

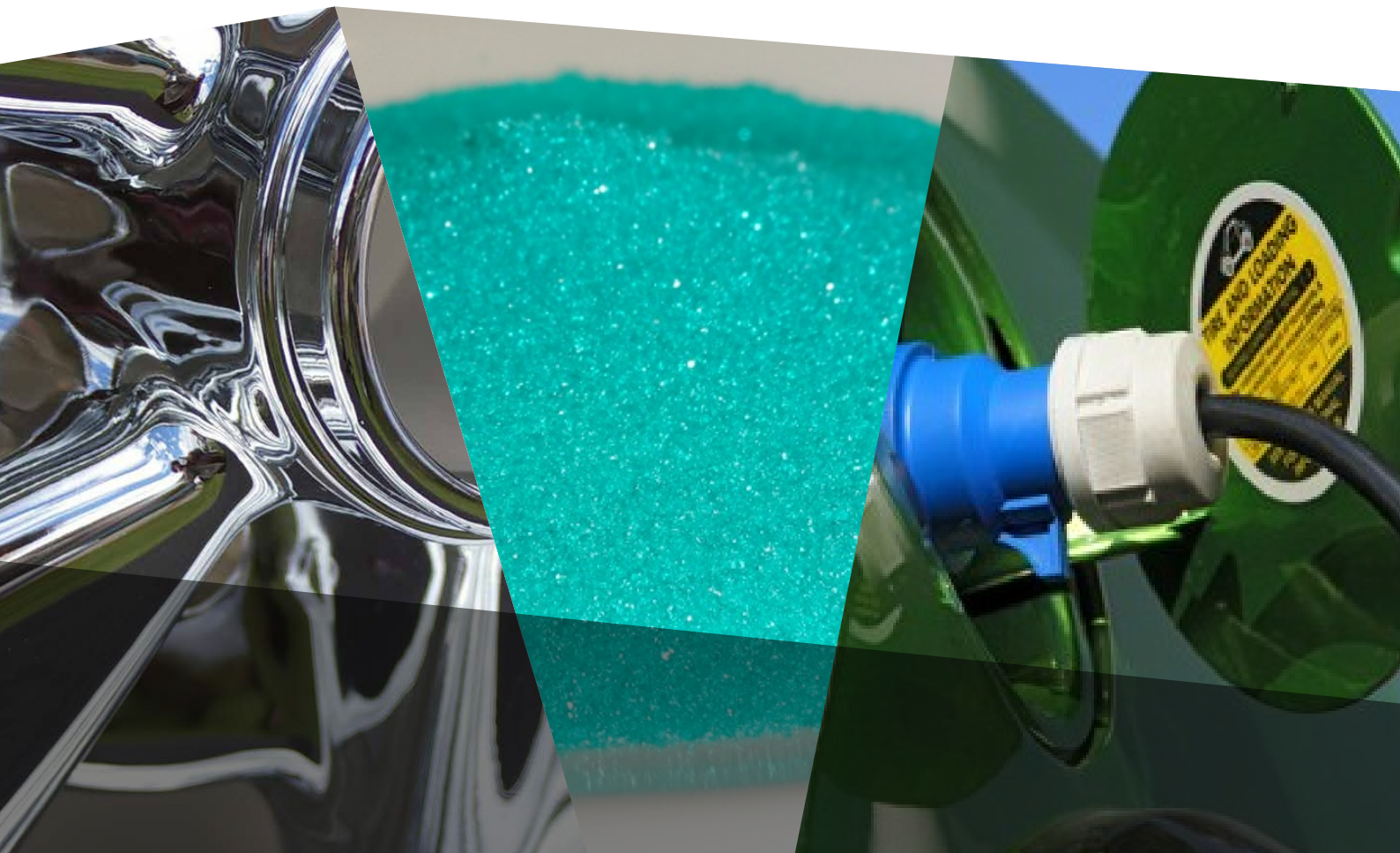


AML
AUSTRALASIAN MINING LIMITED

New Nickel Sulphate Supplier

Seeking **Expressions of Interest** in Product Off-take

Australasian Mining Limited (AML) is completing a feasibility study into building a nickel sulphate plant at Esperance in Western Australia to produce 10,000 tpa of [high purity nickel sulphate](#) crystals. As part of this process, and before making a final investment decision, AML is seeking expressions of interest in off-take arrangements from buyers in the battery and plating industries.



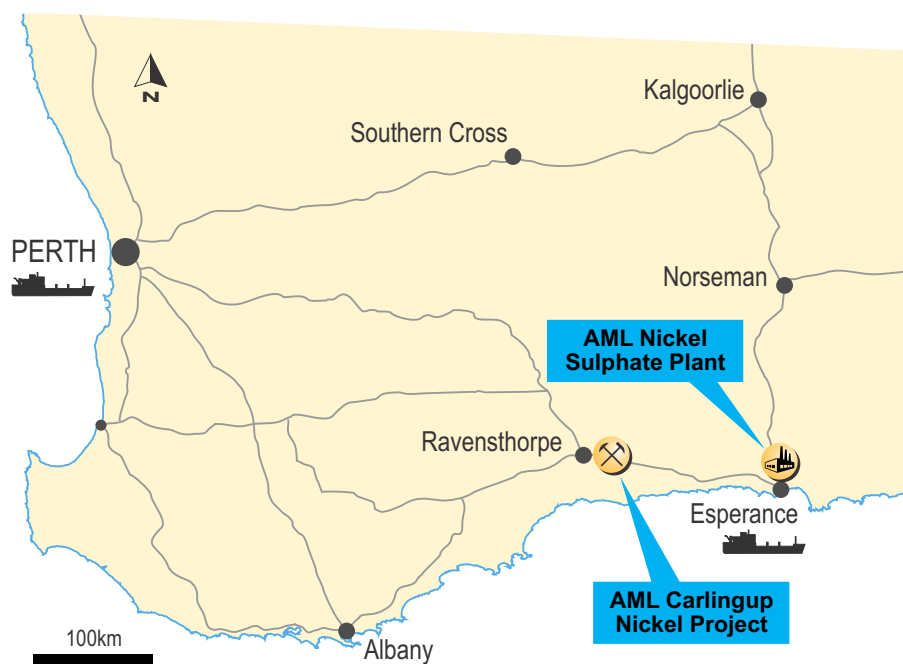
PROJECT BACKGROUND

AML holds certain exclusive rights to the CMN Process technology. The CMN Process is patented solvent extraction technology developed by one of AML's key partners, Canopean Pty Ltd. AML investigated a number of potential project applications for the CMN Process before settling on the Esperance nickel sulphate plant to produce 10,000 tpa of high

purity nickel sulphate to support the growing demand from the battery and plating sectors. Research completed on behalf of AML by New York based Lux Research concluded that nickel consumption in lithium-ion batteries for electric vehicles and stationary storage units are projected to increase by 1,200% over the next 10 years.

PROJECT LOCATION

The plant will be located at the Shark Lake Industrial Park, Esperance, Western Australia. This location was carefully chosen for its proximity to the Esperance Port and potential local sources of nickel feedstock. The plant is therefore perfectly located to receive feedstock from both imported and local sources. Feedstock for the plant will initially be sourced from third party producers however AML will switch to its own supply from its wholly owned Carlingup Nickel Project after four years.



TECHNOLOGY

The CMN Process is solvent extraction technology which, due to some key patented steps, facilitates the production of high purity end products. The CMN Process does not involve any complex process operations or toxic and/or flammable gases. These attributes together with the use of field proven, cheap, readily available and stable reagents results in a plant that is easier and simpler to operate with significant savings in operating and capital costs compared to alternative processes.



Nickel sulphate on the left (the end product) and mixed hydroxide precipitate (the plant feed) on the right

TECHNICAL SUPPORT

The Esperance nickel sulphate plant will be the first commercial scale operation for the CMN Process. AML is partnering with Ausenco and Prudentia Process Consulting to carefully manage the risks in commercialising new technology.

Ausenco: "although the CMN Process includes a number of novel aspects, the processes and chemistry are well understood and have been proven at laboratory scale"

Prudentia: "the CMN Process uses predominantly standard solvent extraction unit operations" and that "the proposed processing rates are small ... as a result the scale up risks are therefore considered low".

PRODUCT

A key benefit of the patented purification steps in the CMN Process is that AML can produce a nickel sulphate hexahydrate product to meet the most demanding of specification requirements.

As a new business, AML now has the opportunity to work with end users on an exclusive basis to produce a product to meet their specific requirements in terms of impurity levels, crystal size and packaging.

AML has produced advance electrolyte from two continuous campaigns on a mini pilot plant. Using this advance electrolyte and with the controlled addition of sulphuric acid and cooling, AML has produced its first batch of nickel sulphate crystals with the following specifications:

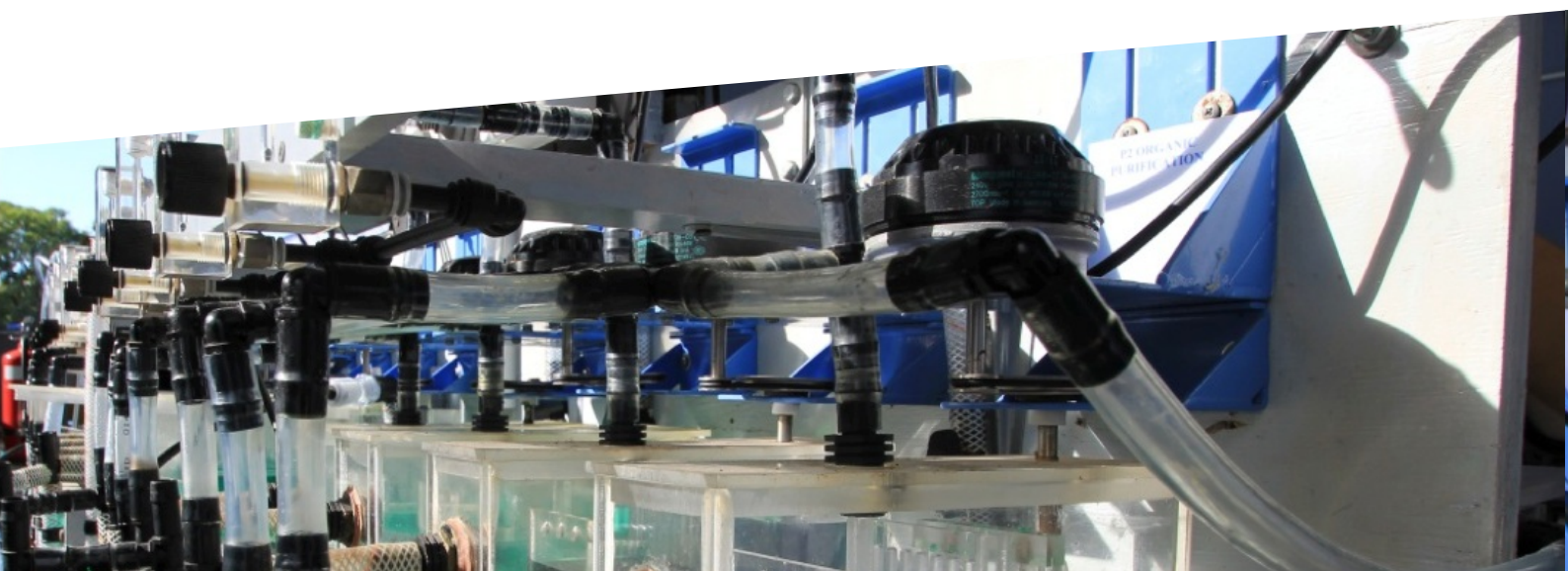
Typical Analysis

Element	Specification
Ni	22.28%
Al	<0.0005%
Ca	0.0005%
Co	0.0005%
Cu	<0.0005%
Fe	<0.0005%
Mg	0.0005%
Mn	<0.0005%
Zn	<0.0005%

It should be noted that these specifications were achieved with the mini pilot rig essentially on 'set and forget' mode with no real capacity to make adjustments to the plant during the run. Consequently, AML is very confident that future specifications will exceed these.

PACKAGING

20kg bags, 50 bags (1,000kg) per pallet



NICKEL SULPHATE AND THE MARKET

Nickel sulphate



USES

	 Automotive	 Consumer Products	 Electronics	 Batteries
Metal surface treatment, battery cathodes	●	●	●	●

GROWTH MARKET

Lithium Ion (Li) batteries are used for storage of renewable energy

Nickel-containing battery technology, specifically battery **cathodes**, is an essential component in the development of electric vehicles

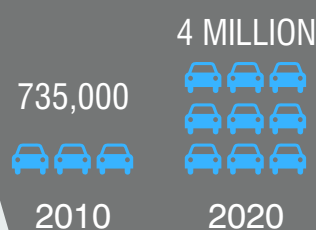
Li BATTERY
PRODUCTION

300%

INCREASE
BY 2020

Nickel will continue to play a key role in battery technology of the future

Electric Vehicle Market





ABOUT AML

AML is an unlisted public company based in Perth, Western Australia. AML's vision is to generate superior shareholder returns through the application of innovative technologies to produce premium value fine chemical products for high growth sectors of the economy.

CORPORATE DIRECTORY

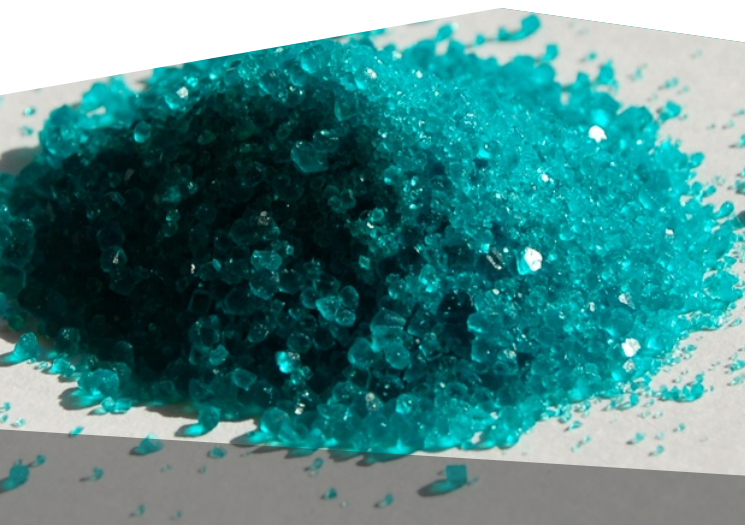
Board: Norm Taylor
Finance, Executive Chairman
Richard Hill
Mechanical Engineer, Non-executive Director
John Riordan
Chemical Engineer, Non-executive Director
David Royle
Geologist, Non-executive Director

Financial Advisors: Key Pacific Advisory Partners

Auditors: Hayes Knight

Bankers: Macquarie Bank Limited

Solicitors: Herbert Smith Freehills



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