

# Maricunga Joint Venture

The Road to Development

November 2017





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#### Competent Person's Statement

The information contained in this presentation relating to Mineral Resources has been compiled by Mr Murray Brooker. Mr Brooker is a Geologist and Hydrogeologist and is a Member of the Australian Institute of Geoscientists and has sufficient relevant experience to qualify as a competent person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. He is also a "Qualified Person" as defined by Canadian Securities Administrators' National Instrument 43-101. Murray Brooker consents to the inclusion in this announcement of this information in the form and context in which it appears. 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. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

#### Reference to Resource Estimate

The reader is referred to the announcement by LPI on the 12 July 2017, which provided details of the updated Maricunga project resource in accordance with Appendix 5A (JORC Code). LPI confirms that the supporting information provided in the announcement by LPI on the 12 July 2017 continues to apply and has not materially changed. The announcement of 12 July 2017 also outlines an exploration target for the Maricunga project. It must be stressed that an exploration target is not a mineral resource or reserve. The potential quantity and grade of the exploration target is conceptual in nature, and there has been insufficient exploration to define a Mineral Resource in the volume where the Exploration Target is outlined. It is uncertain if further exploration drilling will result in the determination of a Mineral Resource in this volume. The exploration target is where, based on the available geological evidence, there is the possibility of defining a mineral resource. The timing of any drilling with the objective of defining resources in the exploration target area has not been decided at this stage. In keeping with Clause 18 of the JORC Code and CIM requirements the exploration target defined at Maricunga is based on a range of values, which represent the potential geological conditions. Values have been selected to present an upper and a lower exploration target size. It is likely that the lithium and potassium contained in the exploration target lies somewhere between the Upper and Lower Cases. The resource refers to lithium carbonate equivalent (LCE), using a conversion factor of 5.32 x lithium metal, and potassium chloride (KCI) using a conversion factor of 1.91 x potassium. A technical report to support the mineral resource estimate entitled "Lithium & Potassium Resource Estimate Maricunga Joint Venture, III Region, Chile, and dated 25 August 2017 may be accessed via this link.

#### Cautionary note regarding reserves and resources

You should be aware that as an Australian company with securities listed on the ASX, the Company is required to report reserves and resources in Australia in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC Code"). You should note that while the Company's reserve and resource estimates may comply with the JORC Code, they may not comply with the relevant guidelines in other countries and, in particular, do not comply with Industry Guide 7, which governs disclosures of mineral reserves in registration statements filed with the U.S. Securities and Exchange Commission. The JORC Code differs in several significant respects from Industry Guide 7. In particular, Industry Guide 7 does not recognise classifications other than proven and probable reserves and, as a result, the SEC generally does not permit mining companies to disclose their mineral resources in SEC filings. Information contained in this presentation describing the Company's mineral deposits may not be comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements of United States securities laws. You should not assume that quantities reported as "resources" will be converted to reserves under the JORC Code or any other reporting regime or that the Company will be able to legally and economically extract them.

## Lithium Power – Corporate Overview



#### **Capital Structure**

ASX Code	LPI
Shares on Issue <sup>1</sup>	195.9m
Share price <sup>2</sup>	A\$0.49
Market Capitalisation (undiluted) <sup>2</sup>	A\$96m
Cash @ bank - LPI <sup>3*</sup> - Chilean JV <sup>3</sup>	AU\$3.1m US\$4.2m
Listed Options exercise price -55cps <sup>4</sup>	72.1m
Unlisted Options exercise price -20cps <sup>3</sup>	33.5m

#### **Substantial Shareholders (as at 1 November 2017)**

FOUNDERS & DIRECTORS <sup>1</sup>	30.6%
CHILEAN JOINT VENTURE PARTNER <sup>1</sup>	8.2%
YARANDI INVESTMENTS PTY LTD	3.1%
G HARVEY NOMINEES PTY LTD	3.0%
J P MORGAN NOMINEES AUSTRALIA LIMITED	3.0%
MORGAN STANLEY AUSTRALIA SECURITIES (NOMINEE)	2.8%
HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	2.8%

#### **Share Price**



Salar de Maricunga Vista

<sup>&</sup>lt;sup>1</sup> 50.4m escrowed until June 2018 or later

<sup>&</sup>lt;sup>2</sup> As at 1<sup>st</sup> November 2017

<sup>&</sup>lt;sup>3</sup> As at 30<sup>th</sup> September 2017 (excludes LPI A\$1m initial payment for the sale of LPI's Argentine project)

<sup>&</sup>lt;sup>4</sup>LPIO expiry 23<sup>rd</sup> November 2017 total 37,526,323

## LPI – Board & Management





Mr. David R Hannon, Chairman

LPI founding shareholder. Founding director and former Chairman of Atlas Iron Ltd which grew to over A\$3b market capitalisation. 30 year career in the finance industry with a focus on property, mining and international investing.



Mr. Martin C Holland, Chief Executive Officer

Founder & CEO of LPI with 12 years corporate experience focused on the mining sector. Previously CEO of gold explorer Stratum Metals from 2010 to 2014, which listed on ASX in 2011.



Mr. Andrew G Phillips, CFO and Company Secretary

Over 25 years of commercial & financial experience. Previous senior management roles with Aristocrat, Allianz, Hoya Lens, and Sequoia, with additional Board experience in the small cap resources sector.



Mr. Ricky P Fertig, Non-Executive Director

Founding director & senior executive with 30 years of international commercial experience across property, healthcare and mining services sectors.



Mr. Russell C Barwick, Non-Executive Director

Mining engineer with over 40 years of experience globally. Formally Rio Tinto, Placer Dome, CEO of Newcrest, and COO of Goldcorp. Extensive management and technical experience globally including Latin America.



Dr. Luis Ignacio Silva P, Non-Executive Director & Manager Latin America

Mining geologist with 40 years experience in South America, including the last 10 years as a lithium specialist. He has worked with Talison, Freeport, Amax, Barrick, Homestake, Rio Tinto, Shell-Billiton, Pegasus, CNC, and SERNAGEOMIM.



Mr. Murray R Brooker, Group Technical Adviser

Geologist specialising in lithium brine over the last 8 years, over 25 years total experience in mining and exploration. Most recently, he was the JORC Competent Person to Orocobre on their lithium brine project in Argentina.



Mr. Stuart Peterson, Exploration Manager – Hard Rock

Hard rock pegmatite geologist with spodumene lithium experience. Most recently, the Senior Geologist with Mineral Resources on their Mt Marion lithium project in Western Australia.



#### Christobal Garcia-Huidobro – Chief Executive Officer – MSB

Civil Engineer with 18yrs experience developing & financing of Mining, Energy, Infrastructure, Finance & Property projects. Formerly CIO of investment company CENTINELA. Board or committee member of a number of mining, property and agricultural funds in North & South America.

#### **Andres Lafuente – Chief Operating Officer – MSB**

Senior Executive with 24yrs experience in Financial & Infrastructure companies. Previously, GM for Scotia Bank in Chile, and Corporate Manager of Compliance for Euroamerica Financial & Life Insurance.

#### Tarek Halasa – Chief Development Officer – MSB

Civil Engineer with 17yrs international experience, specialising in project & cost management, feasibility studies, and sub contractor management. Previously held the role of Construction Coordinator for Bechtel for the past 8 years, working on projects for BHP, Xstrata, Anglo, and BP.

#### Frederick Reidel – QP under TSX NI 43-101 – MSB

Hydrogeologist with 25yrs experience in water, lithium brine and infrastructure projects in North & South America. Undertook the reserve evaluation & feasibility study for Orocobre at the Olaroz lithium brine project. Technical advisor to Lithium Americas on the Cauchari lithium brine project. Participated in the initial resource evaluation for FMC's Hombre Muerto lithium brine project.

#### Peter Ehren – QP under TSX NI 43-101 – MSB

Independent consultant, and industry expert in development processes and technical & economic assessment for new brine projects, especially relating to lithium and potassium. Currently also consulting to Orocobre on the Olaroz project. Previously designed & evaluated projects in Chile, Argentina, China, and Australia.

Carlos Espinoza - Current Associate Professor of University of Chile, extensive experience in hydrogeological simulation and modeling, baseline studies evaluation of environmental impact studies and water resources, and evaporation well simulation (Salar de Atacama).

**Hugo Barrientos Ruiz** – Over 30 years of experience as Mechanical Engineer with an extended background in leading companies such as SQM. Former Engineer Project Manager at Lithium Americas

#### Murray Brooker - QP/CP under TSX NI 43-101/JORC

Independent consultant and hydrogeologist specialising in lithium brine over the last 8yrs, with 25yrs total experience in mining and exploration. Areas of expertise include: project management, project evaluation & feasibility, and geological interpretation & reporting, Has previously led teams in Chile, Argentina, and Australia. Was the JORC Competent Person to Orocobre on their Olaroz lithium brine project.

Lithium Power International Limited ASX: LPI

## Maricunga Lithium Brine Project Overview

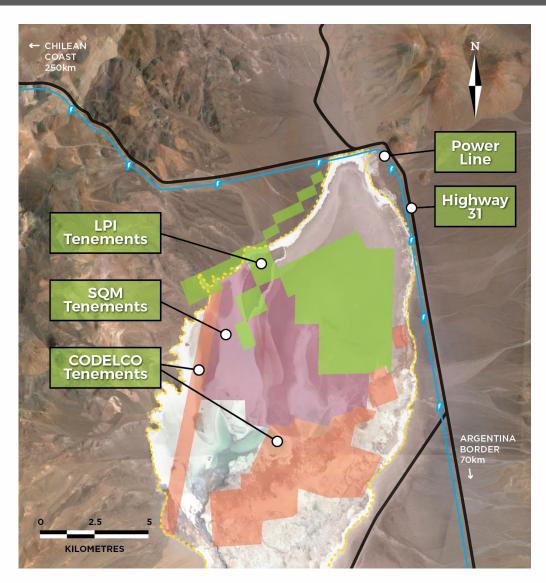


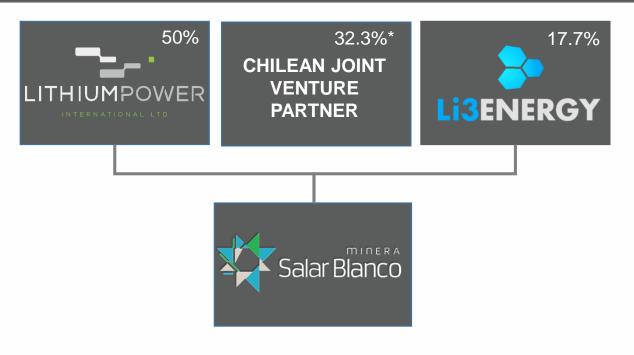
- ✓ Located within the "Lithium Triangle" in northern Chile, home to the largest and highest quality lithium brine deposits.
- ✓ LPI's Maricunga project is the highest quality pre-production lithium brine project in South America in terms of lithium grade, size and aquifer characteristics.
- Most advanced project in Chile outside of the mine expansions by SQM and Albemarle.
- The Maricunga project is a joint venture between Lithium Power (50%), a Chilean investor (32.3%) and Li3 Energy (17.7%). Lithium Power's interest is subject to final earn-in payments of US\$9.5m prior to September 2018.
- The properties are 100% owned by the JV and not subject to leasehold related negotiations impacting other Chilean operators.
- ✓ 2017 JORC and Ni43-101 Resource Estimate
  - 2.15mt LCE & 5.7mt KCI
    - 80% Measured & Indicated: 1.7 mt LCE and 4.5 mt KCI
    - 20% Inferred: 0.45mt LCE and 1.2mt KCI
    - One of the worlds highest grade lithium resources at 1,160 mg/l lithium and 8,500 mg/l potassium
- WorleyParsons Preliminary study results have been positive, indicating Maricunga to be a low-cost lithium producer with long mine life. Port and logistics assessment also fully completed.
- ✓ Preliminary economic study accuracy well underway targeted release end 2017. Definitive feasibility study targeted by end of 2Q18.
- ✓ Stage 1 Pilot plant test work has successfully achieved 5% lithium concentration; Stage 2 test work underway with first Li₂CO₃ and KCl production samples expected by the end 2017
- Optimization of lithium extraction and potassium production to develop the lowest cost process with highest possible recoveries (See page 21)
- ✓ All permitting and government approvals targeted 2Q19



## Maricunga JV – Project & Ownership Structure







<sup>\*</sup> LPI HAS A FIRST RIGHT OF REFUSAL TO ACQUIRE THE CHILEAN JV PARTNERS 32.3%

#### Final Earn-in Timetable



- i. As at 1st November 2017 LPI has earned 36.2% interest of the Maricunga Joint Venture via payments totalling US\$19.7M
- ii. The remaining US\$7.5M (13.8%) is to be paid at LPI's call in three tranches. Tranche 1 was paid on 1st November 2017
- iii. At the completion of the final tranche by the Company, all JV shareholders are required to contribute proportionally in accordance to their shareholding.

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**November 2017** 

US\$2M (PAID)

LPI Ownership:

36.2%

Tranche 2

**March 2018** 

US\$2M

LPI Ownership:

39.8%

Tranche 3

**June 2018** 

US\$2M

LPI Ownership:

43.5%

Final tranche

September 2018

US\$3.5M

LPI Ownership:

50%

2017

2018

## Timeline For Growth Catalysts – 2017 to 2019





- Optimization of Lithium
   Extraction Process and First LCE
   Sample Production –
   Target 4Q17
- Preliminary Economic StudyCompletion Target 4Q17

- Submission of Environmental Impact Assessment (EIA) - Target 1Q18
- Definitive FS Target 2Q18

- Permitting and Government Approvals – Target 2Q19
- Production Decision –Target 2Q19

FINANCING START CONSTRUCTION

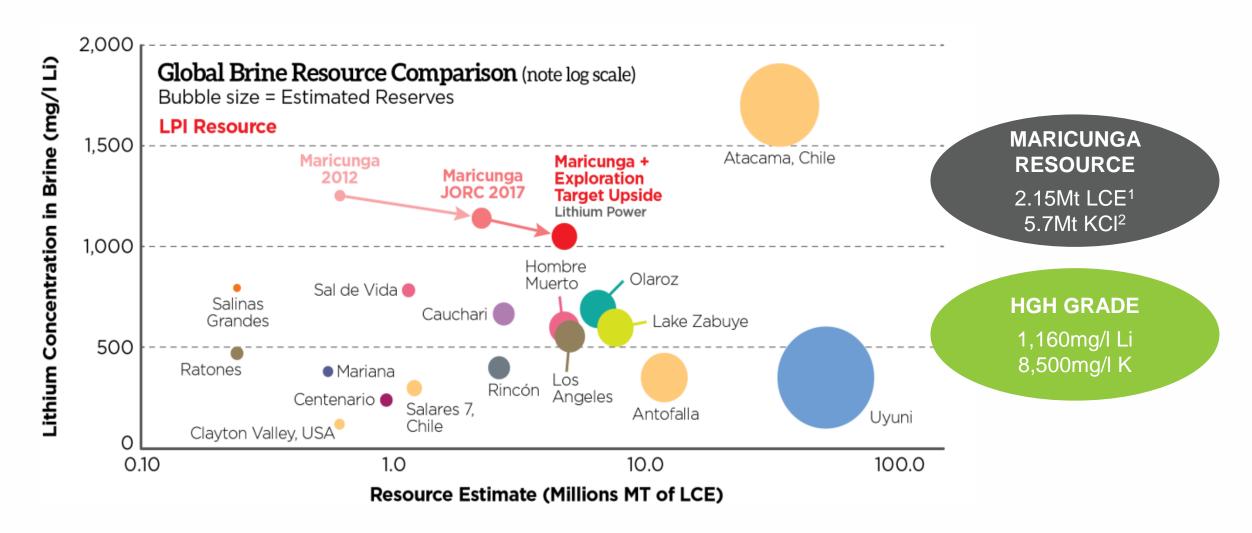
2017

2018

2019

## Maricunga: Highest Grade Undeveloped Lithium Salar Globally





Source: Albemarle investor presentation modified by LPI

# 2017 JORC and Ni43-101 Mineral Resource Estimate & Exploration Target



MARICUNGA RESOURCE ESTIMATE											
Measured Indicated Inferred M&I						1&1	Total Resource				
Area km <sup>2</sup>	18	.88	6.76		14.38 <sup>1</sup>		25.64		25.64		
Aquifer volume km <sup>3</sup>	3.	.06	1.	35	0	.72	4.41		5.13		
Brine volume km <sup>3</sup>	0.	0.15		0.14 0.		.06	0.30		0.36		
Mean drainable porosity % (Specific yield)	5.	5.02		10.65		8.99		6.75		7.06	
Element	Li	K	Li	K	Li	K	Li	K	Li	K	
Mean grade g/m <sup>3</sup> of aquifer	56	409	114	801	114	869	74	529	79	577	
Mean concentration mg/l	1,174	8,646	1,071	7,491	1,289	9,859	1,143	8,292	1,163	8,512	
Resource tonnes	170,000	1,250,000	155,000	1,100,000	80,000	630,000	325,000	2,235,000	405,000	2,980,000	
Lithium Carbonate Equivalent tonnes	900,000		820,000		430	,000	1,72	0,000	2,15	0,000	
Potassium Chloride tonnes	2,40	0,000	2,10	0,000	1,20	0,000	4,50	0,000	5,70	0,000	

Lithium is converted to lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>) with a conversion factor of 5.32. Values may not add due to rounding. No cut-off grade is applied in the resource. Potassium is converted to potassium chloride (KCI) with a conversion factor of 1.91; <sup>1</sup> Inferred underlies the Measured in the Litio properties

	MARICUNGA EXPLORATION TARGET ESTIMATE									
Subarea	Area km²	Thickness m	Mean drainable porosity %	Brine volume million m <sup>3</sup>	Li Concentration mg/l	Contained Li tonnes	LCE tonnes	K Concentration mg/l	Contained K Tonnes	KCI tonnes
	UPPER RANGE SCENARIO									
Western	4.23	100	10%	42.3	1,000	40,000	200,000	6,500	270,000	500,000
Central	21.41	200	10%	428.0	1,000	430,000	2,300,000	7,500	3,200,000	6,100,000
	Continues	from directly I	pelow the resource			470,000	2,500,000		3,470,000	6,600,000
					LOWER RANG	SE SCENARIO				
Western	4.23	100	6%	25.4	600	15,000	80,000	5,000	130,000	240,000
Central	21.41	200	6%	257.0	700	180,000	950,000	5,500	1,400,000	2,700,000
	Continues	from directly l	pelow the resource			195,000	1,030,000		1,530,000	2,940,000

Lithium is converted to lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>) with a conversion factor of 5.32. Values may not add due to rounding. Potassium is converted to potassium chloride (KCI) with a conversion factor of 1.91

## **Project Quality**



- √ Tier-1 companies undertaking project studies for low risk development
- √ Feasibility in progress heading to definitive feasibility study
- High quality brine resource
- ✓ Use of traditional and well proven production process
- ✓ Working with world class equipment suppliers/pilot plant:
  - Engineering: WorleyParsons
  - Production: Veolia, GEA, Andritz, FLSmidth, SGS













#### Infrastructure Overview



Infrastructure required for lithium production at Maricunga consists of:

- ✓ Evaporation ponds
- ✓ Process Plant
- ✓ Installation of wellfield and pipelines to the evaporation ponds
- ✓ Electricity supply and transmission lines
- ✓ Water supply and water treatment
- Roads of sufficient quality to transport construction equipment, chemical consumables for production and lithium carbonate product
- ✓ Port selection for importation and exportation

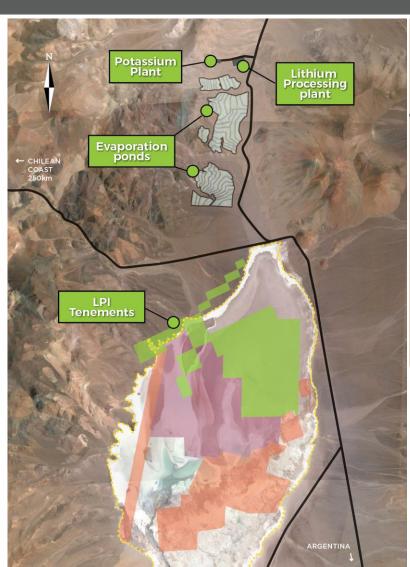


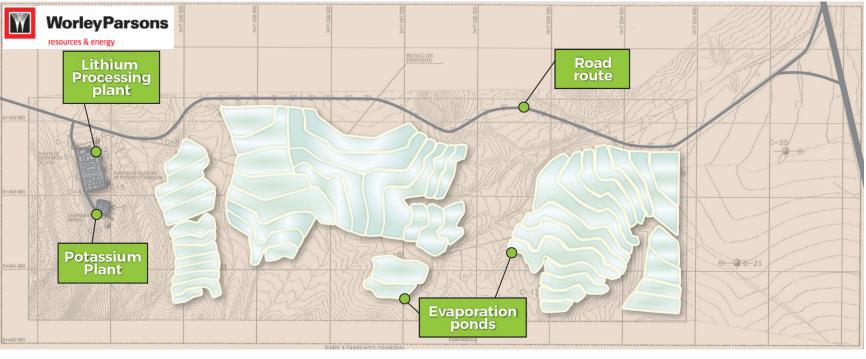




## Processing Plants and Evaporation Pond Site Design





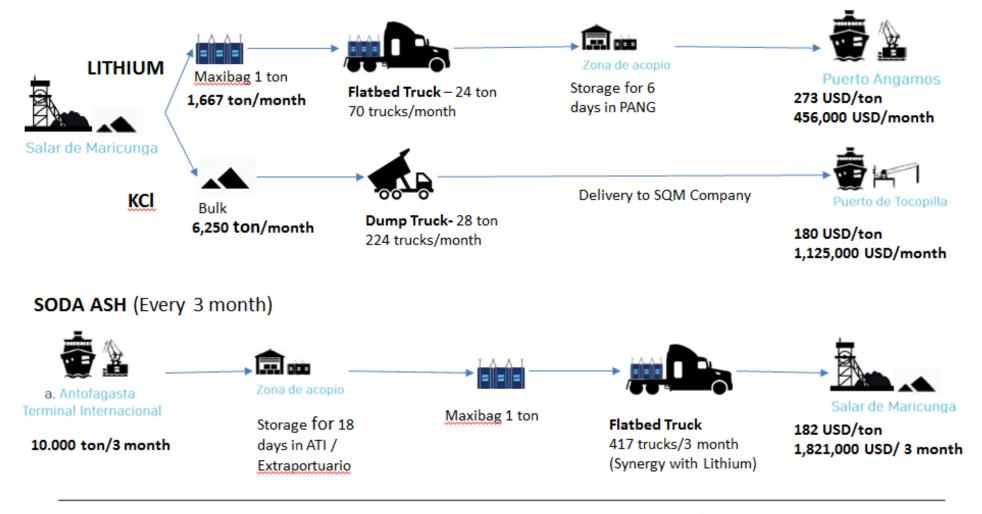


Ponds to be built off the salar to the north to:

- Allow easier construction in areas of gravel
- To minimise the visual impact of the ponds.

## Port & Logistic Assessment Completed







## Permitting Update – Natural Course of Business



#### ✓ EIA

- Baseline compilation well advanced for submission 1Q18
- Social aspects of the project advancing, with indigenous groups and local municipalities
- ✓ Nuclear Commission permit (CCHEN)
  - Application submitted, permit required to export lithium
- ✓ Special Lithium Operation Contract (CEOL)
  - Permits related to the exploitation of new coded mining concessions (new framework outlined 2Q18)

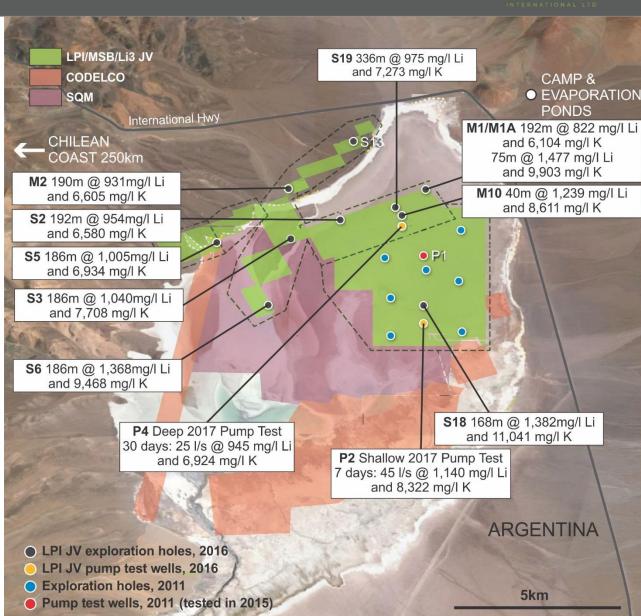


## High Brine Grades = Low OPEX = HIGH IRR



- √ 200m deep holes ranged from 822 1,382mg/l Li and 6,104 - 11,041mg/l K
- Deeper drilling a "game changer" for expanding resource
- ✓ Deep hole S19: 336m at 975mg/l Li and 7,273mg/l K; open at depth

Hole	Depth (m)	Interval (m)	Li (mg/l)	K (mg/l)
M10	200	40	1239	8611
M1	77	66	1,447	9,903
M2	198	190	931	6,605
S5	200	186	1,005	6,934
S3	200	186	1,040	7,708
S13	200	186	999	7,294
S6	200	186	1,368	9,498
M1A	200	192	822	6,104
S2	200	192	954	6,580
S18	173	168	1,382	11,041
<b>S</b> 19	360	336	975	7,273
S20	40	N/A	N/A	N/A



## High Flow Characteristics – Defined in Pumping Tests



- ✓ Drilling defined an upper brine aquifer in halite to ~35 m depth and a lower brine aquifer between 100 and 200+ m depth
- ✓ Three dedicated pump test wells were installed at site, with extensive monitoring well arrays
- ✓ P1 and P2 installed in the Litio property to 150 m and pumped from the upper halite and clay units with limited contributions from volcaniclastics and sand
- ✓ P4 installed to 180 m in the Cocina property and intersected upper halite and extensive gravel and volcaniclastic
- Deeper volcaniclastic likely to behave like well P4



## Favourable High Drainable Porosity & Permeability



- Halite, gravel, sand and volcaniclastic sediments have excellent drainable porosity and permeability characteristics
- Deep well (P4) flowed at an average rate of 25 l/s and average grade of 945mg/l Li and 6,924mg/l K from the gravel and volcaniclastic sediments over a 30 day test period
- ✓ The upper halite in well P2 flowed at 45 l/s, with average grade of 1,140mg/l Li and 8,322mg/l K over a 7 day test period
- Pumping confirms the high flow rate characteristics of the sediments, which have a high permeability and allows pumping at a high flow rate: very positive for long term brine extraction from the salar
- ✓ Flow rates are comparable to those of major lithium brine producers

Geological Model	Drainable Porosity
Upper Halite	6.5%
Clay Core	2.2%
Deep Halite	5.3%
Alluvial NW	14.8%
Lower Alluvial	6.3%
Lower Sand	6.0%
Upper Volcaniclastic	10.3%
Lower Volcaniclastic	10.3%

Average dranable porosity values from laboratory test work



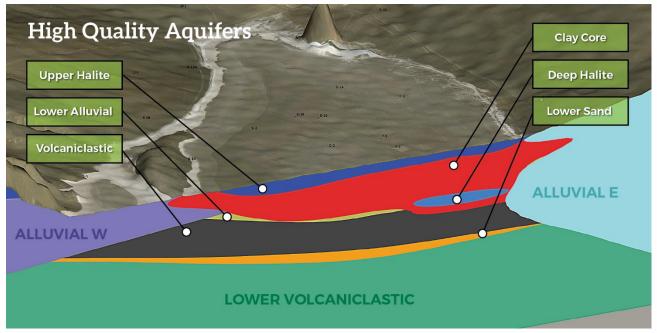
## Geological Model - High Quality Aquifers



✓ Upper Halite (salt) +/- Clay Intervals Extending from surface and up to 55m in thickness; hosts the highest brine grades

#### ✓ Clay Core

Up to ~170m deep and dominant unit in the 2012 resource estimate. Drilling below discovered "game changing" sand and gravel units



#### Western and Lower Alluvium

Well-sorted gravel and sandy gravel in the north and west of the project grading to sand further into the salar; high drainable porosity

#### ✓ Upper and Lower Volcaniclastic

High drainable porosity and volumetrically extensive; separated by a sand unit with the lower volcaniclastic extending to at least 360m depth. Host to Exploration Target immediately below Mineral Resource

Western Alluvium



Volcaniclastic



## Wrap-up: Lithium Power International's Key Differentiators



- ✓ High-grade lithium project in a stable mining jurisdiction : Chile
- ✓ We expect feasibility study will outline near term production at Very low cost.
- ✓ Solid team involved in building mega mining projects
- ✓ Shareholder alignment: Management OWNS 30+%
- ✓ Potential to generate additional value from...
  - Mineral Resources conversion to reserves
  - Continued de-risking of the project
  - Securing strategic offtake partners

# LITHIUMPOWER

INTERNATIONAL LID

## Appendix





### Market-Friendly Chile is an Investment Leader in South America



#### Lithium Resources (M tonnes), January 2017

Argentina	Bolivia	Chile	China	US	Aus	Can	Other
9.0	9.0	7.5	7.0	6.9	2	2	3.6

#### Market-Friendly Chile is an Investment Leader in South America

	<b>Lithium Production</b> 2016, tonnes LCE	Foreign direct investment Net inflows, 2015, as % of GDP	Ease of doing business index 2016 <1=best 190=worst>	Corruption perceptions Index 2016 <1=best 176=worst>
Argentina	30,050	2.0	116	95
Bolivia	25 (sales only)	1.5	149	113
Chile	76,000	8.5	57	24
Australia	74,250	2.9	15	13

Sources: US Geological Survey; Roskill Information Services; Comibol; World Bank; Transparency International; economist.com

## **Process Optimisation**



- Process flow sheet defined
- ✓ Pilot Plant optimisation ongoing for lithium carbonate production, working with Tier-1 companies Veolia and GEA
- ✓ Pilot Plant evaluation completed for potash production with experienced process equipment suppliers Andritz and FLSmidth
- ✓ These companies are global equipment suppliers to the chemical and water industries, with extensive experience with lithium and potash production
- ✓ Lithium carbonate sample production expected by end of 2017
- Process uses evaporation and standard processing technology, to reduce project risk



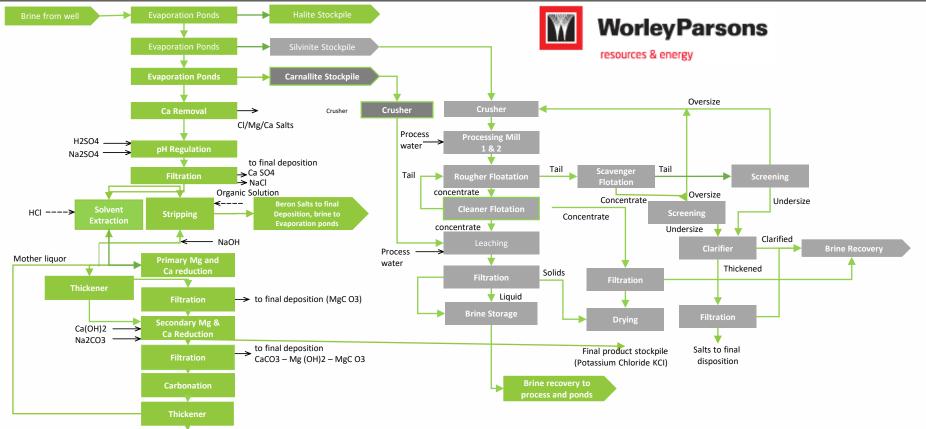






#### Lithium Carbonate and Potassium Chloride Flowsheet





- ✓ Maricunga brine has a moderate Mg/Li ratio of 6.5 (comparable to the Atacama salar) with a low SO4/Li ratio of 0.8 and a relatively high Ca/Li ratio of ~12 with calcium removal necessary for lithium production
- Brine to be processed by a conventional evaporation pond methodology, concentrating brine before extraction of lithium carbonate in a dedicated production plant
- Potassium chloride (KCI) fertilizer production will be a secondary product, commencing three years after lithium carbonate production
- Numerous experienced engineers and technicians in Chile, given the long history of in-country lithium production
- ✓ Conventional Brine processing lower risk

Washing water

> Vapour to the atmosphere

Washing Water

## Hydrogeological Model – the Basis of Reserves



- ✓ The hydrogeological model is the next step towards defining reserves from the resource.
- ✓ The JV is planning to produce 20 kt/a of lithium carbonate, which will require extraction of an average of 218 l/s of brine from the salar
- ✓ Brine will be extracted from both the upper and lower aquifers
- ✓ The aim is to optimise the location of wells for brine extraction.
- ✓ The hydrogeological model is based on the geological model, the water balance for the salar and integration of all the field and laboratory data into a conceptual model
- ✓ The geological model is used to build the 3 Dimensional hydrogeological model, which is used to simulate pumping over the life of the mine
- ✓ Modelling defines how much brine can be extracted from the resource and converted to reserves.
- Modelling also simulates potential long term dilution of brine grades as pumping progresses and fresher water may migrate into the salar from the margins

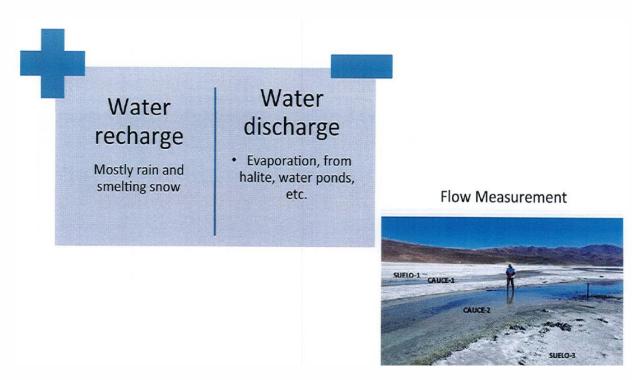




## Hydrogeological Model – Assessing Environmental Impacts



- Modelling also determines the environmental impact of pumping and the model results are the most critical input to the project EIA
- Modelling is being done by international consultants DHI Group (using Feflow software), working with project hydrogeologists FloSolutions
- ✓ Oversight of the modelling is provided by Dr Carlos Espinosa, an external consultant with strong links to the government water resources department
- Modelling will assess potential effects on environmentally sensitive areas such as wetlands (Santa Rosa Lagoon ~20 km south) outside the JV properties
- Possible effects of pumping on third party properties and water rights will also be assessed



## Power Supply





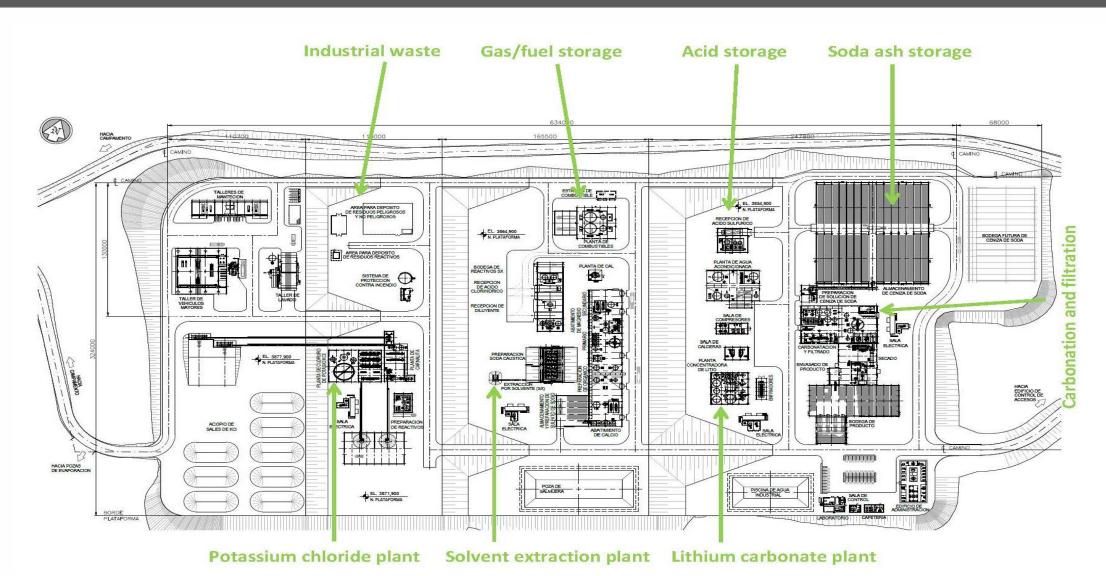


Accessible 23KV existing power line passes by the Maricunga project area.

Lithium Power International Limited ASX: LPI

## Preliminary General Plant Layout





Lithium Power International Limited ASX: LPI

## Working to Ensure a Sustainable Future



Building Strong
Working
Relationship
with our
Communities

- ✓ Local hiring practices
- ✓ Spending on supplies and services in country
- ✓ Building strong community relationships

Developing a strong safety culture

- ✓ Focused on behavior-based culture for risk management at employee and supervisor levels
- ✓ Implementing a more fulsome safety management system
- ✓ Critical to implementation success are:
  - Comprehensive training for all employees,
  - Consistent communication with all employees; and
  - Engagement and accountability

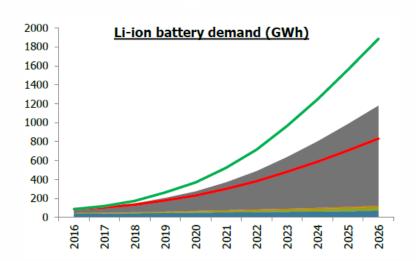
Ongoing
Environmental
Protection

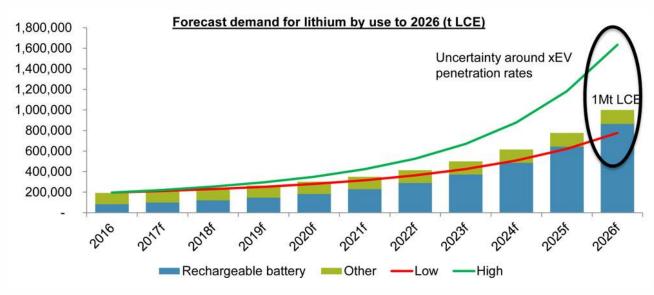
- ✓ Efforts focus on sustainable mine development
- ✓ Ongoing reclamation Recycling program

#### Lithium Market Outlook



- Projected strong growth in lithium demand
- ✓ Use in automobile applications projected to grow 530% by 2030
- Roskill Lithium Industry Consultants suggests 1TWh installed capacity and 1mt LCE demand possible within 10 years
- China issues new mandates for electric vehicle sales
- Germany and India announce aggressive targets for electric vehicle sales
- Car makers lay out strategies to meet these targets
- Development projects needed to meet future demand growth are limited
- New supply coming on stream slowly due to permitting and construction constraints



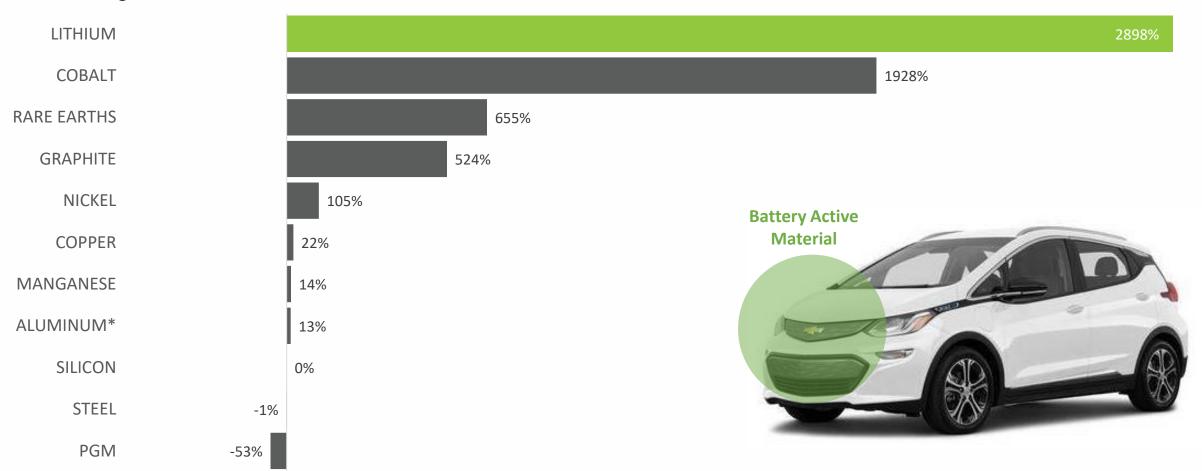


Source: Roskill 2017 Montreal Lithium conference presentation

## Incremental Commodity Demand in a 100% EV World



#### Percentage of Current Global Production



Source: VisualCapitalist.com

## Material Differences in EVs will have a Big Impact on Demand



#### **⊠STEEL**

Batteries are heavy, so aluminium must be substituted for steel where possible



## **M**NICKEL

Used in both NCA and NMC cathodes, the >\$20 billion nickel market would more than double

#### **IMPGMs**

Used to reduce emissions in gas powered vehicles, PGMs could be the **biggest casualty** of mainstream EV adoption

☑LITHIUM/COBALT

In a 100% EV world, these metals are essential. **Better supply chains** will be necessary, as well.

Source: UBS Evidence Lab