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Acquisition and Capital Raising Presentation

September 2019



Summary information

This presentation contains summary information about Calix Limited and its subsidiaries (“**Calix**”), and the proposed acquisition of Inland Environmental Resources Inc. (“**IER**”). The information in this presentation is a general background and does not purport to be complete.

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Calix reserves the right to withdraw the Offer or vary the timetable for the Offer without notice. If Calix proceeds with the offer, then it retains complete discretion as to the terms on which it chooses to proceed, and may deal with one or more potential investors in its discretion without advising any other potential investors that it is doing so. No terms of investment are binding on Calix until signature of definitive and binding transaction documents.

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- Calix has entered into an agreement to acquire 100% of Inland Environmental Resources (“IER”, the “**Acquisition**”; the “**Transaction**”) for total upfront cash consideration of A\$6.4m and deferred, contingent consideration of A\$2.9m
- Founded in 1997 IER is a Magnesium Hydroxide Liquid (“MHL”) business
 - Expected to contribute revenue of A\$13.4 million and EBITDA of A\$1.1 million, on an FY19 pro-forma basis, before synergies and excluding associated acquisition costs
 - Implied transaction multiple (EV / pro forma FY19 EBITDA of A\$1.1 million)
 - 5.8x based on upfront consideration
 - 8.6x including all deferred, contingent consideration



- **Accelerates** US market entry: from 2 customers to 80+, from US\$40k revenues to >US\$9m
- **Combined market experience** - Calix’s experience in MHL for sewers with IER experience in MHL for food processing
- **New market opportunities** Calix’s IP in stabilising MHL brings logistical advantages to the business, opening new markets, both geographically and in new segments
- **Value accretive** for Calix shareholders:
 - Approx. 96% increase in Total⁽¹⁾ FY19 Pro forma Revenue
 - Approx. 220% increase in FY19 Pro forma EBITDA



- Unconditional placement to sophisticated and professional investors at A\$0.70 per share to raise approximately A\$12.0 million
 - Approximately 17.1 million New Shares will be issued under the Offer
- Share Purchase Plan (SPP) to existing eligible shareholders in Australia and New Zealand, up to A\$30,000 per shareholder
 - The Share Purchase Plan will be capped at A\$1.5 million and Calix reserves the right to scale back any applications under the SPP
- Upfront Acquisition consideration, transaction costs, integration and market expansion costs and potential deferred, contingent consideration for Acquisition vendors of up to A\$2.9 million over 1, 2 and 4 year periods⁽²⁾ funded by cash of A\$12 million from Placement proceeds

(1) Core, other product revenue, grant Income, R&D incentives, interest income, debt forgiveness of loan and other income
 (2) 1-year earn-out approx. A\$0.94m, 2-year earn-out approx. A\$1.19m, 4-year earn-out approx. A\$0.79m

Transformational acquisition impact



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			POST TRANSACTION
Revenue^{(1),(2)} A\$m	13.9	13.4	27.3 ↑ 96%
EBITDA⁽²⁾ A\$m	0.5	1.1	1.6 ↑ 220%
Operating Cashflow⁽²⁾ A\$m	0.7	1.0	1.7 ↑ 243%
No. Customers	75	84	159 ↑ 112%
No. US States Penetrated⁽³⁾	2	9	11 ↑ 450%
No. Facilities Globally	3	4	7 ↑ 133%
No. Staff	40	16	56 ↑ 40%

(1) Includes Core and other product revenue, grant income, R&D incentives, interest income, debt forgiveness of loan and other income

(2) Includes exchange differences on translation of foreign operations. 30 June 2019 AUD to USD exchange rate of \$0.7013 applied

(3) For greater than 2% of IER's revenue

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Proven platform technology

- Patent-protected process that produces multiple products targeting a number of verticals
- Over \$50m invested to date to develop the technology

Strong industry tailwinds

- Strong focus on CO₂ emissions, non-toxic pesticides and developing new energy efficient batteries
- Received A\$36 million in grant funding, majority from European Union

Penetrating large global markets

- Large multinational, government agency and blue-chip customers in water / wastewater and aquaculture
- Near-commercial products in agriculture and CO₂ capture
- Government-funded advanced Li-Ion battery program
- Multiple touch-points with global chemical companies

Highly scalable operations

- Vertically integrated value chain from own mine to customers in wastewater and infrastructure

Acquisition that accelerates US market entry

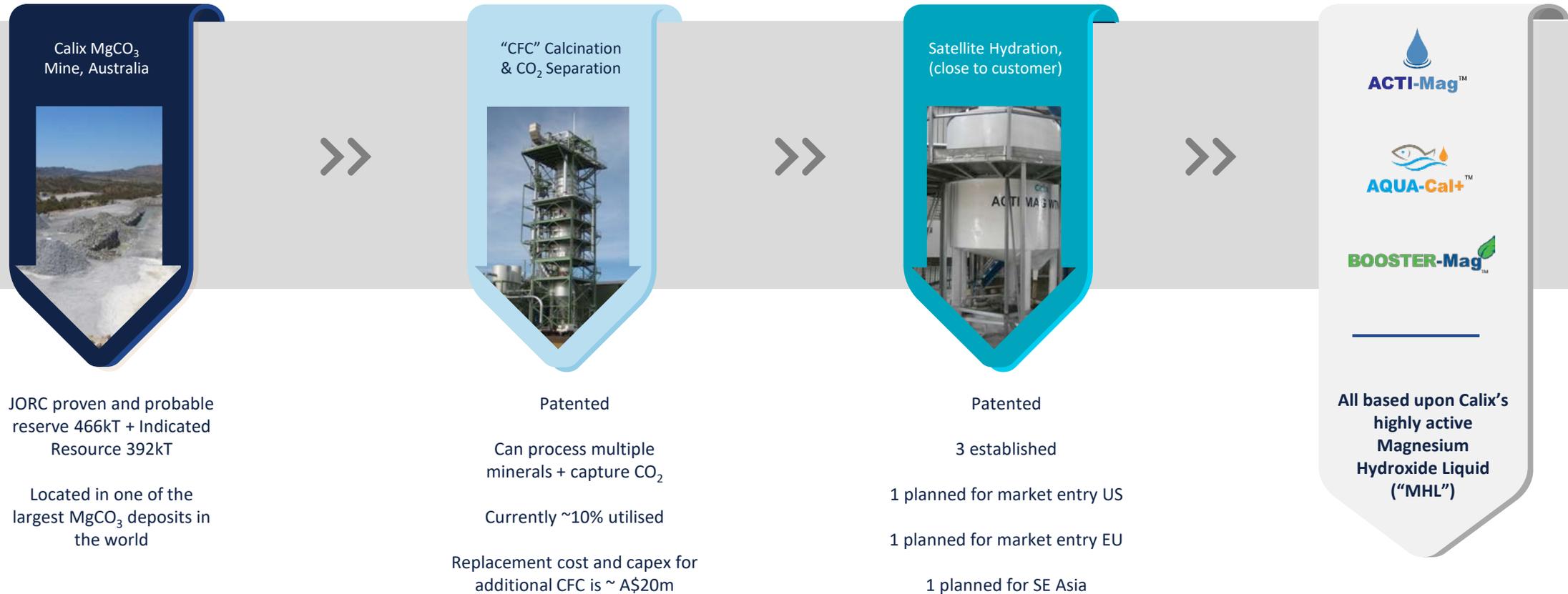
- US operations generating more than US\$9m in revenue on a pro-forma basis
- Over 80 active customer relationships

Experienced management team

- Experienced management team which is significantly aligned with the success of the business

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CALIX IS VERTICALLY INTEGRATED, OWNING THE INPUT AND PROPRIETARY TECHNOLOGY THAT MANUFACTURERS MULTIPLE INDUSTRIAL PRODUCTS...



“The information in this Presentation that refers to a JORC-compliant resource estimate is based on information prepared by Ric Horn of Hornet Resource Assessment Services Pty Ltd. Ric is a Fellow of the Australasian Institute of Mining and Metallurgy and a Chartered Professional and is bound by and complies strictly with the Institutes codes and recommended practices. Mr Horn has 47 years’ experience in the resources industry both in exploration and mining and has sufficient experience relevant to the style of mineralisation under consideration. He has 14 years’ experience involved with the deposit under consideration and activities being undertaken to qualify as a competent person as defined in the 2012 Edition of the JORC Code of the “Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves”. Mr Horn consents to the inclusion in this Presentation of the matters based on his information in the form and context in which it appears.”

Calix's MHL is unique...and addresses multiple verticals



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WATER AND WASTE WATER

Sewer odour and fat control, increase biogas production, asset protection...

PROBLEM

MARKET RESPONSE

CALIX SOLUTION

A \$36.7B⁽¹⁾ MARKET



Rotten Egg gas



Fatbergs



Biogas



Phosphates / Heavy metals discharge



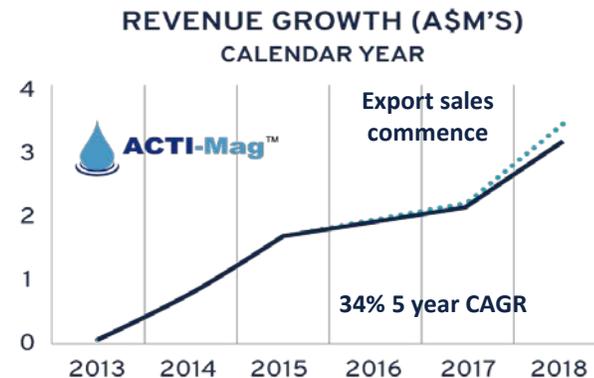
Toxic chemicals



Wasted Energy



Emergency maintenance



	COMPETITOR MHL	CALIX "ACTI-Mag"
Safe / Env. Friendly	✓	✓
Reduces Rotten Egg Gas	✓	✓
Breaks Up Sewer Fatbergs	✓	✓
Produces more biogas	✗	✓
Reduces Phosphates, Nitrates and Heavy Metals	✗	✓
Travel long distances	✗	✓

(1) Frost & Sullivan: Market Opportunity for Calix Flash Calcination, dated 17 April 2018. Refer to Section 4 of the Calix Prospectus for risks associated with the competitive environment, retaining and winning customers and market development.

Calix's MHL is unique...and addresses multiple verticals



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AQUACULTURE & FRESH WATER REMEDIATION

AQUA-Cal+ continues push into Asian prawn farming...

PROBLEM

FARMED PRAWNS

A \$1.5b⁽¹⁾ MARKET

Rapid Growth

Disease

Sustainability

FRESHWATER LAKES

Market opportunity TBD

P and N run-off

Blue Green Algae

Fish Kills

MARKET RESPONSE

Growth of antibiotics

Growth of probiotics

Increase sludge drainage

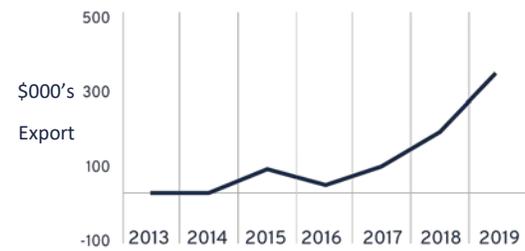
Aeration

Phosloc



CALIX SOLUTION

REVENUE GROWTH (A\$000'S)
CALENDAR YEAR



Focus on SE Asia (esp. China)

	COMPETITOR (Probiotics)	CALIX "AQUA-Cal+"
Safe / Env. Friendly	○	✓
Improves pond biota	✓	✓
Reduces pond sludge	✗	✓
Binds phosphates and nitrates	✗	✓
Reduces Iron	✗	✓
Travel long distances	✗	✓

(1) Frost & Sullivan: Market Opportunity for Calix Flash Calcination, dated 17 April 2018. Refer to Section 4 of the Calix Prospectus for risks associated with the competitive environment, retaining and winning customers and market development.

Calix's MHL is unique...and addresses multiple verticals



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CROP PROTECTION

BOOSTER-Mag commencing commercialisation...

PROBLEM

A \$9.8b⁽¹⁾ MARKET

- Increased Ag Demand
- Increased pesticide restrictions
- Increased Pesticide Development Costs

MARKET RESPONSE

- Increased Investment in ag tech
- Global mega-mergers
- Farmer / Co-op increasing interest in alternatives

CALIX SOLUTION

- Safe / Env. Friendly
- Cost-effective
- Proprietary



- 1/5 of the price point of average pesticide / fungicide
- Enables >50% reduction in standard fungicide / pesticide use



(1) Frost & Sullivan: Market Opportunity for Calix Flash Calcination, dated 17 April 2018. Refer to Section 4 of the Calix Prospectus for risks associated with the competitive environment, retaining and winning customers and market development.

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CO₂ MITIGATION FOR LIME AND CEMENT INDUSTRIES

PROBLEM

A \$10.8b⁽¹⁾ MARKET

- Cement and Lime largest industrial CO₂ emitter
- EU ETC cost of emission keeps rising....

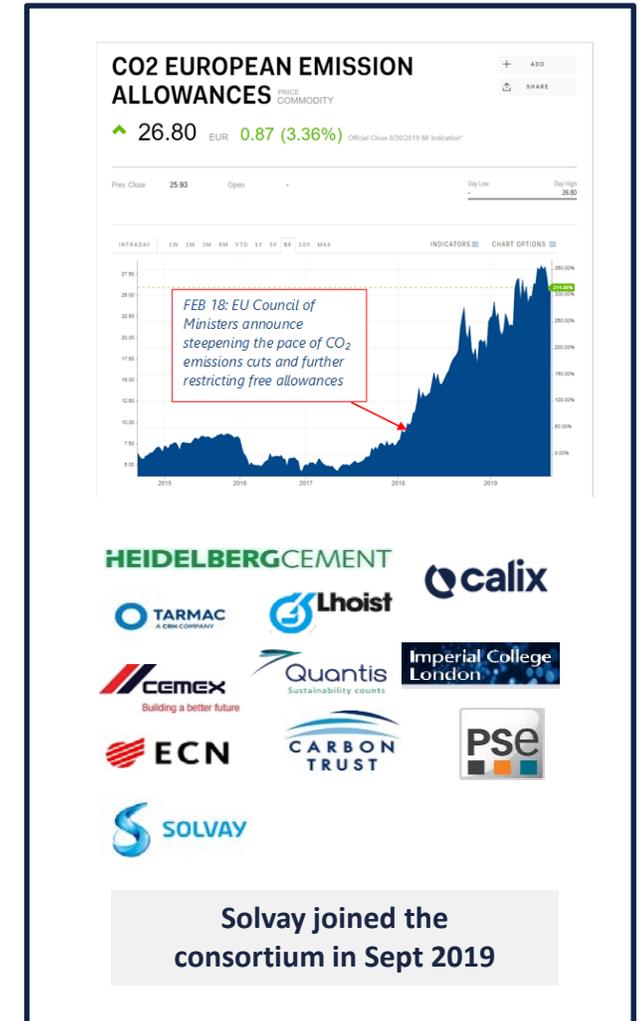
MARKET RESPONSE

- Increasing interest and investment in CO₂ technology
- Heidelberg Cement announces net zero CO₂ by 2050
- Solvay joins the LEILAC Project Sep 2019

CALIX SOLUTION

- Cost-effective
- Proprietary

- LEILAC Consortium formed by Calix to develop its Direct CO₂ separation technology
- Project funding €12m raised, pilot plant delivered on time and budget
- Initial testing confirm technology concept



(1) Frost & Sullivan: Market Opportunity for Calix Flash Calcination, dated 17 April 2018. Refer to Section 4 of the Calix Prospectus for risks associated with the competitive environment, retaining and winning customers and market development.

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ADVANCED BATTERIES

PROBLEM

A \$6.5b⁽¹⁾ MARKET

- Slow charge / discharge
- High cost
- Low recyclability

MARKET RESPONSE

- “Cobalt cliff”
- High R&D activity – porous nano materials

CALIX SOLUTION

- Cost-effective
- Proprietary

- New BATMn Reactor built
- High porosity Manganese Oxide
- Minimise Ni and Co
- New Anode materials



New “BATMn” Reactor – Bacchus Marsh

In September 2019 Calix launched the A\$9.3m CRC-P for advanced battery materials with A\$3m in Government funding

(1) Frost & Sullivan: Market Opportunity for Calix Flash Calcination, dated 17 April 2018. Refer to Section 4 of the Calix Prospectus for risks associated with the competitive environment, retaining and winning customers and market development.

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ACQUISITION OVERVIEW

Inland Environmental
Resources Inc. (IER)

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CALIX KNOWS HOW TO MAKE *STABLE* MAGNESIUM HYDROXIDE LIQUID (MHL)....

Myrtle Springs mine - SA



Magnesium Carbonate

25kTpa Reactor – Bacchus Marsh



Magnesium Oxide

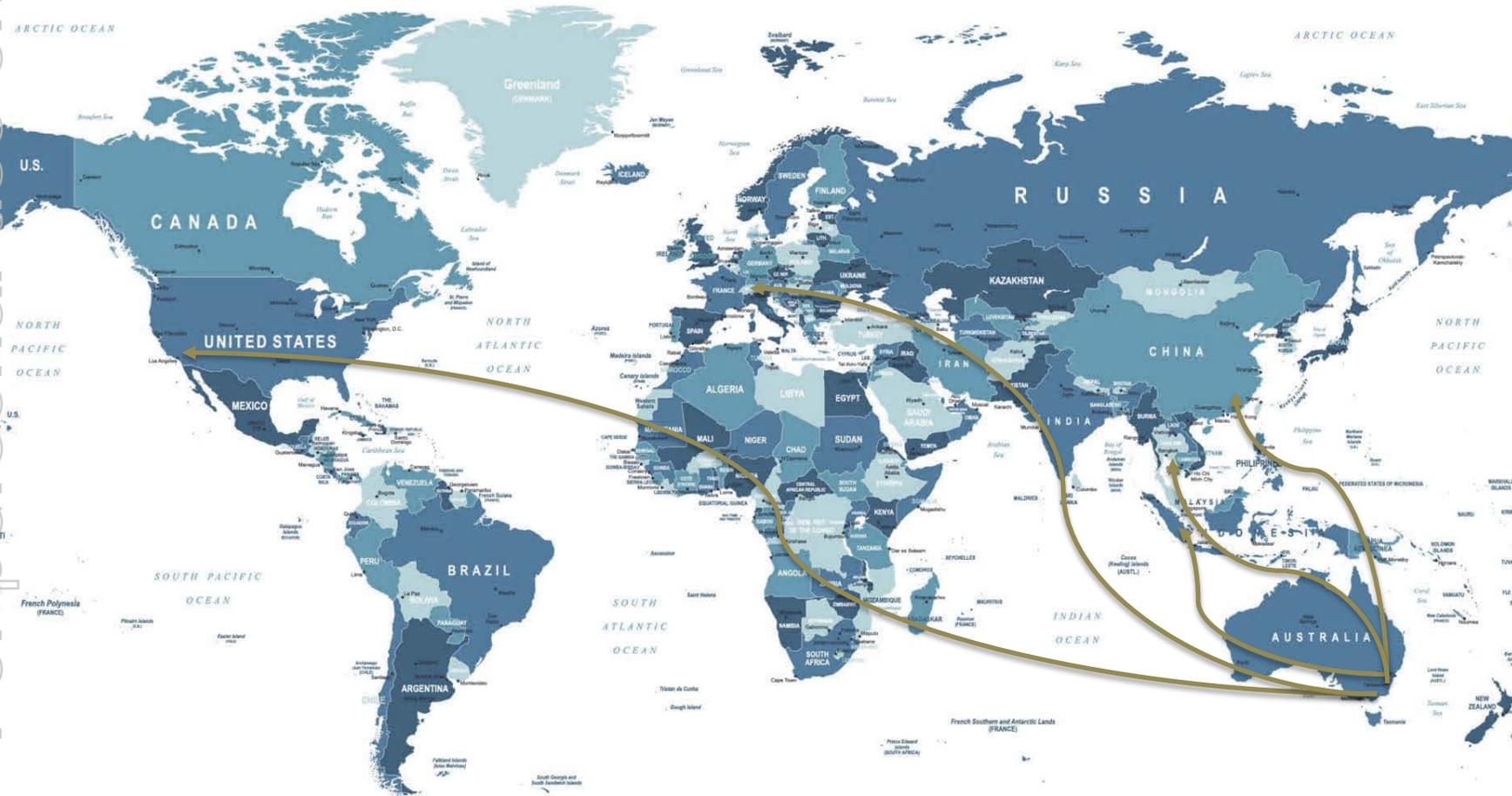
Satellite Hydration “just add water”



Magnesium Hydroxide Liquid “MHL”

**CALIX'S
PATENTED MHL PROCESS
PRODUCES VERY STABLE
MHL FROM SMALL, CLOSE-
TO-CUSTOMER FACILITIES**

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Calix's stable MHL is being used to open new markets...

- A. Establish performance via paid trials
- B. Establish volume foot-hold
- C. Establish local MHL plant, deliver savings in logistics (avoid shipping water!)

IN THE US – THEY CANNOT MAKE MHL THAT CAN TRAVEL LONG DISTANCES OR LAST FOR MONTHS...

EXPERIMENT
Calix MHL
Sent to US



Container sent to US...



...poured into a cup – still in good suspension



Calix MHL is stable and useable over long distances / times

EXPERIMENT
US MHL
Sent to AUS



Water on top...



..."clay" on the bottom

US MHL is unstable and not useable over long distances / times

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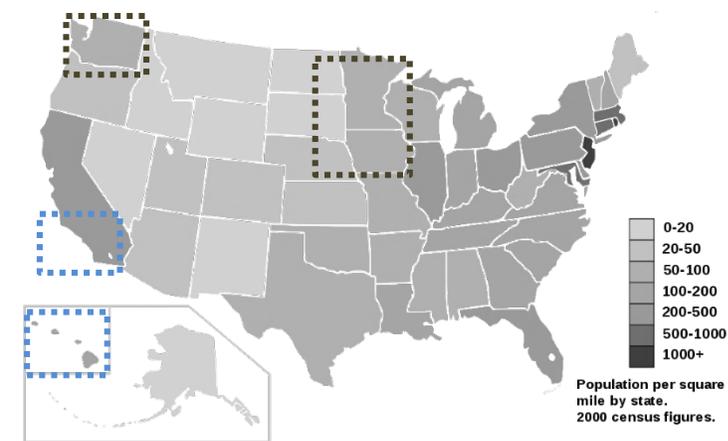
IN THE US – MHL MARKETS ARE THEREFORE CONCENTRATED AROUND A FEW MANUFACTURING FACILITIES...

MHL stability is a key issue in the US: markets are typically defined by a 150km to 200km radius around manufacturing facilities, into large bulk / frequent refill dosing facilities. There are highly prospective markets as yet not serviced by MHL, due to this limitation:

- Target food processing (IER strength) in new markets
- Target odour control (Calix strength) in current IER, and new markets
- Target small dosing / infrequent refill opportunities

By combining Calix’s MHL technology and know-how with IER presence, these markets will be targeted post acquisition.

Significant acceleration of Calix’s US market entry: cash-positive base for expansion



IER Markets (4 manufacturing facilities)

Calix Markets (no manufacturing facilities)

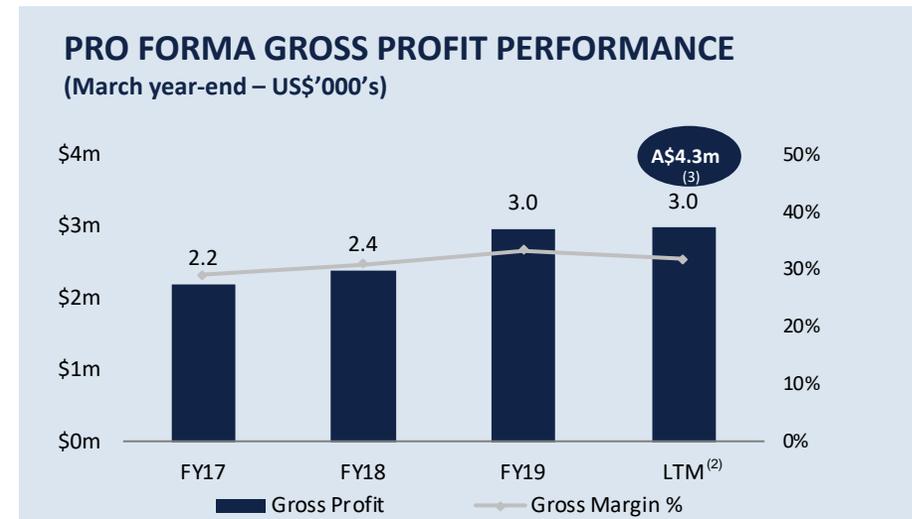
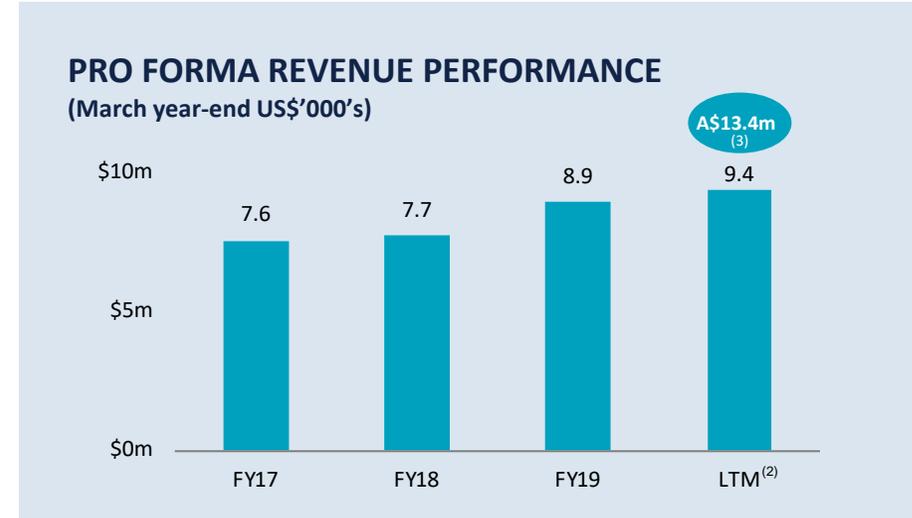


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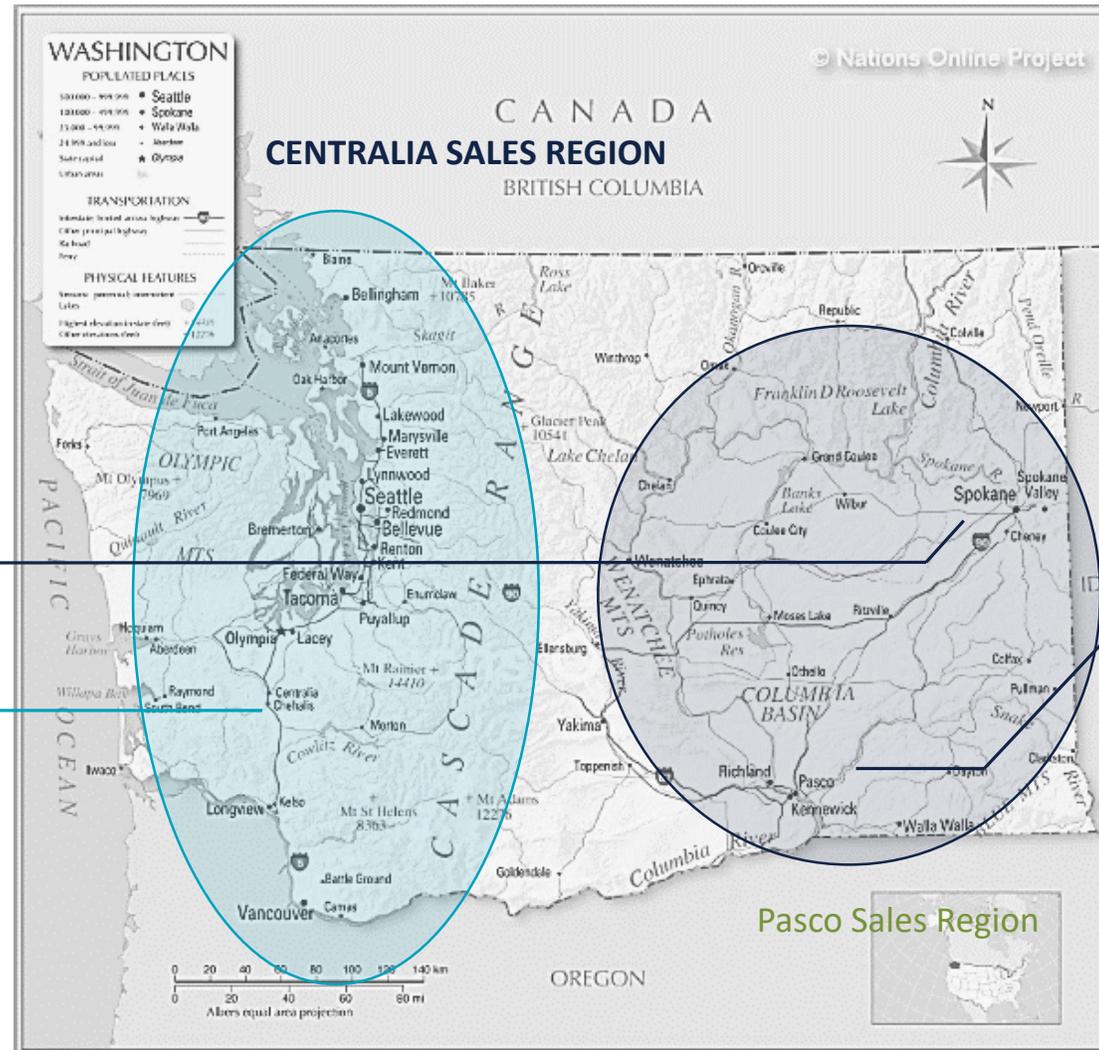
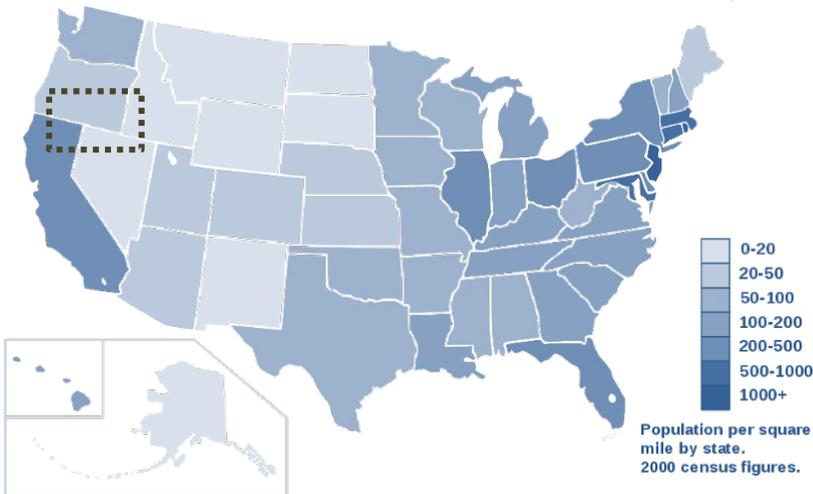
IER¹ has established a steady, cash positive business around its existing manufacturing facilities...

- Founded in 1997 IER is a Magnesium Hydroxide Liquid (MHL) business servicing the Pacific North West (PNW) and Mid-West (MW) of the US
- IER focuses on replacing Caustic Soda with MHL. CVP = price + safety
- Doug Kelley (President - 42% owner) has over 25 years experience in wastewater treatment. Upon completion of the Acquisition Doug will receive 50% of his consideration in cash, and the remaining 50% via an earn-out arrangement subject to conditions surrounding his continued running of the day-to-day operations of the business
- Key business metrics:
 - 16 FTEs
 - 4 operating sites (2 MHL production, 2 mixing)
 - 84 customers incl. 10 key accounts representing around 75% of sales
- Steady growth, with business focus confined to PNW and MW of the US for 20 years

(1) (<https://www.inlande.com/>)
 (2) Last twelve months to 30-Jun-19
 (3) 30 June 2019 AUD to USD exchange rate of \$0.7013 applied for LTM AUD equivalent. See slide 36 for IER's FY19 pro-forma Income Statement



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ADMINISTRATION

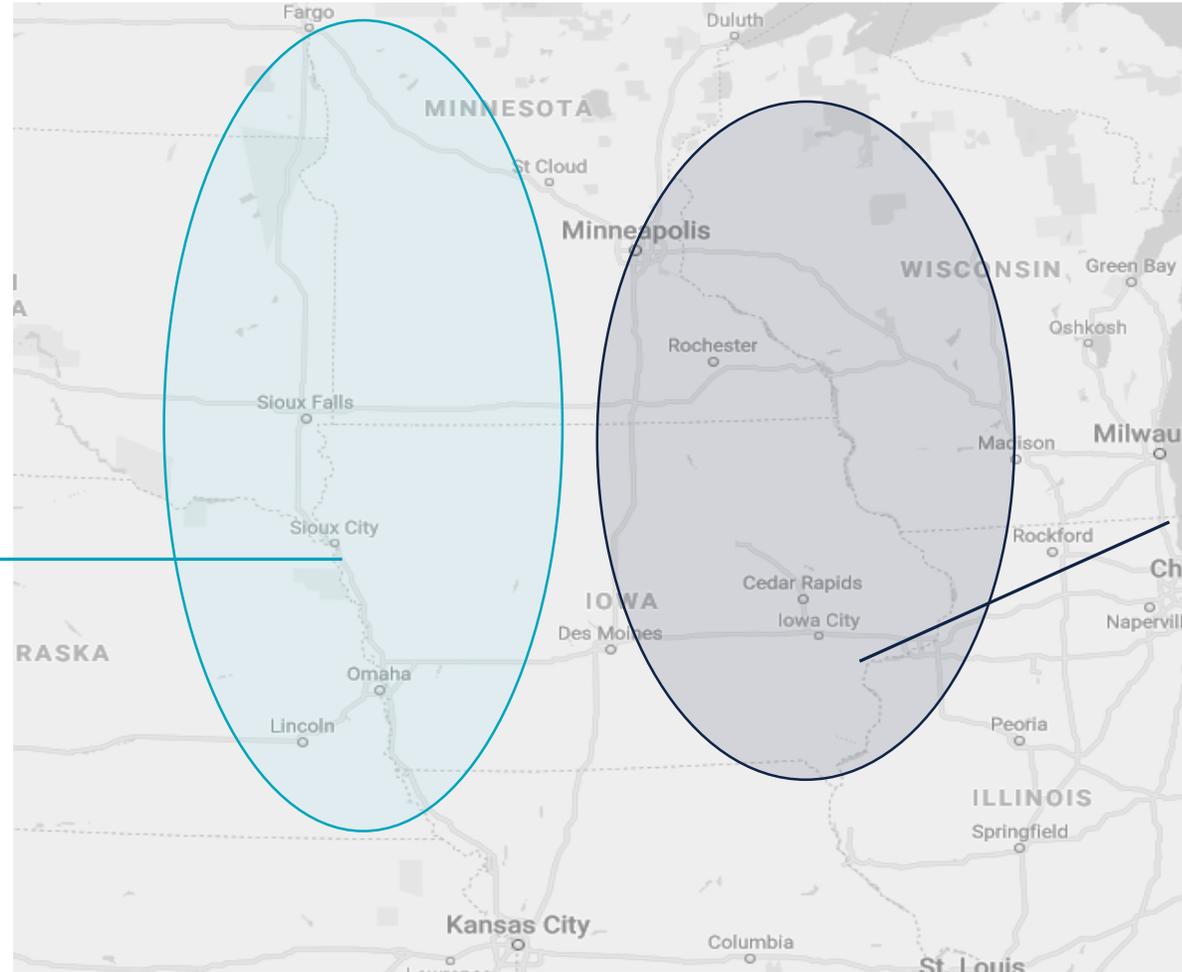
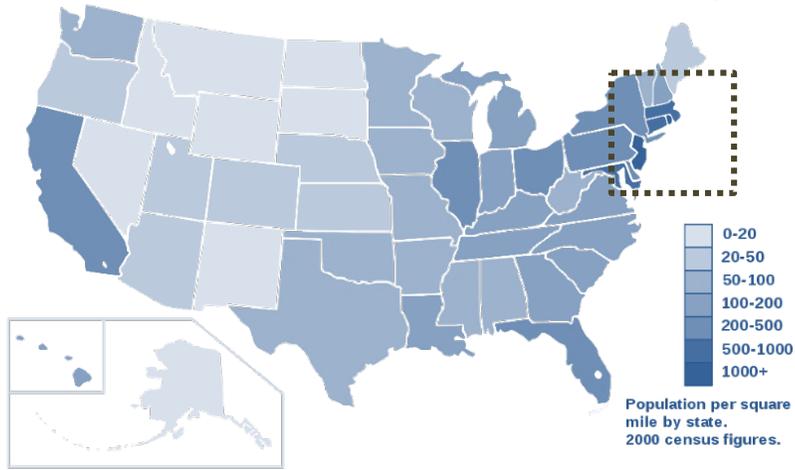
CENTRALIA PLANT

- Land and buildings leased from Port of Centralia
- Multiple storage and batching tanks
- Multiple trucks and barrels, pick-ups and trailers – all owned by IER

PASCO PLANT

- Land leased, buildings and improvements owned by IER
- Multiple storage and batching tanks
- Multiple trucks and barrels, pick-ups and trailer

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BIG SOO PLANT

Used to blend their own MHL material – are now supplied a finished product by rail from the East

- Land and buildings leased
- Multiple storage and batching tanks
- Multiple trucks and barrels, pick-ups and trailers – all owned by IER

MUSCATINE PLANT
As per Big Soo

1	Market synergies	<ul style="list-style-type: none">• IER targets users of Caustic Soda (NaOH) in their wastewater treatment - value proposition for replacement with MHL is cost and safety• Calix targets Municipals for sewer odour control, phosphate removal and fats/oils/grease (FOG) control• Markets are additive / complimentary
2	Market Potential	<ul style="list-style-type: none">• 1,000+ Municipal Wastewater authorities across Washington, Oregon and Idaho. IER only has <1% of these as customers• Calix's current traction in California, Nevada for odour control, phosphate removal and FOGs will be introduced in the IER states• IER's current traction in Caustic replacement will be introduced in California, Nevada
3	Technical synergies and potential	<ul style="list-style-type: none">• IER has two active patents in MHL chemistry, which combined with Calix's multiple patent portfolio, brings considerable IP power together• Synergies are expected from improved MHL stability and performance, particularly associated with extension of delivery envelopes into new markets and smaller / niche MHL dosing set-ups requiring minimal servicing
4	Longer-term potential	<ul style="list-style-type: none">• Potential for strategic relationship with American-based magnesium oxide producer – local calciner for very high surface area magnesium oxide and carbon dioxide capture for enhanced oil recovery

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ACQUISITION PLANNING AND OUTLOOK

IER Transaction Details

- Calix has entered into an agreement to acquire 100% of IER, for total upfront cash consideration of A\$6.5m and deferred contingent consideration of A\$2.9m, subject to certain conditions⁽¹⁾.
- Vendor deferred, contingent consideration:
 - IER Chairman Dick Handley will receive 90% of his consideration (approx. A\$4.9m) paid in cash on completion of the Acquisition, and 10% on the anniversary of completion subject to certain conditions⁽¹⁾. Having recently turned 74, Dick plans to semi-retire and is not actively involved in day to day operations.
 - IER President Doug Kelly will receive 45% of his consideration (A\$1.8m) paid in cash on completion of the Acquisition, and 5% on the anniversary of completion, 30% 2 years post completion and 20% 4 years post completion, subject to certain conditions⁽²⁾
 - Implied transaction multiple (EV / pro forma FY19 EBITDA of A\$1.1 million)
 - 5.8x based on upfront consideration
 - 8.6x including all deferred, contingent consideration

Acquisition consideration

- Total upfront Acquisition consideration is to be comprised of A\$6.4 million in cash
- Deferred vendor earn-out from escrow over 1, 2 and 4 year periods is to be comprised of A\$2.9 million in cash⁽¹⁾
 - Payable in three components, 27% at 1 year post completion, 44% 2 years post completion and 29% 4 years post completion of the Acquisition

Financial Impact

- Highly complementary acquisition significantly enhancing Calix's financial profile:
 - Pro forma Calix FY19 Revenue of A\$27.3 million
 - Pro forma Calix FY19 EBITDA of A\$1.6 million
 - 220% increase in EBITDA on a Pro Forma FY19 basis

(1) 10% of the agreed purchase price will be escrowed for a period of 12 months to help cover liabilities greater than \$50k which arise as a result of undisclosed or unknown liabilities. A further 30% of Doug Kelley's consideration will be held for 2 years, and another 20% for 4 years post closing, on the basis of continued employment with IER and non-dismissal for cause.

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Funding and equity raising

- Upfront Acquisition consideration and transaction costs, as well as escrowed earn-outs at 1, 2 and 4 years, and integration and market expansion costs, funded by:
 - A\$12.0 million via unconditional placement of approximately 17.1 million New Shares at A\$0.70 per share (“Placement”)

Acceleration of US Market Entry

- Investment in additional US based sales people to expand geographic reach or IER
- Provisioning for US based Hydration facility to capitalise on Calix’s technical product advantages

Timing and closing conditions

- The Acquisition is subject to closing conditions, including:
 - Successful completion of the Placement
 - Successful completion of, or waiver of, conditions precedent to the transaction (see Risks Section)
- Exclusivity to complete the transaction through to 31 December 2019

SOURCES AND USES OF FUNDING

Sources	A\$m	Uses	A\$m
Placement	12.0	Purchase consideration ⁽¹⁾	9.3
Share Purchase Plan	1.5	Transaction costs	1.0
		US Integration and Market Expansion	1.7
		Working Capital	1.5
Total	13.5	Total	13.5

(1) Includes provision for deferred, contingent consideration.

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WASTEWATER

- Begin selling MHL into new customers / states via newly acquired IER. Material customer wins to be announced
- European biogas market entry – successful trials leading to first orders
- SE Asia biogas – expansion from two customers via more successful trails in Thailand, market entry Malaysia

CROP PROTECTION

- Afepasa to begin selling Calix crop protection product in Europe. First revenues generated
- Progress licensing deals with crop protection companies in Asia, Americas, Oceania
- APVMA submission in Australia for labelled domestic product

AQUACULTURE

- Continue market penetration into China
- Commence market entries via trials into India, Taiwan, and convert first customers there

CO₂ MITIGATION / LIME / CEMENT

- Confirmation of successfully completed LELAC-1 trials proving longer-term operational and capacity performance
- Secure external funding for much larger scale LEILAC-2 plant
- Progress CO₂ mitigation technology into other industrial verticals via development projects

BATTERIES

- Collaborative agreements with other research networks for materials processing development via BATMn
- Produce first pouch cells for testing

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**DETAILS OF
THE OFFER**

Offer size and structure

- Unconditional placement to sophisticated and professional investors at A\$0.70 per share to raise up to A\$12.0 million
 - Approximately 17.1 million New Shares will be issued under the Offer
- Share Purchase Plan (SPP) to existing eligible shareholders in Australia and New Zealand, up to A\$30,000 per shareholders
 - The Share Purchase Plan will be capped at A\$1.5 million and Calix reserves the right to scale back any applications under the SPP

Offer price

- Issue price of A\$0.70 per New Share under the Placement (“Placement Price”)
 - 7.9% discount to the last traded price of A\$0.76
 - 13.1% discount to 5 day VWAP of A\$0.805
 - 17.7% discount to 30 day VWAP of A\$0.851
- Share Purchase Plan issue price of A\$0.70 per share – the same as the Placement Price

Ranking

- New Shares issued will rank equally with existing fully paid ordinary shares from their time of issue

Syndicate

- Shaw and Partners and Bell Potter are acting as Joint Lead Managers to the Placement

Placement	Date ⁽¹⁾
Trading halt (pre market open)	Wednesday, 25 September
Placement bookbuild	Wednesday, 25 September
Announcement of Acquisition and Placement results and trading halt lifted	Friday, 27 September
Settlement of Placement	Thursday, 3 October
Allotment and trading of New Shares under the Placement	Friday, 4 October

Share Purchase Plan	Date ⁽¹⁾
Share Purchase Plan Record Date	7.00pm, Thursday 26 September
Share Purchase Plan Offer Booklet despatched to shareholders	Tuesday, 1 October
Share Purchase Plan closing date	Monday, 14 October
Allotment of New Shares under the Share Purchase Plan	Friday, 18 October
Normal trading of New Shares issued under Share Purchase Plan	Monday, 21 October
Expected dispatch of holding statements	Tuesday, 22 October

(1) The above timetable is indicative only and subject to change without notice. The commencement of quotation of New Shares is subject to confirmation from ASX. Subject to the requirements of the Corporations Act, the ASX Listing Rules and any other applicable laws, Calix, with the consent of the Joint Lead Managers, reserves the right to amend this timetable at any time, either generally or in particular cases, without notice.

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KEY RISKS

Due Diligence

- Calix undertook a due diligence process in respect of IER, which relied mostly on the review of financial and other information provided by the Vendors. While Calix considers the due diligence process undertaken to be appropriate, Calix cannot provide assurance that the due diligence conducted was conclusive and that all material issues and risks in respect of the Acquisition have been identified. Therefore, there is a risk that unforeseen issues and risks may arise, which may have a material impact on the Calix.
- Calix has sought to mitigate the risks associated with the information provided during due diligence by seeking certain warranties, representations and indemnities from the vendors of IER under the terms of the share purchase agreement for the Acquisition (SPA).

Acquisition Completion Risk

- The SPA is subject to certain conditions precedent to closing, and the closing of the Acquisition is scheduled to occur on or before 31 December, 2019. There is a risk that the Acquisition does not proceed on the current terms and expected timing due to unforeseen circumstances, and that this could materially and adversely affect the value of the transaction, or the transaction proceeding to closure. Apart from standard conditions precedent associated with the administration of the transaction, transferral of relevant documents and directors' resignations etc, key conditions precedent, at Calix's waiver, include
 - All IER employees to sign a new employment agreement with IER, due to required adherence to Calix's employee rules, policies and procedures, including IP ownership
 - One customer (a top 10 customer of IER and approx. 10% of total revenues) agreement needs to be novated, due to change-of-control of IER
 - One MHL supply agreement to be novated for the Mid-West business due to change-of-control of IER (see Operational Risks – Magnesium Hydroxide Supply)
 - New agreements covering the toll-processing arrangements for IER's top customer (see Key Customer Risk)
- Whilst every effort will be made to close the transaction with these conditions precedent intact, there is a risk that one, or more, may be waived by Calix if it deems the transaction remains of sufficient value to proceed without that condition precedent being satisfied, or not waived, in which case the transaction will not proceed.

Key Customer Risk

- In FY19, Calix's core product revenues were derived from 75 customers. Over that period, the top 10 customers represented just over 63% of revenue, highlighting a risk that the loss of one or more key customers could materially impact revenue.
- In FY19, IER's core product revenues were derived from 82 customers. Over that period, the top 10 customers represented just over 74% of revenue, highlighting a risk that the loss of one or more key customers could materially impact revenue.
- Furthermore, IER's top customer represents just over 10% of Gross Margin (including COGS and direct servicing costs). This customer's business is subject to US Refined Coal tax legislation, which is up for review in 2021, and may cease. The revenues attributable to this customer have not been included in IER's revenue line. This customer will be serviced by a tolling arrangement. If this customer's business ceases in 2021, and its Gross Margin contribution has not been replaced, there will be an impact on IER's Gross Margin.

Competition

- Calix's and IER's products and applications compete in each of its markets against alternative products and solutions. There is no guarantee that:-
 - Calix's and / or IER's products and applications will not be superseded by superior products and applications, or achieve the growth, margins and competitive position that constitutes a valuable, growing business.
 - Existing customers of Calix's and / or IER's products and applications will continue to purchase from Calix and / or IER, nor that new customers can be attracted to purchase from Calix and IER.

Loss of key IER personnel

- Doug Kelley is the key manager of the IER business – his services have been secured via earn-outs over 2 and 4 years of 27% and 18% of the consideration payable to him for the IER business. If Doug Kelley is incapacitated, or otherwise unable to work through no fault of his own, IER may suffer loss of business / disruption as a result, but he will continue to receive his earn-out payments. If Doug Kelley commits serious misconduct, he will forfeit his earn-out, however IER may suffer loss of business / disruption as a result.

Foreign currency exposure

- The proposed Transaction will take place in United States Dollars. Calix's Placement to raise money for the Transaction will take place in Australian Dollars. There is a risk if the Australian Dollar deteriorates significantly against the United States Dollar before Completion of the Transaction, that this Placement may not raise sufficient funds to complete the Transaction, in which case a further capital raise may be necessary, or the Transaction abandoned.
- Calix's financial statements are maintained in Australian dollars, and currently a majority of revenues and expenses are settled in Australian Dollars. As Calix expands its product offering internationally, a greater foreign exchange risk is foreseen. The Directors will implement foreign exchange hedging policies for Calix if and when considered appropriate.

Grant-Related Risks

- Calix receives considerable grant income, including the Australian R&D Rebate. This rebate currently turns into a tax deduction once Calix's consolidated income exceeds A\$20m. The acquisition of IER, should growth aspirations be met, will eventually result in the loss of this R&D Rebate. Additionally, there is no guarantee that Calix will continue to be awarded grants to undertake further research and development on the alternative applications of its technology. If Calix is not able to secure further grant funding, then it will need to self-fund its future research and development projects which may affect the amount of research and development undertaken and the time within which it will be able to bring its development technologies to market.

Seasonal Risk

- IER conducts a large proportion of its business with customers whose business is subject to seasonality. As such, there will be seasonal fluctuations in revenue, which may be severe if poor agricultural outputs lead to food processing downturns. These revenue fluctuations could in turn impact IER's cash flow, leading to additional working capital requirements to sustain the IER business in such down-turns.

<p>New market / acquisition risk</p>	<ul style="list-style-type: none"> The proposed Transaction is targeted at establishing a base for expansion into new markets, using the combined market and technical know-how of Calix and IER. There is no guarantee that Calix and/or IER will be successful in acquiring sufficient customers in these new markets to effectively establish a sustainable business in these new markets.
<p>Regulatory Risk</p>	<ul style="list-style-type: none"> In Australia, Calix’s ACTI-Mag and PROTECTA-Mag can be sold as non-dangerous goods, without specific regulatory approvals. There is a risk that regulations covering these products may change, in which case Calix may need to apply for approvals to continue with its business, and may not achieve such approvals. In addition, a change in regulatory approvals may trigger additional risks under product liability, if it is deemed that such change in regulation has been brought about by information on the safety or efficacy of Calix’s products that is unknown to Calix at this time. In the US, IER’s Amalgam product is manufactured and sold as a non-dangerous good. Whilst all reasonable efforts have been made to ensure that IER has the necessary regulatory approvals to carry out its business, there is a risk that regulations covering these products may change, in which case Calix may need to apply for approvals to continue with this business, and may not achieve such approvals. In addition, a change in regulatory approvals may trigger additional risks under product liability, if it is deemed that such change in regulation has been brought about by information on the safety or efficacy of IER’s products that is unknown to Calix at this time. Apart from IER’s products, IER’s operations require compliance with multiple regulatory systems. Apart from general regulatory risks, IER’s operations require adherence to, for example, multiple safety, health, environmental, employment and privacy standards at national, state, and county levels in the US, and across multiple jurisdictions where IER currently, or may choose to, operate. There is a risk that IER may now, or in the future, be in breach of such standards, warranting correction, or involving financial penalties, or possibly other more serious business impacts.
<p>Litigation</p>	<ul style="list-style-type: none"> Calix and IER are exposed to potential product liability risks, which are inherent in the research and development, manufacturing, marketing and use of their products, or products that are developed in the future. Whilst both Calix and IER have liability insurance to help manage such risks, Calix and / or IER may not be able to maintain insurance for product or service liability on reasonable terms in the future and / or Calix’s and/or IER’s insurance may not be sufficient to cover large claims, or the insurer could disclaim coverage on claims. Although Calix endeavours to work to rigorous standards, and will endeavour to do the same through IER, should the transaction proceed, there is still the potential for its products to contain defects that may result in damage to customers’ systems in turn causing a financial or reputational loss. For Calix, these defects or problems could result in the loss of, or delay in, generating revenue, loss of market share, failure to achieve market acceptance, injury to Calix’s reputation, or increased insurance costs. If Calix and / or IER fails to meet its customers’ expectations, Calix’s and / or IER’s reputation could suffer and it could be liable for damages. Calix and / or IER gives no assurance that all such risks will be adequately managed through its insurance policies to ensure that such loss does not have an adverse effect on its performance.

Force Majeure Events

- Events may occur within or outside the US that could impact upon Calix and the value of the IER business. These events include but are not limited to acts of terrorism, an outbreak of international hostilities, fires, floods, earthquakes, labour strikes, civil wars, natural disasters, outbreaks of disease or other natural or man-made events or occurrences that can have an adverse effect on the demand for Calix's products and its ability to conduct business. Calix only has a limited ability to insure against some of these risks.

Operational Risks

- Due to the nature and scale of IER's operations there is the potential for varied disruptions to the supply chain that may unduly impact the scale and scope of IER's activities. This risk is present in several stages of IER's value chain, namely:-
 - Magnesium Oxide Supply: IER sources its magnesium oxide, which it uses to manufacture MHL for its PNW business, from a single supplier. A loss of that supply arrangement could significantly impact IER's ability to service its customers.
 - Magnesium Hydroxide Supply: IER sources its magnesium hydroxide, which it uses to manufacture a specialty MHL, and distribute a standard MHL, for its MW business, from a single supplier. A loss of that supply arrangement could significantly impact IER's ability to service its customers, albeit alternate supply options are available and could be mobilised to minimise business disruption
- Additionally, whilst Calix can source alternate feed-stocks under such circumstances, it may require additional time, and cost more.
 - Distribution: In some cases, IER delivers product directly to customers and in other cases, it relies on distribution partners. Failure to deliver IER's products and services, or delivery of the products and services below an acceptable level, could occur as a result of multiple factors. Such failure could lead to loss of reputation, and ultimately loss of customers, and thus revenues and growth.

IP Risk

- Calix and IER rely heavily on their respective technologies and know-how and there can be no assurance that competitors of Calix and IER or other parties will not seek to imitate or develop technology and know-how that competes with Calix and / or IER, or supersedes Calix's and / or IER's technology. The unauthorised use or disclosure of its intellectual property may have an adverse effect on the operating, marketing and financial performance of Calix and IER which could erode Calix's and IER's competitive advantage. Calix cannot be certain that others will not independently develop the same or similar technologies on their own or gain access to trade secrets or disclose such technology, or that Calix will be able to meaningfully protect its trade secrets and unpatented know-how and keep them secret. There is an inherent risk with any licensed technology that the license may be terminated in accordance with its terms or the patent invalidated by a third party.

Global and local economic downturn

- As a business operating in both local and international markets, the Group's revenue is subject to fluctuations in the global and domestic economy or country specific economic circumstances. Accordingly, adverse economic conditions overseas or in Australia may potentially have an adverse effect on the Group's revenue. Any significant downturn in investment in research and development may result in a reduction in demand for the Group's services and a reduction in revenue earned.

Liquidity

- Calix's Shares are only listed on the ASX and will not be listed for trading on any other securities exchanges. There can be no guarantee that an active market in the Shares will develop or continue. If an active market for the Shares does not develop or is not sustained, it may be difficult for investors to sell their Shares at the time or for the price they seek. Further, the market price for Shares may fall or be made more volatile because of the relatively low volume of trading in the Company's securities. When trading volume is low, significant price movements can be caused by the trading in a relatively small number of shares. Sales of a substantial number of Shares following the Offer, either by the principals (once escrow ends) or by new Shareholders, or the perception or expectation that such sales may occur, could cause the market price of the Shares to decline. The Company may also offer additional Shares in subsequent offerings, which may adversely affect the market price for the Shares.

Taxation

- Future changes in taxation law, including changes in interpretation or application of the law by the courts or taxation authorities, may affect taxation treatment of an investment in Calix shares or the holding and disposal of those shares. Further, changes in tax law, or changes in the way tax law is expected to be interpreted, in the various jurisdictions in which Calix operates, may impact the future tax liabilities and performance of Calix. Any changes to the current rates of income tax apply to individuals and trusts will similarly impact on shareholder returns.

Unforeseen Risk

- There may be other risks of which the Directors are unaware at the time of the Offer which may impact Calix, its operations and/or the valuation and performance of Calix. The above list of risks ought not to be taken as exhaustive of the risks faced by Calix or by investors in Calix. The above risks and others not specifically referred to above may in the future materially affect Calix, its financial performance or the value of Shares.

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APPENDIX

FY19 pro-forma income statement



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Year ended 30 June 2019 (A\$m)	Calix	IER ⁽⁴⁾	Pro forma Calix
Revenue⁽¹⁾	3.3	13.4	16.7
Other revenue⁽²⁾	10.6	-	10.6
Total revenue	13.9	13.4	27.3
Cost of goods sold	(2.0)	(9.1)	(11.1)
Gross profit	11.9	4.3	16.2
Total operating expenses	(11.5)	(3.1)	(14.6)
EBITDA	0.5	1.1	1.6

(1) Core and other product revenue utilised for Calix

(2) Includes Grant Income, R&D incentives, interest income, debt forgiveness of loan and other income

(3) Includes exchange differences on translation of foreign operations

(4) 30 June 2019 AUD to USD exchange rate of \$0.7013 applied

FY19 pro-forma balance sheet

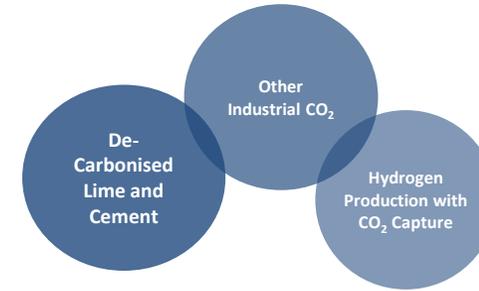
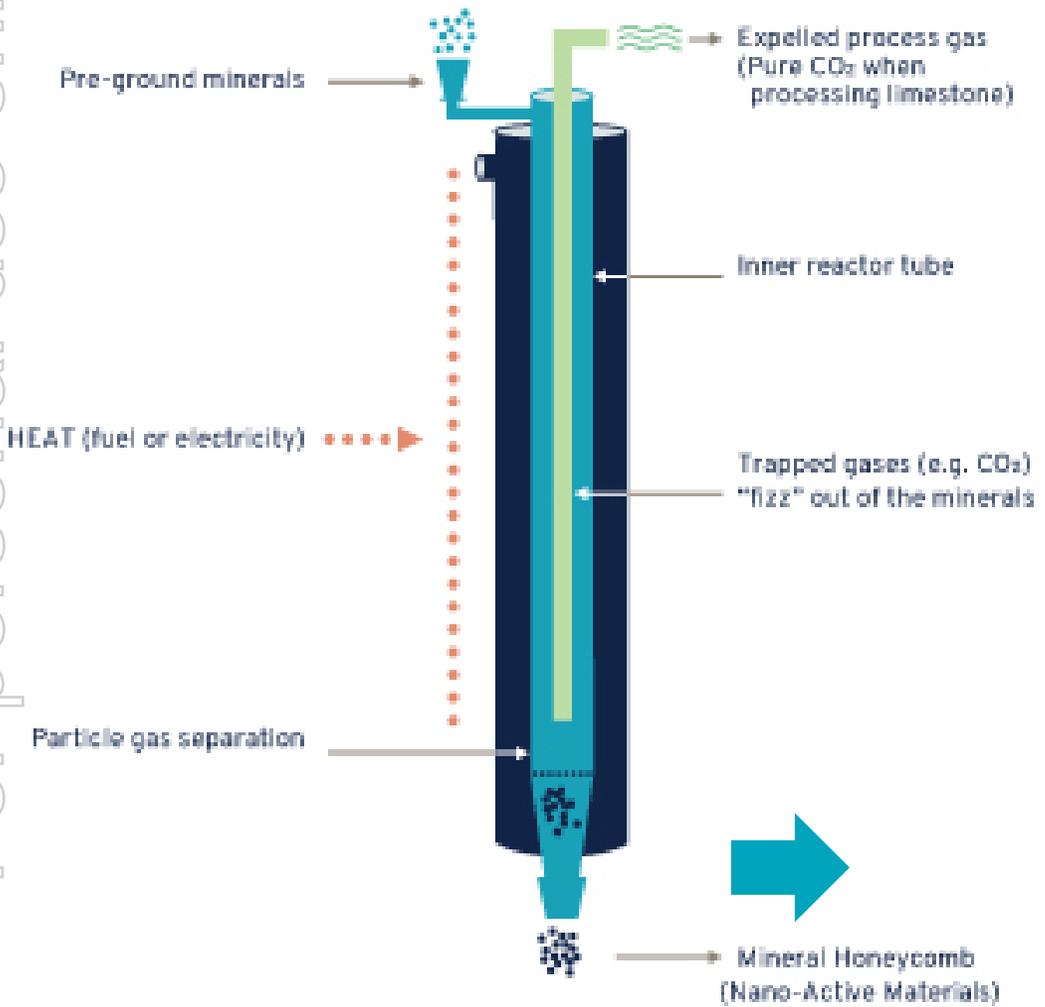


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Year ended 30 June 2019 (A\$m)	Calix	IER ⁽¹⁾	Capital raise / Eliminations	Pro forma Calix
Cash and equivalents	4.4	0.7	2.0	7.1
Trade and other receivables	6.3	1.3	-	7.6
Contingent consideration	-	-	0.9	0.9
Inventories	0.3	0.6	-	0.9
Total current assets	11.0	2.5	2.9	16.5
Intangible assets	0.9	-	7.2	8.0
Contingent consideration	-	-	1.9	1.9
Trade and other receivables	0.3	-	-	0.3
Other non-current assets	13.1	1.5	-	14.6
Total non-current assets	14.3	1.5	9.1	24.8
Total assets	25.3	4.0	12.0	41.3
Current borrowings	2.6	-	-	2.6
Trade and other payables	1.7	0.9	-	2.6
Deferred consideration	-	-	0.9	0.9
Other current liabilities	3.5	0.2	-	3.8
Total current liabilities	7.8	1.2	0.9	9.9
Non-current borrowings	0.1	-	-	0.1
Deferred consideration	-	-	1.9	1.9
Other non-current liabilities	0.6	-	-	0.6
Total non-current liabilities	0.7	0.0	1.9	2.6
Total liabilities	8.5	1.2	2.8	12.5
Total Equity	16.8	2.8	9.2	28.8

(1) 30 June 2019 AUD to USD exchange rate of \$0.7013 applied

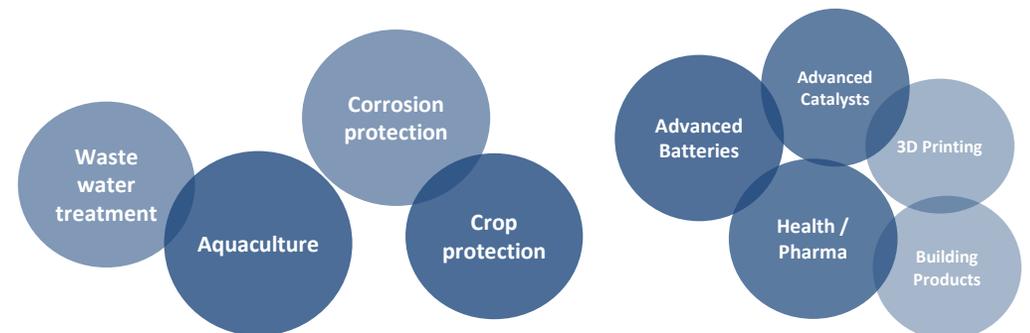
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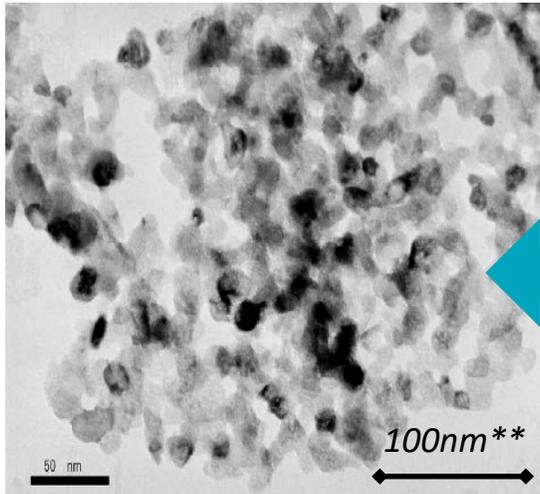
COMMERCIAL | PRE-COMMERCIAL | R&D

- Safe, cheap production of “nano-active” materials
- Direct separation of CO₂ (when processing carbonates)
- Other operational benefits (Capex, Opex)

COMMERCIAL | PRE-COMMERCIAL | R&D



TEM of MgO (sonication C) nanoparticles



STANDARD, LAB-SCALE NANO-MGO

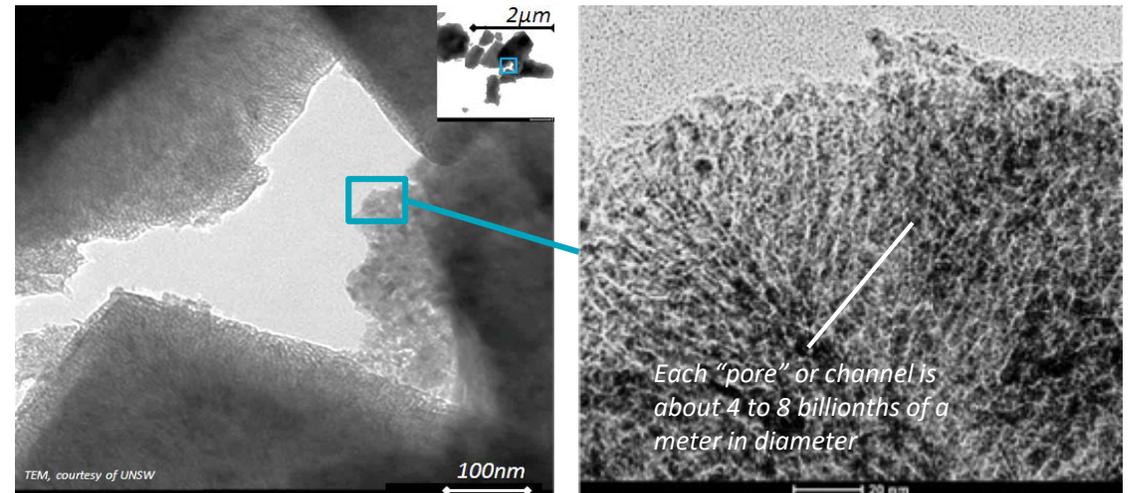
has reported surface areas of 100 to 200 m²/gm and costs \$000's / kg

It is being developed for anti-bacterial / fungal, anti-chemical warfare agent, numerous catalytic, 3D printing and advanced battery development

MAGNESIUM OXIDE (MGO)

Calix mass-produced, micron-sized has higher active surface area than nano-MgO (250 to 300 m²/gm), it is a nano-active, “mineral honeycomb”

It costs a lot less than \$1000 / tonne to produce



*Nano-size MgO as Antibacterial Agent: Brazilian Journal of Chemical Engineering Vol. 29 No. 4 pp 775-781, Oct-Dec, 2012

** 100nm = 100 nano-meters, about 1000x thinner than a human hair

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