

# **PMET Advances On-Site Lithium Refining Strategy Through Technology Collaboration MOU with Mitsui and MWCC**

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MOU to evaluate microwave calcination technology as a key enabling step in PMET's downstream strategy, leveraging use of Québec's low-cost renewable hydroelectricity to support on-site lithium chemical processing

June 18, 2026 - Sydney, Australia

## Highlights

- PMET has entered into a non-binding Memorandum of Understanding ("MOU") with Mitsui & Co., Ltd. ("Mitsui") and Microwave Chemical Co., Ltd. ("MWCC") to jointly evaluate the application of MWCC's proprietary microwave calcination technology to produce higher-value lithium products on-site at Shaakichiuwaanaan.
- The collaboration builds on PMET's recently announced Concept Study (refer to News Release, 14 June 2026), which identified a potential pathway to produce battery-grade lithium carbonate at site and capture additional value within the supply chain.
- Microwave calcination has the potential to support electric calcination at site, which is the first step in the production of value-added lithium chemicals from spodumene concentrate, leveraging Québec's low-cost, renewable hydroelectricity as a potential alternative to conventional fossil fuel-based calcination.
- Pilot plant testing in Osaka will use spodumene samples supplied from Shaakichiuwaanaan, with MWCC leading the testing program and Mitsui supporting the evaluation of future commercialization and project development pathways.
- The initiative is aligned with PMET's longer term diversification strategy to reduce logistics intensity and enhance operational resilience, with potential benefits including reduced transportation requirements and lower truck traffic, reduced reliance on offshore conversion capacity, and the creation of a higher-value lithium product in Québec.
- The MOU is non-binding and non-exclusive, and any future commercial deployment remains subject to successful demonstration at scale, technical and economic evaluation, definitive agreements, funding, permitting, approvals and other customary conditions.

Ken Brinsden, CEO and Managing Director, comments: "This collaboration is a direct extension of the downstream growth strategy we outlined recently for Shaakichiuwaanaan. Our Concept Study identified a potential pathway to produce battery-grade lithium carbonate on site, and microwave calcination now represents an opportunity to evaluate one of the key enabling technologies that could support that vision.

"Shaakichiuwaanaan is already one of the world's premier hard-rock lithium projects, and the collaboration with Mitsui and Microwave Chemical represents another important step in our strategy to evaluate additional value-creation opportunities within the spodumene concentrate.

"This MOU brings together PMET's high-quality lithium resource, MWCC's proprietary microwave calcination technology and Mitsui's global project development and commercialization capabilities. It is an important next step in assessing how Shaakichiuwaanaan can leverage Québec's low-cost renewable hydroelectricity into a more integrated, Western-facing lithium supply chain that supports Québec, Canada and allied markets," added Mr. Brinsden.

[PMET Resources Inc.](#) (the "Company" or "PMET") (TSX: PMET) (ASX: PMT) (OTCQX: PMETF) (FSE: R9GA) is pleased to announce that it has entered into a non-binding Memorandum of Understanding with Mitsui & Co., Ltd. and Microwave Chemical Co., Ltd. to jointly evaluate the application of proprietary microwave calcination technology to spodumene samples from the Company's 100%-owned Shaakichiuwaanaan Project, located in the Eeyou Istchee James Bay region of Québec, Canada.

## Background

Calcination is a key initial processing step in the conversion of spodumene concentrate into downstream lithium chemicals. It uses heat to convert alpha-spodumene into beta-spodumene for subsequent lithium extraction. Historically, fossil fuels have been the key energy source (in the form of gas and/or coal) to create significant heat and the overall energy required to undertake the process change (from alpha to beta spodumene).

Mitsui & Co., Ltd. ("Mitsui") and Microwave Chemical Co., Ltd. ("MWCC") have launched a demonstration experiment for the development of microwave-based low-carbon lithium ore refining technology. Mitsui provides more information regarding the microwave calcination collaboration with MWCC, on their website.

Québec's large-scale and renewable hydroelectricity scheme generates some of the lowest cost power available in North America. Harnessing this power for application in the spodumene calcination step (i.e. replacing fossil fuels) could represent a key

competitive advantage for downstream initiatives and therefore motivates PMET Resources to continue its assessment of value-added and downstream product initiatives at Shaakichiuwaanaan.

### Advancing PMET's Downstream Development Pathway

On 14 June 2026, PMET announced the results of a Concept Study evaluating opportunities to convert spodumene concentrate produced at Shaakichiuwaanaan into higher-value lithium chemical products at site. The study identified Primero's ALiC atmospheric leach process as the preferred pathway for further evaluation and successfully produced 99.8% battery-grade lithium carbonate from Shaakichiuwaanaan spodumene concentrate at bench scale.

A key conclusion of that work was that the combination of electric calcination and downstream lithium conversion could leverage Québec's low-cost renewable hydroelectricity to create a more efficient and lower-carbon lithium supply chain, reducing logistics intensity and increasing value capture within Québec and Canada.

The Mitsui-MWCC collaboration is intended to evaluate microwave-assisted electric calcination as a potential enabling technology within this broader downstream development strategy.

### PMET - MWCC - Mitsui & Co. MoU

The MOU establishes a collaborative framework for the parties to advance technical evaluation, and potential future commercialization pathways for microwave calcination technology in the lithium industry. Under the terms of the MOU:

- PMET will supply spodumene raw material samples from Shaakichiuwaanaan for pilot plant testing, with 1.5 tonnes of  $\text{H}_2\text{O}$  course spodumene concentrate already shipped to the Osaka pilot facility from its prior pilot DMS testwork program.
- MWCC will lead the execution of pilot plant testing using its proprietary microwave calcination technology, and
- Mitsui will contribute to the evaluation of the pilot plant results from a project development perspective and where appropriate will facilitate discussions for potential future commercialization pathways.

The collaboration is intended to assess whether microwave calcination could support PMET's broader value-added downstream products strategy, including the potential production of a lithium-enriched product at site. PMET believes Shaakichiuwaanaan is uniquely positioned to evaluate this opportunity given its scale, location in Québec, potential access to renewable hydroelectric power, and the potential to support a more integrated Western lithium chemicals supply chain.

If successfully developed, electric calcination at or near the mine site could support the use of Québec's low-cost renewable energy to reduce reliance on offshore conversion capacity, lower logistics intensity, and significantly reduce the amount of material transported from site by upgrading spodumene concentrate into a higher-value lower volume lithium product.

The Company's concept study to date has identified meaningful potential benefits from on-site conversion, including reduced transport volumes, reduced logistics costs, reduced truck movements, and the potential to support a lower-carbon lithium supply chain.

The collaboration with Mitsui and MWCC is expected to focus specifically on the calcination stage as a potential enabling technology for this broader downstream pathway.

Following completion of pilot plant testing by MWCC, the parties expect to review the results and discuss whether to proceed with further evaluation and commercialization-oriented discussions relating to the potential application of microwave calcination technology to PMET's Shaakichiuwaanaan project. The parties may also coordinate efforts to evaluate potential government funding opportunities where aligned with critical minerals strategies and clean energy objectives.

The MOU is non-binding and non-exclusive, except for customary provisions including confidentiality and related matters. The MOU is subject to future commercial arrangement, project development structure, technology deployment, financing or construction decisions, subject to successful testwork, further technical and economic evaluation, definitive agreements, required approvals, and other customary development conditions.

About Mitsui & Co., Ltd.

Mitsui & Co., Ltd. is a global trading and investment company with a diversified business portfolio and extensive experience in project development, commercialization, supply chain integration and industrial partnerships across natural resources, energy, infrastructure, mobility, chemicals and other sectors.

About Microwave Chemical Co., Ltd.

Microwave Chemical Co., Ltd. is a Japanese technology company focused on the development and commercialization of industrial microwave-based processes. Under the MOU, MWCC is expected to apply and validate its proprietary microwave calcination technology at pilot plant scale using spodumene samples supplied by PMET.

About PMET Resources Inc.

PMET Resources Inc. is a pegmatite critical mineral exploration and development company focused on advancing its district-scale 100%-owned Shaakichiuwaanaan Property located in the Eeyou Istchee James Bay region of Quebec, Canada, which is accessible year-round by all-season road and proximal to regional hydro-power infrastructure.

In late 2025, the Company announced a positive lithium-only Feasibility Study on the CV5 Pegmatite for the Shaakichiuwaanaan Property and declared a maiden Mineral Reserve of 84.3 Mt at 1.26% Li<sub>2</sub>O (Probable)<sup>1</sup>. The study outlines the potential for a competitive and globally significant high-grade lithium project targeting up to ~800 ktpa spodumene concentrate using a simple Dense Media Separation ("DMS") only process flowsheet. Further, the results highlight Shaakichiuwaanaan as a potential North American critical mineral powerhouse with significant opportunity for tantalum and caesium in addition to lithium.

The Project hosts a Consolidated Mineral Resource<sup>2</sup> totalling 108.0 Mt at 1.40% Li<sub>2</sub>O and 166 ppm Ta<sub>2</sub>O<sub>5</sub> (Indicated) and 33.4 Mt at 1.33% Li<sub>2</sub>O and 155 ppm Ta<sub>2</sub>O<sub>5</sub> (Inferred) and ranks as a top ten lithium pegmatite globally in size. Additionally, the Project hosts the world's largest pollucite-hosted caesium pegmatite Mineral Resource at the Rigel and Vega zones with 0.69 Mt at 4.40% Cs<sub>2</sub>O (Indicated), and 1.70 Mt at 2.40% Cs<sub>2</sub>O (Inferred).

For further information, please contact us at [info@pmet.ca](mailto:info@pmet.ca) or by calling +1 (604) 279-8709, or visit [www.pmet.ca](http://www.pmet.ca). Please also refer to the Company's continuous disclosure filings, available under its profile at [www.sedarplus.ca](http://www.sedarplus.ca) and [www.asx.com.au](http://www.asx.com.au), for available exploration data.

This news release has been approved by

"KEN BRINSDEN"

Kenneth Brinsden, President, CEO, & Managing Director

Disclaimer for Forward-Looking Information

This news release contains "forward-looking statements" and "forward-looking information" within the meaning of applicable securities laws.

All statements, other than statements of present or historical facts, are forward-looking statements. Forward-looking statements involve known and unknown risks, uncertainties and assumptions and accordingly, actual results could differ materially from those expressed or implied in such statements. You are hence cautioned not to place undue reliance on forward-looking statements. Forward-looking statements are typically identified by words such as "strategy", "to evaluate", "enabling step", "potential", "additional", "future", "development", "longer term", "remains subject to", "growth", "opportunities", "further", "advance", "intended", "expect" or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved.

Forward-looking statements include, but are not limited to, statements concerning microwave calcination and its potential, the ability to implement PMET's longer term diversification strategy to reduce logistics intensity and enhance supply chain resilience, the ability to reduce transportation requirements and lower truck traffic, reduce reliance on offshore conversion capacity, and the creation of a higher-value lithium product in Québec, the success of any test, the ability to enter into definitive agreements and the ability to produce battery-grade lithium carbonate on site.

Forward-looking statements are based upon certain assumptions and other important factors that, if untrue, could cause actual results to be materially different from future results expressed or implied by such statements. There can be no assurance that forward-looking statements will prove to be accurate. Key assumptions upon which the Company's forward-looking information is based include, without limitation, the ability to make discoveries, the potential of each of tantalum, lithium, caesium as a co-product, the ability to get approval for the Hydro-Québec power, the obtention of all required regulatory approvals, that proposed exploration work on the Property and the results therefrom will continue as expected, the accuracy of reserve and resource estimates, the classification of resources and the assumptions on which the reserve and resource estimates are based, long-term demand for lithium (spodumene), tantalum (tantalite), and caesium (pollucite) supply, and that exploration and development results continue to support management's current plans for the Property's development.

Forward-looking statements are also subject to risks and uncertainties facing the Company's business, any of which could have a material adverse effect on the Company's business, financial condition, results of operations and growth prospects. Readers should review the detailed risk discussion in the Company's most recent Annual Information Form filed on SEDAR+, for a fuller understanding of the risks and uncertainties that affect the Company's business and operations.

Although the Company believes its expectations are based upon reasonable assumptions and has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking information will prove to be accurate. If any of the risks or uncertainties mentioned above, which are not exhaustive, materialize, actual results may vary materially from those anticipated in the forward-looking statements.

The forward-looking statements contained herein are made only as of the date hereof. The Company disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent required by applicable law. The Company qualifies all of its forward-looking statements by these cautionary statements.

#### Competent Person Statement (ASX Listing Rules)

The information in this news release that relates to the Feasibility Study ("FS") for the Shaakichiuwaanaan Project, which was first reported by the Company in a market announcement titled "PMET Resources Delivers Positive CV5 Lithium-Only Feasibility Study for its Large-Scale Shaakichiuwaanaan Project" dated October 20, 2025 (Montreal time) is available on the Company's website at [www.pmet.ca](http://www.pmet.ca), on SEDAR+ at [www.sedarplus.ca](http://www.sedarplus.ca) and on the ASX website at [www.asx.com.au](http://www.asx.com.au). The production target from the Feasibility Study referred to in this news release was reported by the Company in accordance with ASX Listing Rule 5.16 on the date of the original announcement. The Company confirms that, as of the date of this news release, all material assumptions and technical parameters underpinning the production target in the original announcement continue to apply and have not materially changed.

The Mineral Resource and Mineral Reserve Estimates in this release were first reported by the Company in accordance with ASX Listing Rules 5.8 and 5.9 in market announcements titled "World's Largest Pollucite-Hosted Caesium Pegmatite Deposit" dated July 20, 2025 (Montreal time) and "PMET Resources Delivers Positive CV5 Lithium-Only Feasibility Study for its Large-Scale Shaakichiuwaanaan Project" dated October 20, 2025 (Montreal time) and are available on the Company's website at [www.pmet.ca](http://www.pmet.ca), on SEDAR+ at [www.sedarplus.ca](http://www.sedarplus.ca) and on the ASX website at [www.asx.com.au](http://www.asx.com.au). The Company confirms that, as of the date of this news release, it is not aware of any new information or data verified by the competent person that materially affects the information included in the relevant announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant announcement continue to

apply and have not materially changed. The Company confirms that, as at the date of this announcement, the form and context in which the competent person's findings are presented have not been materially modified from the original market announcement.

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<sup>1</sup> See Feasibility Study news release dated October 20, 2025. Probable Mineral Reserve cut-off grade is 0.40% Li<sub>2</sub>O (open-pit) and 0.70% Li<sub>2</sub>O (underground). Underground development and open-pit marginal tonnage containing material above 0.37% Li<sub>2</sub>O are also included in the statement. Effective Date of September 11, 2025.

<sup>2</sup> The Consolidated MRE (CV5 + CV13 pegmatites), which includes the Rigel and Vega caesium zones, totals 108.0 Mt at 1.40% Li<sub>2</sub>O, 0.11% Cs<sub>2</sub>O, 166 ppm Ta<sub>2</sub>O<sub>5</sub>, and 66 ppm Ga, Indicated, and 33.4 Mt at 1.33% Li<sub>2</sub>O, 0.21% Cs<sub>2</sub>O, 155 ppm Ta<sub>2</sub>O<sub>5</sub>, and 65 ppm Ga, Inferred, and is reported at a cut-off grade of 0.40% Li<sub>2</sub>O (open-pit), 0.60% Li<sub>2</sub>O (underground CV5), and 0.70% Li<sub>2</sub>O (underground CV13). A grade constraint of 0.50% Cs<sub>2</sub>O was used to model the Rigel and Vega caesium zones. The Effective Date is June 20, 2025 (through drill hole CV24-787). Mineral Resources are not Mineral Reserves as they do not have a demonstrated economic viability. Mineral Resources are inclusive of Mineral Reserves.

multimedia:<https://www.prnewswire.com/news-releases/pmet-advances-on-site-lithium-refining-strategy-through-techno>

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