

ASX Announcement | 22 July 2024

# PAM Hosts Leading Chinese Lepidolite Processor and Lithium Chemical Producer, Yongxing, and MOU Partner, IRPC to the RK Lithium Project

# **Highlights**

- Successful site visit to the RK Lithium Project with MOU partner IRPC Public Company Limited ("IRPC"), and leading Chinese lepidolite processor and lithium chemical producer Yongxing Special Materials Technology Co. Ltd ("Yongxing")
- IRPC is a leading integrated petroleum and petrochemical company which focuses on the petroleum, petrochemical, and asset management segments in Thailand
- PAM has entered into discussions with several potential strategic partners with expertise in lithium chemical manufacturing regarding the development of the RK Lithium Project
- Site visit demonstrates the interest PAM's RK Lithium Project is generating and the importance of the Project's strategic positioning in Southeast Asia and particularly Thailand, the fourth largest EV producer in East Asia.

Battery and critical metals explorer and developer Pan Asia Metals Limited (ASX:PAM) ('PAM' or 'the Company') is pleased to report that PAM hosted its MOU partner IRPC Public Company Limited (IRPC), and leading Chinese lepidolite processor and lithium chemical producer Yongxing Special Materials Technology Co. Ltd (Yongxing) on a site visit to the RK Lithium Project last week.

## Managing Director, Paul Lock said:

"It was pleasing to see the PAM team led by Chief Geologist and Technical Director Mr. David Hobby host PAM's MOU partner IRPC and guest Yongxing at the RK Lithium Project last week. IRPC is a leading integrated petroleum and petrochemical company which focuses on the petroleum, petrochemical, and asset management segments in Thailand. Yongxing is one of leading and lowest cost producers of lithium carbonate from lepidolite in China. PAM hosted IRPC and Yongxing on a comprehensive site visit last week, focusing on the RK and BT lithium prospects, and the potential of the newly defined and rapidly advancing KT lithium prospect. The site visit demonstrates the interest PAM's RK Lithium Project is generating and the importance of the Project's strategic positioning in Southeast Asia and particularly Thailand, the fourth largest EV producer in East Asia."



On July 18, 2024, PAM, led by Chief Geologist and Technical Director Mr. David Hobby, hosted representatives from Yongxing and IRPC to its RK Lithium Project. The field visit focused on the RK, BT and KT Lithium Prospects, with inspections including drill core from RK and BT and field work results including pegmatite exposures at KT. Mr. Hobby also confirmed that the central area of the KT Lithium Prospect contains a pegmatite swarm which is 1.5km long and 500m wide, which remains open along strike. Individual pegmatite dykes containing abundant lepidolite and/or muscovite have been interpreted up to 20m wide, with many 5-10m wide.

PAM entered into a non-binding MOU with IRPC in July 2023 for the evaluation of developing linked components of the lithium-ion battery supply chain in Thailand. Under the MOU, PAM and IRPC are assessing the viability of developing a lithium mining operation to produce a lithium oxide concentrate, which is to be fed into a lithium conversion facility to be located in IRPC's Industrial Zone located in the Rayong Province, Thailand, to produce Li<sub>2</sub>CO<sub>3</sub> chemical product (LCE). The MOU will also consider the potential for a Cathode Active Material (CAM) facility in IRPC's Industrial Zone, potentially with a technology knowledge partner, to produce CAM product. See PAM's ASX announcement dated 31 July, 2023, and titled 'Pan Asia Metals and IRPC sign MOU to develop a lithium-ion chemical supply chain in Thailand, which is leading Asia as a regional EV manufacturing hub'.



Figure 1 - PAM, IRPC AND Yongxing Representatives in the field

PAM has entered into discussions with several potential strategic partners with expertise in lithium chemical manufacturing regarding the development of the RK Lithium Project. Successful negotiations could see a three-way agreement between the potential strategic partner, PAM and IRPC. PAM is looking to leading Chinese lepidolite processors as potential strategic and technology partners given their leadership in lepidolite and lithium chemical processing. Chinese based Soochow Securities Co., Ltd. released its energy metal initiation report in February 2024, which included commentary on the Chinese lepidolite based lithium chemical supply chain. This report included a cost curve for integrated lepidolite to lithium chemical processors, see Figure 2, identifying several low cost lepidolite based integrated lithium chemical producers, including Yongxing.



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# Chinese Lepidolite Cash Cost Curve (2024, tonnes LCE)

Figure 2 - Chinese Lepidolite Cash Cost Curve

This is particularly important in the current price environment where lithium carbonate is priced at about CNY95,000/t or US\$13,000/t. As per the above cost curve, the lowest cost integrated lepidolite style lithium chemical processors are producing lithium carbonate at well below current market prices, supporting very strong gross margins.

PAM's RK Lithium Project has similar grades to those leading lithium chemical producers and is also situated in a low-cost environment in close proximity to all of its input requirements such as labour, energy, reagents, as well as its end markets.

The Company looks forward to keeping Shareholders and the market updated on the continued progress and results obtained from the exploration program at the KT prospect and other activities related to the Company's ongoing evaluation activities of its lithium properties in Thailand.

#### Ends

Authorised by: Board of Directors

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#### ABOUT PAN ASIA METALS LIMITED (ASX:PAM)

Pan Asia Metals Limited is the only publicly traded battery materials company with lithium projects in South-East Asia and South America, and with agreements with key battery and chemical producers in the Asian region to produce advanced battery chemicals.

PAM's Asian assets are strategically located in Thailand - the largest vehicle producer in the region. With Asia accounting for more than half of the global annual vehicle production, PAM is uniquely positioned to capitalize on the soaring demand for battery minerals in the region. PAM's South American assets are strategically located in the Atacama region of Chile, it is one of South America's largest and most strategically positioned lithium brine projects, situated at an altitude of 800-1100m with all necessary transport and energy infrastructure. It is north of Chile's lithium chemical refining hub in Antofagasta, with access by rail and road, and only 75km from Iquique, a well-equipped coastal city with a population of 200,000, a deep water bulk and container port, and regular flights to Santiago.

SD JEUOSJAO JO-PAM's dedication to producing innovative, high-value products with a minimal carbon footprint makes us an ideal partner for meeting our needs in both battery chemicals and sustainable energy. PAM is also a respected local company, with a strategy focused on developing an integrated supply chain to cost-effectively deliver relevant and in-demand products to the Li-ion battery market.

PAM is rapidly advancing its lithium projects through to feasibility and plans to expand its global lithium resource sustainably through its extensive holdings in Asia and South America.

To learn more, please visit: <a href="https://www.panasiametals.com">www.panasiametals.com</a>

Stay up to date with the latest news by connecting with PAM on LinkedIn and Twitter.



#### **Competent Persons Statement**

The information in this report that relates to Mineral Resources is based on information compiled by Ms Millicent Canisius and Mr Anthony Wesson, both full-time employees of CSA Global. Mr Anthony Wesson is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy and Ms Millicent Canisius is a Member of the Australasian Institute of Mining and Metallurgy. Mr Anthony Wesson and Ms Millicent Canisius have sufficient experience, relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking, to qualify as Competent Persons as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Anthony Wesson and Ms Millicent Canisius consent to the disclosure of the information in this report in the form and context in which it appears.

The information in this report that relates to Exploration Targets and Exploration Results, is based on information compiled by Mr. David Hobby, is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Hobby is a full time employee, Director and Shareholder of Pan Asia Metals Limited. Mr. Hobby has sufficient experience, relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr. Hobby consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **Forward Looking Statements**

Various statements in this document constitute statements relating to intentions, future acts and events which are generally classified as "forward looking statements". These forward looking statements are not guarantees or predictions of future performance and involve known and unknown risks, uncertainties and other important factors (many of which are beyond the Company's control) that could cause those future acts, events and circumstances to differ materially from what is presented or implicitly portrayed in this document. For example, future reserves or resources or exploration targets described in this document may be based, in part, on market prices that may vary significantly from current levels. These variations may materially affect the timing or feasibility of particular developments. Words such as "anticipates", "expects", "intends", "plans", "believes", "seeks", "estimates", "potential" and similar expressions are intended to identify forward-looking statements. Pan Asia Metals cautions security holders and prospective security holders to not place undue reliance on these forward-looking statements, which reflect the view of Pan Asia Metals only as of the date of this document. The forward-looking statements made in this document relate only to events as of the date on which the statements are made. Except as required by applicable regulations or by law, Pan Asia Metals does not undertake any obligation to publicly update or review any forward-looking statements, whether as a result of new information or future events. Past performance cannot be relied on as a guide to future performance.

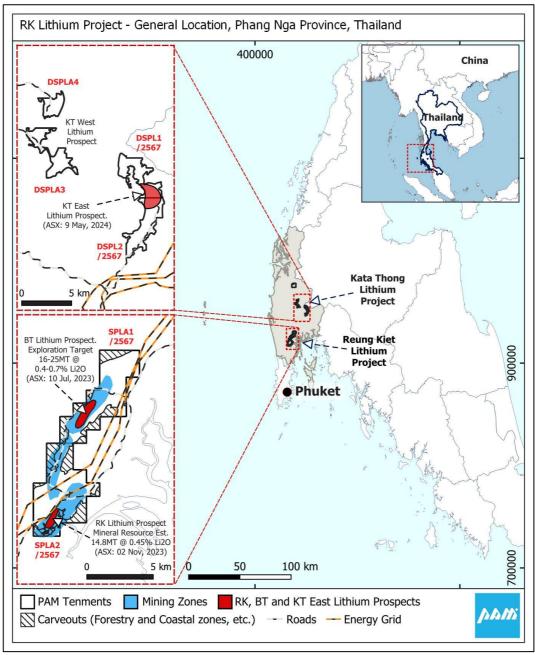
### Important

To the extent permitted by law, PAM and its officers, employees, related bodies corporate and agents (Agents) disclaim all liability, direct, indirect or consequential (and whether or not arising out of the negligence, default or lack of care of PAM and/or any of its Agents) for any loss or damage suffered by a Recipient or other persons arising out of, or in connection with, any use or reliance on this document or information.



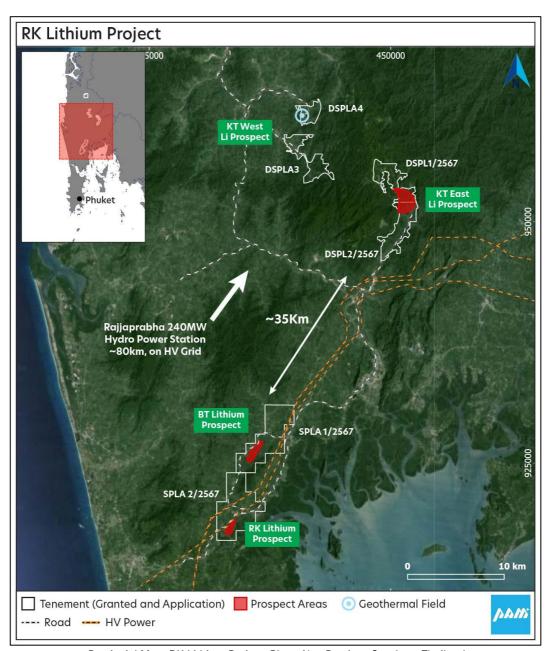
#### **RK LITHIUM PROJECT**

The RK Lithium Project ('RKLP'), inclusive of the RK Lithium Prospect (RK), the BT Lithium Prospect (RK), KT East Lithium Prospect (KT East) and the KT West Lithium Prospect under application, is one of PAM's key assets. RKLP is a hard rock lithium project with lithium hosted in lepidolite/muscovite rich pegmatites chiefly composed of quartz, feldspar, lepidolite and muscovite both lithium bearing micas, with minor cassiterite and tantalite as well as other accessory minerals. Previous open pit mining extracting tin from the weathered pegmatites was conducted into the early 1970's.



Regional map: Location of Phang Nga Province and the Reung Kiet Lithium Project





Provincial Map: RK Lithium Project, PhangNga Province Southern Thailand

## **RK Lithium Prospect**

The RK Lithium Prospect (RK) is located about 8km south of the BT Lithium Prospect (BT) in southern Thailand. At RK PAM has estimated a Mineral Resource Estimate of 14.8 million tonnes at a grade 0.45% Li<sub>2</sub>O, containing 164,500 tonnes LCE. See Table 1 and PAM ASX announcement "Reung Kiet Lithium Project Mineral Resource Update" dated 2 November, 2023.



Table 1. RK Lithium Prospect - Mineral Resource at a 0.25% Li<sub>2</sub>O cut-off (2<sup>nd</sup> November 2023)

| Resource<br>Category | Resource<br>(Mt) | Li <sub>2</sub> O<br>% | Sn<br>ppm | Ta₂O₅ ppm | Rb<br>% | Cs<br>ppm | Cont.<br>LCE |
|----------------------|------------------|------------------------|-----------|-----------|---------|-----------|--------------|
| Measured             | 7.80             | 0.44                   | 410       | 74        | 0.20    | 230       | 85,289       |
| Indicated            | 3.26             | 0.49                   | 349       | 85        | 0.20    | 261       | 39,375       |
| Inferred             | 3.74             | 0.41                   | 390       | 78        | 0.19    | 229       | 38,252       |
| Total                | 14.80            | 0.45                   | 391       | 77        | 0.20    | 237       | 164,500      |

Note: Contained LCE for individual Resource categories is subject to tonnes and grade rounding.

The RK Prospect hosts a relatively large open cut tin mine that operated into the 1970's. The old pit is about 500m long and up to 125m wide. Mining of weathered pegmatites was undertaken by open cut hydraulic methods to about 30m below surface and ceased when hard rock was intersected.

Pan Asia has identified a prospective zone over 1km long. Mineralisation remains open along strike to the north and south, with strong mineralisation particularly evident at surface and at depth in the south. PAM retains a 100% interest in RK.

#### **BT Lithium Prospect**

The BT Lithium Prospect (BT) is located about 8km north of the RK in southern Thailand. At BT PAM has estimated a drill supported Exploration Target of 16 to 25 million tonnes at a grade ranging between 0.4% to 0.7% Li<sub>2</sub>O. See Table 2 and PAM ASX announcement "Reung Kiet Lithium Project Exploration Target Substantially Increased" dated 10 July, 2023.

Table 2 - BT Lithium Prospect - Exploration Target, 10th July, 2023

|       | Million<br>Tonnes | Li₂O % | Sn % | Ta <sub>2</sub> O <sub>5</sub> (ppm) | Rb % | Cs (ppm) | K (%) |
|-------|-------------------|--------|------|--------------------------------------|------|----------|-------|
| Lower | 16.0              | 0.70   | 0.16 | 120                                  | 0.30 | 250      | 2.80  |
| Upper | 25.0              | 0.40   | 0.11 | 95                                   | 0.25 | 200      | 2.40  |

The potential quantity and grade of the Exploration Target are conceptual in nature. There has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The BT hosts a significant historic tin mine that extends for almost 2km along strike. Mining of weathered pegmatites was undertaken by open cut hydraulic methods to about 40m below surface and ceased when hard rock was intersected. PAM retains a 100% interest in BT.



### Tama Atacama Lithium Brine Project

The Tama Atacama Lithium Project distinguishes itself as one of South America's largest and most strategically positioned lithium brine projects. The project is set at an altitude of 800-1100m, and sits within the 12,500km² Pampa del Tamarugal Basin, in the Atacama Desert in northern Chile, which is a hyper-arid environment with very high evaporation rates. The total project area is ~1,535km², of which ~1,234km² comprises granted exploration concessions and ~1,036km² is subject to binding Option Agreements to purchase 100%. See Figure 2 and PAM's ASX announcement titled "Tama Atacama Lithium Option Agreements Signed" dated 2<sup>nd</sup> January 2024.

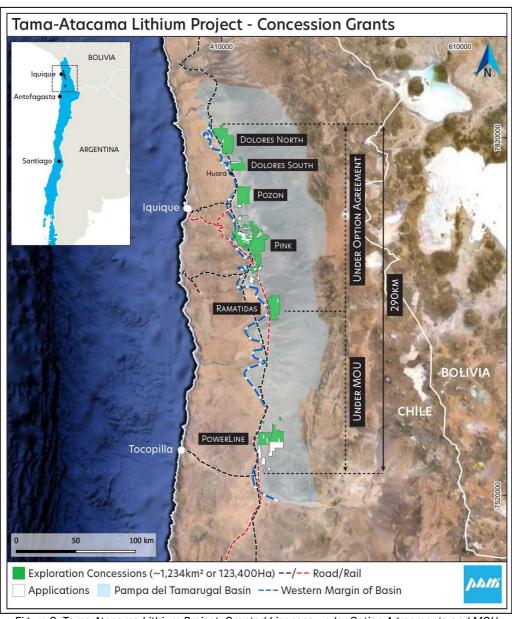


Figure 2. Tama Atacama Lithium Project: Granted Licenses under Option Agreements and MOU

The project is well-supported with all necessary transport and energy infrastructure, and is situated 40-60km from the coast and only 75km from Iquique, a well-equipped coastal city with a population of



200,000, a deep water bulk and container port, and regular flights to Santiago. The project is only 75km from Port of Patillos, Chile's largest salt export terminal, providing PAM a potential solution for waste salt, and several pipelines pump sea water through PAM's project areas, providing a potential solution to achieving water balance. The project is north of Chile's lithium chemical refining hub in Antofagasta, with access by rail and road. See Figure 3.

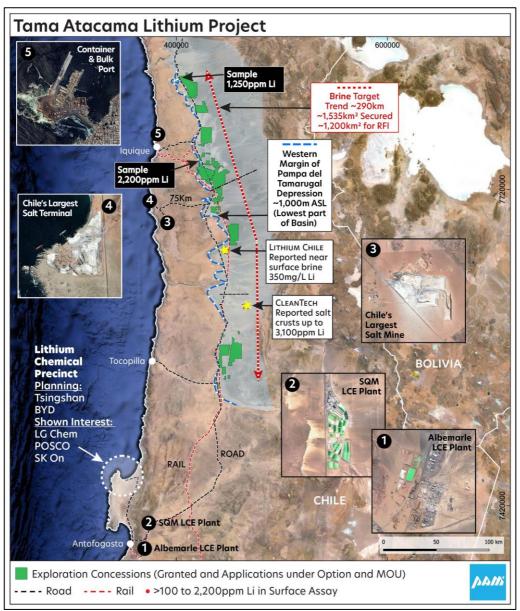


Figure 3. Tama Atacama Lithium Project: Proximal Lithium Chemical Refining Plants

Reconnaissance work suggests similar geochemical signatures to Salar de Atacama. Analysis of historical geophysics (seismic) show a very large basin up to 600m deep. Extensive lithium surface anomalies with lithium results up to 2,200ppm Li, and averaging 700ppm Li (56/177 assays, 270ppm cutoff) extend over ~160km.