



Quarterly Investor Webinar

August 2026

Michael Walshe – Managing Director & CEO



ASX: MTM / OTCQX: MTLMY (ADR) & MTMCF

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This announcement contains forward-looking statements concerning Metallium Limited, including statements regarding the performance and outcome of the research and development programme to be undertaken under the agreement, the potential application and scalability of FJH technology for commercial MXene production, the possible negotiation of a longer-term commercial licence and royalty agreement, the potential to establish a repeatable technology-monetisation model, anticipated commercial deployment activities, and the Company's future plans, strategy and objectives.

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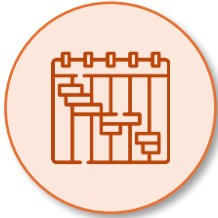
This presentation has been authorized for release by the CEO and Managing Director.



QUARTER HIGHLIGHTS



Our focus has shifted from proving the technology to optimising, scaling and commercialising the platform



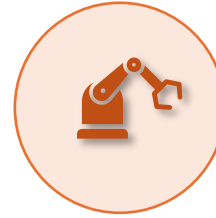
TECHNOLOGY

- Platform substantially de-risked



COMMERCIAL

- PCB feedstock secured
- First revenue pathway established



OPERATIONS

- Gator Point commissioning progressing



GROWTH

- Strategic expansion into MXenes

Transition from Technology Validation to Commercial Execution

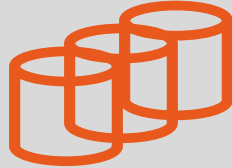
CORE FJH PLATFORM SUBSTANTIALLY DE-RISKED



100+
TEST CAMPAIGNS



12-HOUR
CONTINUOUS
OPERATION



3 FJH UNITS
OPERATING
SIMULTANEOUSLY



400,000x
SCALE-UP



WHAT HAS NOW BEEN PROVEN?

- ✓ Reactor mechanical integrity
- ✓ Process control systems
- ✓ Operating procedures
- ✓ Modular reactor scale-up
- ✓ Stable parallel reactor operation

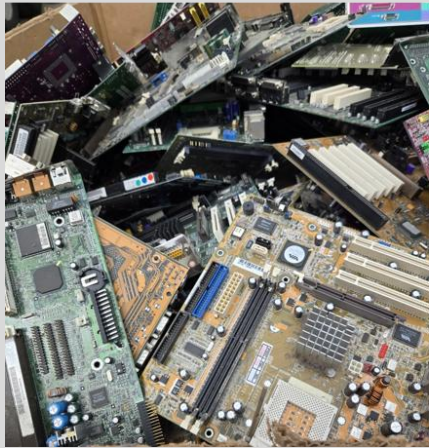
WHAT REMAINS?

- Multi-reactor chlorinated commissioning
- Integrated PCB processing flowsheet demonstration
- Commercial processing services
- Initial saleable product production

**Tech validation phase is substantially complete.
Metallium is now focused on commissioning, optimisation and commercial deployment.**

COMMERCIALISING PCB PROCESSING

Maximising Value from Every PCB

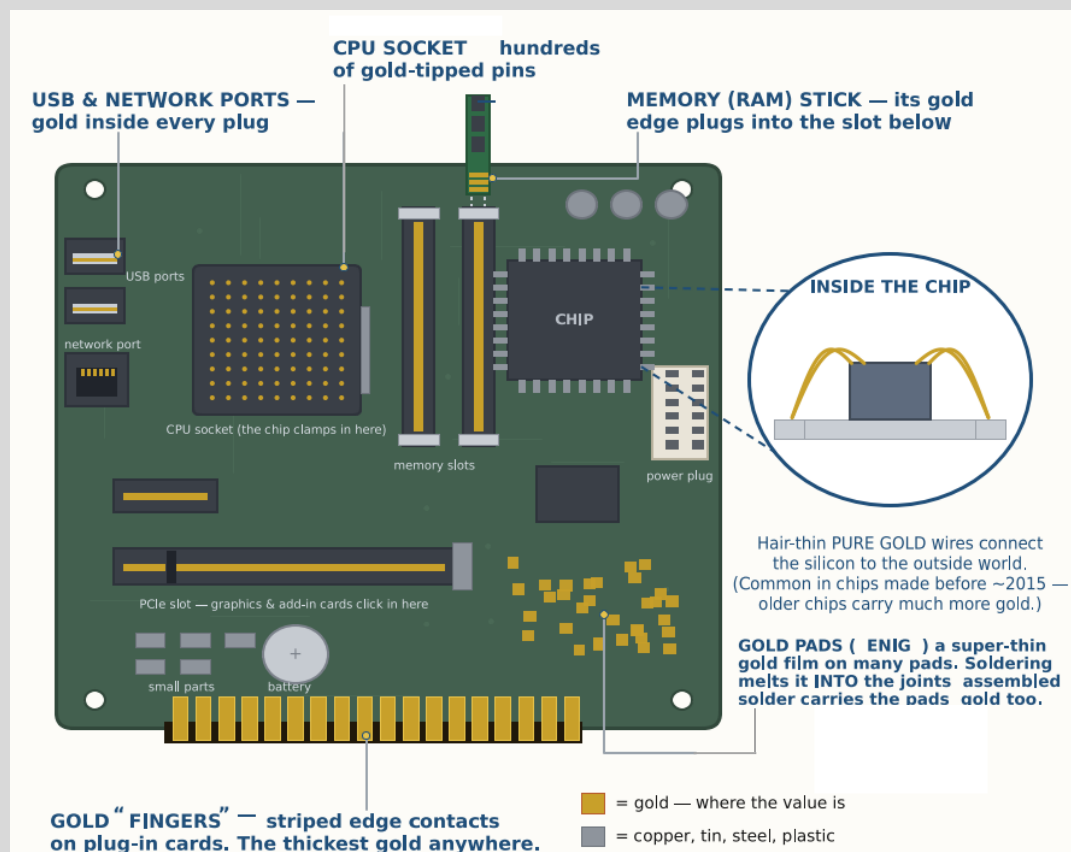


COMMERCIALISING PCB PROCESSING

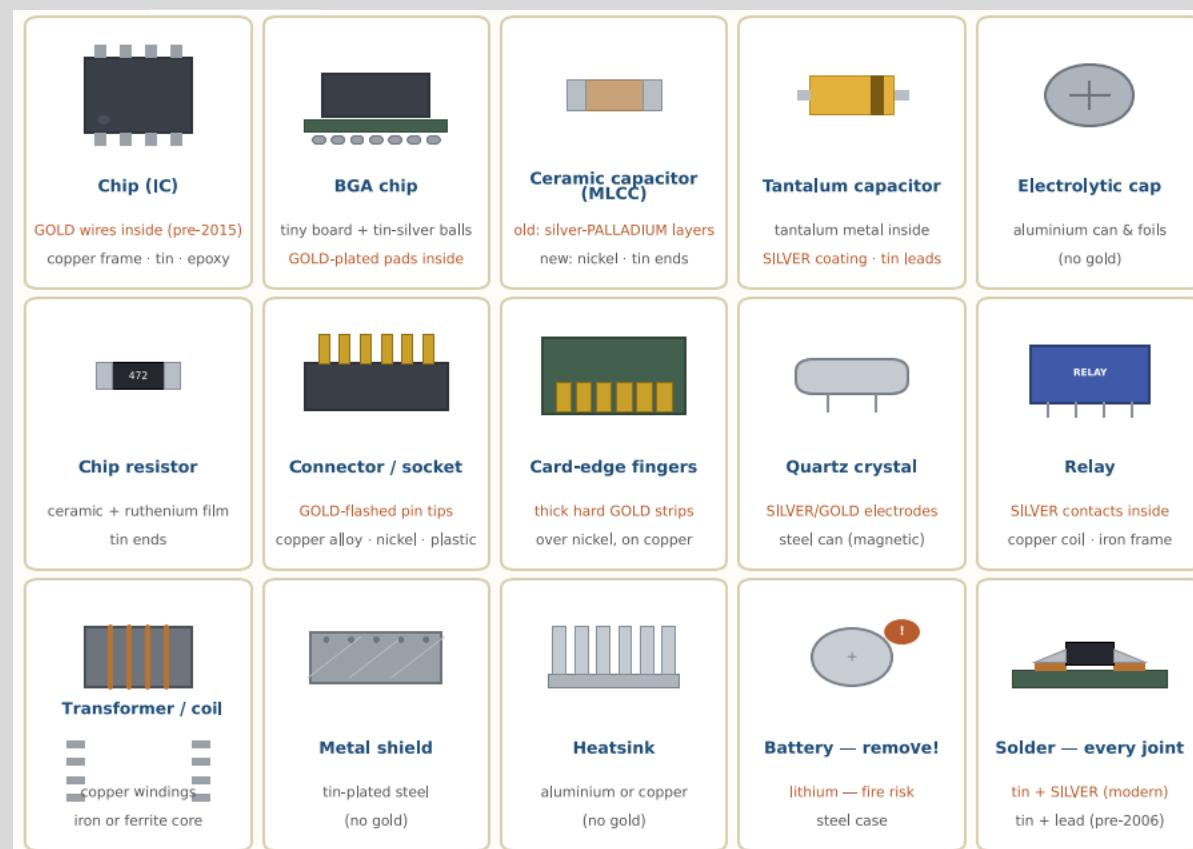
Maximising Value from Every PCB



Typical Printed Circuit Board – Gold Metal Location*



Typical Printed Circuit Board – Metal-Rich Components*

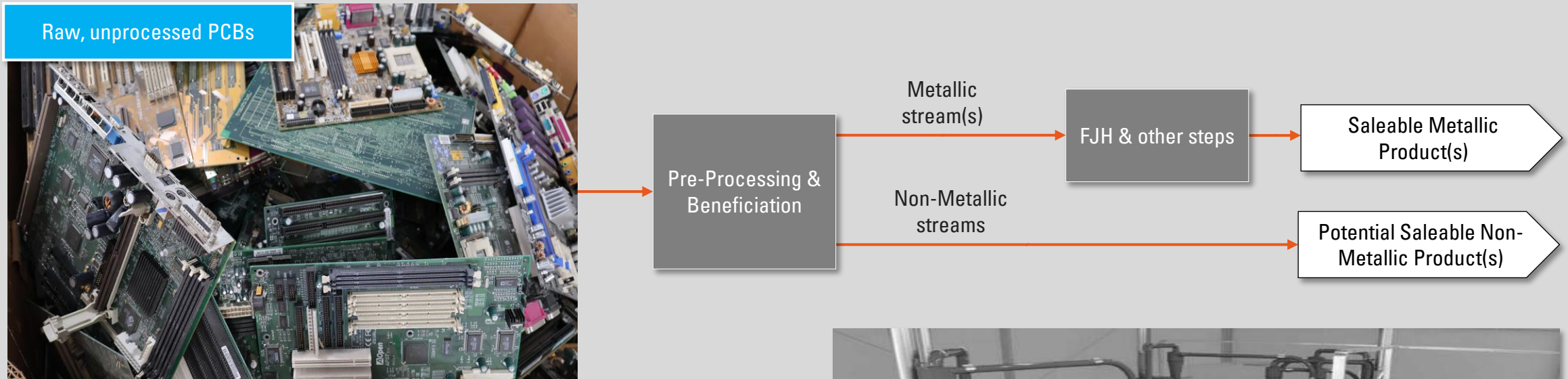


*Illustrative only; Metallium internal technical database.

COMMERCIALISING PCB PROCESSING



Maximising Value from Every PCB



Why develop a proprietary pre-processing flowsheet?

- ✓ Increase reactor throughput
- ✓ Improve economics
- ✓ Recover additional products
- ✓ Generate new IP



*i.e. example dry mechanical separation equipment**

Maximisation of value from Electronic Waste: Higher Returns on Capital & Improved Resource Utilisation

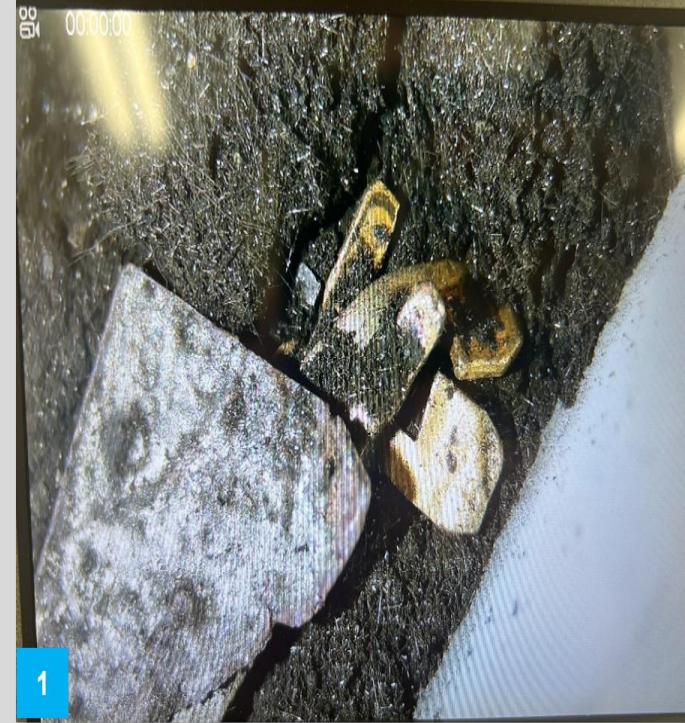
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COMMERCIALISING PCB PROCESSING

Maximising Value from Every PCB



1. Mechanically separated gold fingers;
2. Milled PCB product;
3. Pyrolysed PCB's;
4. Granulated and milled PCB's



1. Solid gold particles visible in post-pyrolysis 'metal-rich carbon' (produced by pyrolysing PCBs;
2. Copper dominant product achieved from mechanical separation of shredded Printed circuit boards

GATOR POINT – FJH TECHNOLOGY CAMPUS



Texas-based hub for ongoing development and eventual commercial production

Completed

- Three-reactor campaign
- Laboratory progressing
- Infrastructure upgrades

Current Focus

- Roof remediation
- TCEQ permit amendment
- Electrical installation

Next Milestones

- Chlorinated campaign
- Integrated flowsheet
- Commercial processing



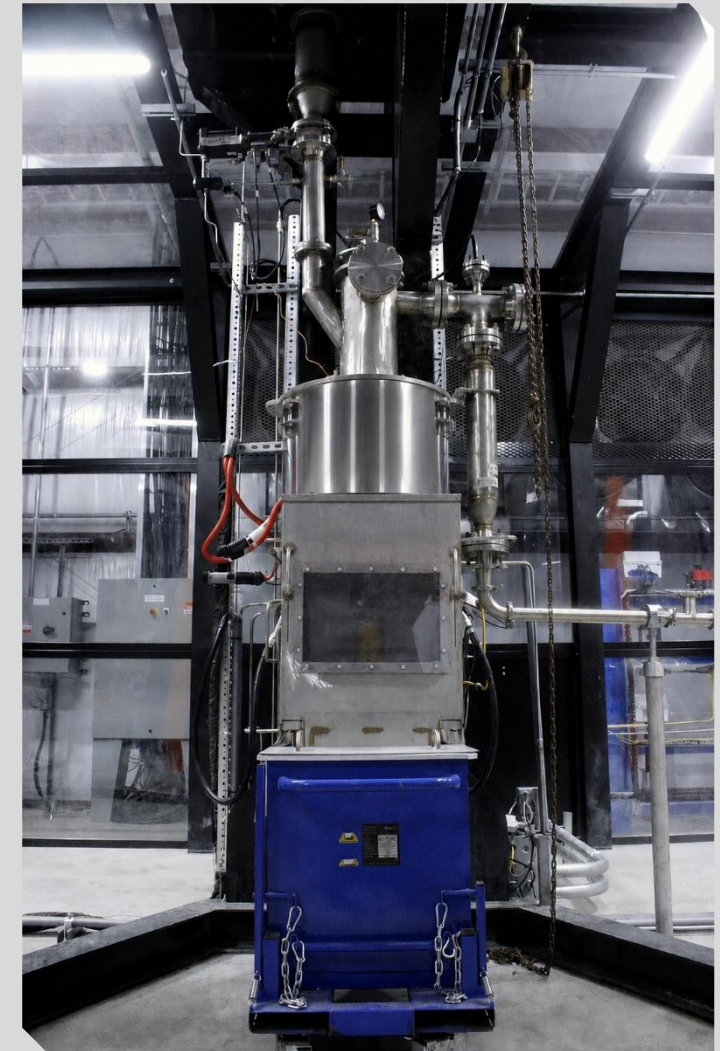
ONGOING COMMISSIONING

Progressing FJH Technology to Commercial Scale



Major interim commissioning milestones achieved: Successful 12-hour continuous commercial-scale FJH reactor campaign using 3 reactors

Next Major Milestone: Multi-reactor chlorinated commissioning



ONGOING COMMISSIONING

Progressing FJH Technology to Commercial Scale



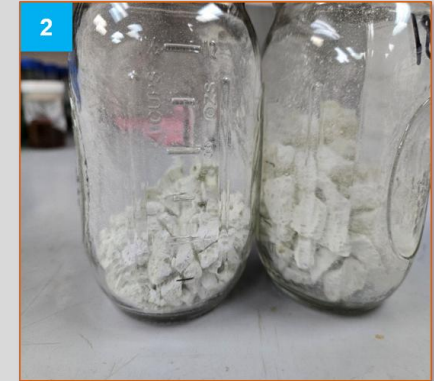
PLATFORM VERSATILITY EXPANDS



Successful development across multiple strategic feedstocks continues to broaden the commercial potential of Flash Joule Heating



1
Pulverised spent catalytic converter feedstock rich in PLATINUM GROUP METALS (Palladium, Platinum, Rhodium)



2
Recovered REE Chloride product produced from raw unbeneficiated REE ore

Coming Soon: ***Dedicated Technical Update***

While e-waste remains Metallium's immediate commercial priority, successful development across multiple critical metal feedstocks continues to demonstrate the versatility of the FJH platform and significantly expands the Company's long-term opportunities

OUR BUSINESS MODEL: TWO ENGINES OF VALUE



U.S. GOVERNMENT ENGAGEMENT

Metallium's Technology and Focus Metals Align with U.S. Strategic Priorities



US\$1M U.S. Defence Contract already in place

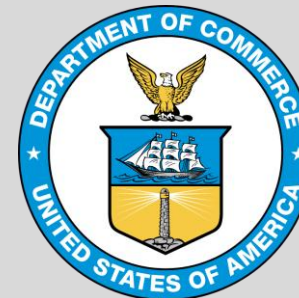
Successful completion of **Phase I Small Business Innovation Research (SBIR) contract** & award of **Phase II** with the **U.S. Department of War** through the Defense Logistics Agency (DLA).



Over **US\$600 million** in identified funding opportunities

Strategic collaboration with AmForge

AmForge



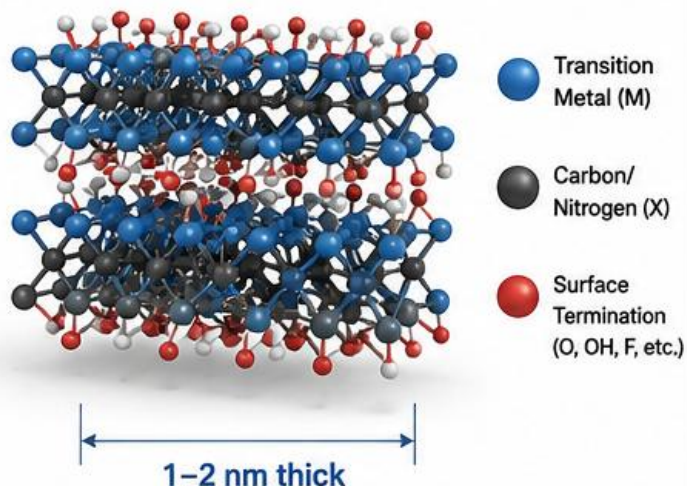
FIRST COMMERCIAL TECHNOLOGY SERVICES AGREEMENT



Advancing Processing-as-a-Service Strategy with ECT

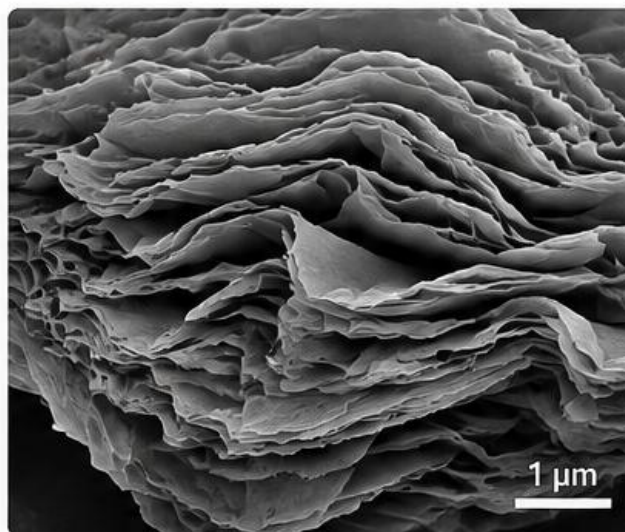
1. ATOMIC LAYERED STRUCTURE

MXenes are atomically thin (1–2 nm) sheets with transition metal carbide/nitride layers and surface terminations.



2. REAL MXENE SHEETS (SEM IMAGE)

Electron microscope image showing the characteristic layered, accordion-like structure of MXene nanosheets.



3. EXCEPTIONAL PROPERTIES

MXenes combine the best of metals and 2D materials, enabling superior performance across industries.



EXCELLENT ELECTRICAL CONDUCTIVITY
High conductivity for energy and electronics



EMI SHIELDING
Effective protection from electromagnetic interference



ENERGY STORAGE
High surface area and fast charge capability for next-gen batteries and supercapacitors



THERMAL MANAGEMENT
High thermal conductivity for heat dissipation applications



CATALYSIS
Active surface sites for catalysis and electrochemical reactions



SENSORS
High sensitivity for chemical, gas and biosensing

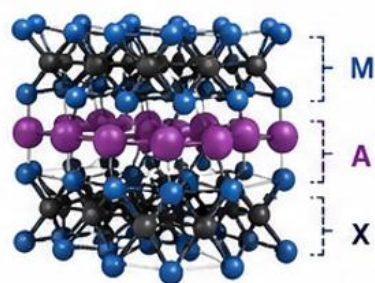
FIRST COMMERCIAL TECHNOLOGY SERVICES AGREEMENT



Advancing Processing-as-a-Service Strategy with ECT

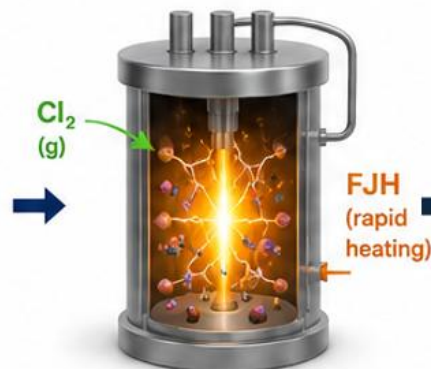
4. FROM MAX PHASE TO MXENE USING FJH + CHLORINE

1. MAX PHASE RAW MATERIAL



MAX phases are layered ternary carbides/nitrides with the general formula $\text{M}_{n+1}\text{AX}_n$.

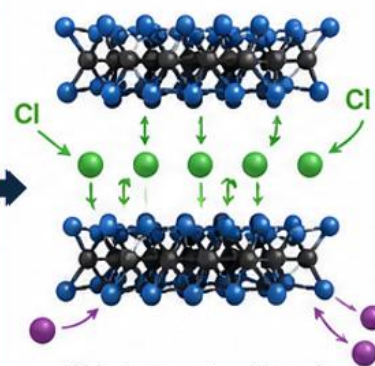
2. FJH + CHLORINE TREATMENT



Rapid, high-temperature treatment using Flash Joule Heating with chlorine gas.

- ✓ Ultra-fast heating
- ✓ Chlorine selectively etches the 'A' layer

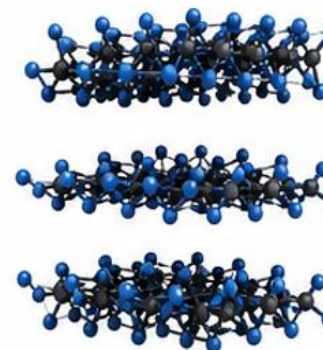
3. SELECTIVE ETCHING OF A-LAYER



Chlorine reacts with and removes the A-layer (e.g., Al) as volatile metal chlorides (e.g., AlCl_3).

- ✓ A-layer converted to volatile chlorides
- ✓ Structure integrity of M_{n+1}X_n layers retained

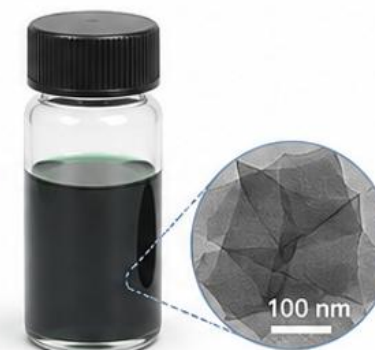
4. MXENE FORMATION



2D MXene layers ($\text{M}_{n+1}\text{X}_n\text{T}_x$) are formed with surface terminations ($\text{T}_x = \text{O}, \text{OH}, \text{F}, \text{Cl}, \text{etc.}$).

- ✓ Atomically thin (1–2 nm) 2D sheets
- ✓ High surface area and reactive terminations

5. MXENE PRODUCT



Delaminated MXene nanosheets

- ✓ Conductive
- ✓ Hydrophilic
- ✓ Ready for formulation and applications

POTENTIAL – TO BE PROVEN VIA TESTING

FLASH JOULE HEATING PLATFORM: Proprietary IP • Scalable • Multiple Applications

BUILD-OWN-OPERATE (BOO) (MTM Owned Facilities)

Metallium owns and operates FJH processing facilities.

- Recover critical and precious metals from strategic feedstocks
- Sell recovered metals
- Generate strong long-term value from owned operations

Example: Gator Point & future MTM facilities

CORE STRATEGIC PRIORITY
High-value metal recovery operations

PROCESSING-AS-A-SERVICE (Customer access to MTM's FJH Platform)

Technology Services (*Engineering & Development*)

Engineering support, reactor access and R&D to develop customer applications.



Pilot Programme (*Demonstration*)

Pilot and demo campaigns to validate performance and economic outcomes.



Commercial Deployment (*Scale & Optimise*)

Scale-up and optimisation leading to **commercial-ready operations**.



Commercial Agreement (*Long-Term Relationship*)

Potential revenue streams:

- Technology licences
- Reactor & equipment supply
- Operator support
- Processing fees,
- Service and spare parts
- Royalty streams

CAPITAL-LIGHT RECURRING REVENUES

Engineering • Licences • Fees • Equipment • Royalties

ECT
Deal

We are
here

U.S. CAPITAL MARKETS EXPANSION STRATEGY

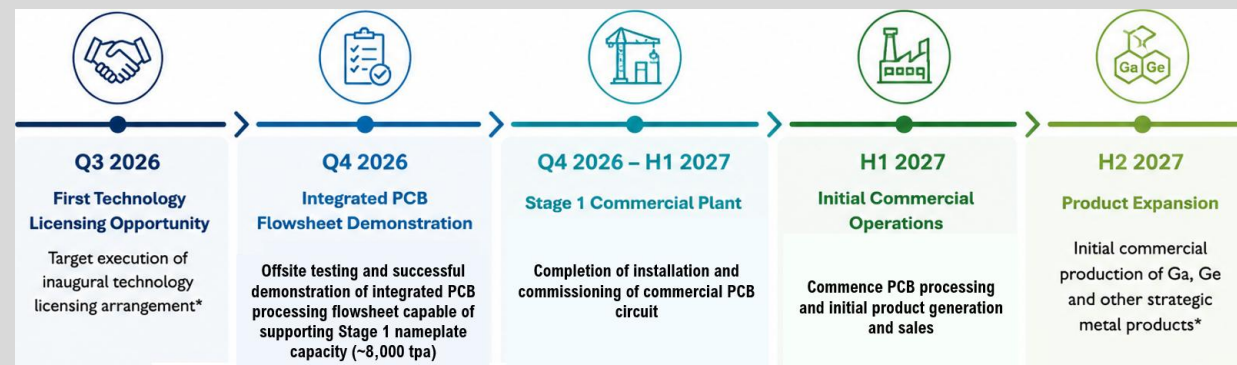
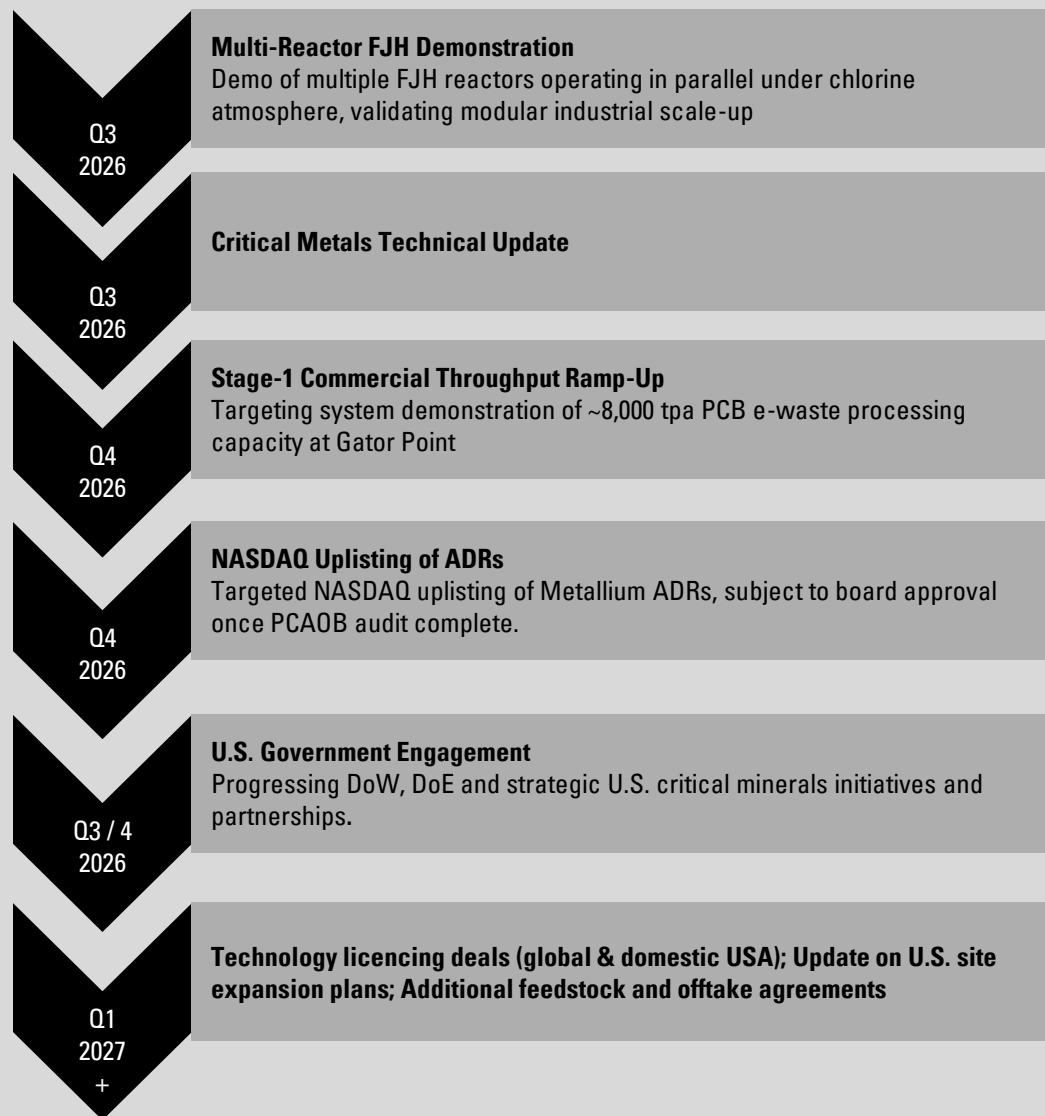


PCAOB audit underway and nearing completion to support anticipated Nasdaq uplisting of American Depositary Receipts (ADRs) by CYQ4 2026

- ✓ ADR established
- ✓ PCAOB audit nearing completion
- ✓ Targeting NASDAQ ADR uplisting



UPCOMING CATALYSTS



Indicative Commercialisation Roadmap

CLOSING



Technology

Platform substantially de-risked

Commercialisation

Execution accelerating

Growth

Building a diversified critical materials and advanced materials platform.

 METALLIUM