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LEIGH CREEK ENERGY
Growing our future

6 September 2021, ASX ANNOUNCEMENT (ASX:LCK)

The Leigh Creek Urea Project (LCUP)

Leigh Creek Energy's (LCK) flagship project has been renamed the Leigh Creek Urea Project, or LCUP, from its previous named "Leigh Creek Energy Project (LCEP)".

Our transition from energy to urea has taken place over the last few years. The project started out as an energy (gas, electricity) project but this has evolved as the economic case for domestic urea manufacture has developed, reducing the energy project to a crucial, but ever smaller part of the project.

Why urea?

The reasons for settling on urea as an end product were twofold – commercial and carbon related:

Commercial

The Preliminary Feasibility Study of October 2020 confirmed our intention to produce urea as it was the option showing the best returns to shareholders at the lowest risk while at the same time being the most environmentally responsible option.

Carbon

The production is not only commercially compelling but a good fit with one of our ESG goals - our revised target of carbon neutral by 2022.

As approximately 75% of carbon produced during the production of gas and the manufacture of ammonia is recycled and reused in making urea. The use of CO_2 in the manufacture of urea is a major contributor to our being able to become carbon neutral.

LCUP Recent Key Progress

This development follows several other recent milestones:

- **November 2020**: Grant of Production Petroleum License (PPL) – the final and ultimate approval LCK requires for the Project's upstream, or underground, gasification operations
- **November 2020:** Pre-Feasibility Study (PFS) outcomes, based on the successful Pre-Commercial Demonstration (PCD), showed a commercially robust IRR of 30% and Net Present Value of A$3.4B
- **March 2021**: Final Investment Decision for Stage 1 of the project
- **June 2021:** LCK awarded the Engineering, Procurement, Construction, Commissioning and Finance (EPCCF), contract to leading global engineering, procurement and construction

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contractor, DL E&C Co. Ltd. The contract encompasses the bankable feasibility study, front end engineering design, final investment decision and the EPCC. It also includes the sourcing of A$1.5 Bn of finance.
- **July 2021**: Acquisition of generators to power upstream# operations for Stage 1 of the project

Key features of the LCUP include:

- The only urea project globally to be carbon neutral from 2022
- Lowest-cost producer of urea in Australia. Urea production prices at $109/tonne placing the LCUP in the lowest cost quartile of global urea producers
- Manufacturing input price stability over the life of the project as all major cost inputs (gas, power, infrastructure) controlled by LCK on site
- Provides additional security to a critical product for the Australian agricultural sector and avoid risks associated with transport, exchange rates, commodity prices and import logistics
- Project life span of 30+ years

LCK Managing Director Phil Staveley commented:

"The renaming to "Leigh Creek Urea Project" creates a more relevant identity that better reflects what the project will entail and is an important step as we become a key supplier of urea to Australia's agriculture sector and international markets."

The Board of Leigh Creek Energy Limited authorised this announcement to the ASX.

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About the Leigh Creek Urea Project

The Leigh Creek Urea Project (LCUP) located in South Australia, 550 kilometres north of Adelaide, is Leigh Creek Energy's (ASX:LCK) flagship project, developing low-cost nitrogen-based fertiliser for local and export agriculture markets. It has previously produced syngas within all approved environmental parameters set by the regulator.

LCK has a comprehensive environment, social and governance strategy and within that a target of being carbon neutral from 2022.

The $2.6 billion LCUP will produce 1mtpa of carbon neutral urea and will be the only fully integrated urea production facility in Australia, with all inputs for low carbon urea production on-site. Forecast operating cost is within the lowest cost quartile of the global urea production cost curve. Pre-tax leveraged Net Present Value (NPV) is A$3.4 billion, with an Internal Rate of Return (IRR) of 30%.

The project will provide long term economic development and employment opportunities for the communities of the Upper Spencer Gulf region, northern Flinders Ranges and South Australia.

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