

## Lake Resources Limited

Low cost funding pathway opening up

Share Price  
& Estimated  
Future Price

Price in 12-months	\$1.04
Current Price	\$0.48
Implied Change	+116%

### Lake Resources (LKE. ASX) announces low cost funding pathway

Normally, an offtake contract is signed first and then project funding follows. However, in this case the reverse has occurred. The Export Credit Agency (ECA) of Britain, the **UK Export Finance (UKEF)** has provided a non-binding Expression of Interest (EOI) to provide or underwrite up to 70% of the finance for developing Kachi. Interestingly, the ECA has also indicated it could provide up to 70% of the cost of expanding Kachi. This really does support LKE's earlier claim that the market is pushing for an expansion of Kachi. ECA debt normally comes in the form of guarantees. However, the EOI suggests the ECA may also direct lend; subject to due diligence and standard project finance terms. LKE suggests direct lending could comprise ~30% of Treasury linked debt with interest rates of around 3%. ECA guarantees should facilitate the completion of syndicated senior debt, at an estimated 5-6% in the current market. The effective "credit wrap" provided by ECA support, puts LKE in an attractive position to secure a Tier-1 offtake partner.

**The Energy transition** – is driving battery materials growth as Biden announces goal, that half of new cars sold in the US will be EVs by 2030.

**Lithium prices are surging** – Benchmark Minerals Intelligence (BMI) suggests the 3rd price surge in 15 years is taking hold - yet this time it **is a story about secular growth driven by government regulations rather than any assumptions about economic growth**. Consequently, BMI consider the risk of significant un-met demand is rising. They forecast a 250kt demand shortfall for the USA and a larger 500kt shortfall in Europe by 2030. With the average mine size being 20-25ktpa, there are simply not enough projects on the drawing board to meet demand and those that are up and running are largely contracted. Interestingly, the path to local development is also not entirely clear with environmental and community concerns rising in the US, and Europe. Just when the space is looking tight the UK shows its hand signing an EOI with LKE's Kachi Project. **No wonder prices are surging.**

**Partnerships** – LKE has long talked about securing a partner at the asset level and Tier-1 offtakers or Lilac Solutions Inc; are strong candidates. Given project timelines and ECA support, we expect improved clarity around partners and offtakers by end 2021.

**Catalysts** – The Hatch led DFS and the Demonstration Plant should complete early 2022 and qualification by OEMs of the NOVONIX NMC622 cathode, containing LKE lithium, should also be known by 1Q2022. Before then, buckle up as funding progresses; partners are selected and quality offtaker agreements are signed.

**Valuation upside** – Following announcement of the EOI with the UK Government, our model is updated to include lower funding costs and greater probability Kachi will be expanded to 51kt/year (Phase-1 now @ 60% & Phase-2 at 15% probability). Each phase is valued and risked separately. Using a nominal NPV8, our 12-month value is \$1.39/share. Discounting this value by 25% yields a 12-month target price of \$1.04/share. As Kachi progresses through its catalysts and with continued de-risking, the 3-year value could rise towards \$3.29/share.

### Analyst: Di Brookman (BSc. Hons)

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#### Company Information

ASX Ticker	LKE
OTC Ticker	LLKKF
ASX Price (A\$)	0.48
52-week range (A\$)	0.04-0.68
Position relative to 52-week high	-30.0%
Shares on Issue (m)	1,104.8
Options (m)	163.5
Fully Diluted Shares on Issue (m)	1,268.3
Market Capitalisation (A\$m)	530.3
Average Daily Volume (m)*	8.35

#### Market Model - undiluted

	Unit	
Market capitalisation	A\$m	530.3
Cash	A\$m	26.0
Debt	A\$m	0.0
Enterprise value (EV)	A\$m	504.3
EV / NPV8 as in PFS refresh	%	23%
Cash % market cap	%	5%

#### Key Personnel

Stephen Promnitz	MD & CEO
Stuart Crow	Chairman & NED
Robert Trzebski	NED
Sra. Amalia Saenz	NED
Dr Nick Lindsay	Exec Tech Director

#### LKE Price Chart (Source: Factset)



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### Company Summary

#### Investment thesis – Lithium Triangle produces 40% of worlds lithium and hosts large deposits

LKE aims to become a major global producer of high quality battery grade lithium carbonate. It holds 100% equity in four significant Argentinian brine assets situated in the Lithium Triangle. LKE plans to use disruptive lithium extraction technology to produce lithium for sales into Europe, US and Asia. With its clean technology partner Lilac Solutions, LKE is moving fast to bring a low carbon, low water, low waste, light footprint, and low-cost - high value project to market. With the DFS due early 2022, construction could start mid 2022 and production of high purity lithium could commence early 2024. Samples of the NMC622 cell created by NOVONIX, using LKE lithium carbonate, have demonstrated Tier-1 quality and will be sent to customers for further battery testing against commercial peers. Results are expected in coming months.

#### Recent activities include;

- Strong Expression of Interest to fund 70% of Kachi Project (August '21)
- Lake adds Argentina-based director to support development (July '21)
- Kachi drilling underway to support doubling of lithium production (July' 21)
- Kachi project finance advances (June '21)
- Lake accelerates exploration across broader portfolio (March '21)
- PFS refreshed – price increased to US\$15,500/t (March '21)
- Positive Initial NOVONIX battery cell testing results for Lake high purity lithium carbonate (March '21)

#### Kachi Project Valuation – PFS refreshed (real terms)

Kachi is one of three deposits located in Argentina. LKE plans to develop Kachi to produce 25.5kt LCE/year. The PFS suggests the 25-year project life would utilise ~20% of the total resource. The direct lithium extraction plant is modular and scalable.

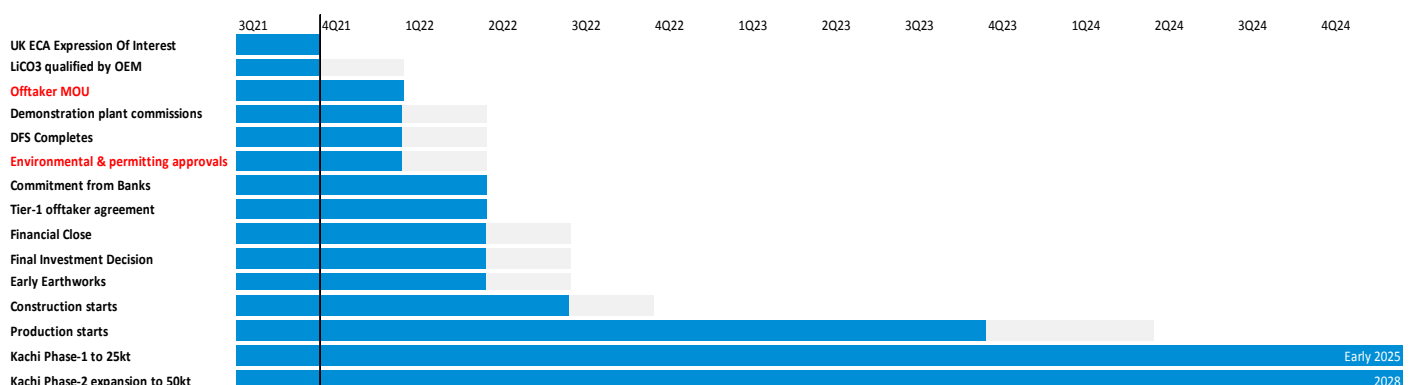
JORC RESERVES In mt LCE	Measured	Indicated	Inferred	Measured & Indicated	Measure, Indicated & Inferred
Kachi (net 100%)	-	1.01	3.40	1.01	4.41

LKE recently refreshed the PFS to include a lithium price assumption of US\$15,500 up from US\$11,000 used in the April '20 PFS. Lithium prices are presently rising strongly in China and with few projects under construction/expansion it is considered buyers could pay price premiums for the cleaner, high quality lithium for use in battery cathodes. LKE reported that no other assumptions were altered to achieve an upgrade of the NPV8 from US\$748m to US\$1.58Bn (A\$2.1Bn). The project's EBITDA/year increased from US\$155m to US\$257m. Breaking this down, the gross profit/t increased 65% from US\$6,822/t to US\$11,322/t.

#### Company Valuation Summary – (Nominal terms refer page 14 for details)

A Phase-1 development is based on the refreshed PFS. We then model a Phase-2 expansion to 51kt. Phase-1 value is then discounted by 35% and Phase-2 by 85%. We currently value LKE at \$1.23/share and \$1.39/share in 12-months. Taking dilution into account, value could rise in 3-years to \$3.29/share, which then when fully de-risked could rise to \$5.20/share by 2030.

#### Catalysts timeline (source: Lakes Resources CCR estimates)



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### Key Points – lots to happen soon to get project into market to meet surging demand

**Industry Highlights** – BMI forecasts suggest global demand for lithium could rise some 30x by 2040 and more recently the International Energy Agency suggested demand could jump 40x by 2040. With pressure on the supply chain – the maths is crazy! There really seems very little room for debate; every project under consideration needs to be developed. As suggested in our recent [initiation report](#) those with a strong ESG advantage should stand to be developed.

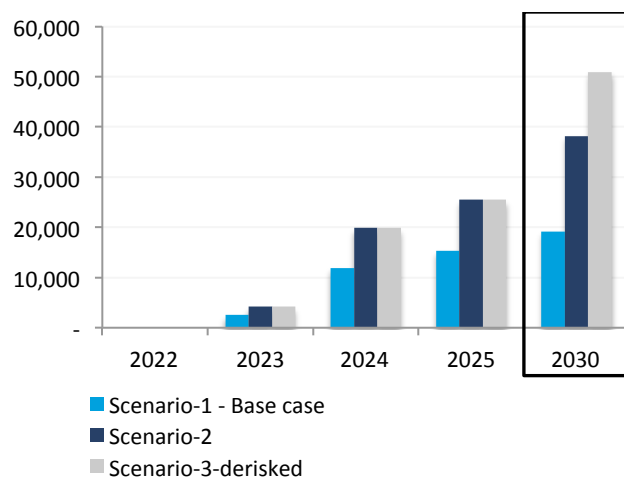
**Partnerships** – The strategic partner(s) required to take the Kachi project through to production have yet to be announced. Ideally, the chosen partner(s) should reduce execution risk for stakeholders. Lilac Solutions Inc (Lilac), backed by the Gates led Breakthrough Energy Fund, is LKE’s technology partner and plans to operate the DLE plant at Kachi. In a recent Interview, the LKE CEO suggested the possibility of Lilac taking a position at the asset level, to reduce perceived technology and operational risk. Alternatively an offtake partner could take such a position, which is more commonplace.

**Funding Strategy** – LKE has stated on more than one occasion that they are funded through to FID, which we estimate to be mid 2022. Development funding is expected to be funded 70% debt to 30% equity. Consequently, the Phase-1 project equity requirement is estimated to be US\$120m. To partially fund this, LKE plans to issue up to 110m options with an exercise price of \$0.75/share to raise \$75m by June 2022. Short-term additional exercise of options could realise an incremental \$40-70m. Although still being negotiated, offtake pre-payments may also reduce equity and project risk.

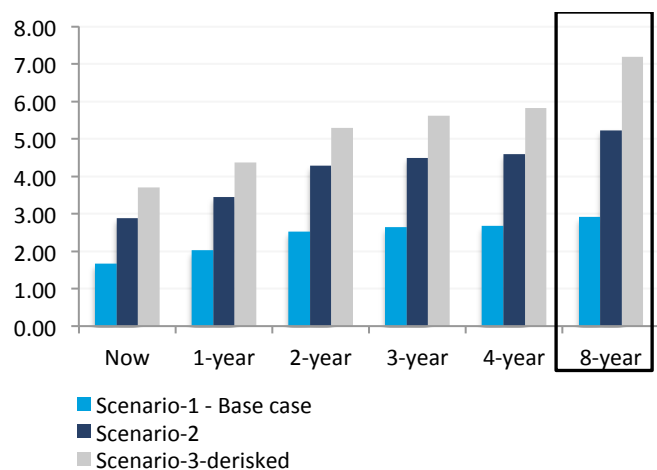
**Exploration** – The Kachi JORC indicated resource of 1.01mt and inferred resource of 4.4mt remains open laterally and at depth. The proposed Phase-1 development, producing at 25.5kt over 25 years, would utilise only ~20% of the total resource leaving considerable potential to double production from the remaining resource with additional exploration, which is underway. The reserve upgrade is required for the current planned 25.5kt/year production and further resource upgrades would support the expansion option to 51kt/year through to the DFS.

**ESG** – Water sustainability is becoming important for investors and offtakers alike. Roskill suggests that around 70% of lithium extracted from South American brines is located in areas described as having a “High” water risk. Done properly this could be a point of differentiation for LKE as ~40% of the world’s lithium is presently produced from brines and most of this is from the Lithium Triangle (Argentina, Chile and Bolivia). With global lithium demand forecast to rise by 10x to 2030 and 30-40x to 2040, those projects that can point to water sustainability, low chemical usage and use of renewable power will stand to attract Tier-1 offtakers. Lets face it – as all projects need to be developed it seems that those with a genuinely sustainable approach will secure Tier-1 offtakers – and financing - ahead of those slow to adapt. LKE is leading the change and has already attracted the attention of the UK Government, signing an EOI to provide up to 70% of the funding required to develop Kachi. LKE is in the process of acquiring its “ESG score card” that will quantify the projects ESG benefits, around total water use, total energy use and percentage use of renewables, adding needed transparency.

#### Production Outlook (in t/year)



#### Valuation Outlook (in A\$/share)



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### Lithium prices continue to build a head of steam

- **BMI suggests the 3rd price surge in 15 years is taking hold**
- **LiCO<sub>3</sub> prices are up 11.9% in the last month and 116% YTD**
- **Very little production due online before 2023**
- **Very little un-contracted lithium available**
- **Very few “independent” new producers coming online**
- **Upside price risks if supply cannot meet the market; and**
- **Market seems driven by structural growth, via government regulations, rather than economic growth**

As recently as October 2020, spodumene prices were trading at a lowly US\$360/t. Unfortunately, these low prices resulted in the closure and the delay of project start-ups and brownfield expansions. However, a recent spot sale for 10kt of spodumene concentrate by Pilbara Minerals on the digital Battery Material Exchange (BMX) was priced at a significant US\$1,250/t. Rumours circulated at the time of prices twice the amount being talked about. This has now been verified. On 14<sup>th</sup> September Pilbara Mines announced that the 2<sup>nd</sup> auction for 8kt had realised an equivalent price of US\$2,500/t (CIF China basis). As little uncontracted quantities are available, the thin spot market has seen a strong squeezing of the price, and this will likely be the new reality for some time.

With spodumene prices rising, lithium hydroxide prices are also rising. Lithium hydroxide is preferred by some parties to stabilise high nickel cathode chemistries in NCM and NCA battery cells.

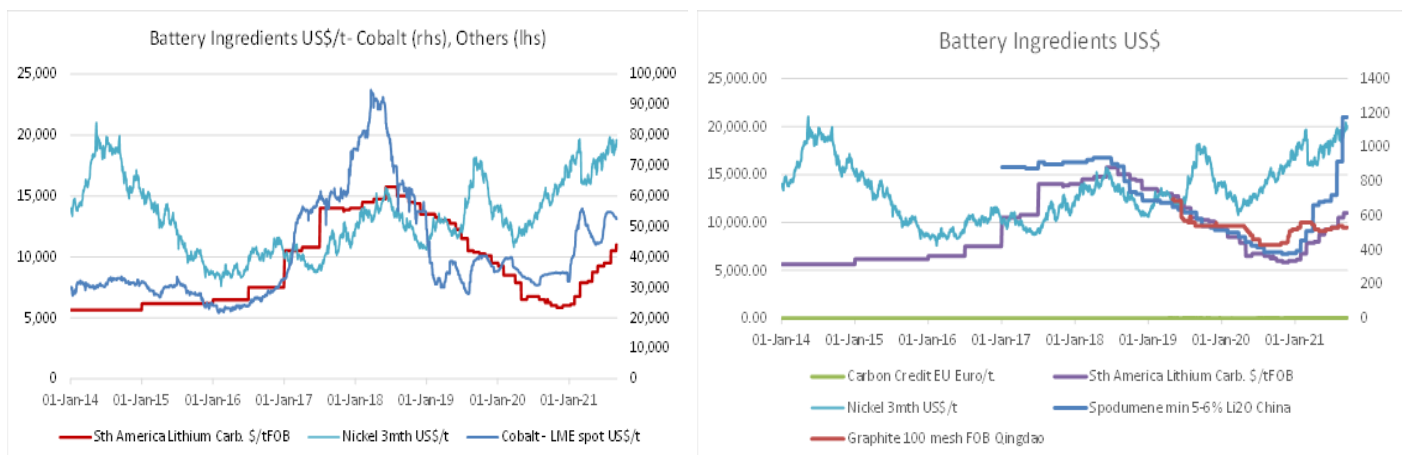
Fastmarkets, suggests the summer lull and tight supplies is also driving prices higher. At end August 2021, the spot price for 99.95% battery grade lithium carbonate was trading at US\$15,000-US\$16,000/t, whilst the spot price for battery grade lithium hydroxide was trading at US\$16,500-US\$17,500/t. Fastmarkets reports that LiCO<sub>3</sub> prices are at US\$18,000-US\$20,000/t, up 46% in 3-months. Lithium carbonate prices have also outperformed expectations in 2021, due to a surge in demand for cheaper Lithium Iron Phosphate (LFP) batteries.

With prices surging it seems the lithium market is not in balance and given that minimal quantities of LCE projects are under development, a reprieve from any further price increases does not look sustainable. JPMorgan recently raised its long-term lithium spodumene price by 31% to US\$850/t.

We have lifted our forecast LiCO<sub>3</sub> price from US\$14,500/t to US\$15,500/t and are now in line with the forecasts assumed by LKE in the refreshed PFS. The original PFS was completed by Hatch in April 2020.

The second largest producer of lithium, SQM, recently claimed the market was tighter and the prices higher than they had expected so far in 2021. Insiders believe this price rise is different to 2018, which was driven by Chinese demand growth. This time around, EV growth and needed precursor materials to fuel growth is being driven by Government regulations.

### Lithium Prices



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### Recent industry highlights

- **CME Group, the world's leading and most diverse derivatives marketplace launched its Lithium Hydroxide CIF CJK (Fastmarkets) futures on May 3**
- **USA to reduce emissions by 50% from 2030, doubling the pledge undertaken at the 2015 Paris Climate Agreement, where Obama vowed to cut emissions by 26-28% compared with 2005 levels**
- **Japan to reduce emissions by 46% from its 2013 levels**
- **Canada to reduce emissions by 40-50% by 2030**
- **UK increases target to 78% reduction by 2035; and**
- **LiFeP making up 50% of EV battery sales within China in March 2021...driving Lithium Carbonate prices**

#### Global EV stock is low; and supply chains are very China centric

In Europe, there are 500m people and 3.1m plug in passenger EVs in stock, whilst in the US there are 330m people and 1.8m EVs in stock.

Uptake to date has been slow prior to late 2020, but as costs come down, availability increased and European bans on new ICE sales from 2025-2030 become effective, demand for battery materials will only become more frantic as there were only **12m EVs in the global fleet (incl. hybrid, trucks, vans and buses) at the end of June 2021**. **BNEF suggests the fleet could rise towards 170m by 2030**. That is an extraordinary growth of 158m in EV fleet size in less than 8.5 years.

Globally, BMI has a line of sight to 225 gigafactories supporting battery capacity of 4,200GWh by 2030. As electrification is really about EVs, grid storage and personal tech, BMI forecast total LIB demand for 2030 at 2,430GWh, suggesting a capacity utilisation factor of just 61%. This suggests there is room for the market to grow. So where is the problem? Again it seems to be with the battery precursors.

China controls the supply chain and therefore prices and it is no surprise that the US and Europe, which both import 100% of their cathode requirements from China until 2022, include their associated precursor materials in their critical elements list. China's cathode market share is still material at close to 60%.

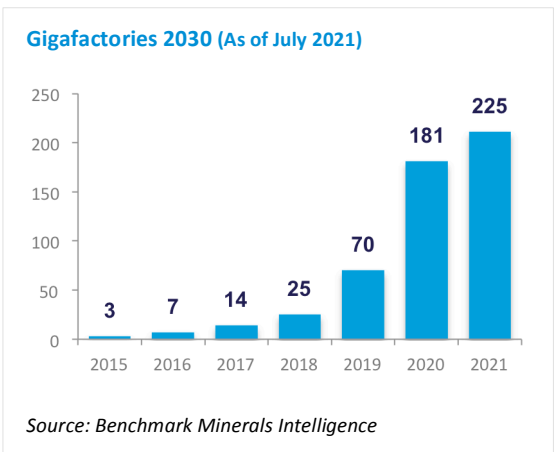
The system could be de-stressed if solid-state batteries are commercial at scale by then. However, as discussed earlier, BMI considers solid-state could just account for 10% of supply in 2030.

In a recently released BNEF report titled 'Electric Vehicle Outlook 2021', it forecast global passenger plug-in EV annual sales could rise strongly from 3.1m in 2020 to 14m in 2025, 30m in 2030 and 65m by 2040. This would increase the global EV inventory from 12m today to 56m by 2025 and 169m by 2030. This represents huge growth of 13x in 9 years.

However, it gets worse. Under a zero emissions target scenario to 2050, run by BNEF for the first time, it sees 218m passenger EVs required by 2030 to ensure the 2050 zero emissions target can be met. That is a massive growth of 17x in 9 years.

In this context, BNEF suggests the global EV segment could represent a US\$7Trillion market opportunity by 2030, growing to US\$46Trillion by 2050 - this is unquestionably a systemic megatrend. The rub here, unfortunately, is that from an anode and cathode precursor perspective, it is not just EVs that are going electric. There will be continuing demand for electronics, trucks, commercial vehicles and long-life storage systems. Such is the challenge for some and the potential reward for others.

**What did the European market look like in 2020?** The European plug-in passenger EV fleet size at the end of 2020 was 3.1m against a population of 500m, yielding a penetration rate of <1%. Thus, to meet the European Commission target of 30m zero-emission cars by 2030 and with 90% of this supply expected to be sourced from within Europe, there is much work to be done.



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**The US is not moving as fast as it thinks it is** –The global trend towards EVs in 2020 was also evident in the US, where EV sales rose by 4% to 0.3m units and total passenger car sales declined by 15%. However, with a US EV fleet size of only 1.8m and a population of 330m, there is also much work to be done.

**How dominant is China?** 100% of global natural anode and 68% of global synthetic anode is refined in China. In short, China controls the global midstream battery chain by controlling 60% of global chemical refining, 87% of global anode manufacturing, 61% of global cathode manufacturing and 73% of global battery manufacturing. It is battery supply and price domination at scale.

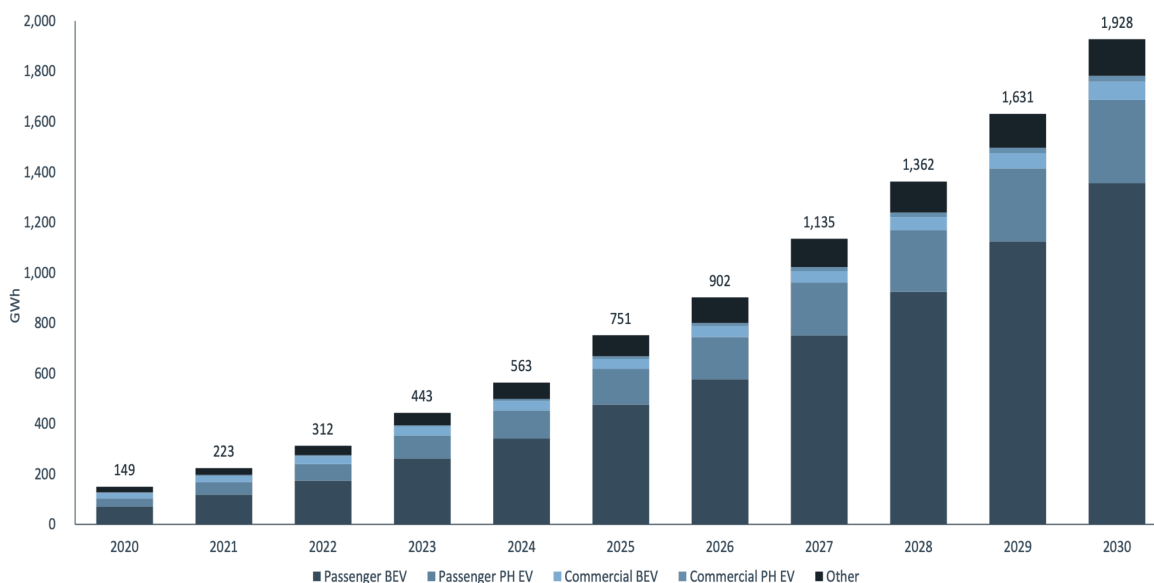
**How reliant is the US?** The US presently imports 96% of its lithium requirements, 100% of its natural and 100% of its synthetic anode powders, as well as 100% of its cathode powders and 90% of its battery cell requirements. Also, there is risk the US might be vulnerable to political, environmental and social interruptions that could hinder the build out of its locally grown supply chains.

With policy support in both Europe and the US, car companies are embracing the EV. Recent multi billion-dollar announcements for new car sales include;

- **Tesla** – predicts 50% of all new car sales will be electric by 2032
- **Ford** – US\$30Bn investment through to 2025, which will see new sales being all-electric by 2030. Ford plans to inject US\$1Bn into a German plant with first production in 2023. Ford also recently announced a partnership with Google and a \$7Bn injection into autonomous technology
- **General Motors** – US\$35Bn investment through to 2025 from GM, which plans to release 30 new EV models by 2025 and an all-electric fleet by 2035
- **VW** – recently announced plans for 50% of its US sales to be electric by 2030; and
- **Stellantis** – a JV between Chrysler and French automaker Groupe PSA plans to spend US\$30Bn and build gigafactories across North America and Europe by 2030.

BMI suggests below that passenger BEVs (Battery Electric Vehicles) will be the most significant driver of EV demand. Now all that is required is the battery materials – but no new production has come on line - GAME ON!

**EV Estimated Demand by Segment** (Source: Benchmark Minerals Intelligence)



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### Lake signs an Expression of Interest with the UK Government – subject to due-diligence

- **Low cost ECA direct 10-year loan up to 70% of capital mix – drives our valuation uplift**
- **EOI suggests ECA debt could also be available to support expansion to 51kt/year**
- **No volume commitment evident and UK equipment clause key driver for deal; and**
- **ECA funds in form of guarantees and direct lending**

Getting funding support from quality investment banks was going to be difficult and expensive and a potential headwind for Tier-1 customers. The EOI with the UK ECA (UK Export Finance) to fund and support the development of Kachi changes all of that. Further, it is unusual to secure funding ahead of the completion of the project DFS and we consider this is evidence of the strength of the market and the view that Kachi offers a unique ESG offtake opportunity. LKE has announced that the EOI does not preclude it from securing participation from other Export Credit Agencies.

Effectively, Government backed loans for pre-production assets are being transacted at rates similar to those received by AAA corporates like JNJ and MSFT. The net effect of this credit uplift makes LKE appear substantially more attractive/less risky to Tier-1 customers and their banks. In debt markets this is often referred to as a “credit wrap”.

Normally, ECA project support comes in the form of guarantees. Rather surprisingly, some funds will be in the form of direct loans, will also be made available.

**What do ECA guarantees do?** The ECA guarantees ensure that a lender, or bank, will receive payment in the event that the producer, like LKE, defaults. As Kachi is located in Argentina, the ECA guarantees would effectively cover country risk and corporate risk. This provision of insurance should reduce the risk to lending banks, as they are not taking real project risk, which should reduce the cost of funds to LKE. For this reason, we suspect that interest payable on loans will be almost half of what a corporate loan might look like at around 5-6%.

**What is ECA Direct lending? – This involves the ECA directly lending funds to LKE, which are secured against the project.** This is unusual, but is expected to be a source of even lower cost of funds.

**What is the cost and duration of the debt? –** Lithium is priced in US dollars and the debt will also be in US and benchmarked against the Commercial Interest Reference Rates (CIRRs), which are the official lending rates of Export Credit Agencies. The current CIRR rate is 1.8% with a spread of around 1.2%. The CEO stated in a recent corporate webinar that the cost of debt could approximate a blended 3%. The duration of the debt is circa 11-years or 8.5 years from first production. This timeline will cover the construction and ramp-up of Phase-2 to 51kt/year.

**Equity risk declines –** High levels of debt normally increase equity risk. However, ECA debt is low cost and long term. Further, the lower cost of debt lowers the company WACC and reduces the call on equity and hence dilution to shareholders and increases potential free cash flows. The combination of these two forces de-risks the project at both the Phase-1 and Phase-2 levels and in so doing; also leads to an increase in valuation.

**The company WACC is declining –** We continue to model the project discount rate at 8% and corporate costs at 10%. However, applying a cost of equity at 11.6% combined with a cost of debt of 5.1% yields a WACC, supported by 70% debt and 30% equity, of just 7%. However, until more certainty around funding is provided, we maintain a project discount rate of 8%. We do however de-risk the two Phases of project development.

**The outlook for securing Tier-1 offtakers has improved –** With the low cost EOI, CCR considers the prospect of securing Tier-1 offtakers has risen. It is not clear at this stage if the UK Britishvolt, which has announced intention to build a 30Gwh plant, or other UK or EU based battery cell-maker, will become an offtaker. S&P Global Platts reported in June that the UK was expected to have 140Gw/year of gigafactories on line by 2040. There seems to be plenty of potential in the UK. However, the CEO reports that an offtake agreement is not a requirement of the UK ECA funding arrangement

**The UK Government supports aggressive uptake of EVs –** The UK Government is interested in access to hard currency and the provision of UK equipment to an offshore operation. By securing this from LKE, the UK Government is seen to be supporting UK manufacturing. This EOI from the UK ECA effectively shows offtakers that LKE is serious about its development and is now also capable of funding the Kachi development.

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### Funding Strategy

LKE has stated on more than one occasion that they are funded through to FID, which we estimate to be mid 2022. With development funding 70% debt to 30% equity, the Phase-1 project equity requirement is estimated to be US\$120m. Short-term additional exercise of options could realise an incremental \$40-70m from the \$0.35 bonus options, which expire in Oct 2022 and from the 30c options issued in Feb 2022. LKE plans to issue 110m options with an exercise price of \$0.75/share to raise \$75m by June 2022. We have diluted for the former but not the later as the shares are still out of the money. Although still being negotiated, we understand pre-payments from offtakers are also being considered to secure equipment for early works. There remains a risk that this is not achieved, however CCR considers this risk is ameliorated by the strong interest from buyers and the limited number of ESG centric projects on offer at this stage.

Production is still expected 1H2024. In a recent ASX release, the UK Government lodged an EOI in providing funding support for the Kachi development.

However, LKE has indicated that the following items are required for the EOI to convert to a binding finance agreement.

- The DFS (1Q21)
- The Environmental Impact statement (1Q21)
- Finalise one offtaker agreement; and
- Due diligence

Benefits of ECA debt include;

- Lower cost debt
- Longer term debt; and
- Guarantees, which reduce risk for banks making it less risky to lend to LKE, as default risk is guaranteed by the ECA; and
- Political and commercial risk insurance, which reduces the perception of country risk.

To fund the potential equity outlay, LKE could seek to;

- Sell down equity in Kachi, which would reduce capital outlay and equity required. Dilution risk could be offset by a proposition bought to the table by the co-investor/partner; and/or
- Seek early pre-development funds from an offtaker payable once FID is declared to offset supply chain risk

**Other Funds – Option exercise** At the end of June 2021, LKE had cash of A\$26m and no debt. There are two option streams that in combination could bring in an incremental \$40-70m. This exercise of options could increase cash to some \$70-90m by end December.

LKE has stated on more than one occasion that they are presently funded through to FID. The above funds if raised could cover the equity component of the Phase-1 development and additional exploration at Cauchari.





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### The ESG thematic ESG benefits vary across Direct Lithium Extraction (DLE) projects

Tracking and reporting of carbon emissions, as well as water flows and usage, will be key to establishing the true value of LKE’s ESG credentials. Recently, Vulcan released its ESG score and significant market outperformance followed. LKE has stated that they also plan to undertake such an analysis however, we are not aware of the timetable at this stage.

In March 2021, BMW announced a €285m lithium offtake agreement with Livent, for supply from its Argentinian brine project. The key driver for this agreement was the projects perceived ESG credentials despite using a combination of evaporation ponds and DLE. Despite this, BMW identified Livent's project as undertaking “responsible extraction of lithium in Argentina”. It is understood that Livent uses an “adsorption bead method” to extract the lithium from the concentrate and has been using this dual extraction process to concentrate the lithium since early 2000’s.

LKE will not be using evaporation ponds to concentrate the lithium. LKE was concerned about project delays and lack of approvals for evaporation ponds on lithium projects in Chile and the lack of water sustainability. This caused LKE to reassess how they might develop the Kachi deposit. Early on, LKE sought to proactively seek out disruptive technology that could not only improve lithium quality and yields but was also water efficient.

Lilac Solutions Inc, backed by the Bill Gates led *Breakthrough Energy Fund*, had developed such a technology. The process is 100% DLE, meaning no evaporation ponds are used to concentrate the brine. As the process uses the “ion exchange method” rather than the “adsorption bead method”, water loss should be significantly less and once the lithium has been extracted from the brine, the water (brine) is returned to the reservoir.

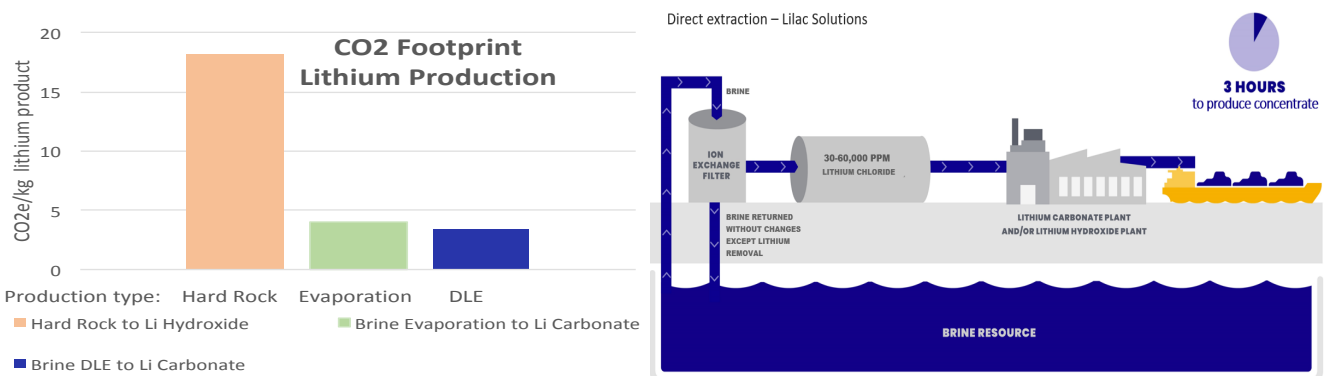
We find this water sustainability aspect interesting, as BMW was attracted to the Livent project not only because it had un-contracted supplies available but also because “Livent employs an innovative method, that emphasises sustainable water use and minimises the impact on local ecosystems and communities”. CCR believes it will be very interesting to see how these two projects compare when data is finally available. On the surface, it would appear the Lilac Solutions DLE method might have an edge over the hybrid DLE method used by Livent with lower water use. We suggest BMW may see scaling or delivery risk with LKE and not with Livent. We wonder; how long can OEM’s maintain this passive view?

**Is the Lilac Process water intensive?** It is reported to use the lowest amount of water of any DLE process under investigation. The Lilac process was specifically designed to extract lithium from brines in arid to semi arid areas where available fresh water, used in processing, is scarce. To combat this, the Lilac process uses acid to strip the beads and not fresh water as occurs with other methods, where water shortages are not as critical. Process water is also low.

**Key disruptive features of Clean Tech as outlined by Lilac and LKE;**

- No mining, crushing or evaporation ponds required
- Simple project flowsheet is more efficient (lower cost and very fast...hours versus years!)
- Doubles lithium recoveries – concentrates from 45% to 85% effectively doubling reserves
- No water politics – as 99% of brine is re-injected back into the reservoir; and
- 90% smaller physical project footprint; and Delivers a constant product quality.

**DLE ESG benefits ...lower carbon footprint and very fast**



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### Corporate Activity – China’s Ganfeng moving fast to secure supply chain

- **Jan 2021** Piedmont makes 9.9% strategic investment in Sayona in Canada and secures offtake contract and 25% purchase at the asset level, Also acquired an option to increase holding to 19.9%
- **March 2021** Ganfeng acquires 49% in China’s Minmetals Salt Lake, which owns the Yiliping lithium salt lake project in northwest China for US\$225m
- **May 2021** Ganfeng increases equity in Baconora from 50% to 100%, valuing the company at US\$392m, giving it control of the Mexico’s Sonora lithium clay project
- **June 2021** Ganfeng acquires 50% of Firefinch’s Goulamina hard rock project in Mali for US\$130m
- **July 2021** Ganfeng received approval to build a 20,000 tonnes per year lithium plant for its Mariana project in northern Argentina
- **July 2021** Piedmont established strategic partnership with IronRidge to develop its spodumene resource in Ghana. Will purchase 50% at asset level
- **July 2021** Ganfeng progressing acquisition of Argentina focussed Millennial Lithium Corp for US\$280m
- **August 2021** Ganfeng and its partner Lithium Americas commenced development planning to increase Cauchari production from 40ktpa to 60ktpa, once initial production commences in mid 2022
- **August 2021** the Orocobre and Galaxy merger was approved resulting in a US\$4Bn company; and
- **GM receives MOU with Controlled Lithium** to purchase lithium from geothermal energy.

With lithium prices rising strongly into 2021, M&A activity has also surged. The most active party has been the Chinese company Ganfeng, which has made some 4 acquisitions in the last 9-months. This rush of activity appears reminiscent of China’s acquisition frenzy in 2001 and 2002, when it acquired emerging oil and gas assets ahead of the rise in oil prices.

The recent merger of Orocobre and Galaxy has created a US\$4Bn company with forecast production of around 40-50kt by 2026. Interestingly, LKE plans to be producing 25.5kt by 2024 and if an expansion proceeds, it could be producing 51kt by 2028/29. The value arbitrage appears significant if Lake can successfully progress Kachi onto the global stage.

**LKE and its shareholders are exposed.** LKE does not have a shareholder with greater than 5%. In the interest of LKE’s dreams of becoming a significant producer, this absence of a sizeable and/or strategic shareholder really needs to be addressed.

LKE continues to suggest that they see Lilac providing a long-term partnership over the life of the project. What form this partnership will take is still not clear. Will it be at the asset level or not? If not Lilac, will it be an offtaker?

### Company Comparatives

Company	Ticker Code	A\$ /share	Region	Location	Mkt cap A\$m	Net Cash A\$m	EV A\$m	Cash % EV	M+I Net mt	M++I Net mt	NET M+I EV A\$/t	NET M++I EV A\$/t	Most Recent Study	Process Type
Lake Resources	LKE.ASX	0.48	S. America	Argentina	530	26	504	5%	1.0	4.4	504	115	PFS	DLE
Standard Lithium	SLL.TSXV	8.08	USA	Nevada	1,166	34	1,132	3%	0.9	1.2	1,202	953	PEA	DLE
Core Lithium	CXO.ASX	0.46	Australia	NT	534	38	496	8%	0.3	0.5	1,872	1,033	DFS	Hard Rock
Piedmont	PLL.ASX	0.77	USA	Nth Carolina	442	219	224	98%	0.4	0.8	577	293	PFS	Hard Rock
Ioneer	INR.ASX	0.74	USA	Nevada	1,273	83	1,190	7%	1.3	1.2	952	992	DFS	Hard Rock
European Metals	EMH.ASX	1.67	Europe	Czech	217	8	210	4%	2.0	3.5	104	59	PFS	Hard Rock
Infinity Lithium	INF.ASX	0.12	Europe	Spain	46	19	27	70%	1.2	1.3	23	22	PFS	Hard Rock
European Lithium	EUR.ASX	0.09	Europe	Austria	80	5	78	7%	0.2	0.3	430	288	PFS	Hard Rock
Liontown	LTR.ASX	1.58	Australia	WA	3,007	13	2,994	0%	2.7	4.3	1,109	696	PFS	Hard Rock
Vulcan Energy	VUL.ASX	15.89	Europe	Germany	1,727	115	1,613	7%	2.1	16.2	783	100	PFS	DLE
Argosy Minerals	AGY.ASX	0.17	S. America	Argentina	213	28	185	15%	0.2	0.2	973	NA	PEA	Brine
Anson Resources	ANS.ASX	0.11	USA	Utah	105	3	102	3%	0.1	0.2	721	533	PEA	DLE
Frontier Lithium	FL.V	0.84	Canada	Ontario	165	4.2	161	3%	0.2	0.2	859	804	PEA	Hard Rock
E3 Metals	ETMC.TSXV	2.12	Canada	Alberta	125	6	119	5%	-	6.7	-	17.7	PEA	DLE
Alpha Lithium	ALLI.TSXV	0.59	S. America	Argentina	71	8	62	14%	-	-	-	-	-	DLE
Hawkstone Minin	HWK.ASX	0.04	USA	Arizona	66	5	61	8%	0.2	0.3	405	191	-	Hard Rock

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### Exploration & development meets ESG requirements

- **The Kachi brine volume is 25x that of the Sydney Harbour**
- **One of few independent, 100% held lithium projects remaining**
- **Oil field practice could lighten the footprint, optimize the resource and lower the cost of extraction; and**
- **The brine reservoir has high producible permeabilities as evidenced by low clay/high sand content**

The Kachi project is located in Catamarca Province Argentina and has an indicated JORC resource of 1.01mt LCE and an indicated and inferred JORC resource of 4.4mt LCE. Resource upside still exists at Kachi as only 37% of the current lease has been explored. In addition, further upside exists at Cauchari (LKE 100%) located within proximity to Ganfeng and Orocobre's producing assets.

The Kachi resource remains open laterally and at depth, allowing for a potential extension to the life of the mine or expansion to production. Exploration is underway to prove the reserve required to FID the project and expand production to 51ktpa.

The depositional environment is volcano-sedimentary. Meaning, the lithium etc. is the product of volcanic eruptions with the ash and tuffaceous sediments, ejected from the volcano or fissure, being laid down in a sedimentary basin. In the presence of a desert environment, any rain that has fallen percolates down through the lithium rich volcano-sedimentary pile and accumulates at the lowest point. This process has been going on for hundreds of thousands of years.

At Kachi, the potassium rich brine is located in un-consolidated sands. As such, the denser more viscous salty brine sits below the shallower less dense freshwater. Passive seismic, suggests the column of freshwater lies in a wedge above the brine up-dip to the north and that the brine included within the measured, indicated and inferred resource extends to a laterally extensive reflective marker at around 400 to 800m depth.

As the density of the brine is higher than water, wells will likely be drilled down towards a depth of 400m. Sand screens are expected to be installed on all wells to ensure the unconsolidated sand does not preferentially flow into the well bore and block/inhibit the flow of lithium rich brine to surface.

#### Is there an improved way to optimize extraction of the brine at a lower cost?

Once the radius of drainage around a well is calculated, the wells can be drilled following a specific grid, usually 0.5km to 1.5km apart. Drilling the wells too close together could result in well interference and possible early breakthrough of water. Wells drilled too far apart and the brine could be left in-situ, thereby reducing the theoretical recoveries.

Eco drilling includes the drilling of multiple wells from a single drill pad and could unleash significant savings and reduce the projects footprint. This is well understood in the shale and coal seam gas sector. Normally, brine extraction methods involve drilling a single vertical well and when the well is complete the rig is disassembled, hauled to the next pad and then reassembled. The relocation of the rig and associated infrastructure in this way can be costly for the operator and the environment.

To be clear, you cannot think about developing the Kachi resource as you would a mine. Production methodologies inputs and outputs are closer to that of the petroleum industry. A lot of the issues at hand here have been dealt with at length by the petroleum industry and are well understood; consequently **we suspect an important operational hire might include a senior operations manager transitioning across from the oil and gas sector to the Kachi project**. When starting to think like a petroleum geologist/analyst, which this analyst was in a prior life, it gets to be quite exciting as the CEO is very much across this thematic. As a result, CCR are optimistic that further savings in excess of the PFS might actually be possible, especially on the cost of the provision of energy (refer initiation report).

LKE has suggested that some 8-10 wells will be required to produce enough brine to extract 25.5kt of LCE/year. Each of these wells would be expected to have a 25-year life. A 2P reserve may result in a 1km well spacing with limited well interference. A 1P reserve would be closer to a 0.5km well spacing. Due to the shallow nature, reservoir pressure will be low and therefore pumping is required. Once again, we do not expect this to be a complicating factor, as other producers produce from shallow reservoirs. We do however; envisage that water studies/management will become an important aspect of securing permitting going forward. As such we expect that numerous shallow geotechnical wells will be required

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to monitor the rise and fall of the water table and that well density will be managed accordingly to minimize depletion risk. LKE has explained this in having a narrow diameter monitoring well located adjacent to a production well.

The PFS was based on production of 25.5kt/year over a project life of 25-years. Over this time, 62% to 85% of the indicated resource would be utilised. Given strong demand, it is quite reasonable to assume that LKE might seek to develop as much resource as demand for its product enables. Exploration is ongoing to move inferred resource to the indicated category.

Separately, the Cauchari Brine project is “located adjacent to major world class brine projects in production or construction, including Orocobre’s Olaroz lithium production and adjoins the impending production of Ganfeng Lithium/Lithium Americas’ Cauchari project. Lake’s Cauchari project has shown lithium brines over a 506m interval with high grades averaging 493mg/L lithium (117-460m) with up to 540mg/L lithium. These results are similar to lithium brines in adjoining leases and infer an extension and continuity of these brines into LKE’s leases. Based on the early stage of exploration here, we ascribe a value of \$40m to the Cauchari brine lease.

KACHI LITHIUM BRINE PROJECT	MINERAL RESOURCE ESTIMATE					
	Indicated		Inferred		Total Resource	
JORC Code 2012 Edition	17.1		158.3		175.4	
Area, km <sup>2</sup>	6		41		47	
Aquifer volume, km <sup>3</sup>	0.65		3.2		3.8	
Brine volume, km <sup>3</sup>	10.9		7.5		7.9	
Element	Li	K	Li	K	Li	K
Weighted mean concentration, mg/L	289	5,880	209	4,180	211	4,380
Resource, tonnes	188,000	3,500,000	638,000	12,500,000	826,000	16,000,000
Lithium Carbonate Equivalent (LCE), tonnes	<b>1,005,000</b>		3,394,000		<b>4,400,000</b>	
Potassium Chloride, tonnes	6,705,000		24,000,000		30,700,000	

Lithium is converted to lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>) with a conversion factor of 5.32  
Potassium is converted to potassium chloride (KCl) with a conversion factor of 1.91

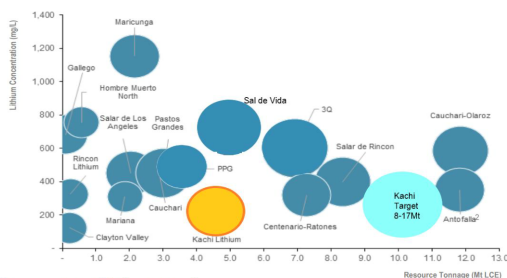
### Kachi – Drill Holes & Seismic Lines Used in Resource Estimation

## Kachi – Deep Brines

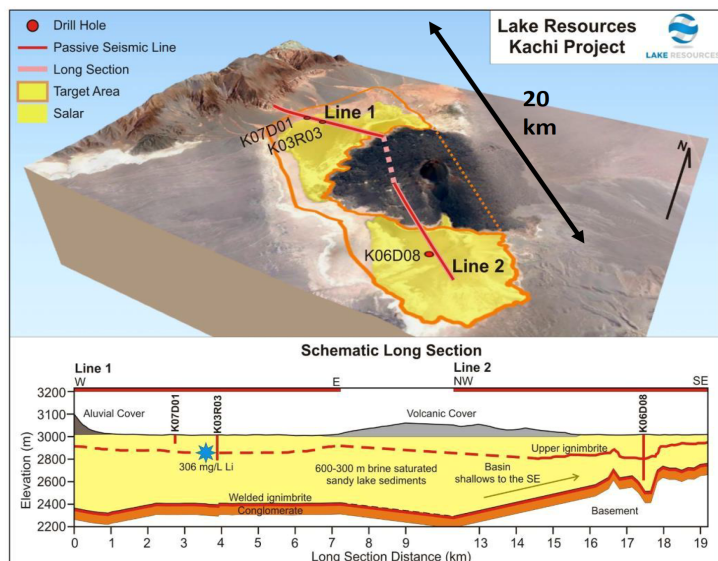


### Potential Expansion

- Geophysics show large deep basin with brines from surface to 400-800m depth
- Potential expansion at depth, south & west



Source: Company Disclosure, Roskill, Investment Banking Research, Galaxy GXY graph  
Notes:  
1. Bubble size represents annual production capacity forecast  
2. Bubble size represents estimated annual production capacity forecast due to lack of available production estimates



Source: Lakes Resources

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### CCR Valuation is DCF based

We model Kachi in line with the original PFS. The CCR model assumptions were highlighted in our [initiation report](#).

Changes to assumptions since the initiation report include; raising the lithium price to US\$15,500/t, project de-risking and a reduction to the interest rate payable on debt from 7.5% to 4.5%, supported by ECA guarantees and direct lending.

For valuation purposes, we model a two- phased development of the Kachi lithium project and then probabilistically apply three differing scenarios to each phase of development. Our **base case is scenario-1**, which carries a 60% probability that Phase-1 and a 15% probability that phase-2 will be developed.

As positive catalysts are announced the inherent optionality within the model is realised. We model this as a reduction in risking of each phase, which leads to an increased probability of occurrence and thus an increase in valuation. As this occurs, scenario-2 becomes more likely – as evidenced below.

### Kachi is developed in two Phases – the expansion option seems well advanced

**Phase-1 has a 60% chance of success. Thus, all funds, modelled under a phase-1 development, are discounted by 40%**

Phase-1 models production to 25,500t/year with a project life of 25 years. Value is achieved as catalysts such as off-take agreements, funding and/or JV partnerships are achieved.

By the time FID of Kachi is declared, the project might be considered to be 85% de-risked. Ultimate de-risking would occur with a successful commissioning of the project. This forms the base case of our Phase-1 valuation.

**Phase-2 – has a 15% chance of success in the model. Thus phase-2 expansion cashflows are discounted by 85%**

A Phase-2 expansion would take production to 51,000t/year. The CEO has indicated on numerous occasions that the expansion option is being considered in the DFS, which is due for completion early 2022. Further backing this claim, the recently announced EOI with the UK Government led ECA, suggested they would provide funding support for up to 70% of the Kachi expansion. It seems clear to us that, the expansion option at Kachi is well advanced.

We recognize there is only sufficient indicated resource for 25-years and thus we assume production will only double from year 5 for a duration of 20-years. With spot lithium carbonate prices of US\$18,000/t, we have increased our price assumption from US\$14,500 to US\$15,500/t in real terms. This is also now consistent with the PFS pricing.

### VALUATION SUMMARY (RISKED VALUATION - Based on SCENARIO-1)

Scenario-1	Discount Rate	NOW	12-months	2-year	3-year	4-year	8-year
Kachi Phase-1	8%	0.98	1.14	1.41	1.44	1.42	1.36
Kachi Phase-2	8%	0.20	0.21	0.23	0.25	0.28	0.43
<b>Total Kachi Project value</b>	<b>A\$/share</b>	<b>1.18</b>	<b>1.35</b>	<b>1.64</b>	<b>1.69</b>	<b>1.70</b>	<b>1.79</b>
Other Argentina assets		0.04	0.04	0.05	0.05	0.06	0.09
<b>Total Argentina</b>	<b>A\$/share</b>	<b>1.22</b>	<b>1.39</b>	<b>1.69</b>	<b>1.74</b>	<b>1.76</b>	<b>1.88</b>
Corporate Costs	10%	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Working Capital		0.03	0.02	0.02	0.02	0.02	0.02
Net Cash Cash (last qtr rpt-adj)		0.02	0.02	0.02	0.02	0.02	0.02
<b>Scenario-1 LKE value</b>	<b>A\$/share</b>	<b>1.23</b>	<b>1.39</b>	<b>1.69</b>	<b>1.74</b>	<b>1.76</b>	<b>1.89</b>
<b>Scenario-2</b>							
Kachi Project value		2.30	2.59	3.11	3.24	3.30	3.70
Other assets		0.05	0.04	0.05	0.05	0.06	0.10
<b>Scenario-2 LKE value</b>	<b>A\$/share</b>	<b>2.35</b>	<b>2.64</b>	<b>3.16</b>	<b>3.29</b>	<b>3.36</b>	<b>3.80</b>
<b>Scenario-3</b>							
Kachi Project value		2.97	3.29	3.88	4.08	4.22	5.13
Other assets		0.03	2.66	3.18	3.31	3.38	3.82
<b>Scenario-3 LKE value</b>	<b>A\$/share</b>	<b>3.02</b>	<b>3.33</b>	<b>3.93</b>	<b>4.13</b>	<b>4.28</b>	<b>5.23</b>

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### Scenario Analysis for Kachi project development (corporate costs are not included)

As catalysts are executed, the probability of progressing from Scenario-1 to Scenario-2 becomes more likely and as production is commissioned, and development risk of a two-phased project subsides we move to Scenario-3, which is fully de-risked. Exploration options at Cauchari & Olaroz etc are not included in the project sensitivity below but are included in corporate valuation as a separate line item.

#### Scenario –1 CCR **Base Case**. Includes a 60% probability for a Phase-1 & 15% for a Phase-2 expansion

Production	RISKED	2022F	2023F	2024F	2025F	2030F
<b>Capacity</b>	<b>Risking</b>					
Phase-1 to 25,500t	60%	-	2,537	11,909	14,555	14,555
Phase-2 to 51,000t	15%	-	-	-	-	3,817
<b>Riskied Production</b>	kt	-	<b>2,537</b>	<b>11,909</b>	<b>14,555</b>	<b>18,373</b>
<b>EBITDA</b>	<b>A\$m</b>	-	<b>48</b>	<b>163</b>	<b>203</b>	<b>275</b>
EV/Ebitda	Ratio	-	13.7x	4.0x	3.2x	2.4x
<b>VALUATION</b>	<b>Now</b>	<b>1-year</b>	<b>2-year</b>	<b>3-year</b>	<b>4-year</b>	<b>8-year</b>
Phase-1	0.98	1.14	1.41	1.44	1.42	1.36
Phase-2	0.20	0.21	0.23	0.25	0.28	0.43
<b>Total Kachi Business</b>	<b>1.18</b>	<b>1.35</b>	<b>1.64</b>	<b>1.69</b>	<b>1.70</b>	<b>1.79</b>

#### Scenario–2 Assumes Phase-1 is fully de-risked and the Phase-2 expansion is riskied to 50%

PRODUCTION	RISKED	2022F	2023F	2024F	2025F	2030F
<b>Capacity</b>	<b>Risking</b>					
Phase-1 to 25,500t	100%	-	4,228	19,848	24,259	24,259
Phase-2 to 51,000t	50%	-	-	-	-	12,725
<b>Riskied Production</b>	kt	-	<b>4,228</b>	<b>19,848</b>	<b>24,259</b>	<b>36,983</b>
<b>EBITDA</b>	<b>A\$m</b>	-	<b>82</b>	<b>280</b>	<b>368</b>	<b>588</b>
EV/Ebitda	Ratio	-	8.0x	2.3x	1.8x	1.1x
<b>VALUATION</b>	<b>Now</b>	<b>1-year</b>	<b>2-year</b>	<b>3-year</b>	<b>4-year</b>	<b>8-year</b>
Phase-1	1.63	1.90	2.35	2.40	2.37	2.27
Phase-2	0.67	0.69	0.76	0.84	0.92	1.43
<b>Total Kachi Business</b>	<b>2.30</b>	<b>2.59</b>	<b>3.11</b>	<b>3.24</b>	<b>3.30</b>	<b>3.70</b>

#### Scenario–3 Assumes both phases are fully developed, we are no where near this scenario at this stage

PRODUCTION	UN-RISKED	2022F	2023F	2024F	2025F	2030F
<b>Capacity</b>	<b>Risking</b>					
Phase-1 to 25,500t	100%	-	4,228	19,848	24,259	24,259
Phase-2 to 51,000t	100%	-	-	-	-	25,450
<b>Unriskied Production</b>	kt	-	<b>4,228</b>	<b>19,848</b>	<b>24,259</b>	<b>49,708</b>
<b>EBITDA</b>	<b>A\$m</b>	-	<b>61</b>	<b>177</b>	<b>323</b>	<b>974</b>
EV/Ebitda	Ratio	-	10.7x	3.7x	2.0x	0.7x
<b>VALUATION</b>	<b>Now</b>	<b>1-year</b>	<b>2-year</b>	<b>3-year</b>	<b>4-year</b>	<b>8-year</b>
Phase-1	1.63	1.90	2.35	2.40	2.37	2.27
Phase-2	1.35	1.39	1.53	1.68	1.85	2.86
<b>Total Kachi Business</b>	<b>2.97</b>	<b>3.29</b>	<b>3.88</b>	<b>4.08</b>	<b>4.22</b>	<b>5.13</b>

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### RISKED EARNINGS FORECAST, CASHFLOW & BALANCE SHEET

PRICE: A\$0.48

PROFIT AND LOSS (Year End June)							PRODUCTION ESTIMATES (Net)						
Year ending 30 June	Unit	2020A	2021F	2022F	2023F	2024F	Year ending 30 June	Unit	2020A	2021F	2022F	2023F	2024F
Revenue	A\$m	-	-	-	-	51.4	<b>PROJECTS</b>						
Expenses	A\$m	(4.5)	(4.8)	(3.0)	(3.2)	(14.5)	Brine treated	mcm	-	-	-	4	18
<b>EBITDA</b>	A\$m	<b>(4.5)</b>	<b>(4.8)</b>	<b>(3.0)</b>	<b>(3.2)</b>	<b>36.9</b>	Brine grade	mg/L Li	-	-	250	250	250
Depreciation	A\$m	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	Contained lithium	t LCE	-	-	5,080	23,850	29,150
EBIT	A\$m	(4.5)	(4.8)	(3.0)	(3.2)	36.9	Recovery	%	-	-	83%	83%	83%
Net interest (expense)	A\$m	(0.5)	-	-	-	(7.9)	Recovered lithium	t LCE	-	-	4,228	19,848	24,259
<b>PBT</b>	A\$m	<b>(5.0)</b>	<b>(4.8)</b>	<b>(3.0)</b>	<b>(3.2)</b>	<b>29.0</b>	<b>PRICING &amp; FOREX ASSUMPTIONS</b>						
Tax expense	A\$m	(0.0)	-	-	-	(2.0)	<b>PRICES</b>						
<b>NPAT (pre-abnormal)</b>	A\$m	<b>(4.9)</b>	<b>(4.8)</b>	<b>(3.0)</b>	<b>(3.2)</b>	<b>27.0</b>	Lithium carbonate	US/kg	-	17	18	17	17
Abnormal items	A\$m	-	-	-	-	-	Lithium carbonate (LCE)	US/t	-	15,500	15,888	16,285	16,692
<b>NPAT (reported)</b>	A\$m	<b>(4.9)</b>	<b>(4.8)</b>	<b>(3.0)</b>	<b>(3.2)</b>	<b>27.0</b>	Lithium carbonate (LCE)	A\$/t	-	20,667	21,183	21,713	22,256

CASH FLOW						
Year ending 30 June	Unit	2020A	2021F	2022F	2023F	2024F
<b>OPERATING CASHFLOW</b>						
NPAT	A\$m	(5)	(5)	(3)	(3)	27
Add: non-cash items	A\$m	1	2	0	0	(1)
Change in working capital	A\$m	-	-	-	-	-
<b>Operating cash flow</b>	A\$m	<b>(3.5)</b>	<b>(3)</b>	<b>(3)</b>	<b>(3)</b>	<b>26</b>
<b>INVESTING CASHFLOW</b>						
PP&E (Capex less depreciation)	A\$m	-	-	-	(130)	(309)
Exploration & evaluation	A\$m	(4)	(3)	(10)	(6)	(6)
Sustaining capital (from 2028)	A\$m	-	-	-	-	-
Rehabilitation charge	A\$m	-	-	-	-	-
<b>Investing cash flow</b>	A\$m	<b>(4)</b>	<b>(3)</b>	<b>(10)</b>	<b>(136)</b>	<b>(315)</b>
<b>FINANCING CASHFLOW</b>						
Share issues	A\$m	6	20	50	-	-
Project equity	A\$m	-	-	-	132	-
Project debt	A\$m	-	-	-	309	-
Other	A\$m	(1)	-	-	-	-
<b>Financing cash flow</b>	A\$m	<b>5</b>	<b>20</b>	<b>50</b>	<b>442</b>	<b>-</b>
Surplus Cashflow	A\$m	(3)	14	37	302	(289)

BALANCE SHEET						
Year ending 30 June	Unit	2020A	2021F	2022F	2023F	2024F
<b>ASSETS</b>						
Cash (incl. raising)	A\$m	0	14	51	354	72
Accounts receivable	A\$m	0.3	0.3	0	0	0
PP&E (Capex less depreciation)	A\$m	-	(0)	(0)	130	438
Exploration & evaluation assets	A\$m	17	20	30	36	43
Other	A\$m	0	-	-	-	-
<b>Total assets</b>	A\$m	<b>18</b>	<b>35</b>	<b>82</b>	<b>520</b>	<b>554</b>
<b>LIABILITIES</b>						
Creditors	A\$m	1	1	1	1	1
Provisions	A\$m	-	-	-	-	-
Borrowings	A\$m	-	-	-	309	309
Other	A\$m	0	0	0	0	0
<b>Total liabilities</b>	A\$m	<b>1</b>	<b>1</b>	<b>1</b>	<b>310</b>	<b>310</b>
<b>SHAREHOLDER'S EQUITY</b>						
Share capital	A\$m	35	57	107	240	247
Reserves	A\$m	3	3	3	3	3
Retained earnings	A\$m	(22)	(27)	(29)	(33)	(6)
<b>Total equity</b>	A\$m	<b>17</b>	<b>34</b>	<b>81</b>	<b>211</b>	<b>244</b>
Diluted weighted average NoSh	m	1,047	1,047	1,268	1,356	1,356

RATIOS						
ASSETS	Unit	2020A	2021F	2022F	2023F	2024F
Net Cash (Debt)	A\$m	0	14	51	45	(237)
Net Debt/Equity	%	0%	0%	0%	0%	97%
EPS	cps	-	-	-	(0.00)	0.02
PE ratio	ratio	-102.6x	-105.2x	-203.7x	-202.4x	24.1x
Ebitda ratio	ratio	-	-	-	0.0x	0.7x
EV/Ebitda ratio	ratio	-	-	-	-156.9x	13.7x

MARKET MODEL		
Year ending 30 June	Unit	
Market cap	A\$m	530
Cash	A\$m	26
Debt	A\$m	-
<b>Enterprise value (EV)</b>	A\$m	<b>504</b>
<b>EV / NPV8 as in PFS refresh</b>		<b>23%</b>
<b>Cash % market cap</b>	%	<b>5%</b>
No of shares (undiluted)	m	1,105

DISCOUNTED CASHFLOW MODEL - Refer Scenario-1						
Nominal	Discount	Unrisked	Unrisked	Risked		
NPV8 (Post tax)	Rate %	NPV (A\$m)	A\$/sh	Risking	NPV (A\$m)	A\$/sh
Kachi Lithium Phase-1	8%	2,066	1.63	60%	1,239	0.98
Kachi Expansion Phase-2	8%	1,706	1.35	15%	256	0.20
<b>Total Kachi Cashflows</b>		<b>3,772</b>	<b>2.97</b>		<b>1,495</b>	<b>1.18</b>
Other Lithium Assets		53	0.04	100%	53	0.04
-Corporate Costs	10%	(49)	(0.04)	100%	(49)	(0.04)
-/+Working Capital	8%	32	0.03	100%	32	0.03
+Net Cash		25	0.02	100%	25	0.02
<b>Equity value</b>		<b>3,834</b>	<b>3.02</b>	<b>100%</b>	<b>1,557</b>	<b>1.23</b>
<b>Equity value</b>					1,557	
NoSh - fully diluted (m)					1,268	
<b>Value NOW</b>			<b>A\$/share</b>		<b>1.23</b>	
<b>Value 12 months out</b>			<b>A\$/share</b>		<b>1.39</b>	
<b>Target Price 12-months out*</b>			<b>A\$/share</b>		<b>1.04</b>	

*12-month target price equates to value 12-months out discounted by 25%*

VALUATION SENSITIVITIES					
LITHIUM PRICES		US\$/t	\$m	\$/sh	% diff
	Base	15,500	1,557	1.23	
-2,000	Low	13,500	1,220	0.96	-22%
+2,000	High	17,500	1,894	1.49	21%
EXCHANGE RATE (long term)		AUD/USD	\$m	\$/sh	% diff
	Base	0.75	1,557	1.23	
+0.1	Low	0.85	1,372	1.08	-12%
-0.1	High	0.65	1,800	1.41	15%
WACC (post tax)		\$m	\$/sh	% diff	
	Base	8.0%	1,557	1.23	
	Low	7.0%	1,736	1.36	11%
	High	9.0%	1,402	1.10	-10%

**Note:** The above is based on Scenario 1, Phase 1 at 60% and Phase 2 at 15%. As the risking changes so does the input to the P&L, Cashflow and Balance Sheet.

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