NEWS

Issue 25 | APRIL 2018

Calix

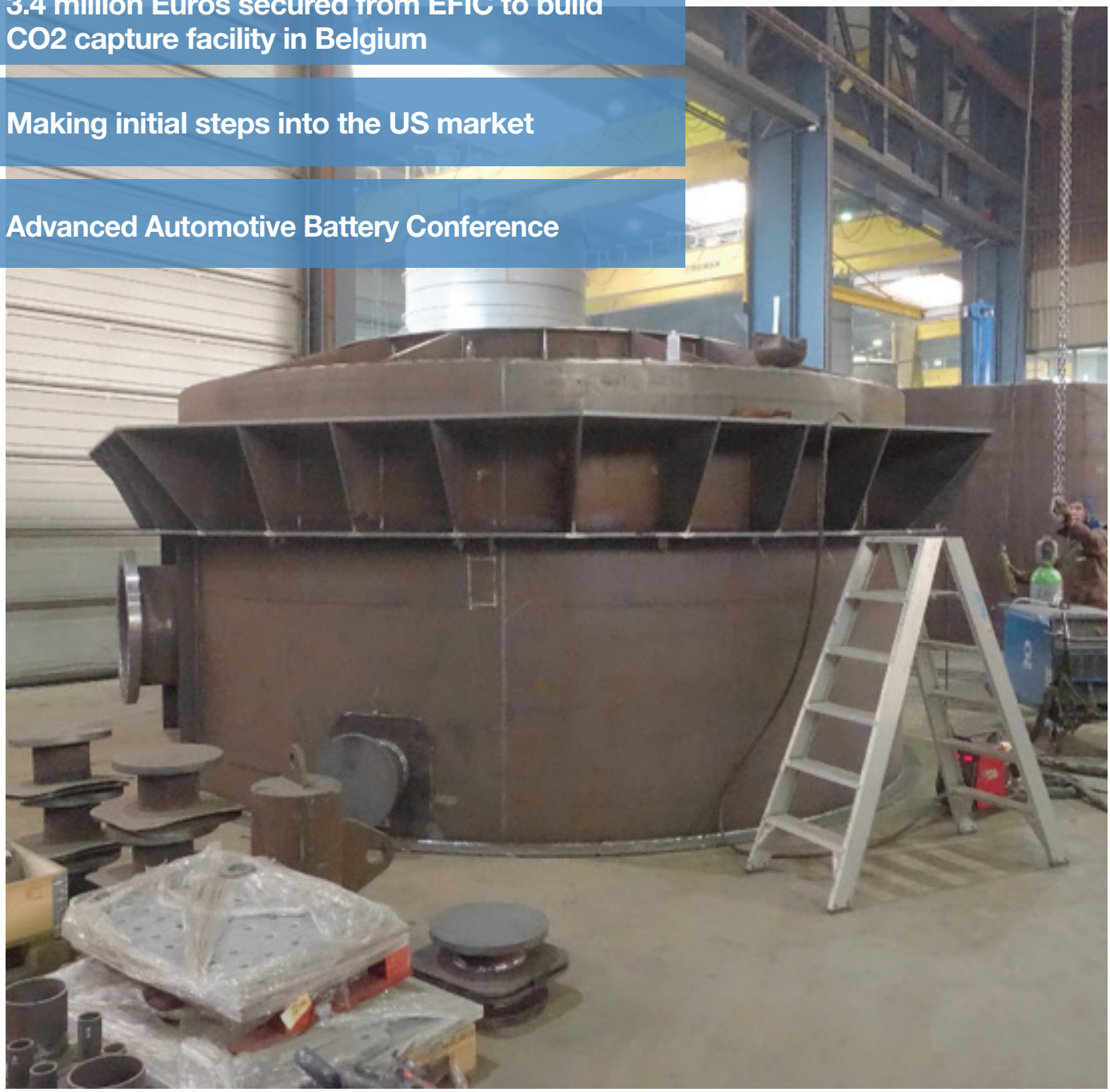
HIGHLIGHTS

European LEILAC project hosts major Industrial Carbon Capture and Storage conference

3.4 million Euros secured from EFIC to build CO2 capture facility in Belgium

Making initial steps into the US market

Advanced Automotive Battery Conference



Calix's LEILAC Project – construction begins in earnest in Belgium

EDITORIAL

Welcome to Issue 25 of the Calix newsletter.

Phil Hodgson
CEO

We are off to a flying start for the year with the kick-off of two important projects. Both our domestic advanced battery materials production facility and our overseas pilot project in thermo-chemical renewable energy storage (SOCRATCES) have commenced preliminary front-end engineering design. We'll keep you informed of both exciting projects as they progress.

In another leap forward, our Low Emissions Intensity Lime and Cement (LEILAC) project in Belgium has executed all major fabrication and construction contracts, and work has begun in earnest. We are pleased to have been selected by Australia's Export Finance and Insurance Corporation (EFIC) to help with our working capital commitments to this project. In conjunction with the ramp-up of this project, an Innovation in Industrial Carbon Capture and Storage conference was held on February 7 and 8, with top-level delegates from our consortium partners, industry and the European Commission in attendance.

Also, our commercial business continues its expansion overseas, with our first shipments to the US (Hawaii) despatched in February.

In Issue 23 of our Newsletter, we mentioned our intention to look at an Initial Public Offering (IPO) of the company in the near future. Our IPO strategy has been recently bolstered via a small yet successful pre-IPO capital raising of AU$2m to help cover some of the costs of an IPO. At the same time, the company converted around AU$3.5m out of our AU$4m in debt into equity / shares. The company now has the resources and balance sheet to continue to progress an ASX listing. Provided market conditions are conducive for such a listing at the time we choose to list, the company will make a prospectus available for the IPO. Anyone who wishes to acquire shares under the IPO will need to complete the application form that will accompany the prospectus, once published. We will keep you informed as we progress this process. On behalf of the Calix team, thank you for your continued interest in Calix.

KEY MILESTONES

INNOVATION IN INDUSTRIAL CARBON CAPTURE AND STORAGE CONFERENCE

On February 7 and 8 our European LEILAC project hosted a major Innovation in Industrial Carbon Capture and Storage Conference (IICCS). More than140 top-level delegates from our consortium partners, industry and the European Commission, attended the conference in Liege, Belgium:
https://www.carbontrust.com/media/675153/innovation-industrial-carbon-capture-conference.pdf

The event marked the official "ground-breaking" commencement of fabrication and construction of the LEILAC project.

Panel moderated by Jaap Vente, ECN on the role of technology innovation in driving deep decarbonisation of cement and lime sectors L-R Jorge Pablo Garcia. Garcia (CEMEX), Eleni Despotou (EuLA), Dr Nils Rokke (EERA/Sintef), Claude Lorea (CEMBUREAU), Jeroen Schuppers (EC DG Research & Innovation), Gianpiero Nacci (EBRD) and Phil Hodgson (Calix).

CALIX SECURES 3.4 MILLION EUROS EFIC TO BUILD CO2 CAPTURE FACILITY IN BELGIUM

Delegates at the IICCS Conference tour the LEILAC construction site at HeidelbergCement's plant in Lixhe, Belgium.

Calix has secured 3.4 million Euros in working capital from EFIC, the Australian Government's export credit agency, to build the CO2 capture facility for the Low Emissions Intensity Lime and Cement (LEILAC) project in Belgium.

EFIC is a specialist financier that delivers simple and creative solutions for Australian exporters. Its aim is to assist Australian businesses by helping them to win business, grow internationally, and achieve export success.

As an Australian company developing technology with global applications, the support of government organisations such as EFIC is critical in ensuring Calix's success.

Calix engineers and scientists are leading the LEILAC project, which is a European-Australian collaboration, and includes a consortium of some of the world's largest cement and lime companies, as well as leading research and environmental institutions.

Calix's technology uses indirect heating so CO2 and furnace combustion gases don't mix. This re-engineering of the existing process captures almost pure CO2 released from the limestone without significant additional costs or increased energy use. The technology is complementary with other carbon capture methods already developed in the power and cement sector, such as oxyfuel, and can make use of alternative fuels.

The pilot plant will aim to demonstrate a technology that facilitates dramatic reduction of CO2 emissions in the cement and lime industries without significant energy or capital penalty.

CALIX MAKES INITIAL STEPS INTO THE US MARKET

PROTECTA-Mag™ ACTI-Mag™

Calix's Michael Wheatland presenting a paper on PROTECTA-Mag at the 2017 HWEA Collection System Conference in Honolulu.

After a successful launch and sales ramp-up of our ACTI-Mag and PROTECTA-Mag products in New Zealand, Calix has turned its sights on our next target market, the US. In November 2017, Calix participated in a Water Conference in Honolulu, Hawaii and presented a technical paper at the event. The conference was a great success with local counties and consulting companies showing great interest in Calix products.

During our time in Hawaii, we also contacted and shortlisted potential local partners to help deliver our products and services. We selected a Honolulu-based business as a potential partner, and agreed to move forward as a team to help introduce the products under trial into the market.

Calix and our potential partner then met up with various departments in the County of Honolulu. The presentations and technical discussions led to trials being planned for Calix products, which were shipped in February, 2018, for coating and protecting sewer assets with our PROTECTA-Mag product as well as starting a dosing trial for our ACTI-Mag product.

The interest shown and speed of decision to trial our products has been a great initial step for Calix into the huge US market.

R&D UPDATE

CALIX AT THE ADVANCED AUTOMOTIVE BATTERY CONFERENCE – MAINZ

In late January, Chief Scientist Dr Mark Sceats and CEO Dr Phil Hodgson travelled to Mainz in Germany, to attend the largest ever Advanced Automotive Battery Conference: http://www.advancedautobat.com/europe/

More than 1,000 delegates attended a multi-workstream conference covering R&D in battery chemistry; raw materials; charging and infrastructure; engineering; and supercapacitors, as well as applications in hybrid and electric vehicles, and specialty and public transport electric vehicles.

Calix presented a poster on our recent work with Imperial College, Monash University and Deakin Universities' BATtri Hub, on our nano-active advanced battery materials produced from our Calix Flash Calcination technology.

The poster generated a lot of interest, and we will be continuing discussions with several European groups as we develop our technology into battery materials applications.

INTRODUCING

JONATHON WEBB
PRODUCTION MANAGER

Jonathon joined Calix in March 2014 as a Graduate Process Engineer. Working as a part of the production team his main duties were around operation of the CFC15000, Calix's "Catalytic Flash Calciner", and operation of the ACTI-Mag hydration plant. Through these duties he developed a good understanding of Calix's products and processes.

In July 2017, Jonathon became a Production Manager. He manages production and logistics activities out of the Bacchus Marsh site and handles all of the company's exports.

Jonathon holds a Bachelor of Chemical Engineering from the University of Melbourne. His father and grandfather on his mother's side were chemical engineers, so he felt it was is fate to follow the same path. Calix appealed to him as during his studies he had developed an interest in mineral processing while spending two summers at a tin mine in Tasmania as a Metallurgical Vacation Student.

When not working Jonathon enjoys multi-day hikes with friends, drinking red wine and playing squash and in a competitive dodgeball league.