

ASX Announcement

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ASX: PWN FSE: 4IP

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CORPORATE UPDATE

Highlights

Building aMES™ Technology Delivery Platform

- Established Parkway Minerals Engineering & Technical Office, at Victoria University.
- Recruited two senior process engineers, with extensive technology EPC experience.
- Negotiating potential partnerships with key partners including major EPC company.

Business Development

Strong business development pipeline from greenfield through to major operations.

Industry Developments

- Significant investment in lithium projects and next-generation processing technologies.
- Increasing awareness of sustainability of raw materials for fertiliser and electrification.

New Mexico Lithium Project – Evaluation Plan

• Ongoing farm-out process, with interest from several North American companies.

Karinga Lakes Potash Project - Pre-Feasibility Study

 Exploring optimal pathway to advance PFS and evaluating proposal from potential study manager.

Davenport Resources

Recently completed scoping studies being used to advance strategic opportunities.

Parkway Minerals NL (ASX: **PWN**) ("**Parkway Minerals**" or the "**Company**") is pleased to provide the following corporate update.



Building aMES™ Technology Delivery Platform

The Company has recently established a *Parkway Minerals – Engineering & Technical Office*, at Victoria University's Werribee Campus, co-located within the Institute for Sustainable Industries & Liveable Cities.

In order to develop a more comprehensive aMES™ technology related engineering capability and to improve interfacing between the R&D team and third-party collaborators, including major engineering (EPC) and equipment (OEM) partners, as well as prospective clients, two engineering roles have been established. The newly created roles include a *Senior Process Innovation Engineer* and a *Senior Process Integration Engineer*, both of which were recently filled with highly credentialled candidates with extensive engineering procurement construction (EPC) company experience, working for major energy, mining and industrial clients

In addition to ongoing discussions with prospective end-users of the aMES™ technology, Parkway Minerals is negotiating potential partnerships with key partners including a major EPC company which would provide Parkway Minerals with an accelerated deployment capability, as well as a structured profit share framework.

>> additional information is outlined in the *About aMES™ Technology* section towards the end of this announcement.

Business Development

Further to recent updates, Parkway Minerals is actively exploring and evaluating a range of potentially high-value applications of the aMES™ technology in the broader mining and energy sectors. These potential applications range from greenfield projects predominantly in Australia and North America, through to more advanced projects, including established globally significant operations owned by the majors in a range of markets. In the December 2019 Quarterly Report, the Company provided an update on positive aMES™ piloting studies performed on behalf of a major global potash producer and continues to advance a number of equally prospective opportunities with several parties.

The growth and consolidation of the aMES™ Technology Delivery Platform outlined above, provides the Company with an improved capacity to identify, engage, evaluate and eventually participate in a broader range of projects. Given the extensive market opportunities for the aMES™ technology, the Company is prioritising its efforts on established (brownfield) opportunities and generally only considering greenfield opportunities, where an opportunity may exist to be able to extract a long-duration recurring revenue stream (royalty linked to the provision of the aMES™ technology). Given the long-term, potentially life-of-mine (LOM) nature of these transactions, they inherently require extensive process evaluation, collaboration with a range of parties, and prolonged negotiations to ensure a satisfactory outcome for all stakeholders. Notwithstanding these requirements, the Company remains focused on advancing a portfolio of opportunities with the potential to generate significant recurring revenues, as these will in time, limit the Company's external funding requirements and underpin substantial long-term value creation.

Industry Developments

Recent corporate activity in the lithium sector, combined with the accelerating electrification of transportation and adoption of battery storage in a range of other industries, is resulting in increased strategic investor interest in the lithium sector. Unlike previous bouts of optimism, the industry appears to be maturing with the current interest notably underpinned by major sustainability related drivers. New industry entrants and existing supply chain participants,



particularly large electric vehicle (EV) manufacturers, are increasingly demanding that lithium production is sustainable. This emerging thematic is expected to intensify, as environmentally and socially conscious consumers continue to demand more visibility and accountability from the supply chain.

The importance of these ESG drivers is increasingly being validated by significant investments in projects, developers and more recently, potential technology solution providers. On the 20th of February 2020, Lilac Solutions – an emerging direct lithium extraction (DLE) technology solution provider announced it had secured a US\$20 million investment from Breakthrough Energy Ventures, a high-profile fund backed by prominent technology investors, including Bill Gates.

Parkway Minerals is familiar with many DLE technologies and believes each have their inherent opportunity sets based on the individual advantages and disadvantages of the respective technology. In the case of the aMES™ technology, several of the key distinguishing features include the ability to recover freshwater and byproducts (in addition to primary products such as potassium or lithium), generally without the use of any reagents. In this regard, the Company is encouraged by ongoing strategic investor interest in this space and is confident the aMES™ technology has strong competitive advantages, particularly in processing highly concentrated brines, where conventional processes simply don't work or are generally inefficient.

New Mexico Lithium Project (NMLP) – Evaluation Plan

The Company recently commenced a formal farm-out process soliciting interest in the NMLP from a number of third parties, which may be interested in earning into the project by funding near-term drill testing of the project. Given recent industry interest and the relatively low-cost of initial project appraisal, this opportunity has generated strong interest predominantly from North American companies active in sector. The Company will evaluate credible earn-in offers against the potential cost of drilling the project on a sole-risk basis, to determine the optimal opportunity. As outlined previously, the Company acquired an interest in the NMLP several years ago, as the project is deemed to be particularly well suited to direct processing of brine through the aMES™ technology.

Parkway Minerals holds a 70% interest in the NMLP, with the right to earn up to a 100% interest.

Karinga Lakes Potash Project (KLPP) - Pre-Feasibility Study

The Company has been involved in the evaluation of the KLPP for several years, and has performed extensive aMES™ based piloting studies, through which it has been able to successfully produce a high specification sulphate of potash (SOP) product, where conventional processes yielded generally poor results.

The KLPP pre-feasibility study (PFS) represents an attractive opportunity for Parkway Minerals to demonstrate the significant advantages of the aMES™ technology by radically transforming project development concepts, including the potential to eliminate significant non-process infrastructure.

Further to the recent update provided in the December 2019 Quarterly Report, the Company is continuing to explore the optimal pathway to advance the KLPP-PFS and is currently evaluating a detailed proposal from a potential study manager with significant experience in the sector.

Parkway Minerals holds a 15% interest in the KLPP, with the right to earn up to a 40% interest.



Davenport Resources (ASX: DAV)

Recently completed scoping studies prepared by Davenport Resources, provide strong encouragement that the significant potash resource delineated in Central Germany represents a globally significant opportunity. Parkway Minerals is in discussions with the management of Davenport Resources, as well as major shareholders, to explore a range of potential value accretive opportunities to create and unlock significant value from this strategic resource.

Parkway Minerals owns ~21% (34.3 million shares) of issued capital in Davenport Resources (ASX: DAV).

About aMES™ Technology

The activated Mineral Extraction System, or aMES™ is an innovative process technology that enables the treatment of concentrated brine solutions to recover a range of valuable minerals, reagents and fresh water. The technology utilises a proprietary multi-staged process incorporating novel membrane technology and is based on proprietary IP, incorporating patents, expertise and know-how acquired over more than a decade of intense process development initiatives.

The advantages of the aMES™ technology include:

- improvements in mineral recovery and product quality,
- opportunity for substantial project capex & opex savings,
- efficient use of energy and produces pure water as a by-product, and
- improved project footprint and environmental sustainability.

Ongoing collaboration with a number of brine project developers and operators has confirmed there are many applications where the aMES™ technology has the potential to deliver substantial value by applying the technology to enhance existing flowsheets, in order to improve overall project performance.

Additional Information

www.parkwayminerals.com.au/ames-technology



Commentary

Parkway Minerals - Managing Director, Bahay Ozcakmak commented:

"We've hit the ground running in 2020. Following a successful capital raising in late 2019, we've been busy putting in the foundations for building a serious mining technology focused company. We've been fortunate to be able to attract two exceptional senior process engineers, which together with our existing capabilities and our strategic R&D partners at Victoria University, will assist us enormously as we seek to commercialise our aMES™ technology.

We are actively exploring a range of project and partnership opportunities, all of which are progressing well and generally in line with our expectations. As we continue to build our aMES $^{\text{TM}}$ technology delivery platform, we are critically aware of the importance to engage with the right partners for the right reasons. Whilst we have various partnering options, we are focused on those which provide maximum long-term alignment - we hope to provide further details in the near future.

During the last 12 months, several of our partners and collaborators have been acquired by larger players, which points to the dynamic environment in which we operate and highlights the strategic value of what we have set out to achieve. As an emerging mining technology solution provider, we are already challenging many industry norms about what is achievable in terms of mineral recoveries, water demand, reagent use, and know we have a target on our back. This is the nature of disruption. In the tech-space, it is common for larger, well-resourced companies to keep a watching brief on emerging strategic tech companies, and the moment they appear to be making critical breakthroughs or generating traction, all too often these companies are taken out by larger players. In Australia, we lament this phenomenon with our junior biotechnology and pharmaceutical companies, but internationally, the demand for acquiring strategic water and/or mining-tech companies are often just as ferocious.

In terms of recent industry developments regarding DLE technologies, this is part of a broader thematic around sustainability and long-term resource utilisation efficiency. Parkway Minerals has received interest from several of the DLE technology developers to explore how they might be able to secure access to or benefit from the aMES™ technology. There are significant opportunities to integrate the aMES™ technology with established and emerging technologies, however, we seek to advance these opportunities in a methodical and strategic manner, to ensure we retain our long-term commercial advantage. In this regard, we look forward to providing the market with further details about the aMES™ Technology Delivery Platform we are building.

In the interim, we would like to thank all our stakeholders for your continued support as we seek to realise our vision to transform global brine processing methods, through innovative technology, in order to improve sustainability, and create value."

Approved for release on behalf of Parkway Minerals NL, by Bahay Ozcakmak.

Additional Information

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About Parkway Minerals

In October 2019, Parkway Minerals (ASX: PWN) completed a transformational transaction by acquiring an Australian unlisted public company, Consolidated Potash Corporation (CPC). Through CPC, Parkway Minerals acquired a minority interest in the Karinga Lakes Potash Project (KLPP) in NT Australia, as well as a majority interest in the New Mexico Lithium Project (NMLP), in the United States. The CPC transaction, also resulted in Parkway Minerals acquiring the innovative aMES™ technology, which has been developed to process a range of challenging brine streams from the mining industry, in order to recover valuable minerals, reagents as well as produce fresh water.

Given the significant market opportunities, Parkway Minerals is focused on building and leveraging the aMES™ technology platform to improve the efficiency, sustainability and ultimately the profitability of various brine and wastewater streams, by enabling the development of more innovative project development concepts, particularly in the mining and energy sectors.

Strategic Investment

Parkway Minerals holds a strategic investment (34.3 million shares) in Davenport Resources (ASX: DAV), which has successfully delineated a globally significant in-situ potash resource (in excess of 550 million tonnes of contained potash) across 5 projects, at its South Harz project in Germany. Recently completed scoping studies have delivered excellent technical and economic results and provide Parkway Minerals with encouragement that this investment will generate significant returns as well as provide Parkway Minerals with the opportunity to investigate a range of value-accretive initiatives.

Our Vision:

"To transform global brine processing methods, through innovative technology, in order to improve sustainability, and create value."

Forward-Looking Statements

This ASX Release may contain certain "forward-looking statements" which may be based on forward-looking information that are subject to a number of known and unknown risks, uncertainties, and other factors that may cause actual results to differ materially from those presented here. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. Forward-looking information includes exchange rates; proposed or projected project or transaction timelines; uncertainties and risks associated with the advantages and/or performance of the Company's projects and/or technologies; uncertainties and risks regarding the estimated capital and operating costs; uncertainties and risks regarding any envisaged timelines in relations to any results, milestones, partnerships, including but not limited to any milestones which may require obtaining approvals from third parties.

For a more detailed discussion of such risks and other factors, see the Company's other ASX Releases. Readers should not place undue reliance on forward-looking information. The Company does not undertake any obligation to release publicly any revisions to any forward-looking statement to reflect events or circumstances after the date of this ASX Release, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.