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Julia Creek Renewables Project Update – Shortlisted Parties

Highlights

- **QEM has shortlisted non-binding indicative bids to develop, own, and operate up to 1GW of renewable energy, consisting of a hybrid of wind and solar farms (“Renewables Project”).**
- **The Renewables Project will be immediately adjacent to the Company’s flagship Julia Creek Vanadium Project (“JCP”) and represents one of Queensland’s largest renewable energy projects.**
- **The Renewables Project has the potential to provide cheaper power for the JCP and to contribute to decarbonisation and the Queensland and Australian Government renewable energy and emission reduction targets.**
- **Outcomes, if successful, have the potential to form crucial components of the Pre-Feasibility Study for the JCP.**

Further to its announcement of 31 May 2023, QEM Limited (ASX: QEM) (“**QEM**” or “**Company**”) is pleased to announce that following receipt and consideration of non-binding indicative bids, it has now shortlisted parties to commence commercial negotiations with regards to the potential development of a renewable energy project (“**Renewables Project**”) adjacent to the Company’s flagship Julia Creek Project (“**JCP**”).

The Renewables Project proposes up to 1 gigawatt (GW) hybrid wind and solar generation. After successfully completing the Renewables Project generation optimisation study and installing wind and solar monitoring on-site, critical minerals explorer and developer QEM has accumulated more than 12 months of live data, essential information for the Renewables Project to progress.

QEM received a number of non-binding offers, indicating strong interest from global developers on the Renewables Project located near Julia Creek (Refer: ASX announcement 31 May 2023). After assessing the non-binding offers, QEM has shortlisted three potential developers, owners, and operators for one of the State’s largest proposed renewable energy projects:

- ACCIONA Energía;
- Enel Green Power; and
- Origin Energy and Energy Estate (joint offer).

QEM would like to thank all parties who submitted non-binding offers in the process.

Speaking following the World Mining Congress in Brisbane where the Premier Annastacia Palaszczuk unveiled the Queensland Critical Mineral Strategy and a \$245 million investment into growing Queensland's critical mineral sector on opening day (27 June), QEM Managing Director Gavin Loyden said the global interest in developing, owning, and operating the renewables project adjacent to the company's flagship vanadium project was very encouraging.

"QEM has prioritised the design and development of the renewables project with the primary objective of obtaining cheaper electricity for the Julia Creek Project," said Mr Loyden.

"It affirms our work to date on the Renewables Project to hear the Queensland Premier state at the World Mining Congress that the *government is investing \$5 billion to build CopperString 2032, to connect the North West Minerals Province, with the largest renewable energy zone on the east coast of Australia to mine and process critical minerals with renewable energy.*¹

"The Queensland Government has committed to the roll-out of its Queensland Energy and Jobs Plan and to legislate its renewable energy targets of 60% by 2030 rising to 80% by 2035.

"To put the QEM renewables project in context, there was 6GW of large-scale wind and solar projects in Queensland when the Plan was launched last year. By 2030, the Government projects it will require 16GWs of wind and solar projects and 25GWs by 2035," he said.

Mr Loyden said renewable resource monitoring on site started in May last year and studies have been conducted for environmental assessments, topographic surveys, preliminary flood modelling, and geotechnical studies, all amidst ongoing stakeholder engagement.

"The highly encouraging monitoring results over the past year and the calibre of non-binding indicative offers, when combined with the Government's commitment to CopperString 2023, large scale renewable energy development and critical minerals, is certainly pleasing," Mr Loyden said.

"Critical minerals like vanadium are vital for the global transition to clean energy. The opportunity for QEM and the broader North West Minerals Province is to harness the region's wind and solar resource above the ground to explore, develop and refine the critical minerals under it."

Colin Langton, Director of Operations CopperString at Powerlink Queensland said, "This scale of renewable generation at Julia Creek will be integral to the overall CopperString project."

"With the high quality and enormous potential scale of renewables in the area, the North and North West is well positioned to become the future powerhouse of Queensland," said Mr Langton.

¹ Link to Premier's statement: <https://statements.qld.gov.au/statements/98059>

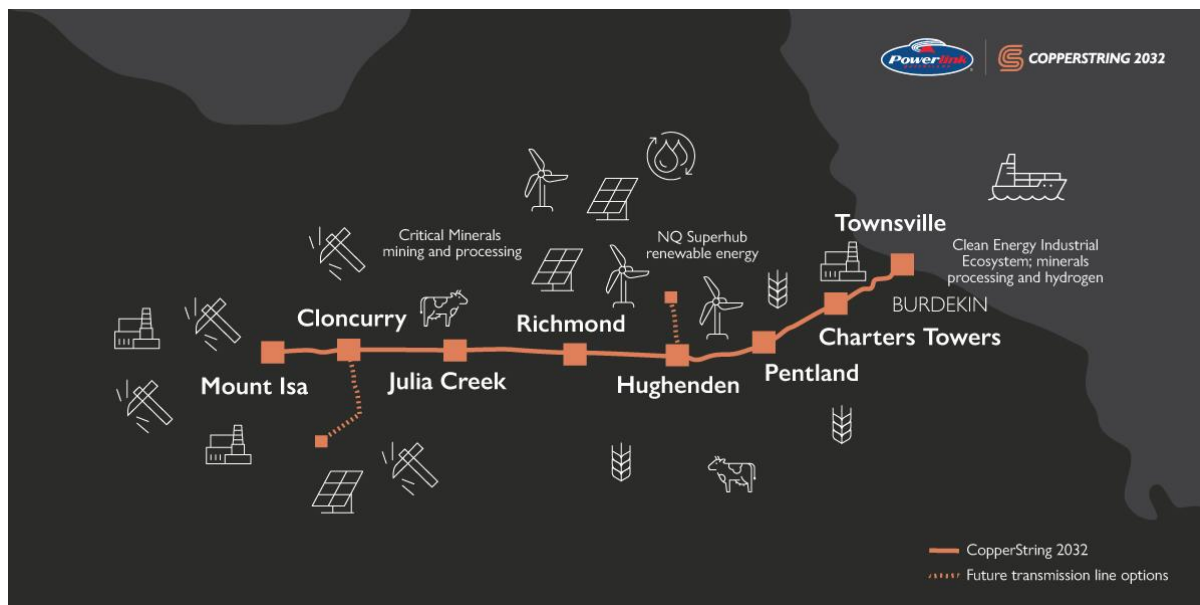


Image source: <https://www.powerlink.com.au/projects/copperstring-2032>

QEM will commence commercial negotiations with the shortlisted companies in July. Definitive contractual terms will need to be ultimately agreed at the conclusion of the commercial negotiation process with the selected party. As such, at the time of this announcement, there is no guarantee that any counterparty offer will ultimately become binding, and accordingly, investors should not place any undue reliance on the outcome of the potential Renewables Project.

Wind and solar monitoring

In May 2022, solar monitoring equipment was installed on site at the JCP, and a 163 mt tall meteorological mast fitted with anemometers and other measurement instrumentation was commissioned in July 2022 (ASX announcement 29 July 2022; ASX announcement 27 October 2022).



Images: QEM's solar and wind monitoring equipment onsite at Julia Creek

**Renewable power generation studies**

The objective of the wind and solar data gathered over the past year is to further inform the renewable power generation optimisation study conducted by global engineering consultant GHD, which includes up to 1GW of hybrid solar/wind generation capacity (ASX announcement 28 January 2022).

Additional studies have been conducted over the past year to further de-risk the hybrid wind/solar farm. Environmental assessments, topographic surveys, preliminary flood modelling and geotechnical studies were completed at potential locations of wind turbines. These studies form a crucial component of the Pre-Feasibility Study for the JCP.

Announcement of CopperString 2.0 - Acquisition by Queensland Government

On 7 March 2023, the Queensland Premier Annastacia Palaszczuk released a joint statement with the Queensland Treasurer Cameron Dick, Resources Minister Scott Stewart, and Energy Minister Mick de Brenni announcing that the Palaszczuk Government will deliver the 1,100 km CopperString project to unlock Australia's largest renewable energy zone and more than \$500 billion dollars in new critical minerals in North Queensland. Early works on the \$5 billion project will start this year with construction planned to commence next year.²

CopperString will connect vast renewable wind and solar resources with critical minerals mining and processing in the North West Minerals Province ("NWMP"). "CopperString is the most significant investment in economic infrastructure in North Queensland in generations. Unlocking affordable renewable energy and our critical minerals will benefit Townsville, Mount Isa and every town in between – unlocking thousands of jobs and billions in investment," said Queensland Premier Annastacia Palaszczuk.

Construction is expected to support 800 direct jobs over six years and thousands of new jobs in critical minerals mining, manufacturing, and construction of renewables. Publicly owned transmission business Powerlink will lead work on the project.

² <https://statements.qld.gov.au/statements/97314>

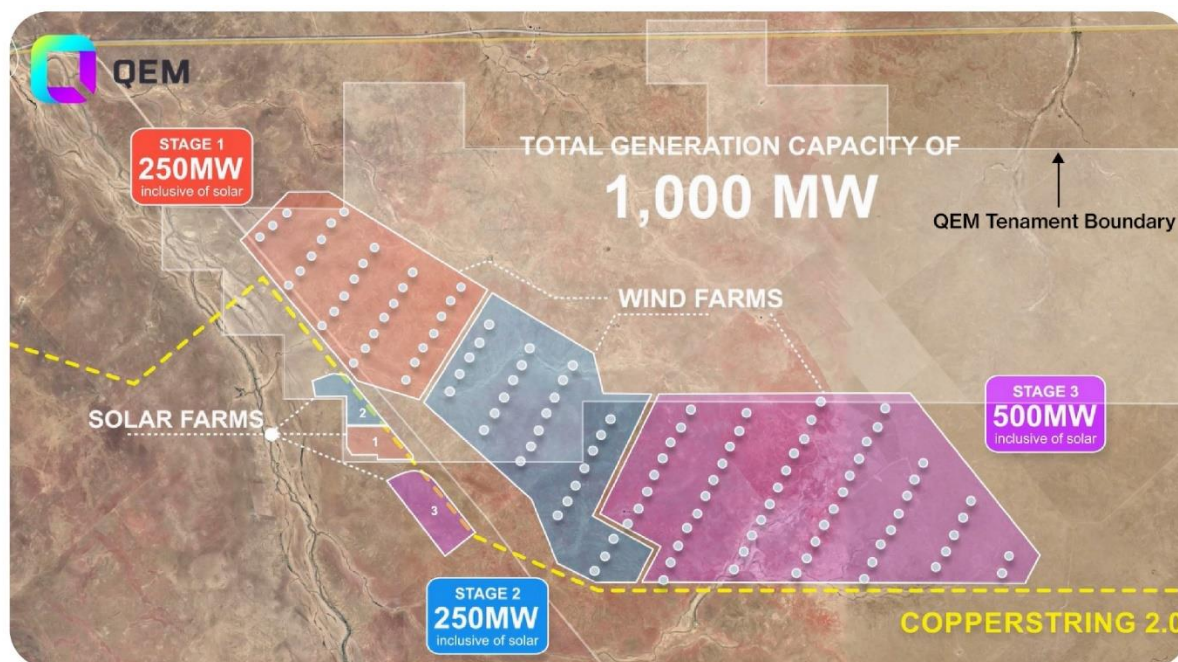


Image: Proximity of CopperString to QEM's tenements

The Company will continue to keep the market fully updated in respect of the process for the potential Renewables Project.

ENDS

This announcement was authorised for release on the ASX by the Board of QEM Limited.

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ABOUT QEM

QEM Limited (ASX: QEM) is a publicly listed company which is focussed on the exploration and development of its flagship Julia Creek Project, covering 250km² in the Julia Creek area of North Western Queensland.

The Julia Creek vanadium project is a unique world class resource with the potential to utilise and deliver innovative and sustainable energy solutions, through the production of energy fuels and vanadium pentoxide. QEM strives to become a leading supplier of high-quality vanadium pentoxide, to both the nascent energy storage sector and the Australian steel industry.

This globally significant JORC (2012) Mineral Resource of 2,850 Mt @ 0.31% V₂O₅ is one of the single largest ASX listed vanadium resources and represents a significant opportunity for development. The resource is comprised of 360Mt @ 0.29% V₂O₅ in the Indicated category and 2,490Mt @ 0.31% V₂O₅ in the Inferred category, with the added benefit of a contingent (SPE-PRMS

2018) in-situ oil resource of 79MMBBLs of Oil equivalent in the 2C category, and 696MMBBLs in the 3C category, contained within the same ore body.

The tenements form part of the vast Toolebuc Formation, which is recognised as one of the largest deposits of vanadium and oil shale in the world and located less than 6km east of the township of Julia Creek. In close proximity to all major infrastructure and services, the project is intersected by the main infrastructure corridor of the Flinders Highway and Great Northern Railway which connects Mount Isa to Townsville.

*The information in this announcement that relates to the mineral resource and contingent resource estimates for the Company's Julia Creek Project was first reported by the Company in its IPO prospectus dated 20 August 2018 and supplementary prospectus dated 12 September 2018 (together, the "Prospectus") and the subsequent resource upgrade announcements ("Resource Upgrade") dated 14 October 2019 and 7 April 2022. The Company confirms that it is not aware of any new information or data that materially affects the information included in the Prospectus and Resource Upgrade, and in the case of estimates of Mineral Resources and Contingent Resources, that all material assumptions and technical parameters underpinning the estimates in the Prospectus and Resource Upgrade continue to apply and have not materially changed.

ABOUT ACCIONA ENERGÍA;

ACCIONA Energía is the world's largest 100% renewable energy company with no fossil legacy. It has 11.9GW of renewable energy capacity under ownership with commercial operations in 30 countries. With 30 years of experience, ACCIONA Energía offers a complete portfolio of tailor-made energy solutions for its corporate and institutional clients to meet their decarbonisation goals. ACCIONA Energía is committed to the highest environmental, social and corporate governance (ESG) standards. ACCIONA S.A., a leading global company in the provision of regenerative solutions for a decarbonised economy, is the majority shareholder of ACCIONA Energía.

www.acciona-energia.com

ABOUT ENEL GREEN POWER

Enel Green Power, within the Enel Group, develops and operates renewable energy plants worldwide and is present in Europe, the Americas, Africa, Asia and Oceania. A world leader in clean energy, with a total capacity of more than 59 GW and a generation mix that includes wind, solar, geothermal, and hydroelectric power, as well as energy storage facilities, Enel Green Power is at the forefront of integrating innovative technologies into renewable energy plants.

ABOUT ORIGIN ENERGY

Origin (ASX:ORG) is one of Australia's largest integrated energy companies with activities spanning electricity generation, energy retailing, renewable energy and rooftop solar, and energy services, with 4.5 million energy accounts across Australia. Origin owns and operates Australia's largest power station, Eraring Power Station on Lake Macquarie.

Origin is also a significant gas producer, domestic gas supplier and LNG exporter through our 27.5 per cent interest in Australia Pacific LNG in Queensland.



Origin's ambition is to lead the energy transition through cleaner energy and customer solutions, underpinned by three strategic pillars: unrivalled customer solutions; accelerate renewable and cleaner energy; and deliver reliable energy through the transition.

ABOUT ENERGY ESTATE

Energy Estate is an Australian-owned company focussed on the accelerated transformation of the energy sector and industrial decarbonisation. We are passionate advocates of the globally significant critical minerals and renewable energy opportunities in North Queensland. Energy Estate's pipeline of projects in the region includes HyNQ - an integrated renewable energy and green ammonia export project at Abbot Point.