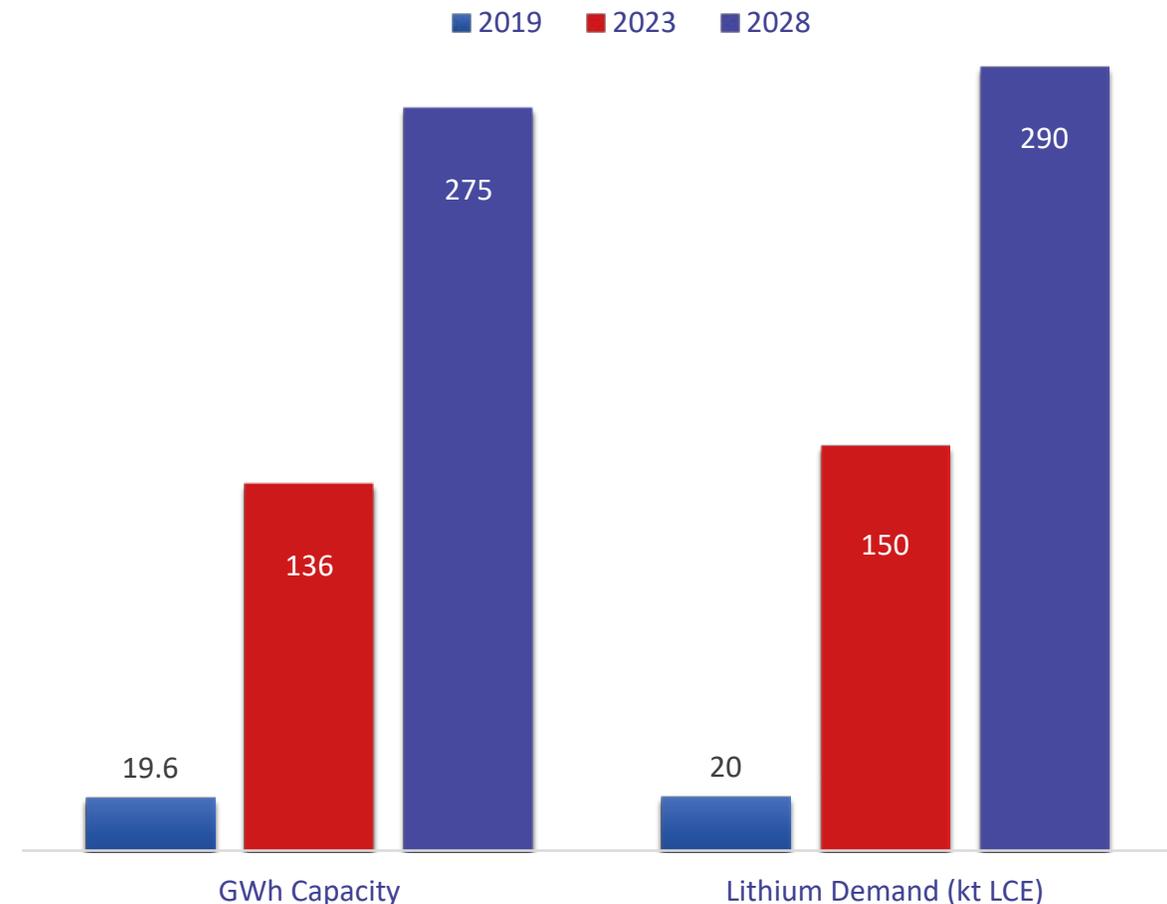
- The Vulcan Lithium Project is in the Upper Rhine Valley in Germany, an area uniquely endowed with lithium-rich hot brines
- Plan to produce battery-grade lithium hydroxide from geothermal brines, with a renewable electricity “by-product”
- Direct Precipitation process will be used for lithium processing which is quicker and less water and carbon-intensive relative to the evaporative method
- Brine lithium production typically cheaper than hard rock; attractive proposition in an EU market with currently only small or complex hard-rock projects
- Aiming to produce more renewable energy from dual-purpose wells than consumed in production & processing, providing a premium, “**Zero Carbon Lithium**” product for the Battery Electric Vehicle (BEV) market
- Provides much-needed secure, domestic lithium supply to the burgeoning European BEV market, reducing reliance on Chinese and South American lithium; project only 60km from automotive factories in Stuttgart.

Right Place, Right Product, Right Time



- EU pushing hard to have fully-integrated local lithium-ion battery supply chain, including lithium chemicals
- Unprecedented push from battery/cathode makers and OEMs to ramp up lithium-ion production
- 150kt LCE demand in Europe, just for battery production, by 2023, and **290kt by 2028**¹
- Zero domestic production of battery-grade lithium in EU – only high C-footprint South American and Chinese lithium products available
- OEMs seeking zero carbon raw battery material supply chain¹

European Battery Production & Lithium Demand



Right Place, Right Product, Right Time

- Vulcan Lithium Project located in the heart of EU's battery and cathode "mega" and "giga" factories
- Within easy range of electric transport to battery and cathode factories: no carbon footprint
- Direct Precipitation method from heated brines to lithium hydroxide
- Renewable energy co-production to offset energy required for lithium production
- Large company precedent for similar project (Salton Sea); potentially high value opportunity
- Vulcan Lithium Project targeting 2023 production start-up of **Zero Carbon Lithium**



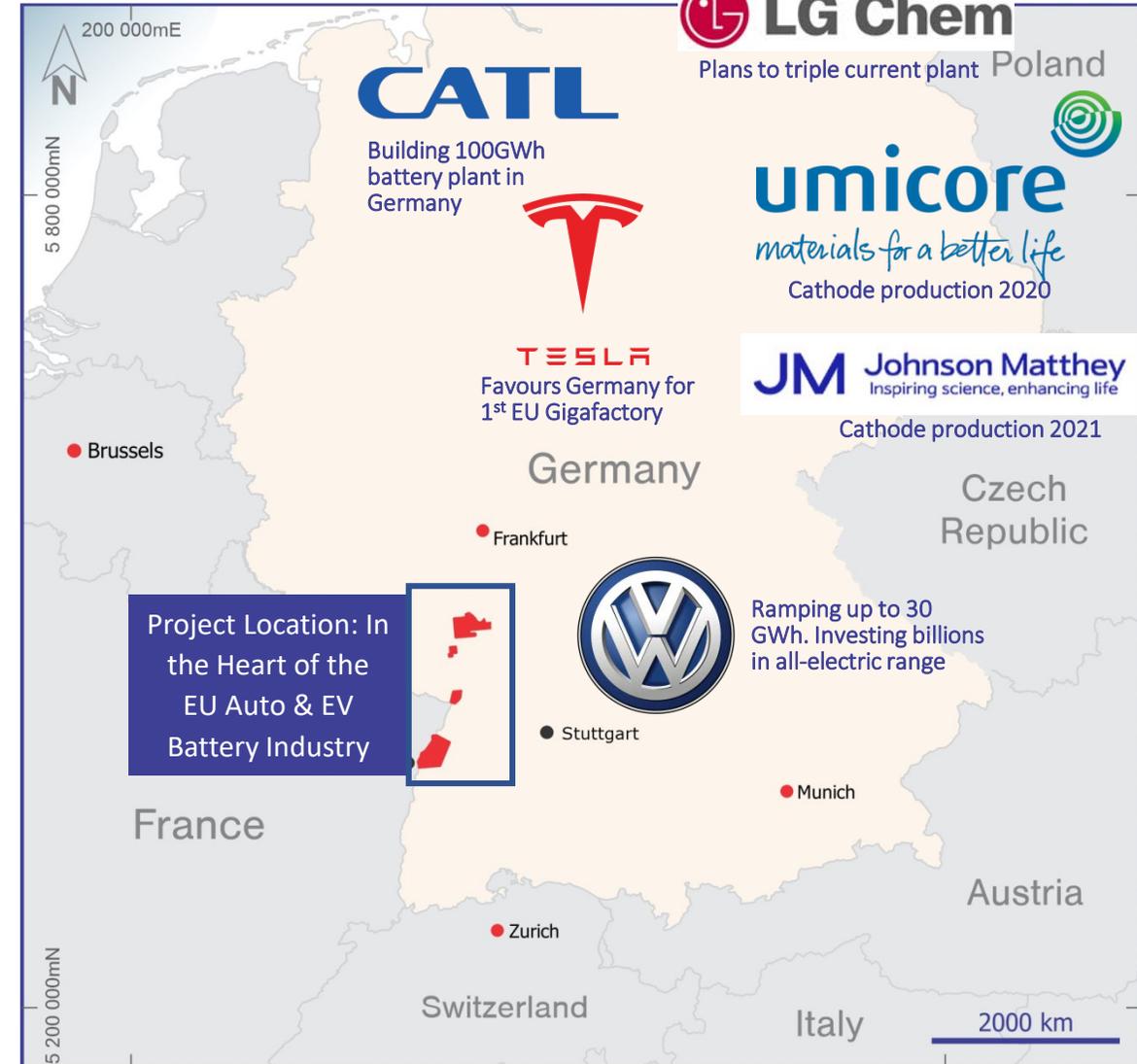
Plans to triple current plant Poland

umicore

materials for a better life
Cathode production 2020

JM Johnson Matthey
Inspiring science, enhancing life

Cathode production 2021



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¹refer ASX Announcement 10 July 2019

Terms of Acquisition



- Koppar to acquire 100% of Vulcan Energy Resources Pty Ltd, holder of the Vulcan Project
- Shareholders are Dr Francis Wedin and Dr Horst Kreuter (refer overleaf)
- Initial Consideration 6,666,667 shares
- Milestone payments¹ to be made on:
 - completion of Scoping Study (4.4M Shares) **within 12 months**
 - completion of Pre-Feasibility Study (4.4M Shares) **within 24 months**
 - securing an offtake or downstream JV partner (4.4M Shares) **within 36 months**
- An additional 1M shares will be issued as an introduction / facilitation fee to parties involved in introducing the project to the Company
- Subject to shareholder approval a further 1.98 million shares may be issued to these parties on achievement of the above milestones¹
- Subject to shareholder approval 750,000 shares and 3.75M performance shares will also be issued to Gavin Rezos and Viaticus Capital as terms of their appointment¹

Current KRX Capital Structure	
Shares on Issue	31,750,001
Options (28.5c, exp Dec-20)	12,687,512
Performance Shares (vest at \$0.40, \$0.75, \$1.10)	3,900,000
Enterprise Value @ 16c (undiluted)	~\$1.4M
Cash Position (Post Capital Raising)	~\$4.3M

Vulcan Project Principals



Dr Francis Wedin, Proposed Managing Director

- Executive Director of ASX-listed Exore Resources Ltd (ASX:ERX)
- PhD & BSc (Hons) in mineral exploration, completing MBA in renewables
- Discovered & defined 2 new JORC lithium resources, on two continents, in under a year, including Lynas Find, now part of Pilbara Minerals' Pilgangoora Project (ASX:PLS)
- Management experience in resources sector on four continents; bilingual



Gavin Rezos, Proposed Chairman

- Held Executive Chairman or CEO positions of two companies that grew from start-ups to entry into the ASX 300
- Extensive international investment banking experience, as an investment banking Director of HSBC with senior multi-regional roles in investment banking as well as in legal and compliance functions
- Currently Chairman of Resource and Energy Group and principal of Viaticus Capital. Previously Non-Executive Director of Iluka Resources, Alexium International Group, Metalysis and Rowing Australia



Dr Horst Kreuter, In-Country Principal

- CEO of Geothermal Group Germany GmbH and GeoThermal Engineering GmbH (GeoT)
- Successful geothermal project development & permitting in Germany and worldwide
- Based in Karlsruhe, local to the project area in the Upper Rhine Valley
- Widespread political, investor and industry network in Germany and Europe



Current Lithium Supply Problematic



- Hard-rock lithium operations are generally high OPEX and have high carbon footprint from processing methods and distance to markets
- Bottleneck of lithium mineral concentrate processing to downstream, battery-grade lithium chemicals has reduced spodumene prices
- Salar lithium operations in South America use large quantities of soda ash mined in the USA. Substantial carbon footprint for long distance reagent and product transport



- Salar operations also use large amounts of water in one of the driest places on earth
- The salar evaporation process takes a long time (up to 12 months) and is vulnerable to weather events
- Battery-grade lithium supply shortfall forecast within five years

The market is ripe for disruption.

Zero Carbon Supply Chains Required

- BEV raw material supply chains have a carbon footprint problem
- OEMs are actively trying to reduce the carbon footprint of their battery supply chains to bolster the credibility of their BEV offerings
- For example, Volkswagen is placing great importance on having a CO₂-neutral production supply chain for its new EV line-up, with sustainability metric for suppliers on par with price²

How will they achieve this through conventionally-extracted lithium?



Our vision is 100% CO₂-neutral E-mobility
Decarbonisation concept

Volkswagen's delivery promise



CO₂-neutral production incl. supply chain

Zero-emission vehicle

Vision

Sustainability as selection criteria on par with quality or price



HV Battery Cathode

Background

- Cathode production and sub-supply chain (raw material production) expected to be CO₂ hot-spot

Need for a Domestic EU Supply of Lithium



- EU supply of battery grade lithium currently 0%
- 150kt per annum of LCE¹ needed in EU by 2023, 290kt by 2028
- Majority of lithium supply controlled by just 5 companies, all non-EU
- Auto and battery manufacturers desperately need security of lithium supply in the 21st Century for the transition to BEVs, instead of relying solely on South American and Chinese production



16% of global Li demand for battery manufacture by 2028



0% of global battery-grade Li supply

"Lithium refining is being promoted as part of a broader strategic push to develop an entire battery value-chain inside Europe."

Maroš Šefčovič, vice-president of the European Commission energy union 11/2018

Volkswagen's CEO said they are capable of building 50 million electric vehicles

Sweden's Northvolt raises \$1 billion to complete funding for mammoth battery plant

CATL boosts battery cell factory in Germany to 100GWh

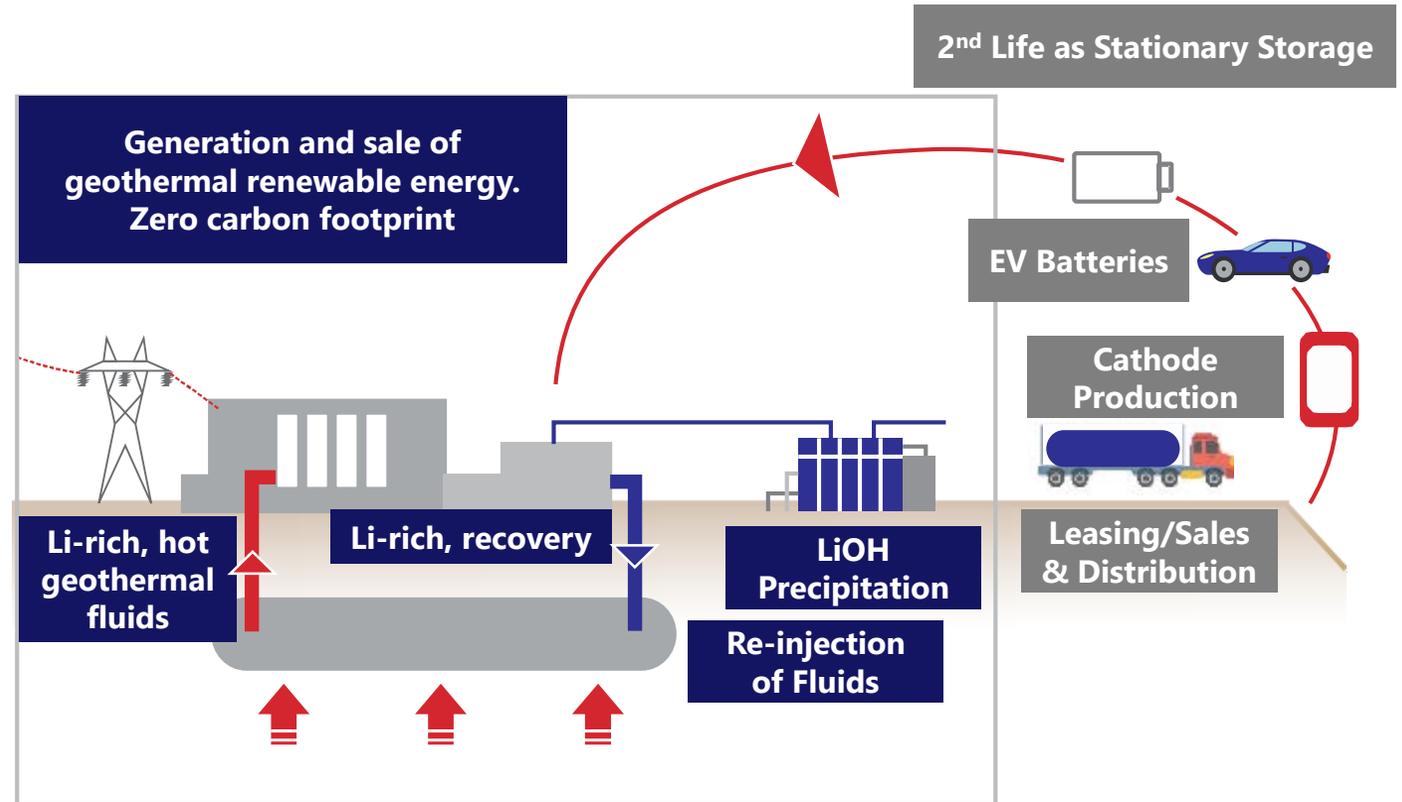
CATL factory could be at least as big as Tesla's Gigafactory

Who will supply?

Solution: Zero-Carbon Lithium in Germany



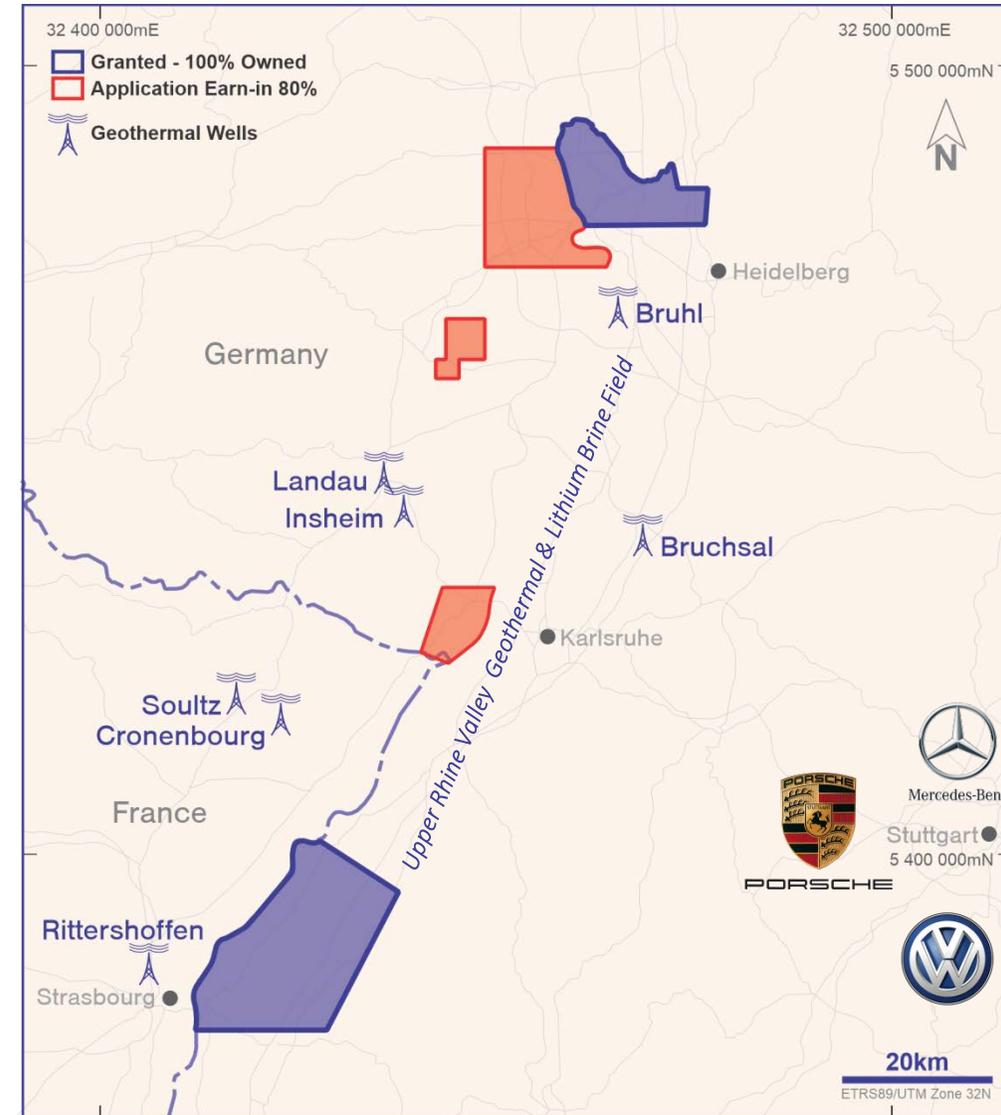
- Well understood geothermal brine field with **uniquely high lithium grade**
- Dual-purpose wells to be drilled
- Renewable energy to **offset** processing **energy** for lithium plant
- Direct precipitation of lithium hydroxide to be used, **avoiding evaporation**, with no pre-heating of hot fluids required – major advantage
- Filtered waters to be re-injected into aquifer - no drawdown on water table
- **Zero-Carbon Lithium** to be produced locally & transported to nearby battery factories



Well Understood Lithium and Geothermal Brine Field



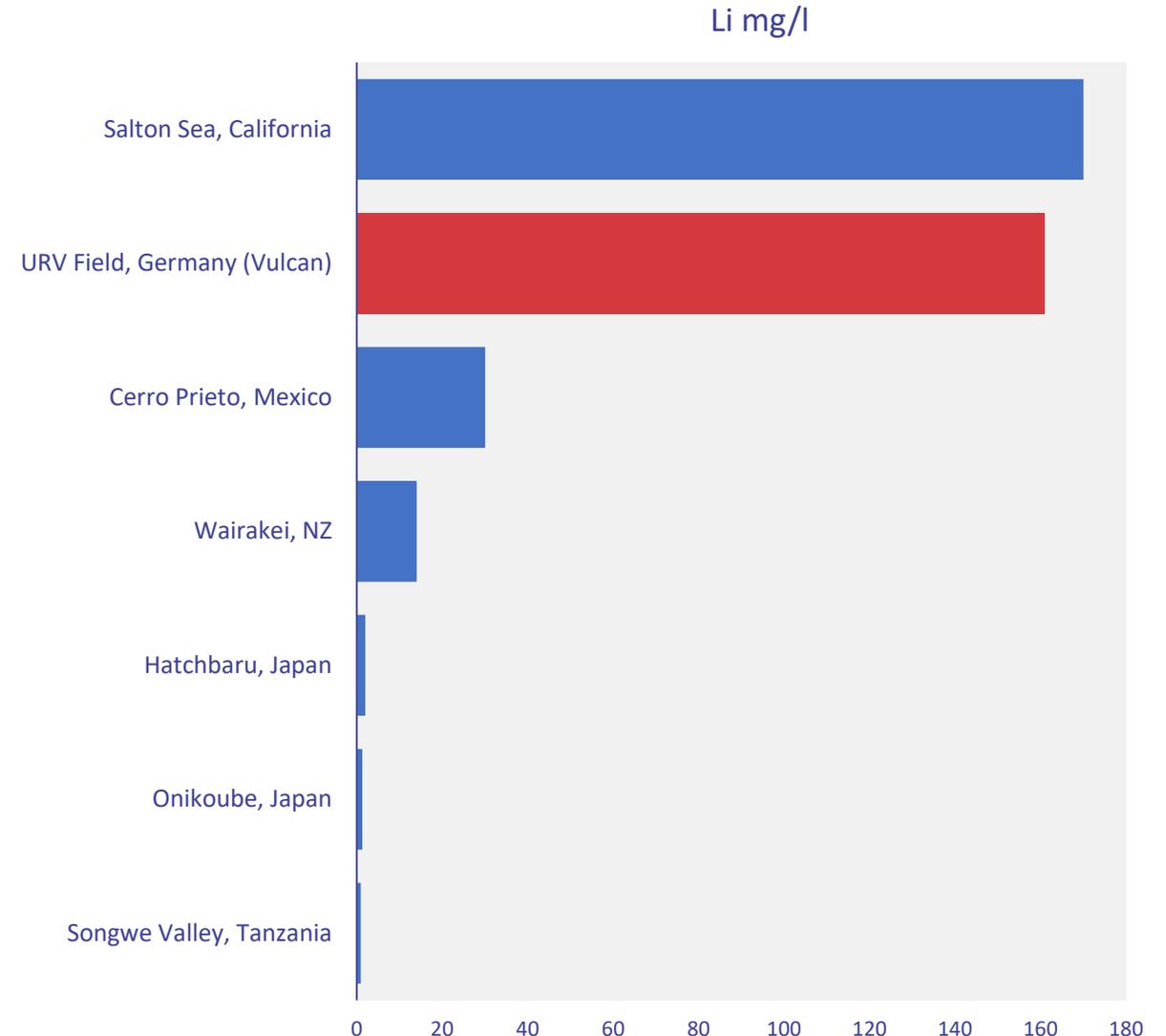
- Upper Rhine Valley geothermal fluids sampled over extended periods of time from multiple locations
- Grades¹ within the deep brine field consistently up to 210mg/l Li, average 161mg/l Li
- Thick Buntsandstein reservoir unit generally at 2,500m depth and has an average porosity¹ of 10%
- **Commanding land position** in the brine field of over 78,600 Ha, of which over 51,000Ha is already granted
- Selected areas based on commissioned study, defining most promising aquifers – Li grade, flow rate, heat
- Very well understood brine field; large amounts of **existing seismic and drilling data available** for resource evaluation
- Potential advantage of very short product transport distance



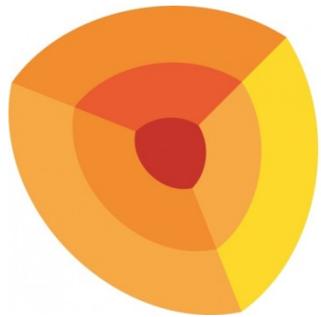
URV Brine Field: Unique Lithium Grade Potential



- Areas with heated brines are common, but the fluids are rarely lithium rich
- Typical geothermal brine fields have Li values in the order of 1-10mg/l Li¹
- The URV geothermal brine field exhibits Li values one to **two orders of magnitude** greater¹: up to 210mg/l Li, average 161mg/l Li,
- Only other known geothermal field in the World with similar lithium grades and flow rate is Salton Sea, California¹
- **Same order of magnitude of Li grade** as South American Li salar brines, but with processing advantage of being already heated
- URV field also exhibits low average Mg:Li ratios of 0.73¹



In Good Company – Peer Comparison



Controlled
Thermal
Resources



Other **geothermal brine lithium** companies:

- Controlled Thermal Resources (CTR), (Salton Sea), advancing to lithium production with **US\$1.8B project**¹, similar Li grades to Upper Rhine Valley (Vulcan) area
- CTR project previously held by Simbol (Salton Sea, California), which was reportedly **valued at US\$2.5B** and rejected **takeover offer of US\$325m** from Tesla¹
- Berkshire Hathaway Energy, with \$91B in assets (Salton Sea), also seeking to produce battery-grade lithium¹
- EuGeLi Consortium, including BASF, PSA Group (Peugeot-Citroen), EDF and Eramet (France) - recently secured funding for project in same URV field

Strong Corporate Appeal. Financial Model & Processing Route Well-Tested by Peers.

VULCAN PROJECT: UNIQUE SELLING PROPOSITION



SAMSUNG



LG Chem

BASF

We create chemistry

DAIMLER

GS YUASA

northvolt

JM Johnson Matthey
Inspiring science, enhancing life

PSA
GROUPE

CATL

SK innovation

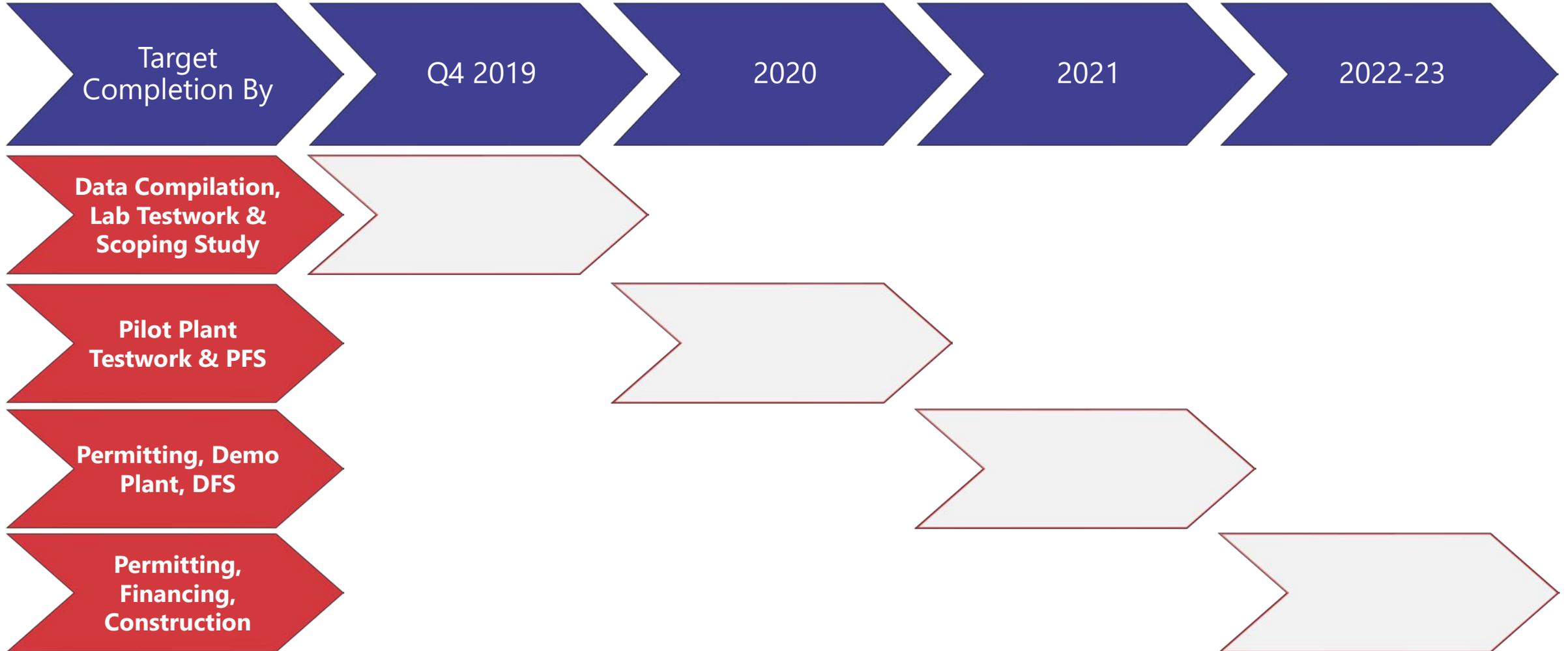
umicore
materials for a better life

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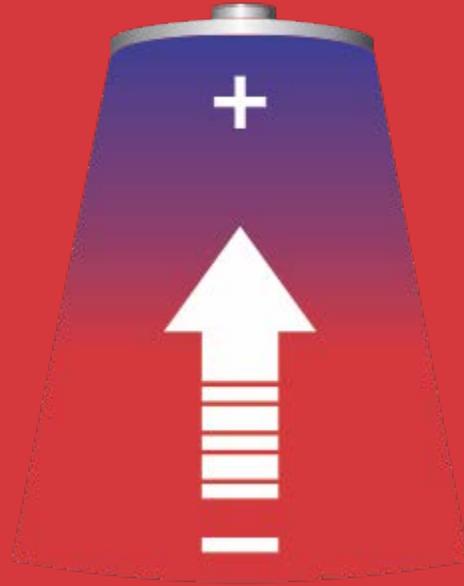
- Potentially **only “zero carbon” lithium product** to be on the burgeoning EU market - ultimate selling point for EV-producing manufacturers, potential to charge a premium over other lithium sources
- **Strategic, secure** domestic supply for EU OEMs at a time of global trade insecurity, in a Chinese-controlled market
- **Quick processing time** using Direct Precipitation means it can be responsive to market needs, unlike current salar production
- Potential for **additional credits** from renewable energy
- Lithium can potentially be recycled at end of useful battery life, providing fully circular economy, in line with EU aims
- Very short distance to market, unlike current sources of lithium

Poised for an explosion of European lithium demand

Planned Project Timeline



Poised for 2023 Lithium Demand Inflection Point in EU



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Thank you

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www.kopparresources.com

Appendix 1: Information Sources for Slide 12-13

- Elders, W., Cohen, L., (1983) *The Salton Sea Geothermal Field, California*, Technical Report. Institute of Geophysics and Planetary Physics, University of California
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- Mnzava, L., and Mayo, A. (2013). *Geochemical investigation of geothermal power potential exploration of hot springs in South western Tanzania*. *International Journal of Water Resources and Environmental Engineering* Vol. 5(10), pp. 597-607

The Competent Person is not aware of any new information or data that materially affects the information contained in the above sources or the data contained in this announcement