



# Recharged and ready to go

Investor Presentation February 2021

**ASX:MNS** 





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## PLACEMENT DETAILS

Amount Raised

A\$34m

Offer Price

A\$0.28

### **Including**

1:1 unlisted option exercisable at \$0.50 expiring 24 months from date of issue

### **Use of funds**

Commence Production at the NY Battery Plant









### THE MAGNIS VISION

To become a leading global producer of next-generation, green credentialed Lithium-ion batteries though:

- Developing Gigafactories globally with key alliances and JV partners
- Maintaining a competitive advantage through unique IP
- Mitigating key material supply risk
- Delivering a commercial advantage to all Global Gigafactories







Magnis has **three core areas** of focus which provide the Company with a strategic advantage; battery technologies, gigafactories and graphite.



#### **Battery Technologies**

The Company has rapidly moved into battery technology with their high performing, chemical free anode technology and through the partnership formed with US Based Charge CCCV.



#### **Gigafactories**

New York Lithium-ion Battery Plant & Australia Lithium-ion Battery Plant



#### **Graphite**

Magnis holds a world class graphite deposit, the Nachu Graphite Project





### **Capital Structure - Post Placement**

**MNS** 

A\$0.33

**ASX Code** 

ASX Share Price (5/2/2021)

**A\$36M** 

A\$280

Cash

Market Cap

851M

129M

Shares on Issue

**Unlisted Options** 

6.44M

Average Daily Volume (100 days)

4.7¢ - 42.5¢

52 week Low - High



Source: ASX, Chi-X, Terra Studio

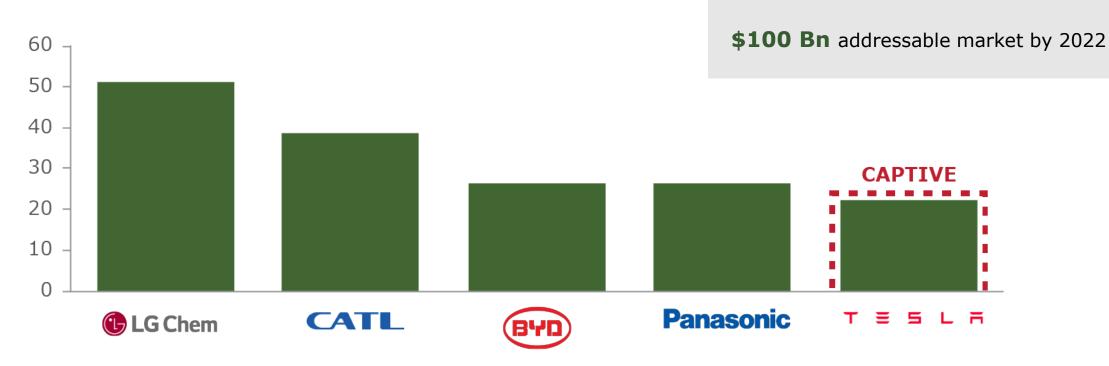


### **INDUSTRY OVERVIEW**



85% of Market is controlled by Top 5

Magnis is focused on the **Top 6 Global Energy Storage Markets** 



Source: Benchmark Mineral Intelligence



GLOBAL GIGAFACTORIES & OPPORTUNITIES



ASX:MNS







- Equipment and assets acquired. (Valued at US\$71M)
- 15GWh plant
- 1GWh production planned ASAP
- Magnis holds 58% of project (iM3NY)





- Tanzania
- Shovel ready and BFS completed



### **Australia Battery Plant**

- Feasibility Study submitted 2019
- 18GWh plant
- Magnis holds 33.3% of iM3TSV
- Potential revenues of over US\$3.5 Billion pa







#### Frank Poullas

**Executive Chairman** 

- Over 20 years in investment markets, technology and engineering sectors
- Partner in a successful technology firm
- Involved in successful ventures within the technology and mining industries



James Dack

**Executive Director** 

- One of Australia's most successful and influential people in the Real Estate industry
- Over four decades of experience in the Public, Private and Government sectors
- Founder and director of a successful fund



Prof M. Stanley Whittingham

Non-Executive Director

- Key figure in the invention of the Lithium-ion battery technology and awarded the 2019 Nobel Chemistry Prize
- Has headed large projects for the US Department of Energy, Exxon and Schlumberger
- Distinguished Professor of Chemistry at Binghamton University, part of State University of New York



### Peter Tsegas

Non-Executive Director

- 15+ years experience in Tanzania engaging both private and public sectors on projects; Tanzanian resident
- Previous consulting roles to the Tanzanian government and to a number of mining companies including Rio Tinto



The Hon. Troy Grant

Non-Executive Director

- Former Deputy Premier of New South Wales and leader of The National Party
- Distinguished career over three decades in public, private and government sectors
- Former Police, Emergency Services, Justice, Hospitality, Gaming and Racing and Arts Minister
- Runs successful consulting practice



### PRIMARY TECHNOLOGY PARTNER





Dr. Shailesh Upreti

### **Charge CCCV LLC (C4V)**

Dr. Shailesh Upreti has been awarded numerous patents for composition of matter inventions with over 20 years of Li-ion battery experience





Professor Stanley Whittingham

Prof Stanley Whittingham, **inventor of Lithium Ion Batteries**, is part of a leading center of excellence for LIB development located within Binghamton University



STATE UNIVERSITY OF NEW YORK

World class \$300m+ development facilities with capabilities for Materials engineering, Cell fabrication & Cell testing





### **GLOBAL INDUSTRY PARTNERS**



### **Key Ingredient to Lithium-ion Battery Success**

#### Siemens

Agreement signed March 5, 2018 covering global LIB plant opportunities



World leader in LIB factory digitization, automation and in-line manufacturing technology

### Celgard

Joint Development Agreement signed 13th Feb 2018

Global market leader of separators for Lithium-ion batteries with 40+ years experience

Subsidiary of global chemicals manufacturer Asahi Kasei



#### **Durr MEGTEC**

Strategic Partnership Agreement signed 20th Mar 2018

Manufacturer of world leading double sided coating equipment driving low footprint, increased efficiency, and significant capital and operating cost advantages



# Additional Global Industry Partners (Commercial in Confidence) for:

- Electrolyte
- Battery electrode materials
- Cell forming
- Cell assembly



# NEW YORK LITHIUM-ION BATTERY PLANT



### iM3NY (Imperium3)

Magnis has a ~58% interest in iM3NY

Manufacturing facility and plant located in Huron Campus with **first production expected 2021 - 2022** 

**Offtake agreements signed** with various parties

**Equipment valued at over US\$71.34m** purchased from Alevo (valuation completed late 2019 by independent engineering group Ramboll)

NY State Government announced **US\$13.25m funding package** 

Campus at Huron could **support 4-5 GWh** 









Cathode Welding machine, example of assets purchased in February 2018



# NEW YORK LITHIUM-ION BATTERY PLANT



### iM3NY (Imperium3)

Cutting-edge technology, including **technology exclusively licensed** from C4V

Abt Associates report highlights batteries produced by iM3NY will be the **greenest in the world** 

**AI analysis** makes iM3NY batteries superior + cheaper with time

State-of-the-art manufacturing & global partnerships to scale from **1 GWh to 15 GWh** 

Manufactures batteries in a **highly scalable fashion** with factory continuously upgrading, ensuring seamless upgrades at Customer Site with no required changes to next-gen factory

**100 MW** on-site Power Plant









### **AUSTRALIAN BATTERY PLANT**



Magnis has a ~33.3% interest in iM3TSV

Queensland Government funded **feasibility study completed and approved** (August 2020)

Townsville Project template for **18 GWh manufacturing plant** being established

**Major global partners** and all forms of government supporting the project

At full production, potential revenues of over **US\$3.5 Billion annually** 





# GAME CHANGING BATTERY TECHNOLOGIES



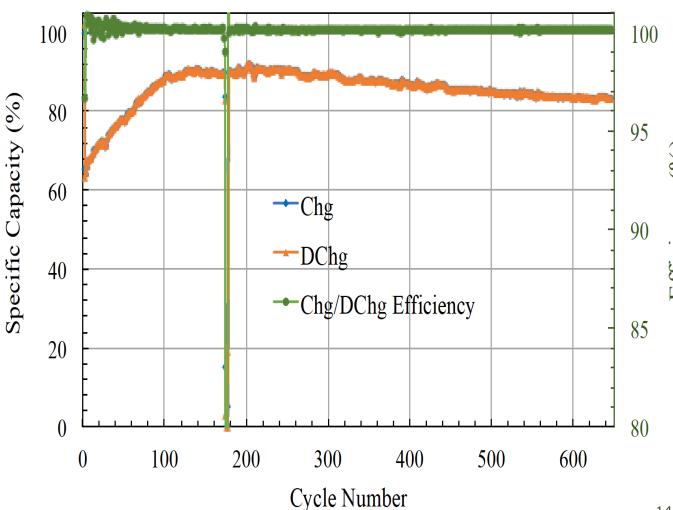
### **Fast Charging**

Over **85% charge** achieved in **6 mins** 

Demonstration program for New York
State Transit Buses with BAE
Systems, Consolidated Edison
and funded by NYSERDA

Potential game changer for the transportation industry

Discussion have begun with **major** overseas OEM's





# GAME CHANGING BATTERY TECHNOLOGIES



### **Anode**

Patent protection in over **35** countries

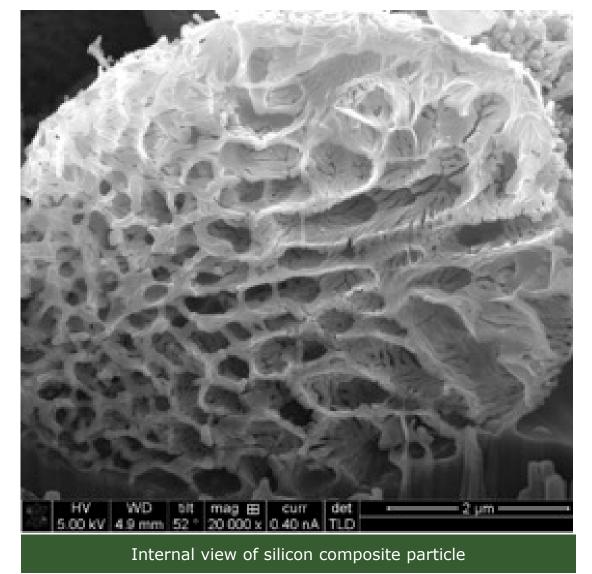
Lowest cost producer of spherical graphite above **99.95% TGC purity** 

**Strong green credentials** - no downstream chemical or thermal purification required

Graphite and silicon anode blend the **next generation of high-performance anode material** 

Potential to deliver significant increase in mileage and power

Test work and commercial validation for 10% silicon additive blended with Nachu coated spherical graphite





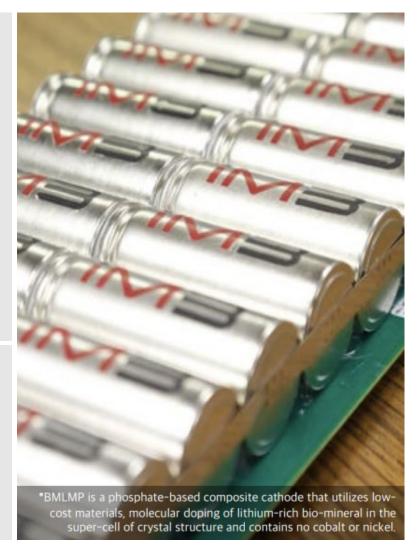
# GAME CHANGING BATTERY TECHNOLOGIES



### Cathode - BMLMP

- Patent protection for our Cathode composition in 35+ countries
- High performance and long-life technology
- Low cost due to no nickel and cobalt
- Greater reliability made with commercial processes, fully transferable to Gigafacilities
- Raw materials used in plentiful supply
- Wide range of applications due to no compromise between life, energy density and power

Cathode Material	Voltage (V)	Capacity (Ah/kg)	Cell Energy (Wh/kg)
LFP	3.3	150	130
NMC	3.7	155	215
NCA	3.6	200	250
BMLMP	3.9	160	230*





# MAGNIS BATTERY TECHNOLOGY ROADMAP



**Generation II & Solid State** 

SOP-1

2019

>200 Wh/kg

>500 Wh/I





2021

>300 Wh/kg

>650 Wh/l

No Cooling up to 65°C

### 2025

>400 Wh/kg

>800 Wh/l

Solid State Battery

#### NOTE

Our Gen II and Solid State Lithiumion Battery technology roadmap is being developed within the scope of our existing manufacturing equipment supply chain. Only minor changes to our production environment are required in supporting our Gen II and SS technology roadmap. This will allow Magnis to avoid significant additional capital costs when technology improvements are implemented.











### **Political Landscape / Permits / Shovel Ready**

### **SEZ Recap**

- SEZ license permits 100% ownership by Magnis Resources Limited
- Legislative amendments allow for International Arbitration if disputes arise
- Revenues from product sales to be paid into overseas bank accounts – defraying major sovereign risk
- Fiscal stability ensured with a range of incentives including a favorable 10-year corporate tax-free period

**EPC Agreement** signed with China Metallurgical Corporation

### **RAP Payments / Relocations Complete**

**Project Funding** – active options ongoing

- JV partners and debt equity financing options being explored
- Site visits have taken place with more planned







### **Technology**





2020

Optimize different cell manufacturing processes to further enhance performance

H1 2021

Finalise Funding

### **Battery Plants**







H2 2020

Commence equipment reassembly + hiring key staff

H<sub>2</sub> 2021

Commissioning complete + first production

H1 2022

Begin commercial production





### **WHY MAGNIS?**

#### MAGNIS ENERGY TECHNOLOGIES ASX: MNS

### **Highlights**



Global Opportunity to make a direct investment into the rapidly growing Lithium-Ion Battery (LIB) sector via Magnis



**Unique IP** with our next generation anode & cathode battery materials, which have patent protection in over 35 countries. Leading particle engineering IP for our raw material processing



The People to Execute with highly experienced & credible Board of Directors. Unrivalled capabilities and expertise in LIB, Automotive Innovation & Mining sectors



**Substantially lower power cost** due to IBM's existing infrastructure at New York plant



End to end Supply Chain Management and control.

Global procurement strategy which includes raw material acquisition and processing

# **Business & Technology Advantages**



**Lower Cost** 



**Increased Life** 



**Better Performance** 



**High Manufacturing Yield** 



**Higher Energy Density** 



**Higher Safety** 



**Scalability** 





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