SEEKING ALPHA FROM SUSTAINABLE LITHIUM:

Fastmarkets Lithium Supply & Markets Conference

AUTUMN 2021

Commitment to the Future

LEPIDICO

EQUITY FUNDAMENTALS:

VERTICALLY INTEGRATED FROM MINE TO LITHIUM CHEMICAL

Lepidico is an elegant investment solution for the complex battery materials market, ideal for those seeking alpha from the rapidly rising - but yet-to-peak - lithium prices.

Market
ASX

Ticker
LPD

Market Cap
A$172m (share price A2.8c) (at 17 September 2021)

Cash
A$14.7m (no debt) (at 30 June 2021)

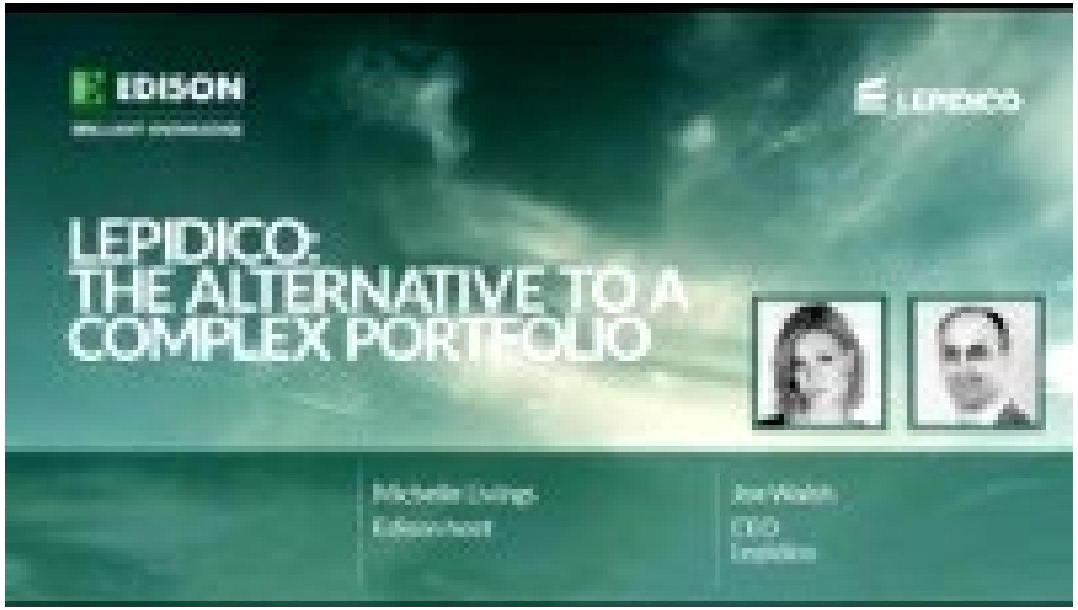
LEPIDICO

INVESTMENT CASE:
ALL THE LITHIUM UPSIDE, LESS RISK & COMPLEXITY

TIGHTENING CONDITIONS, HIGHER PRICES

"…the (lithium) market is set to face structural issues from 2021 onwards. Without significant supply-side developments, chemical availability poses a major bottleneck risk to battery production growth. We expect higher price levels to incentivise further investments by late-2021."
Benchmark Mineral Intelligence (BMI)

Despite market conditions, achieving alpha from equities in the sector is increasingly complex. Traditional lithium businesses are at risk from rapidly evolving battery tech, tightening ESG requirements, security of supply and long-term margin expectations. Whilst a slew of start-ups are making big claims, most are touting early stage technologies. We exist substantially outside this complex landscape.



Our tech-focused, ESG-led business model is pilot-proven, flexible, scalable and poised for its first lithium deliveries from mineral supply that is relatively uncontested.

We can also be considered a tech play, with others licencing our IP.

LEPIDICO

Corporate Timeline

2013-2015
- ✓ 2013 L-Max® process concept
- ✓ 2014 Provisional patent application
- ✓ First continuous lab trials 2015

2016
- ✓ ASX listing
- ✓ Company name change to Lepidico Ltd
- ✓ PFS starts

2017
- ✓ Pre-Feasibility Study complete
- ✓ Phase 1 Feasibility Study starts

2018
- ✓ L-Max® Pilot Plant development
- ✓ Provisional patent application for Cs & Rb separation process

Cs Rb

2019
- ✓ LOH-Max® provisional patent application
- ✓ Acquisition of TSX-V listed Desert Lion Energy & Karibib assets
- ✓ Pilot Plant confirms viability of L-Max® technology
- ✓ First L-Max® patent protection received

2020
- ✓ Inaugural Ore Reserve estimates for Rubicon and Helicon announced
- ✓ World's only Ore Reserve estimate for "Critical Minerals" Cs & Rb
- ✓ Phase 1 Project DFS completed
- ✓ Namibia ESIA & ESMP completed to IFC Standards

2021
- ✓ EPCM contract awarded
- ➢ Front End Engineering & Design to complete
- ➢ First product offtake agreements

2022
- ➢ Phase 1 full funding package
- ➢ Karibib mining commences
- ➢ Karibib concentrator ore commissioning starts

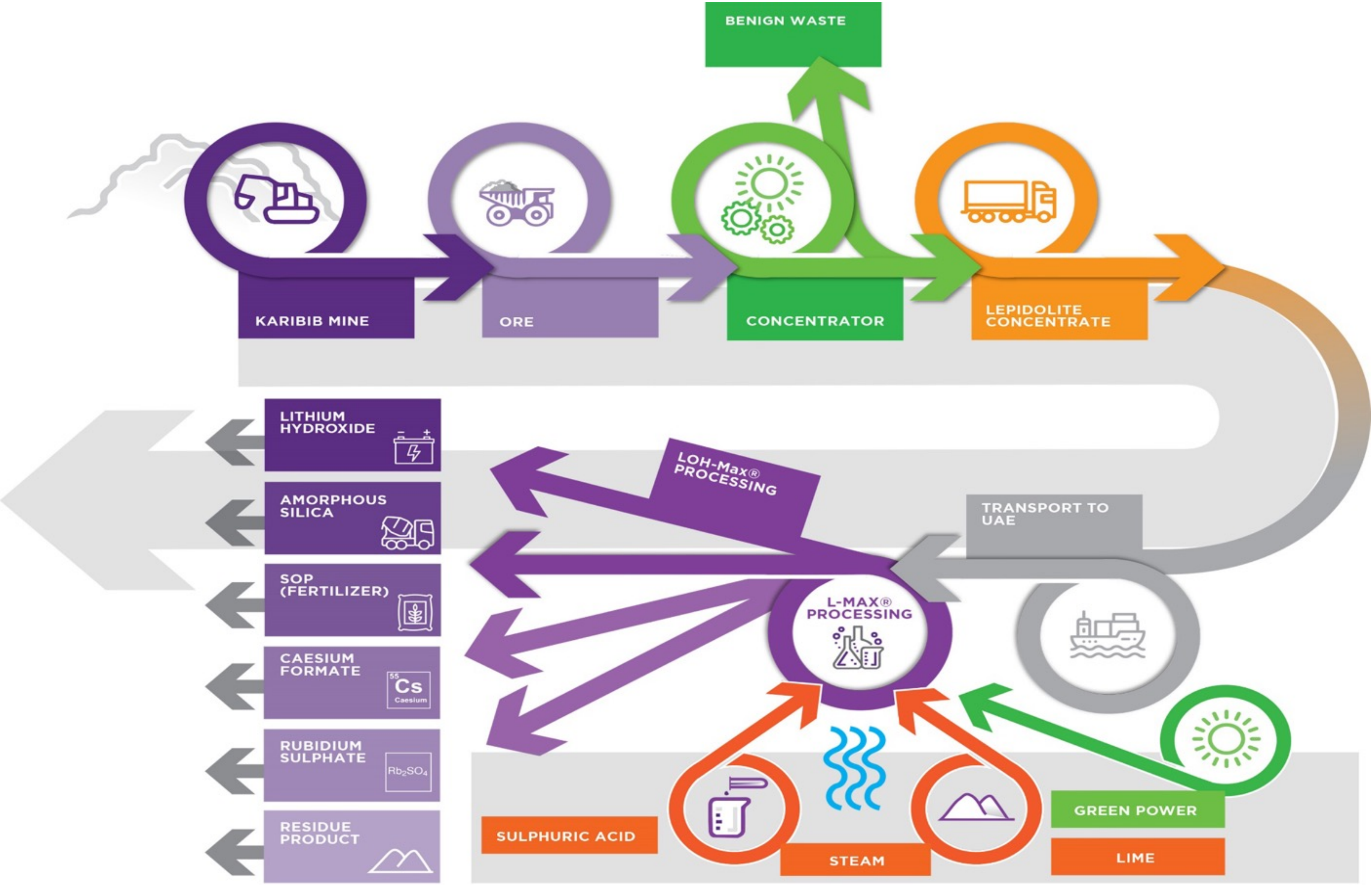
2023
- ➢ Chemical Plant commissioning starts
- ➢ Project fully operational
- ➢ Phase 2 Feasibility Study starts

LEPIDICO

THIS IS WHAT WE DO:
FROM MINE TO MARKETPLACE

When operations come on stream in 2023, lithium mica ore mined and concentrated in Namibia will be shipped as concentrate for processing in the UAE.

Our patented technologies transform the concentrate into lithium hydroxide - or carbonate - as well as in-demand strategic chemicals caesium and rubidium - and other saleable outputs.



TRANSITIONING TO PRODUCTION:
PROGRESS POISED TO DELIVER

Critical Minerals Confirmed
We have 6.7Mt in Reserves of lithium, caesium, rubidium & potassium

Feasibility Study
Competitive costs and enhanced margins from by-product revenues

Pilot Proven Technologies
Our patented L-MAX and LOH-MAX processes produce high quality chemicals hydro-metallurgically

Approvals in Place
Mining Licence and all environmental permits to construct in place

Pricing cycles
Lithium prices continue to rise. Supply deficits forecast this year.

Experienced Management
Track record in project development and sustainable production

Strong ESG Credentials
CO_2, water and land use intensities low, and we aim to make these best-in-class

Debt Financing
Formal mandate signed with U.S. Development Finance Corporation

Offtake Discussions
Advanced discussions with LiOH customers and 4 caesium consumers

Strategic Collaboration
First technology licence sold to Cornish Lithium Ltd

LEPIDICO

OUR TECHNOLOGIES

Commitment to the Future

LEPIDICO

L-Max® – the conversion solution for Li-mica minerals

- **Innovation:** efficiently leaches and refines lithium from less contested lithium micas and phosphates
- **Sustainable operations:** utilises common, inexpensive reagents, is energy efficient & has straightforward OH&S characteristics, It also utilises conventional equipment & operates at atmospheric pressures and modest temperatures
- **High value:** As well as the caesium and rubidium by-products, L-Max® also delivers potassium sulphate fertiliser (SOP), amorphous silica and gypsum residue; with zero-waste potential
- **Scalable:** A larger Phase 2 Plant is expected to reduce already competitive capital intensity[1]: US$10,500/t after credits @ 20,000tpa LCE

Patents: Australia, Europe, Japan & US patent protection received.

The Australian Patent Office declared L-Max® to be "novel, inventive, industry applicable and patentable"

Amblygonite

$(Li,Na)AlPO_4(F,OH)$

Lepidolite

$K(Li,Al,Rb,Cs)_3(Al,Si)_4O_{10}(F,OH)_2$

Zinnwaldite

$KLiFeAl(AlSi_3)O_{10}(OH,F)_2$

LEPIDICO

[1] *Capital intensity is the measure of pre-production capital per tonne of annual lithium carbonate equivalent plus by-products adjusted to lithium hydroxide equivalent*

LOH-Max® - a more sustainable Lithium Hydroxide solution[1]

- **Patent** – provisional patent lodged early 2019; national patent phase started August 2020
- **Broad application** – in lithium mineral conversion that employs sulfur-based chemistry; includes Spodumene
- **Recovery enhanced** – +4% versus conventional Spodumene process; +1,000tpa LiOH at nominal 20,000tpa rate

- **CapEx reduced** – by US$52M (14%) on 20,000tpa LCE reference case Spodumene converter on simplified flowsheet
- **OpEx reduced** – by US$8M pa versus reference Spodumene converter case on lower power and reagent consumption
- **CO_2 reduced** – lower Scope 1, 2 and 3 emissions versus conventional processing
- **Value enhanced** – by +US$100M per 20,000tpa $LiOH.H_2O$ over 10-years
- **Waste** – benign gypsum/alunite waste
- **Risk reduced** – as sodium sulphate not produced; a potential fatal flaw for conventional plants if disposal required
- **Ownership** – 100% owned by Lepidico; royalty sharing arrangement with original developers for third party licenses

[1] *ASX Announcement: LOH-Max® process technology acquisition & improvements, 29 October 2020*

LEPIDICO

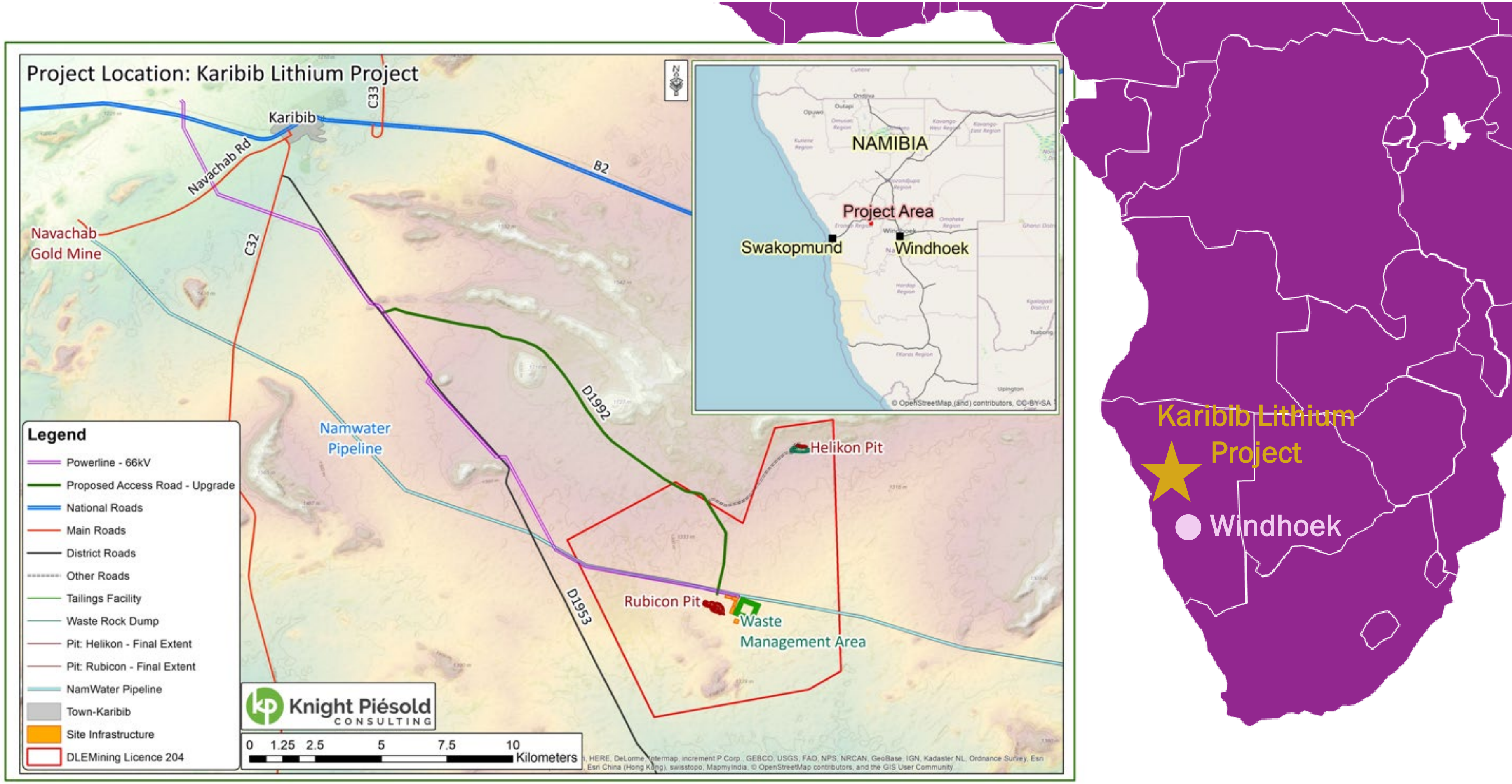
OUR PHASE 1 PROJECT

Commitment to the Future

LEPIDICO

Karibib Project, Namibia

- Brownfield re-development of Rubicon & Helikon mines
- Fully permitted: Granted 68km^2 Mining Licence
- Water extraction licence given - 85% of process water will be recycled
- Construction of new small-scale 60,000tpa concentrator
- Direct access to excellent existing regional infrastructure
- New 25km line for grid power
- +1,000km^2 land position prospective for lithium, caesium, rubidium & gold



Drilling began May 2021 to test 3 priority lithium pegmatite targets: objective is to expand Mineral Resource base to extend Phase 1 life & support the Phase 2 Project Scoping Study

LEPIDICO

Reserves & Resources : Unique source of Critical Minerals

Ore Reserve Estimate[1] Rubicon & Helikon 1 deposits

Reserve Category	Tonnes (M)	Li_2O (%)	Rb (%)	Cs (ppm)	Ta (ppm)	K (%)
Proved	1.93	0.59	0.28	410	50	2.10
Probable	4.79	0.41	0.21	290	40	1.99
Total Reserves	**6.79**	**0.46**	**0.23**	**320**	**50**	**2.02**

- JORC Code (2012) compliant Ore Reserve estimate for lithium, rubidium, caesium & potassium
- 76% conversion of Measured & Indicated Resources to Reserves for a 14-year project life
- Inferred Resource potential supports expansion potential or Phase 2 Project development
- Mineral Resource estimates in progress for lepidolite surface stockpiles
- Ore exposed at surface and deposits pre-stripped by historical mining
- Strip ratio just 0.5 to 1 for the first 2 years and 3.8 to 1 Life of Mine
- Most mine development work complete including haul road to Helikon 1 & water supply

Karibib Project Global Mineral Resources [2]

Deposit	Resource Category	Tonnes (M)	Li_2O (%)	Rb (%)	Cs (ppm)	Ta (ppm)	K (%)	Cut-off (% Li_2O)
Rubicon & Helikon 1[3]	Measured	2.2	0.56	0.27	389	51	2.14	0.15
	Indicated	6.66	0.38	0.20	274	42	2.07	0.15
	Inferred	0.17	0.7	0.29	1100	150	2.18	0.15
Helikon 2, 3, 4 & 5[4]	Inferred	2.2	0.41					0.20
Rubicon tailings[5]	Indicated	0.07	0.99	0.42	538	60		0.00
Rubicon & Helikon stockpiles[5]	Inferred	0.57	0.79					0.00
Global	**Measured**	**2.2**	**0.57**	**0.27**	**389**	**51**	**2.14**	
	Indicated	**6.73**	**0.39**	**0.21**	**277**	**42**		
	Inferred	**2.94**	**0.5**					
	Total	**11.87**	**0.45**					

[1] ASX Announcement: DFS Delivers Compelling Phase 1 Project Results, 28 May 2020
[2] Resources are inclusive of Ore Reserves
[3] ASX announcement dated 30 January 2020: Updated Mineral Resource Estimates for Helikon 1 and Rubicon
[4] ASX announcement dated 16 July 2019: Drilling starts at the Karibib Lithium Project
[5] ASX announcement dated 12 March 2021: Karibib Mineral Resources Expanded

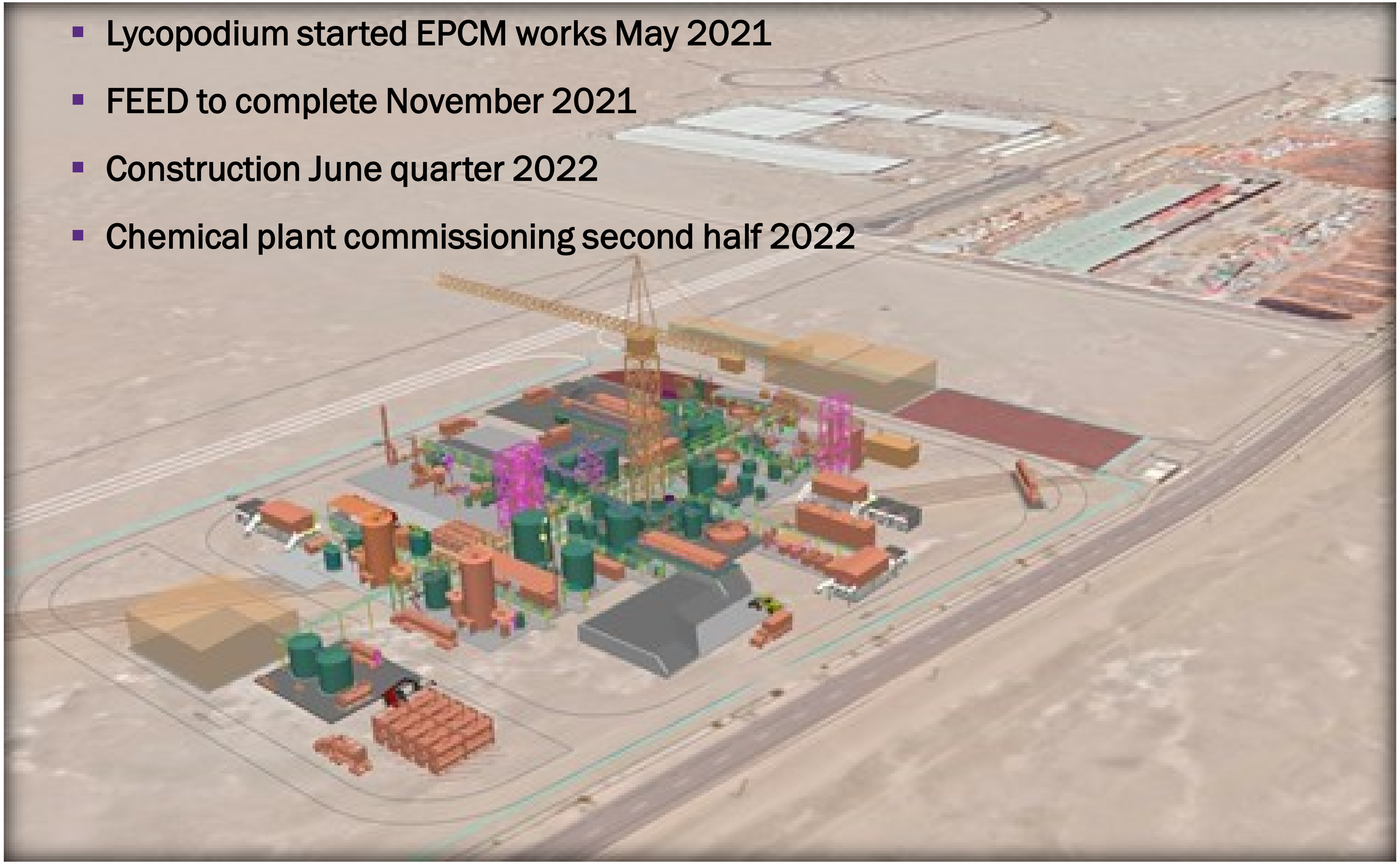
LEPIDICO

Karibib Concentrator – conventional flotation, small footprint

- Lycopodium started EPCM works May 2021
- FEED to complete November 2021
- Construction March quarter 2022
- Mining December quarter 2022
- Concentrator commissioning late 2022

Phase 1 Chemical Conversion Plant – Abu Dhabi

- Lycopodium started EPCM works May 2021
- FEED to complete November 2021
- Construction June quarter 2022
- Chemical plant commissioning second half 2022



- Located in Khalifa Port Free Trade Zone, Abu Dhabi
- Existing infrastructure available through "plug and play" approach
- Abu Dhabi ESIA complete and environmental permit to construct in place

LEPIDICO

Phase 1 Project Definitive Feasibility Study[1]

Construction Cost of
US$139M

Post Tax
NPV_8 of US$221M
NPV_0 of US$521M
IRR of 31%

Project Payback
(from start of production)
3 years

Operating Costs
(by-product LCE basis)
C1 Cash Cost US$/t 1,656
ASIC US$/t3,221

Average Annual Free Cash Flow[3]
(post ramp-up)
US$49M

Lithium Hydroxide Production[2]
4,879 tpa

Sulfate of Potash Production[2]
12,000 tpa

Caesium Sulfate Production[2]
240 tpa

Total LCE All Products[2]
7,060 tpa

Project Life
14 years

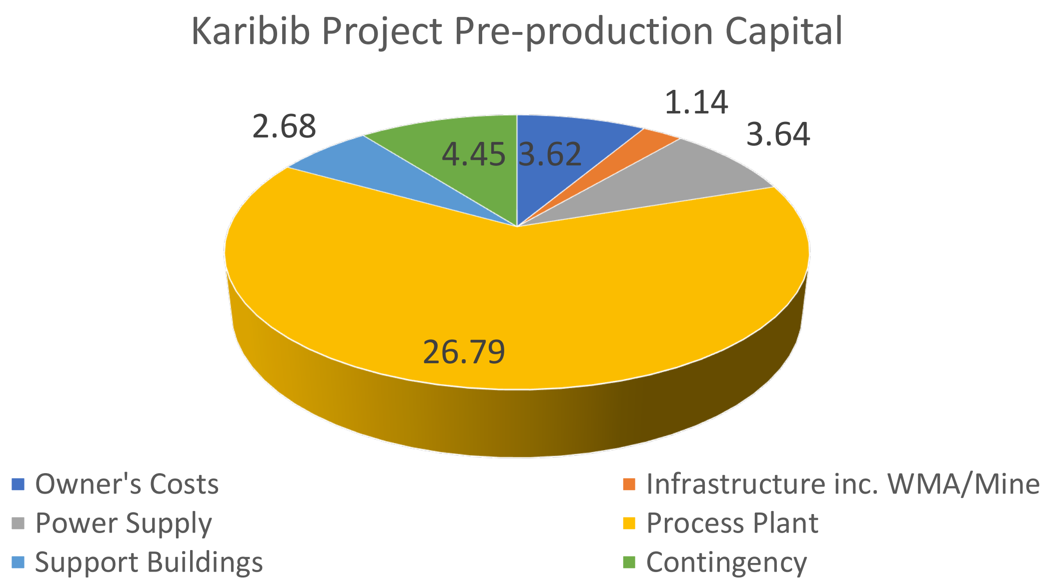
[1] *ASX Announcement 28 May 2020: DFS delivers compelling Phase 1 Project results.*
[2] *By-products at steady state operation.*
[3] *Cash flows based on Benchmark Mineral Intelligence Q1 2020 LiOH price forecast (US$12,910/t long term).*

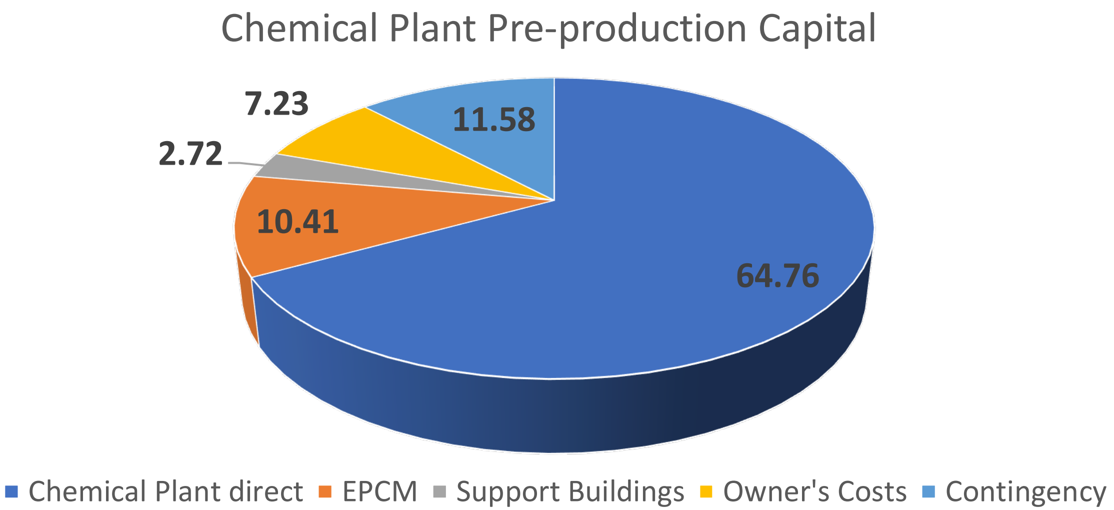
LEPIDICO

Capital Cost Summary

Competitive capital intensity: US$17,400/t LCE after by-product credits; US$27,900/t before credits

Pre-production Capital	$M
Karibib Project	37.9
Chemical Plant	85.1
Contingency (13%)	16.0
Total Pre-production	**139.0**
Working capital	16.0
Leasing value	5.5

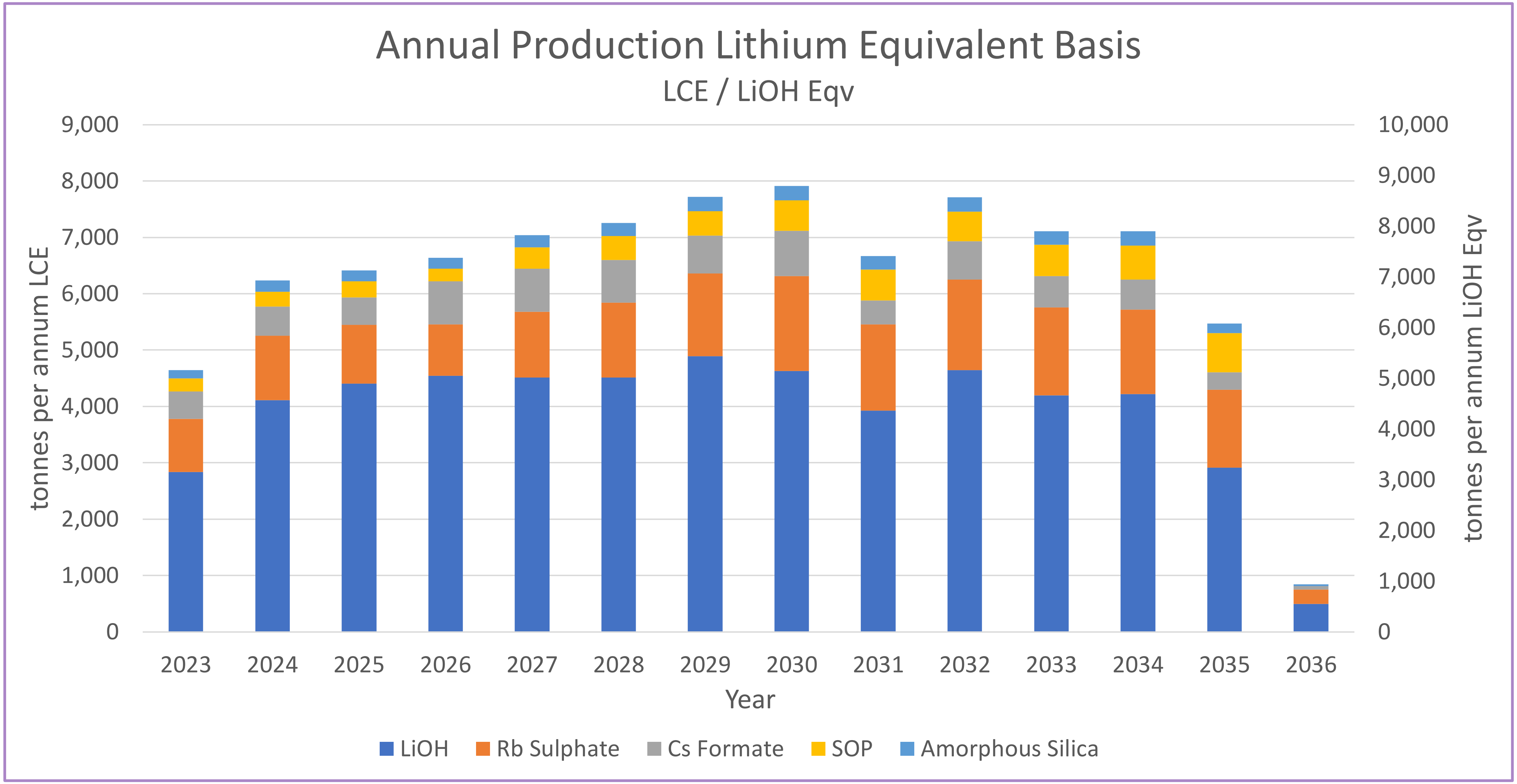




Sustaining Capital – Life of Project	$M
Karibib Project	14.2
Chemical Plant	8.7
Acid Plant	15.6
Total Sustaining	**38.5**

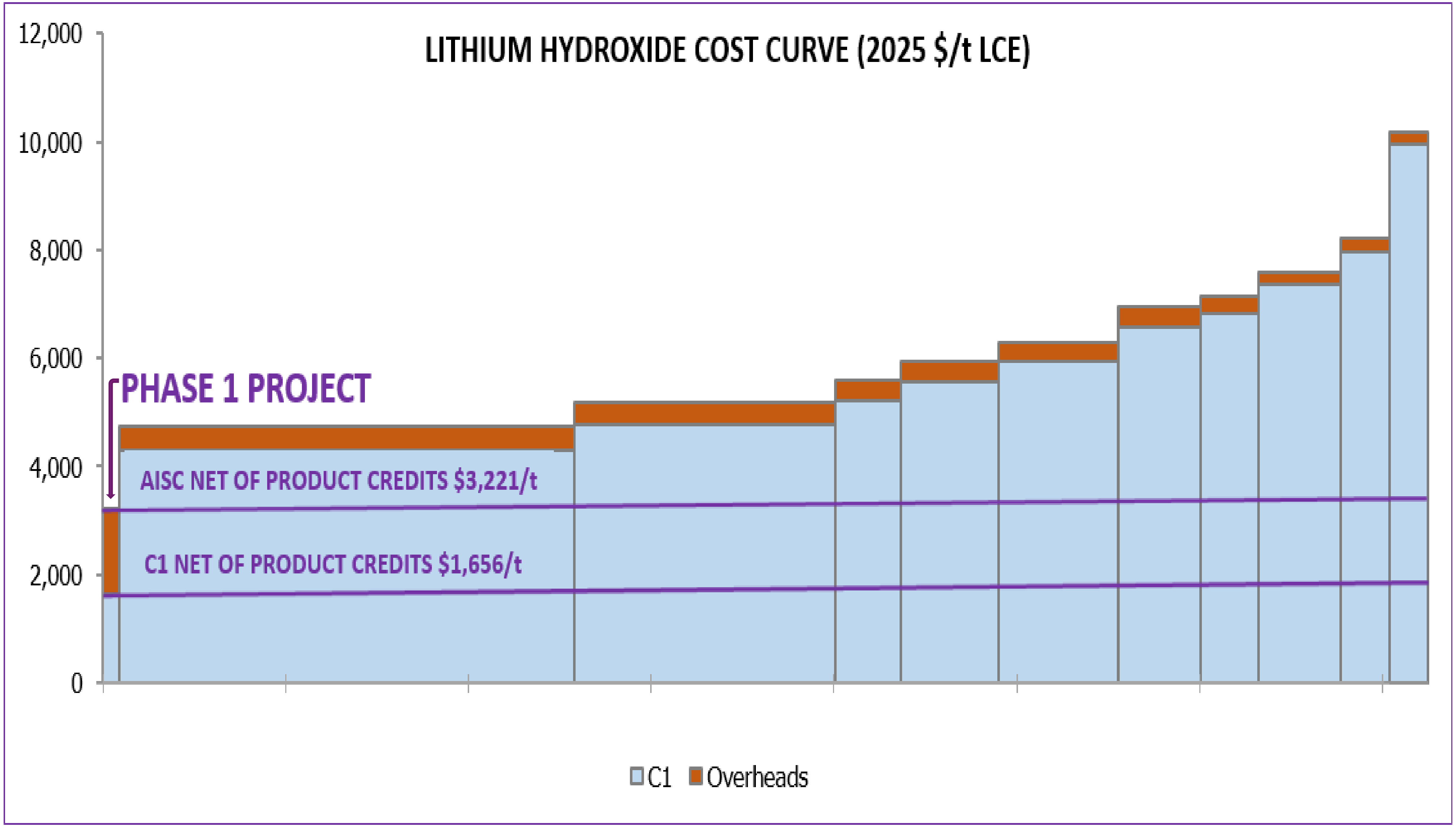
LEPIDICO

Life of Mine Production



LEPIDICO

Low All in Sustaining Costs



Source: Benchmark Mineral Intelligence for industry data; Lepidico for Phase 1 Project data

ESG

Commitment to the Future

LEPIDICO

Environmental stewardship

- **Competitive carbon intensity** – GHD reported "low" chemical plant emissions intensity vs other LiOH plants; 8.8tCO_2-e/t $LiOH.H_2O$ (10.0tCO_2-e/t LCE) for integrated project Scope 1 & 2 emissions – 90% in chemical plant, 10% mine & concentrator; renewable power and green hydrogen can lower emissions to just 3.0tCO_2-e/t LCE
- **Other emissions & pollutants** – negligible
- **Water intensity** – 33m^3/t LCE, 44% allocation to LiOH; 20% Namibia/80% UAE for first 5 years, with 85% of concentrator water recycled
- **Land use intensity** – 962Ha integrated project on predominantly industrial land; mine closure plan to return land to agricultural use; Category B designation
- **Biodiversity** – ESIAs identifies no material impacts at Karibib & UAE operations are located within a designated industrial park
- **Industrial waste generation** – no TSF required, benign mine and concentrator waste co-disposed; no sodium sulphate generated from converter; & opportunity for zero-waste chemical plant

LEPIDICO

Social Responsibility & Governance

Health & Safety

- Lost Time Injury & Total Recordable Incidents Frequency Rates 0 > zero harm
- More than 118,000 hours worked with no Recordable Incidents since records began in 2016

Social

- Creation of 115 direct jobs and +800 indirect jobs in Namibia
- 119 new direct jobs in the UAE
- No relocation requirement
- Water supply to local farmers
- Medical equipment donation

Governance

- Experienced Board of Directors with complementary skills
- Sustainability & best practice ESG integrated with strategic planning
- Diversity Committee established
- Risk register including a residual risk rating for all actions and controls

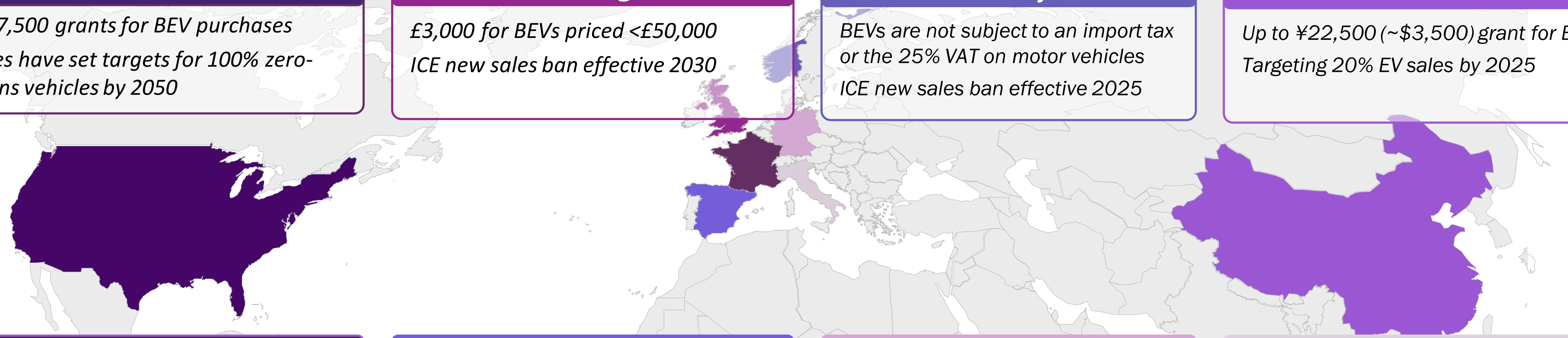
LEPIDICO

LITHIUM MARKET

Commitment to the Future

LEPIDICO

Push & Pull Policies Are Creating Tailwinds for Electric Vehicles…



United States
Up to $7,500 grants for BEV purchases
10 states have set targets for 100% zero-emissions vehicles by 2050

United Kingdom
£3,000 for BEVs priced <£50,000
ICE new sales ban effective 2030

Norway
BEVs are not subject to an import tax or the 25% VAT on motor vehicles
ICE new sales ban effective 2025

China
Up to ¥22,500 (~$3,500) grant for BEVs
Targeting 20% EV sales by 2025

France
€7,000 grant on BEV purchases <€40,000 + €5,000 scrapping incentive
ICE new sales ban effective 2040

Spain
Up to €6,500 grant for BEV purchasers
ICE sales ban effective 2040

Germany
€9,000 grant on the purchase of BEVs priced below €40,000
ICE new sales ban effective 2030

Italy
€6,000 BEV purchase incentive +€4,000 if an ICE vehicle is scrapped
Targeting 30% EV penetration by 2030

Automotive Manufacturers Have Identified Electric Vehicle Targets

*January 28, 2021 – General Motors is working with the Environmental Defense Fund to develop an **all-electric vision** and **eliminate tailpipe emissions from new light-duty vehicles by 2035***

DAIMLER
*July 22, 2021 – Daimler will invest **over €40 billion into battery electric vehicles** between 2022 and 2030 as they plan to go **all electric by the end of the decade***

*January 7, 2021 – Volvo Cars commits to becoming a premium electric car company and, **by 2025, aims for its global sales to consist of 50% fully electric cars with the remainder being hybrids***

*March 17, 2021 – BMW Group expects to deliver to customers about **2 million full-electric vehicles by the end of 2025, increasing to 10 million by 2030***

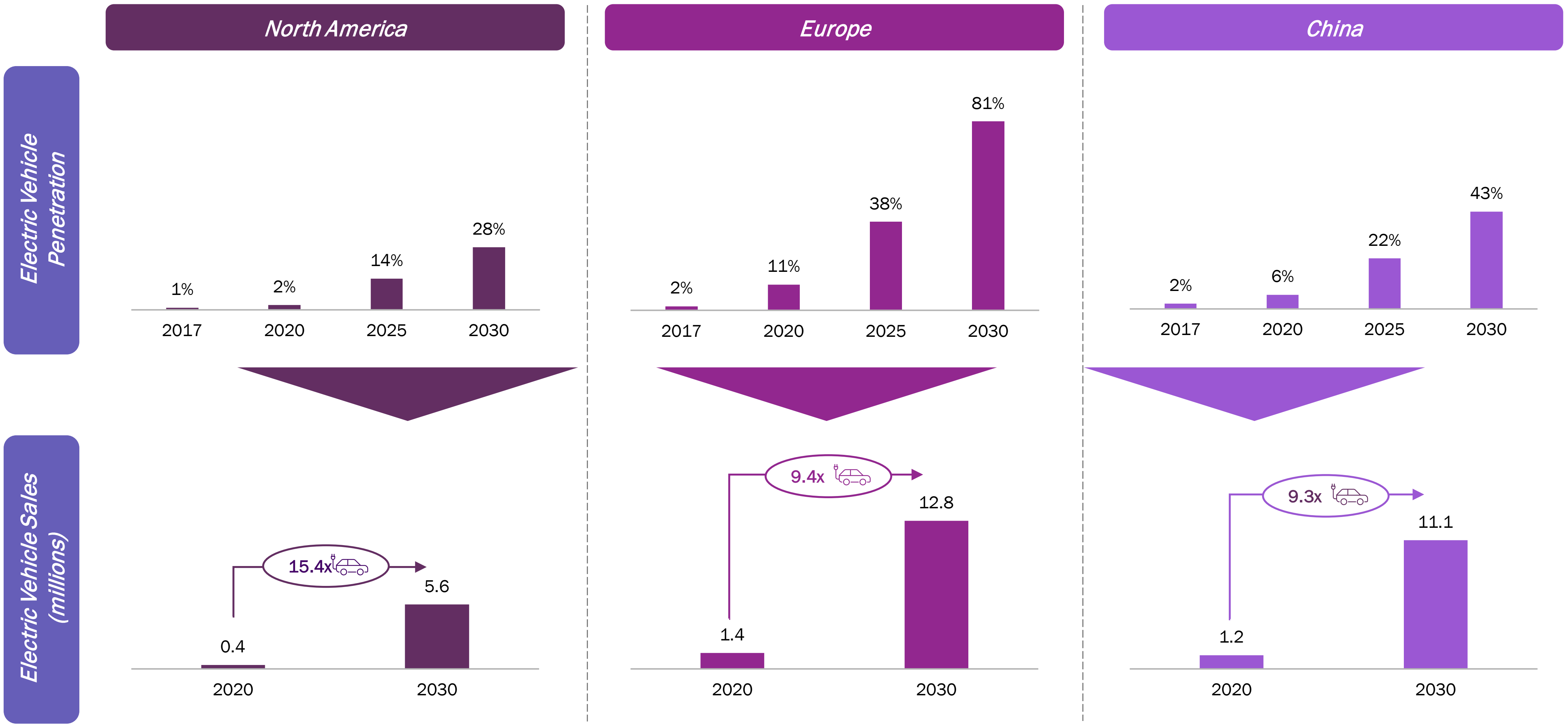
*March 19, 2021 – Volkswagen announced goal of becoming **balance sheet CO_2 neutral by 2050***

*June 2, 2021 – Toyota plans to expand to around **70 electrified models globally by 2025 and become carbon neutrality by 2050***

LEPIDICO

Source: Company websites, Jefferies Equity Research.

…Driving Significant Ramp-Up in Electric Vehicle Penetration Globally



Secular Changes in EV Adoption Will Transform Demand for Battery Materials

LEPIDICO

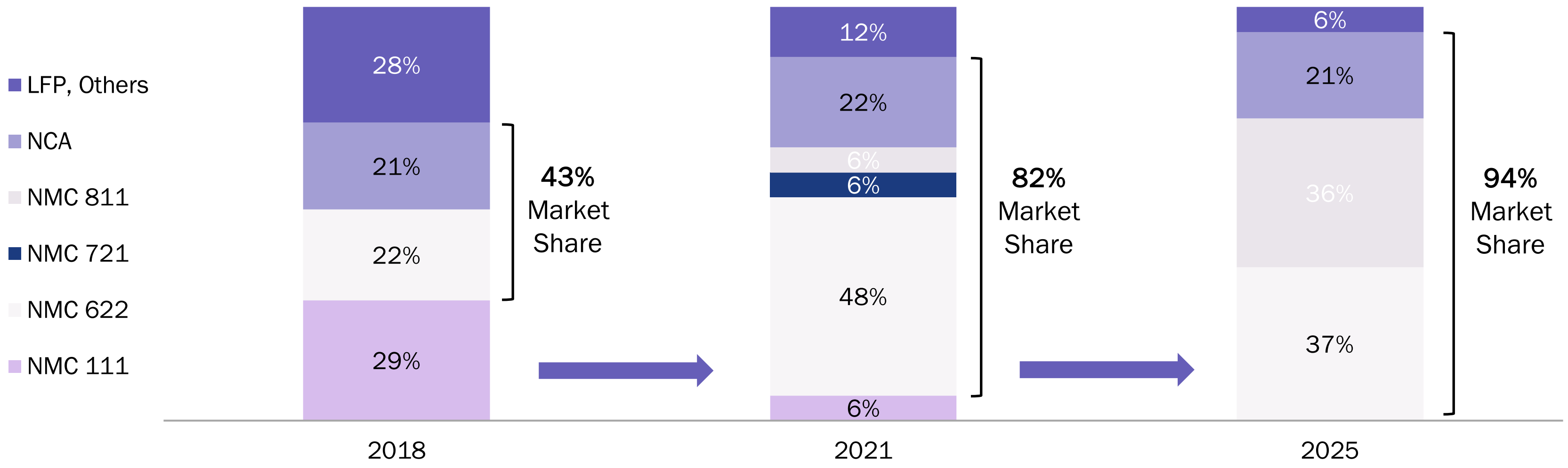
Source: Jefferies Equity Research.

Lithium Is THE Critical Component

Lithium Is the Constant Input Across All Types of EV Batteries

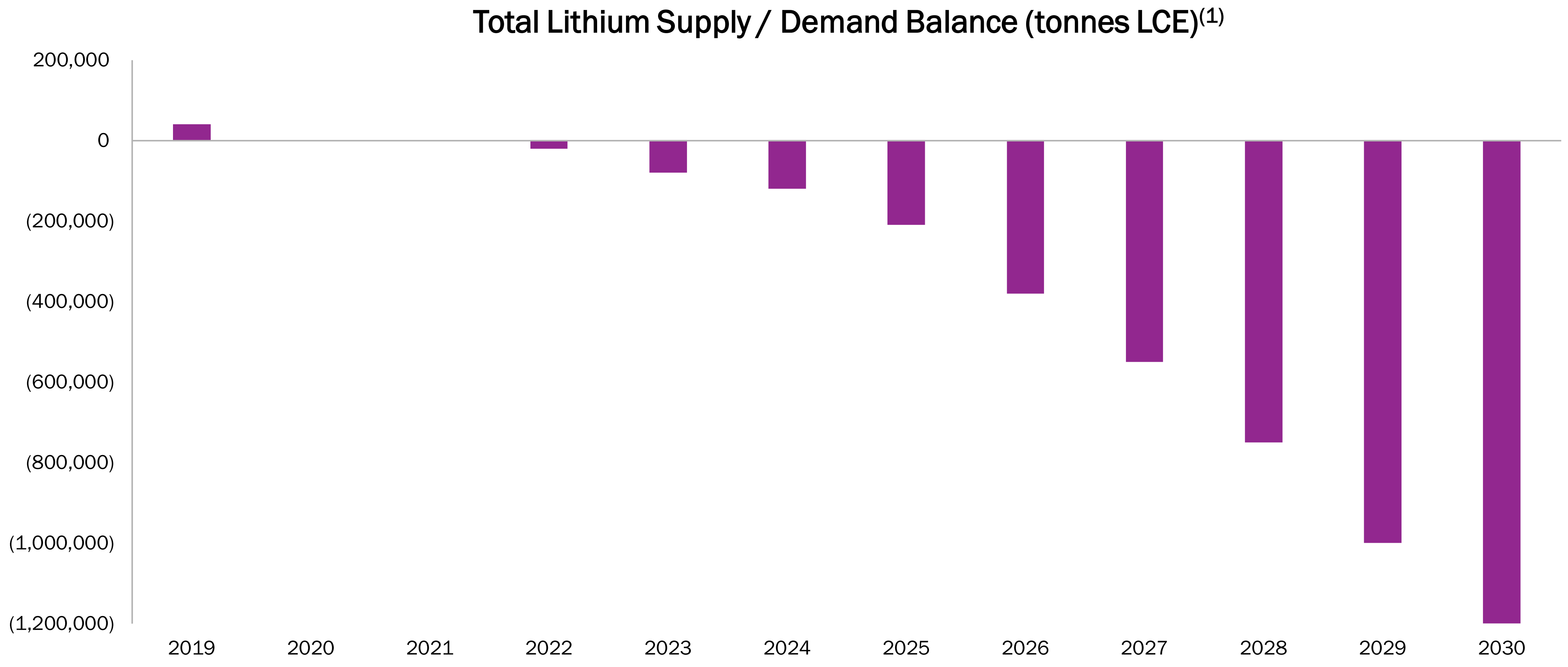
Cathode Material	Lithium	Copper	Nickel	Manganese	Cobalt	Graphite
NCA	✓	✓	✓		✓	✓
NCA+	✓	✓	✓		✓	✓
NMC 333	✓	✓	✓	✓	✓	✓
NMC 532	✓	✓	✓	✓	✓	✓
NMC 622	✓	✓	✓	✓	✓	✓
NMC 811	✓	✓	✓	✓	✓	✓
LFP	✓	✓				✓
LMO	✓	✓		✓		✓

LiOH expected to take dominant share (90%+) in lithium battery cathode chemistries by 2025



Source: IEA.

Strong Fundamentals…

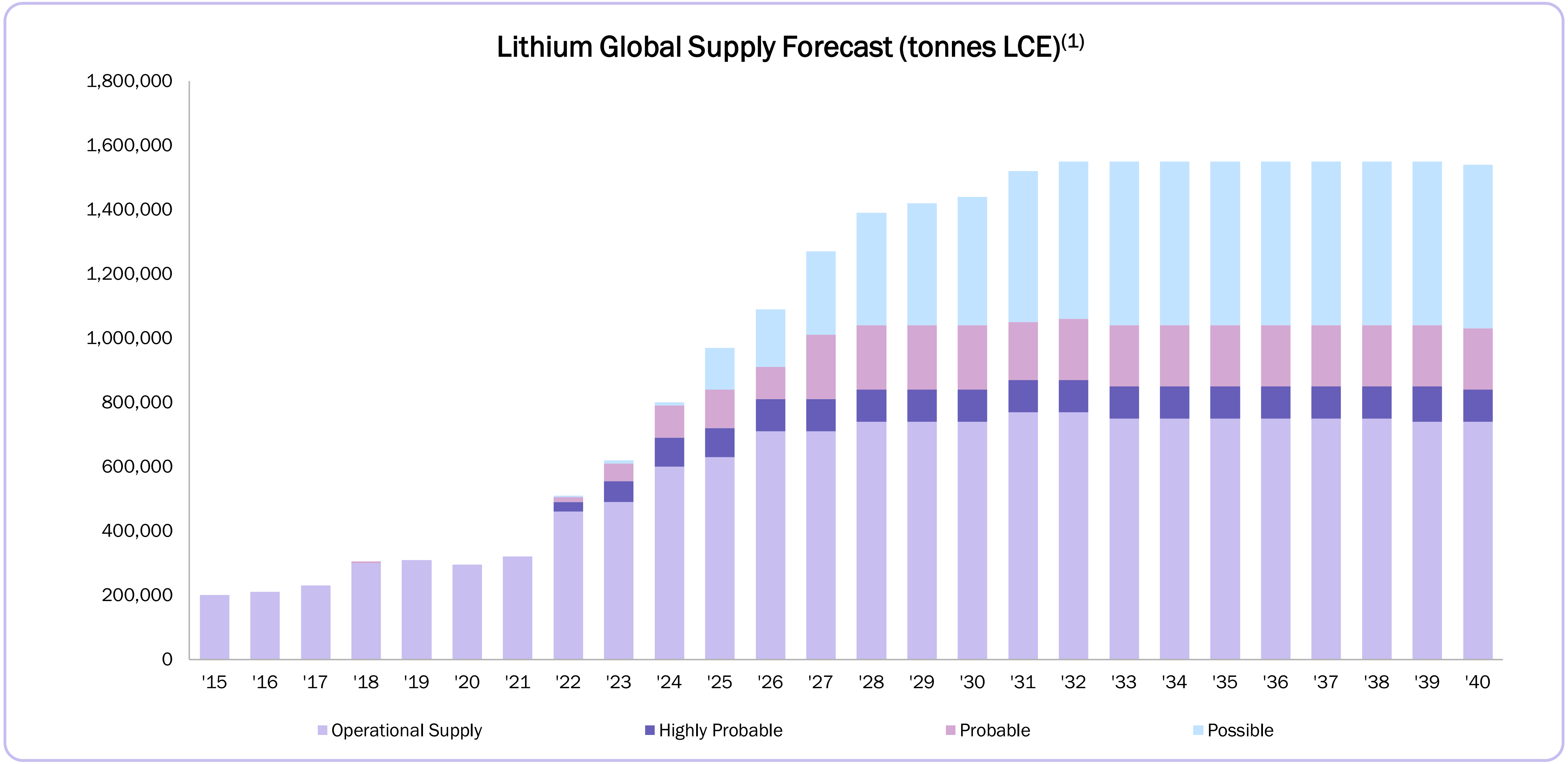


The market for lithium chemicals is forecasted to be in a supply deficit from 2022 onwards

LEPIDICO

(1) Source: Benchmark Mineral Index.

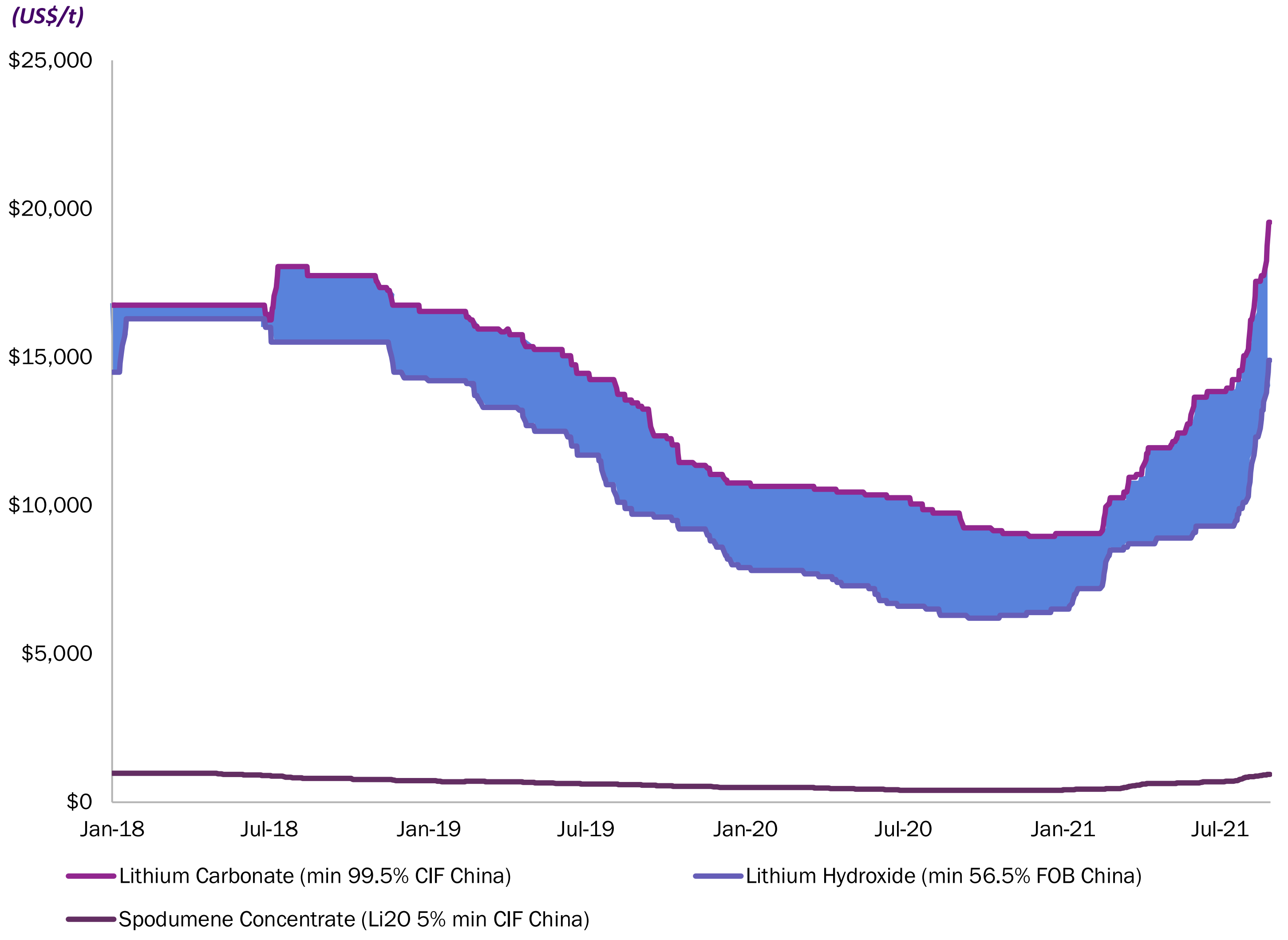
...Underpinned by Project Uncertainty and Long Lead-times



LEPIDICO

Lithium Industry Pricing Mechanisms

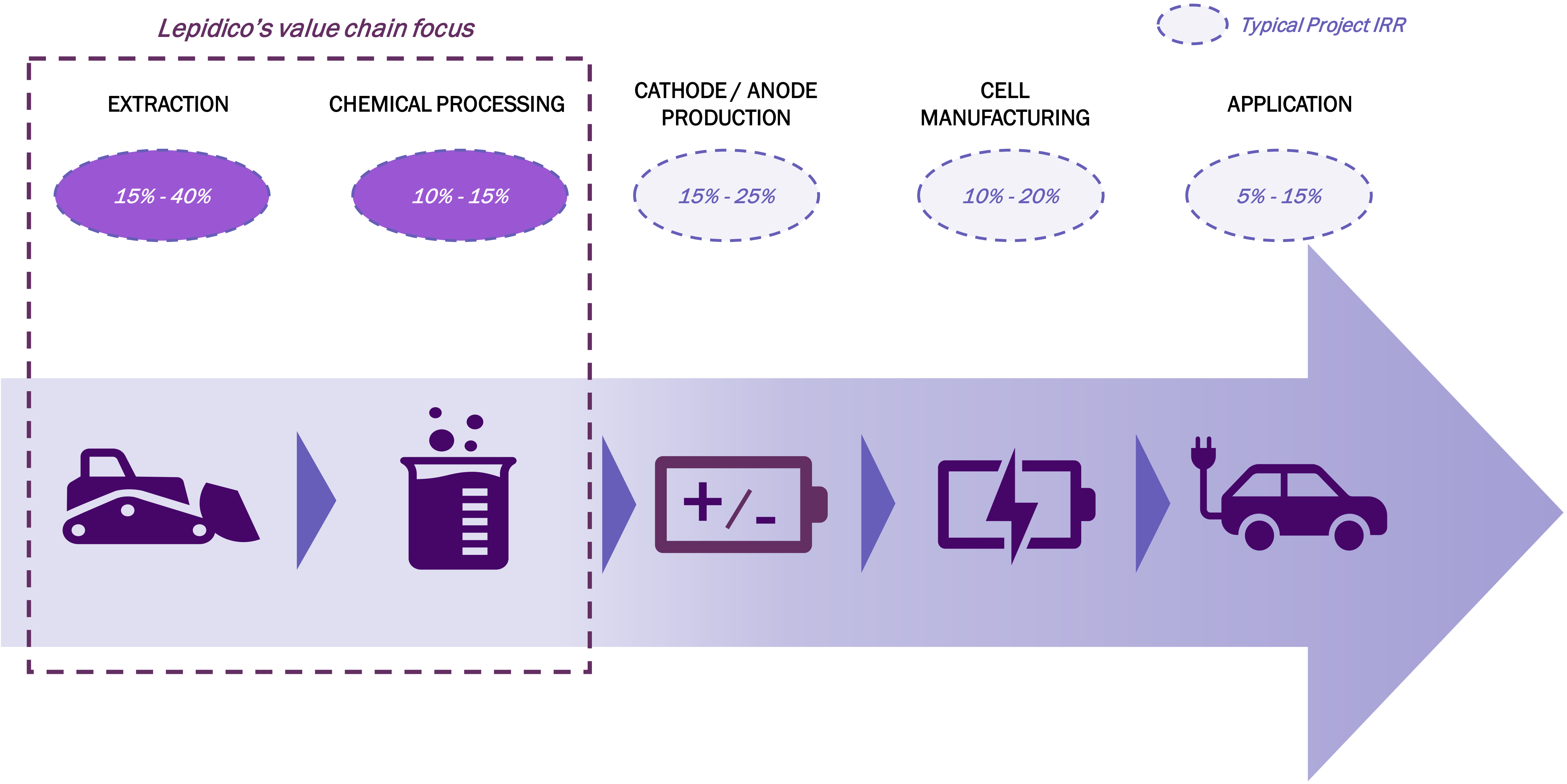
- Since beginning of 2021, prices of both lithium hydroxide and lithium carbonate have continued to rise back to almost 2018 levels
- Primarily driven by the sharp surge in domestic Chinese lithium carbonate market
- Similarly prices for most battery raw materials were maintained at historically high levels compared to the past 2-year period
- Continued strong demand growth into H2 2021 is expected to maintain elevated prices



Source: Bloomberg, S&P, Roskill.
Note: Market data as of September 3, 2021.

LEPIDICO

Lithium Supply Chain



Source: Benchmark Mineral Intelligence, Wall Street Broker Research.

LEPIDICO

Commitment to the Future

IN SUMMARY

LEPIDICO

Lepidico's Transition to Construction & Operations

Permitting

- Karibib Project ESIA completed; aligned with Equator Principles & IFC Performance Standards.
- Karibib Project fully permitted for mines and concentrator
- Abu Dhabi ESIA complete; aligned with Equator Principles & IFC Performance Standards
- Environmental permit to construct the chemical plant at KIZAD granted

Construction

- EPCM contract award to Lycopodium; works started May 2021
- Phase 1 early services, early works and FEED fully funded & on schedule for November 2021 completion
- Construction to start February 2022 subject to finance
- Commissioning to start Q4 2023 for chemical production Q4 2023

Offtake

- Lithium hydroxide offtake discussions well advanced with multiple consumers in the EV supply chain
- Constructive discussions with 4 prospective customers of caesium; higher specification products confirmed
- Marketing of bulk by-products, SOP, silica & gypsum residue, in UAE resumed September 2021

Finance

- Lion's Head Global Partners advising on debt finance from Development Financing Institutions (DFIs) and commercial lenders
- Mandate letter signed with the U.S. International Development Finance Corporation (DFC)
- Independent engineer appointed for DFC debt financing of the Phase 1 Namibian operations and working capital

LEPIDICO

IMPORTANT INFORMATION

This presentation has been prepared by the management of Lepidico Ltd (the 'Company') for the benefit of brokers, analysts and investors and not as specific advice to any particular party or person.

The information is based on publicly available information, internally developed data and other external sources. No independent verification of those sources has been undertaken and where any opinion is expressed in this document it is based on the assumptions and limitations mentioned herein and is an expression of present opinion only. No warranties or representations can be made as to the origin, validity, accuracy, completeness, currency or reliability of the information. The Company disclaims and excludes all liability (to the extent permitted by law), for losses, claims, damages, demands, costs and expenses of whatever nature arising in any way out of or in connection with the information, its accuracy, completeness or by reason of reliance by any person on any of it.

Where the Company expresses or implies an expectation or belief as to the success of future exploration and the economic viability of future projects, such expectation or belief is based on management's current predictions, assumptions and projections. However, such forecasts are subject to risks, uncertainties and other factors which could cause actual results to differ materially from future results expressed, projected or implied by such forecasts. Such risks include, but are not limited to, exploration success, commodity price volatility, future changes to mineral resource estimates, changes to assumptions for capital and operating costs as well as political and operational risks and governmental regulation outcomes. For more detail of risks and other factors, refer to the Company's other Australian Securities Exchange announcements and filings. The Company does not have any obligation to advise any person if it becomes aware of any inaccuracy in, or omission from, any forecast or to update such forecast.

Forward-looking Statements

All statements other than statements of historical fact included in this release including, without limitation, statements regarding future plans and objectives of Lepidico, are forward-looking statements. Forward-looking statements can be identified by words such as "anticipate", "believe", "could", "estimate", "expect", "future", "intend", "may", "opportunity", "plan", "potential", "project", "seek", "will" and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, its directors and management of Lepidico that could cause Lepidico's actual results to differ materially from the results expressed or anticipated in these statements.

The Company cannot and does not give any assurance that the results, performance or achievements expressed or implied by the forward-looking statements contained in this release will actually occur and investors are cautioned not to place any reliance on these forward-looking statements. Lepidico does not undertake to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this release, except where required by applicable law and stock exchange listing requirements.

Competent Person Statement

The information in this report that relates to the Helikon 1 and Rubicon Ore Reserve estimates is extracted from an ASX Announcement dated 28 May 2020 ("Definitive Feasibility Study Delivers Compelling Phase 1 Project Results") and was completed in accordance with the guidelines of the JORC Code (2012). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are represented have not been materially modified from the original market announcement.

The information in this report that relates to the Rubicon and Helikon 1 Mineral Resource estimates is extracted from ASX Announcements dated 30 January 2020 ("Updated Mineral Resource Estimates for Helikon 1 and Rubicon") and 12 March 2021 ("Karibib Mineral Resource expanded"), which completed in accordance with the guidelines of the JORC Code (2012). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are represented have not been materially modified from the original market announcement.

The information in this report that relates to the Helikon 2 - Helikon 5 Mineral Resource estimates is extracted from an ASX Announcement dated 16 July 2019 ("Drilling Starts at the Karibib Lithium Project") and was completed in accordance with the guidelines of the JORC Code (2012). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are represented have not been materially modified from the original market announcement.

Creative Resources Leadership

Website: www.lepidico.com

Contact us: info@lepidico.com

LEPIDICO