ZMI
ZINC OF IRELAND LTD

COMPLETION OF MECLEX ACQUISITION

Acquisition completed, with testwork now recommenced and funding secured to move technologies forward

HIGHLIGHTS

- **Completion of the acquisition of 100% of Meclex**, the developers of two proprietary hydrometallurgical metal recovery technologies: **ARGO** and **VOLTA**.
- The Meclex technologies: **ARGO** and **VOLTA**, directly address environmental and regulatory pressures, offering potential **low-temperature, low-emission alternatives** to the incumbent high-cost pyrometallurgical processes
- The acquired technologies aim to **generate economic value** via sustainable and environmentally favourable disruptive applications, unlocking new sources of critical minerals.
- The Company has established a clear pathway to commercialisation: **targeting a low-capital and low-cost entry to market**.
- Testwork programs have already recommenced for **VOLTA**, with **ARGO**'s testwork set to recommence next month.
- Strong cash position with A$5.5m placement to fund the development of the newly acquired technologies and exploration at Kildare.

Mr Greg Ross, CEO commented:

"With the Meclex acquisition complete and new funding secured, ZMI is now able to accelerate our commercial and developmental plans to become a key provider for metals recovery technologies urgently needed to meet the demands from increasing economic, environmental, and regulatory pressures worldwide, but foremost in Europe.

Multiple test work streams for the ARGO technology will commence in July in Europe and are already underway in Australia, with a focus on key near-term development milestones, from collaborations with both world-renowned laboratories and major industry participants. Work is also continuing on the commercialisation of the VOLTA technology, and we anticipate gaining further market traction in the coming months as the pilot and demonstration plants come online. The Company is well placed to capitalise on the growing regulatory constraints on the battery recycling industries in Europe, with further opportunities opening up in the USA.

The next six to 12 months are set to be transformative for ZMI and the Company is looking forward to updating the market as ARGO and VOLTA's development and commercialisation progresses."

ENQUIRIES:

Greg Ross
+61(8) 9322 6322

Tom Corr
+61(8) 9287 4600

Sam Cordin
+61(8) 9322 6322

Zinc of Ireland NL (*to be renamed Zinc of Ireland Limited*) (ASX: ZMI) (**ZMI** or the **Company**) is pleased to advise it has completed the acquisition of 100% of Metallon Clean Extractions BV (**Meclex**), a European-based company focused on the development of metallurgical technologies designed to recover valuable metals from industrial residues and recycling streams. Meclex has developed two proprietary hydrometallurgical metal recovery technologies - **ARGO** and **VOLTA**.

	ARGO	VOLTA
Target industry	Zinc leach residue (ZLR) processing	End-of-life lead-acid battery recycling
Metals potentially recovered	Zn, Pb, **Ag, Ga, Ge, In, Cu**	**Pb**
Process	Low-temperature hydrometallurgy	Ambient-temperature hydrometallurgy
Replaces	Pyrometallurgical ZLR treatment (Waelz kiln / Ausmelt Furnace)	High-temperature lead smelting (1,100–1,300°C)
Key advantage	Recovers critical minerals currently lost to waste	Eliminates SO_2 and lead emissions >99% Pb recovery
Development stage*	TRL 4 Verified by Solvomet/KU Leuven Pilot phase 2027	TRL 6 Pilot constructed by FIB S.p.A TRL 7/8 target end 2026
Strategic partner	Nyrstar (feedstock and permitted facilities)	FIB S.p.A (company controlled by SERI Industrial S.p.A.)
IP ownership	Meclex	Meclex

The development of these technologies is driven by the **growing economic and environmental pressures** faced by industry in Europe and globally, including:

- **Extreme volatility** and energy prices
- **Increasing cost** and escalating regulations of carbon emissions
- **Growing cost, legislation and regulations** restricting waste disposal and enhancing recycling
- **Substantial unutilised value** from unrecovered zinc, lead, silver, and critical minerals

ARGO and **VOLTA** directly address these structural pressures, offering potential low-temperature, low-emission alternatives to the incumbent high-cost pyrometallurgical processes

ARGO TECHNOLOGY

The **ARGO technology** is a hydrometallurgical process designed to recover zinc, lead, silver and potentially critical minerals (**gallium, germanium, and indium**) from Zinc Leach Residue **(ZLR)** generated during primary zinc smelting and refining.

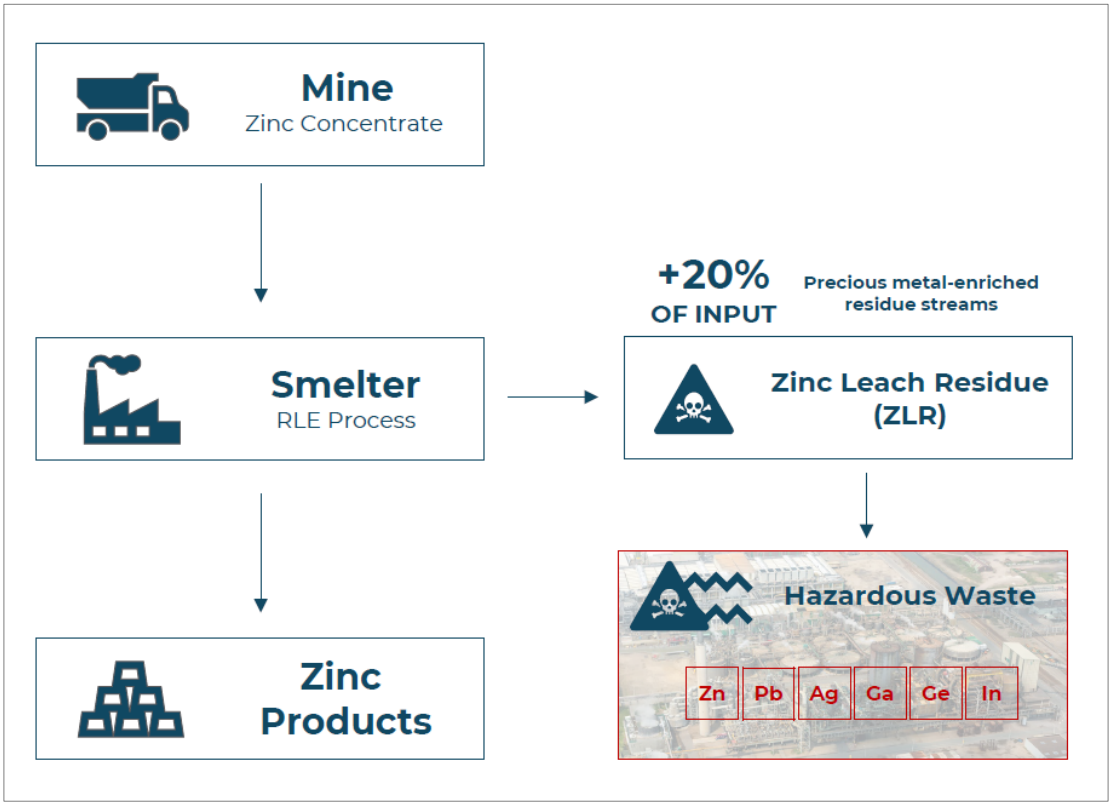


Figure 1: Schematic of Zinc Processing

ARGO is being developed to target considerable benefits compared to traditional and other ZLR processes by providing:

- **Higher recoveries** of zinc, lead, silver and potentially critical minerals
- **Reduction** in energy consumption
- **Reduction** in carbon-dioxide and gaseous toxic metals emissions
- **Reduction** in waste disposal liabilities - stable and inert waste product
- **Potential to increase** zinc concentrate's value and enhance the economics of projects like Kildare

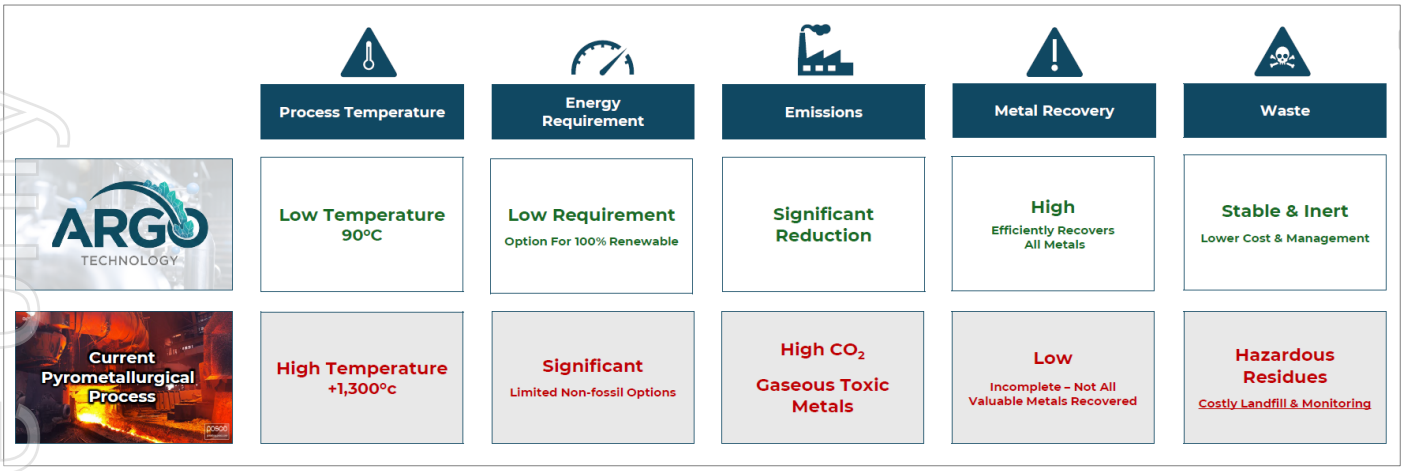
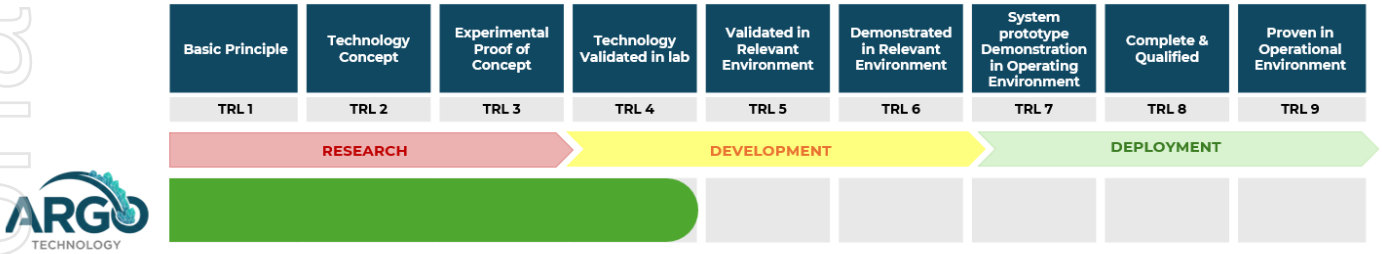


Figure 2: The ARGO Advantage

The ARGO Technology is currently in the development phase with a clear pathway to advance. Meclex has previously successfully carried out the key steps of the process in a lab-scale (batch) environment using distinct industrial samples of ZLR, validating the core technology in the lab.



Meclex has a cooperation agreement for ARGO with Nyrstar, a leading international producer of industrial and critical minerals and metals, including zinc and lead (**ARGO Cooperation Agreement**), confirming a **genuine market demand** for the technology. Under the ARGO Cooperation Agreement, Nyrstar provides Meclex with feedstock (**ZLR**), industry know-how and testing facilities. The terms are non-exclusive with all IP remaining with Meclex.

The ARGO Cooperation Agreement with Nyrstar demonstrates industry demand and the requirement for the technology, and aligns incentives to drive a shift away from the current energy-intensive process.

NEXT STEPS

The ARGO technology is being defined through a 12-month testing program designed to progress the ARGO flowsheet through to the pilot phase in 2027 (TRL 5/6). This laboratory work is being undertaken by Solvomet in Belgium. Solvomet is the Catholic University of Leuven's Research Centre for Circular Hydrometallurgy.

ZMI has commenced simulation testing to develop a full circuit model for a full-scale installation (+50,000 tonne per annum). This work will deliver the critical energy, reagent, and reaction data required to advance design and engineering of the complete circuit model.

Meclex has applied for, and continues to progress, applications for Government grants and incentives and should it be successful, expenditure on ARGO will increase in line with proceeds from grants.

VOLTA TECHNOLOGY

The **VOLTA technology** is a disruptive hydrometallurgical advanced lead-acid battery recycling process using a low-energy and low-temperature process with the potential to replace the current inefficient high-temperature process, resulting in:

- **Elimination** of toxic gases
- **Significant reduction** in carbon-dioxide emissions
- **Ultra-high recoveries** meeting all regulatory thresholds and future targets
- **Significant reduction** in waste

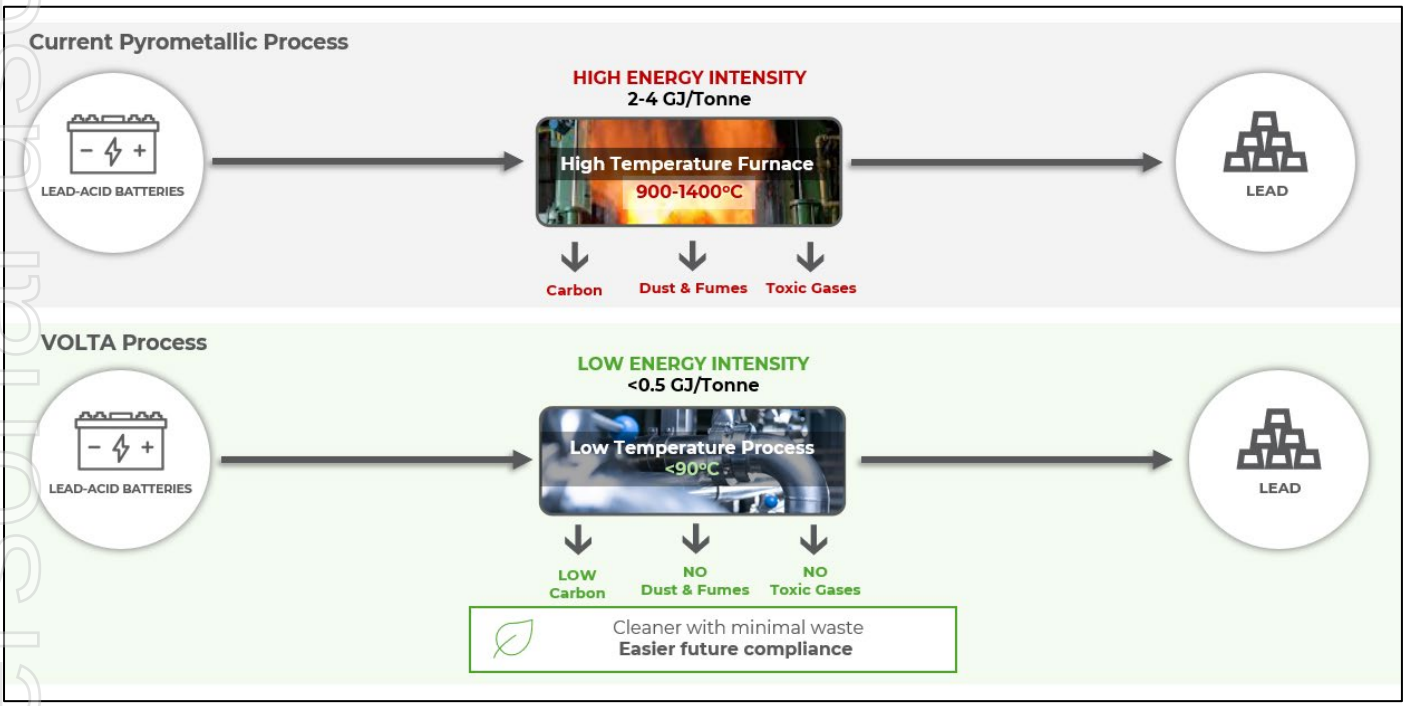


Figure 3: The VOLTA Advantage

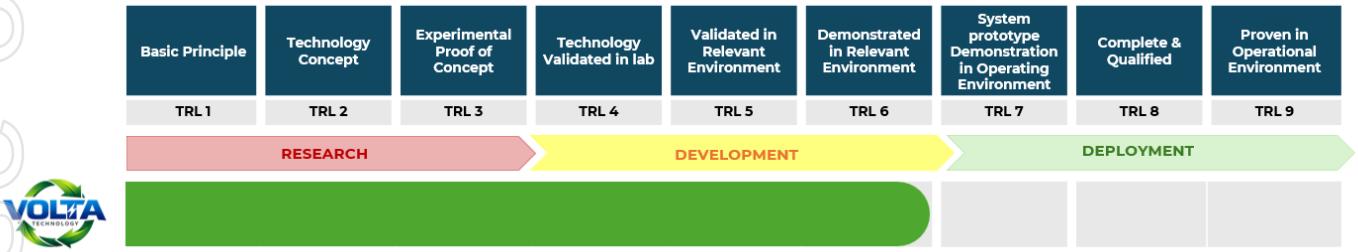
Lead-acid batteries are entering a phase of coexistence between battery chemistries, with lead batteries continuing to play an indispensable role in transportation systems. In Europe alone, every year, 60 million dead car batteries are generated each year, containing over 1Mt of Lead.

Lead-acid batteries are the world's most recycled consumer product, with recycling rates exceeding 99%[1] underpinning a large, stable and predictable feedstock supply for VOLTA. The global lead-acid battery recycling market was valued at approximately USD 16 billion in 2025 and is forecast to reach USD 29 billion by 2034, growing at approximately 6–10% per annum[2].

Once commercialised VOLTA will be disruptive across Europe, providing a simple solution to the EU Battery Regulation (2023/1542), specifically targeting lead recovery and the use of secondary (recycled) materials. Currently, VOLTA achieves recoveries of over 99%, clearly meeting the December 2027 deadline of 90%.

[1] *https://www.jycbattery.com/lead-acid-circular-economy-the-world-s-most-recycled-commodity/*
[2] *https://www.fortunebusinessinsights.com/industry-reports/lead-acid-battery-recycling-market-100242*

The VOLTA technology has previously been tested by FIB S.p.A and the key benefits verified in operation. Improvements have been identified and are currently being implemented in the new pilot plant that will operate within the existing ULAB recycling plant in Calitri, Italy. This pilot program will see the VOLTA technology pass the TRL 7 development stage and move towards a full-scale commercial demonstration plant.



VOLTA is under a Cooperation Agreement with FIB S.p.A, a company-controlled by SERI Industrial S.p.A, a leading European battery recycling company (**VOLTA Cooperation Agreement**), providing a low-cost development pathway to commercialisation.

The VOLTA Cooperation Agreement will provide the pilot plant infrastructure, engineering expertise and funding of development activities for the VOLTA Technology, with a pathway to TRL 8 and subsequent sales of the VOLTA technology within the European Union, providing a clear route to market.

Under the VOLTA Cooperation Agreement, Meclex retains its intellectual property rights and access to other markets around the world.

The agreement significantly reduces the execution and funding risk associated with VOLTA, as ZMI will not be required to construct or fund pilot-scale infrastructure.

The VOLTA Cooperation Agreement is due to expire on 31 August 2026 (unless extended if required), with timing aligned with the successful operation of the Pilot Plant and achieving TRL 7. At this point, the Company expects to transition to a commercial licensing arrangement for the EU market.

NEXT STEPS

Commissioning of the Pilot Plant at the SERI factory in Italy, which is scheduled to commence later this month and continue into July.

ZMI's strategy is to become a technology licensing company and work with its partners to implement the VOLTA technology across Europe and the globe. ZMI has received interest from other third-parties validating its strength and market expansion potential, with the Company in discussions with a potential party on a Licence Agreement for a greenfield plant in Europe.

EXPLORATION & TECHNOLOGY INTEGRATION AT KILDARE

ZMI controls seventeen (17) Prospecting Licenses (PL's) covering an area of 595km^2 containing 130km of prospective strike on the Rathdowney Trend with its flagship and most advanced deposit, Kildare, which hosts an Inferred Mineral Resource Estimate (**MRE**) of 11.3Mt at 9.0% Zn + Pb.

The region is one of the most prospective belts of ground for high-grade, large-tonnage, "Irish Type" Zn/Pb deposits in the world and has recently had some exploration success by other explorers.

ZMI has commenced the planning and permitting of a drilling program across its Kildare project, with an initial 3,500 metres of drilling (**Phase One**) planned. The program is to infill and target extension areas of the existing mineralisation.

On 2 June 2026, drilling approvals were received from the Geoscience Regulation Office (**GSRO**) for the program. The Company has secured a drilling rig, and it is anticipated that drilling will commence mid-July starting at the Rapla prospect and then moving on to the Kildare structure to complete the program.

PLACEMENT

The Company is undertaking a placement to professional and sophisticated investors to raise $5,500,000 at an issue price of $0.01 per Share (**Placement**), of which 466,551,603 shares have been allotted (to raise $4,665,516), with the remaining 83,448,397 shares expected to be allotted in the coming days (to raise $834,484).

The Placement was well-supported with Directors of the Company, Messrs Pearce, Corr and Huljich subscribing for $250,000, $200,000 and $100,000 respectively.

ZMI is now well funded for the development of the ARGO and VOLTA technologies and ongoing exploration at Kildare.

DISCLAIMERS & DISCLOSURES

Competent Persons' Statement

The information in this announcement that relates to the Mineral Resources at ZMI's Kildare Project is extracted from the announcement entitled (Increase in JORC Resource and Completion of Mining Study at the Kildare Zn/Pb Project Co. Kildare, Ireland) created on 8 September 2020 and is available to view on the ASX Platform in the Company announcements section. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

McGregor Shamrock and FC3 Inferred Mineral Resource							
Deposit	**ZnEq Cut Off (%)**	**Mt**	**Zn%**	**Pb%**	**Zn + Pb%**	**Zn (kt)**	**Pb (kt)**
McGregor	3.5	**13.2**	6.2	1.0	**7.1**	815	127
Shamrock	3.5	**6.9**	5.4	0.9	**6.3**	376	59
FC-3	3.5	**1.5**	6.4	0.9	**7.3**	98	14
Total	3.5	**21.7**	5.9	0.9	**6.9**	1,289	201
McGregor	4.0	**11.0**	6.7	1.1	**7.7**	736	117
Shamrock	4.0	**5.4**	6.0	0.9	**6.9**	325	49
FC-3	4.0	**1.2**	7.3	1.0	**8.3**	87	12
Total	4.0	**17.6**	6.5	1.0	**7.5**	1,147	178
McGregor	4.5	**8.7**	7.4	1.2	**8.6**	641	106
Shamrock	4.5	**4.3**	6.6	1.0	**7.5**	282	41
FC-3	4.5	**1.0**	8.0	1.0	**9.0**	80	10
Total	4.5	**14.0**	7.2	1.1	**8.3**	1,003	156
McGregor	5.0	**7.0**	8.1	1.4	**9.5**	565	95
Shamrock	5.0	**3.5**	7.1	0.9	**8.1**	248	33
FC-3	5.0	**0.9**	8.5	1.0	**9.5**	74	9
Total	5.0	**11.3**	7.8	1.2	**9.0**	887	136
McGregor	5.5	**5.9**	8.7	1.5	**10.2**	510	86
Shamrock	5.5	**3.1**	7.4	1.0	**8.4**	228	30
FC-3	5.5	**0.8**	9.0	1.0	**10.0**	70	8
Total	5.5	**9.7**	8.3	1.3	**9.6**	808	124
McGregor	6.0	**5.0**	9.3	1.6	**10.9**	465	78
Shamrock	6.0	**2.6**	7.7	1.0	**8.8**	204	27
FC-3	6.0	**0.7**	9.2	1.0	**10.2**	68	8
Total	6.0	**8.4**	8.8	1.3	**10.1**	737	113

Table 1. Updated Mineral Resource Estimate Table, Kildare.

- Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided
- The ratio between Pb and Zn (0.8) is based on long term average price assumptions of $2,500 per tonne for zinc (Zn) and $2,000 per tonne for lead (Pb)
- ZnEq = (Zn% * Zn recovery) + (0.8* (Pb% * Pb recovery)).
- ZnEq = (Zn% * 0.9639) + (0.8 * Pb% * 0.8644)

Forward Looking Statement

This release may include forward-looking statements, which may be identified by words such as "expects", "anticipates", "believes", "projects", "plans", and similar expressions. These forward-looking statements are based on ZMI's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of ZMI, which could cause actual results to differ materially from such statements. There can be no assurance that forward-looking statements will prove to be correct. ZMI makes no undertaking to subsequently update or revise the forward-looking statements made in this release, to reflect the circumstances or events after the date of that release.

This announcement has been approved and authorised for release by the Company's Chief Executive Officer, Mr Greg Ross.