

PURE  
RESOURCES 

---

# 3D Recycled Carbon Nanotube Fibre IP Collaboration

High-Flux, Low-Mass Thermal Management

# Disclaimer & Cautionary Statement

Pure Resources Limited | ASX: PR1

ACN 653 330 413

## **IMPORTANT NOTICE**

This presentation has been prepared by Pure Resources Limited (“Company” or “Pure”). It is provided for information purposes only and is not a prospectus, product disclosure statement or offering document under Australian law or any other jurisdiction. This presentation is not, and does not constitute, an offer, invitation, solicitation or recommendation to subscribe for or purchase securities in any jurisdiction. Any offer of securities will be made in accordance with the Corporations Act 2001 (Cth) and applicable laws.

## **NOT FINANCIAL PRODUCT ADVICE**

This presentation does not constitute financial product, investment, legal, tax or other advice. It has been prepared without taking into account the objectives, financial situation or needs of any recipient. Recipients should consider the appropriateness of the information and seek independent professional advice.

## **FORWARD-LOOKING STATEMENTS**

This presentation contains forward-looking statements, including statements regarding the Company’s expectations, intentions, plans and beliefs regarding future events, including exploration results, development outcomes, commercialisation pathways, and market opportunities (including those relating to the Rice University collaboration and downstream carbon materials strategy). Forward-looking statements are subject to known and unknown risks, uncertainties and assumptions, many of which are beyond the control of the Company. Actual results may differ materially from those expressed or implied. The Company does not undertake any obligation to update forward-looking statements, except as required by law.

## **EXPLORATION & TECHNICAL INFORMATION**

This presentation includes references to exploration results and technical information previously released to ASX. The Company confirms that it is not aware of any new information or data that materially affects the information included in those announcements. Where applicable, exploration targets, conceptual studies or early-stage R&D outcomes (including carbon fibre applications and thermal management systems) are conceptual in nature and there is no certainty that further work will result in the determination of a Mineral Resource or that any development will proceed.

## **R&D AND COMMERCIALISATION RISK**

The Company’s collaboration activities, including those with research institutions, are at an early stage. There is no guarantee that research outcomes will be technically successful, commercially viable, or capable of being scaled or monetised. Statements regarding potential applications, markets (including defence, AI and data centre infrastructure), or total addressable markets are indicative only and should not be relied upon as forecasts.

## **PLACEMENT & CAPITAL RAISING**

The proposed placement described in this presentation is subject to shareholder approval and other conditions. There is no certainty that the capital raising will proceed as described or at all.

## **NO LIABILITY**

To the maximum extent permitted by law, the Company and its directors, officers, employees, agents and advisers disclaim all liability for any loss or damage arising from the use of this presentation or its contents.

## **CONFIDENTIALITY**

This presentation is confidential and is not to be distributed, reproduced or disclosed, in whole or in part, without the prior written consent of the Company.

# Corporate Structure

Pure Resources Limited | ASX: PR1

Pure Resources is a mineral exploration company focused on its Garnet Hills Garnet and Graphite project, located on a granted mining lease in the Halls Creek region of Western Australia.

## Key Metrics

69,842,127

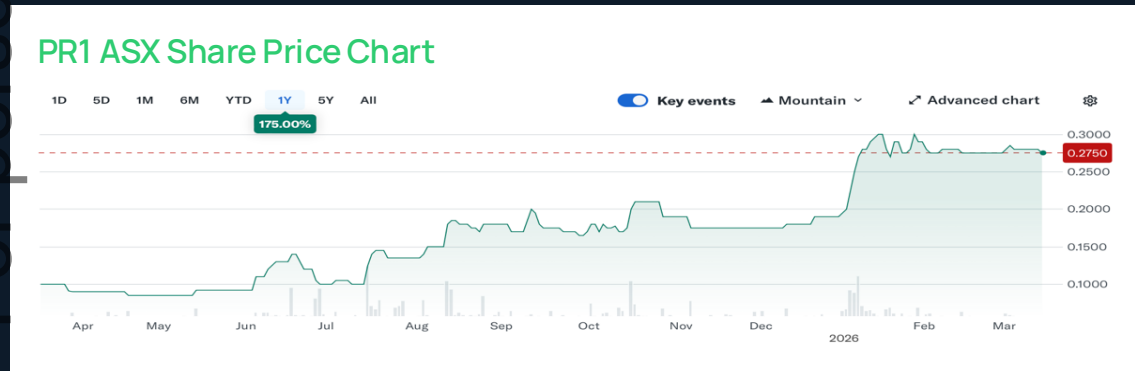
Shares on Issue  
(post placement)

\$17,460,531

Market Capitalisation (@\$0.25  
(post placement))

~\$4,000,000

Cash (post placement)



Top 20 Ownership

75%

## Board of Directors

Quinton Meyers (Non-Executive Chairman)

Jane Law (Non-Executive Director)

Marty Helean (Non-Executive Director)

# Material Terms Of The R&D Collaboration

Pure Resources Limited X Rice University | Legally Binding Agreement

## Graphite Supply from Garnet Hills

Pure will provide samples of graphite materials from the 100%-owned Garnet Hills Project to Rice for the development and testing of CNTF systems.

## World-Class Research Team

Rice provides Prof. Pasquali, Preston, Sanchez and Wehmeyer, full testing facilities, and delivers all technical assessments and IP outputs to Pure.

## USD\$500,000 R&D Funding

Pure to fund up to USD\$500,000 over a maximum 24-month term for the purpose of the collaboration.

## Joint IP Ownership

Both Pure and Rice will have joint ownership of any intellectual property where there are inventors from both Rice and Pure Resources— including performance data on Garnet Hills materials in CNTF structures.

## Commercial Pathway

Outputs provide Pure with an early-stage understanding of technical capabilities and commercialisation avenues for Garnet Hills graphite in advanced carbon markets.

## Rice University Pedigree

Rice's capability validated through prior ASX collaborations: Metallium Ltd (ASX:MTM) — Flash Joule Heating; Locksley Resources (ASX:LKY) — DeepSolve Technology.

# Garnet Hills Project

## The Graphite Feedstock Underpinning The Rice University Collaboration

### Large-to-Jumbo Flake Graphite<sup>1</sup>

Recent petrographic studies confirm average flake sizes of ~200 µm with occurrences exceeding 300 µm – supporting strong beneficiation potential and premium pricing.

Clean, inclusion-free graphite hosted in high-grade metamorphic rocks – a technically compelling hard-rock graphite opportunity and viable material for the Rice University collaboration.

### Project Overview

- 100% owned by Pure Resources Limited
- Granted mining lease, Halls Creek region, Western Australia
- Dual-commodity platform: graphite and garnet
- Surrounded by GCM Corporation Ltd (ASX:GCM) McIntosh Graphite Project
- US market alignment: thermal management, defence and REE extraction pathways

### Mine-to-Materials Strategy

Graphite and carbon materials form the foundation of a rapidly expanding advanced materials ecosystem underpinning next-generation energy, electronics and AI infrastructure.

Global technology trends are shifting value creation downstream into engineered carbon materials: graphene, carbon fibres and carbon nanotube-based systems.

The Rice collaboration positions Pure within emerging supply chains linking critical minerals, advanced materials manufacturing and next-generation digital infrastructure.

# Garnet Hills Project

## Large To Jumbo Flake Graphite On Granted Mining Lease<sup>1</sup>

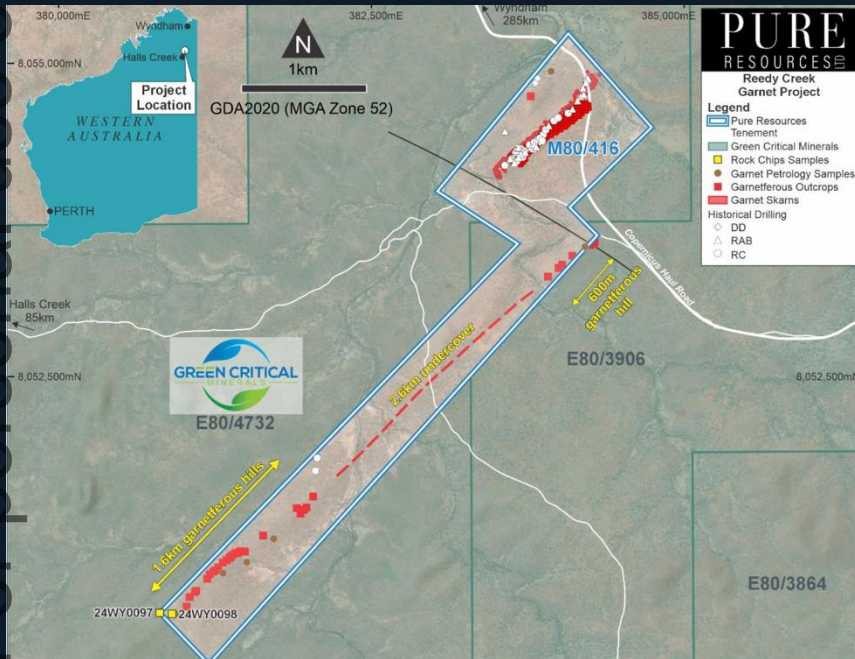


Figure 1 - Graphite Sample locations at M80/416

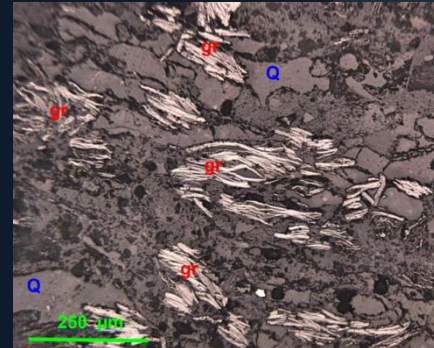


Figure 2. Sample P20097

- Large - sized flake graphite (gr) occurs as platy clumps that parallel the quartzofeldspathic (Q) gneissic host.
- Plane polarized reflected light.
- Field of view - 1.13 mm

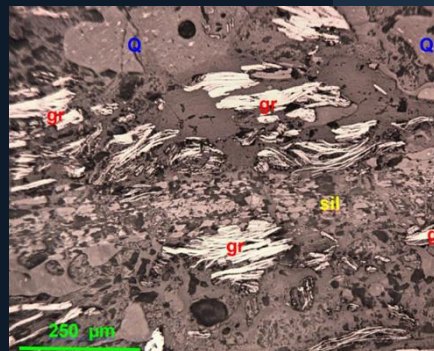


Figure 3. Sample P20098

- Large - sized flake graphite (gr) occurs as singular flakes and platy clumps that parallel the quartzofeldspathic (Q) gneissic host.
- Fibrous sillimanite (sil) parallels the gneissosity.
- Plane polarized reflected light.
- Field of view - 1.13 mm

# Building A Global Team To Deliver

## Building A World-class Leadership Team

### OUR GOAL

Lead the transformation of the U.S. thermal management industry through:

Collaboration

---

Innovation

---

Strategic leadership

### Building A World-class Team

Actively forming a world-class management and advisory board with deep expertise in:



Achieving the highest levels in the value-add chain (downstream)



U.S. market expansion and regulatory frameworks

# Intellectual Property Target Market

## USA Data Centres, AI & Defence

Massive Scale & Opportunity



**~US\$30 - \$100BN+**

Advanced Heat Exchange &  
Heat Sink Platforms Market (USA TAM)

**US\$35BN+**

AI, Defence System-Level  
Thermal Architecture (USA TAM)

CNTF's core properties are application-agnostic.

The Company will evaluate adjacent commercial opportunities as the R&D programme matures and IP positions are established

# Our IP Experts – Rice University

Integrated Technical Capability



**Professor  
Daniel J.  
Preston**

Assistant Professor  
Mechanical  
Engineering



**Professor  
Geoff  
Wehmeyer**

Assistant Professor  
Mechanical  
Engineering



**Professor  
Matteo  
Pasquali**

A.J. Hartsook  
Professor  
Chemical &  
Biomolecular  
Engineering



**Professor  
Vanessa  
Sanchez**

Assistant Professor  
Mechanical  
Engineering



Carbon  
Hub

# Overview – Why

## Advanced TIM's, Heat Exchange & Heat Sink Platforms

### Power & Cooling: The Two Biggest Data Centre Running Costs

- Cool running stacks quicker whilst maintaining performance
- Avoid thermal inefficiencies that lead to downtime, system failure, and energy waste

Consultation with end users reveals an alternative requirement to current Copper and Aluminum heat sinks and improved TIM efficiency – creating a clear market opening for next-gen materials.

Remove commodity price and supply shocks – ultimately lessening the requirement for critical minerals in the supply chain.

Traditional materials face Size, Weight, and Performance constraints – CNTF's aim to eliminate these limitations entirely.

# Overview - The Problem

Thermal Management Is Now A Mission Constraint

Conventional cooling architectures are reaching physical limits.

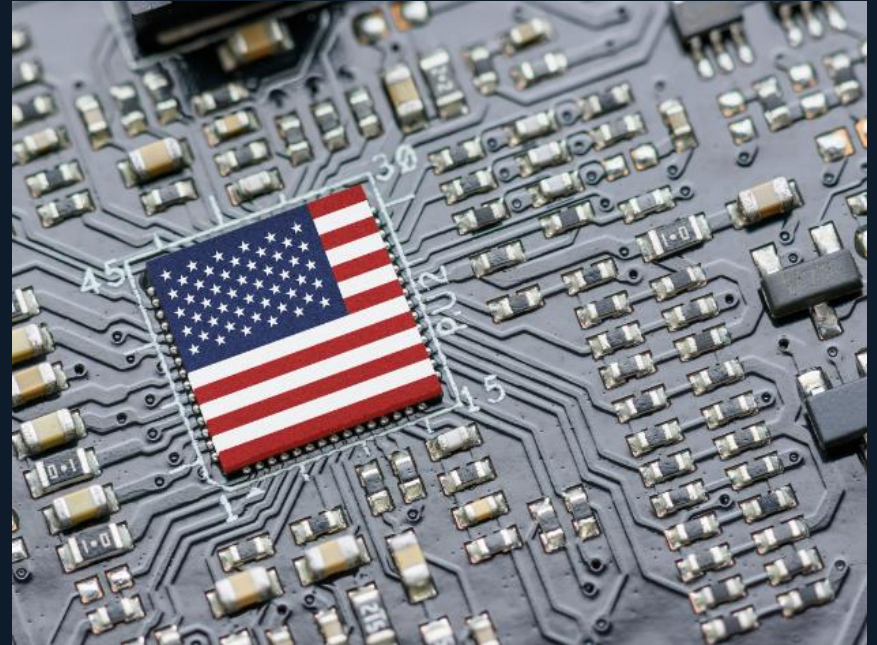
HEAT LOAD

↑↑↑

VS

COOLING CAPABILITY

→ Stagnant



# Overview - Why Now

## Heat Flux Is Rising Everywhere

Power density is increasing faster than metal-based cooling can scale.



Data Centers



Aviation / Aerospace



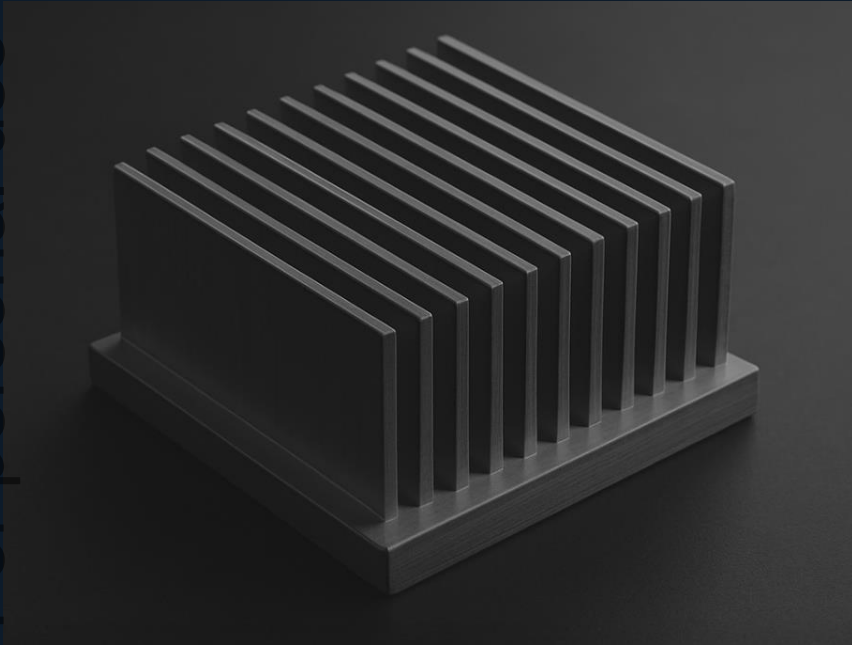
AI Edge Compute

⚡ The cooling gap is now a hard constraint on peak power, range, and operational tempo.

For personal use only

# Overview - Limit Of Metals

## Why Aluminium And Copper Don't Scale



### High Mass

Large heat sink mass per unit heat rejected — a critical penalty for mobile platforms.

### Geometry Constraints

Directionally engineered heat flow through extreme thermal anisotropy and textile-enabled 3D architectures impossible with machined metals

### Diminishing Returns

Further miniaturisation yields diminishing thermal gains with metals.

# Overview – What Are CNTF's?

## Carbon Nanotube Fibres (CNTFs)

Hierarchical carbon nanotube fibres processable as yarns and textiles allow for superior heat flow engineering

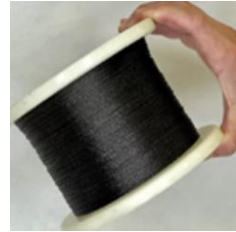
Single CNT



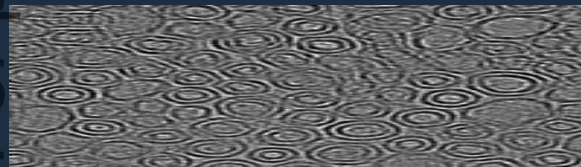
CNT Fiber



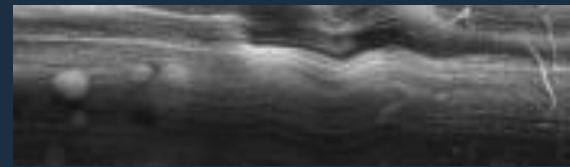
CNTF Yarns



CNTF Fabrics



SEM



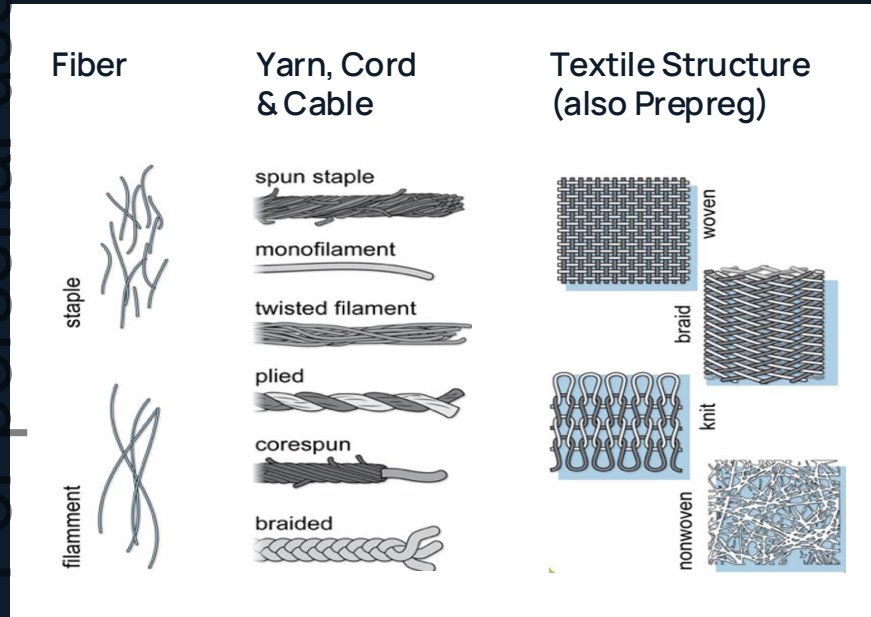
TEM  
/ CNTFs

For personal use only

# Overview - From Fibres To Structures

## From Fibres To Thermal Architectures

Textile manufacturing enables scalable, customisable thermal structures.



## Geometry freedom impossible with metals

3D braiding enables complex internal channel geometries

3D knitting creates conformable, surface-hugging structures

Stitching and bonding for rapid, scalable assembly

Textile architecture = unprecedented geometry freedom

# Overview - Real Hardware

## Hierarchically Structured CNTF Heat Exchangers



Lightweight

High-surface-area heat exchange structures from

Wire → Array → Fabric.

3D braiding enables complex internal channel geometries

# Overview– How

## Ai Defence Thermal Architecture

### Rack-Level AI Heat Density



Optimisation of heat density at rack level for next-generation AI compute deployments in defence and sovereign facilities.

### Sovereign Compute Cluster



Thermal engineering for sovereign compute clusters requiring secure, high-performance cooling in classified environments.

### Radar & Electronic Warfare



Thermal management solutions for radar systems and electronic warfare platforms requiring reliable cooling under combat conditions.

### Passive vs Liquid Integration



Modelling and analysis of passive versus liquid integration pathways to determine optimal cooling architecture per platform.

# Overview – Why

## Potential CNTF Thermal Management Solutions into the Defence Sector

### Potential AUKUS Collaboration Focus

Engage with Australian and USA defence to explore opportunities



Ruggedised Structural-Thermal Enclosures



Shock & Vibration Resistant Composite Heat Spreaders



High-Temperature Continuous Operation Systems



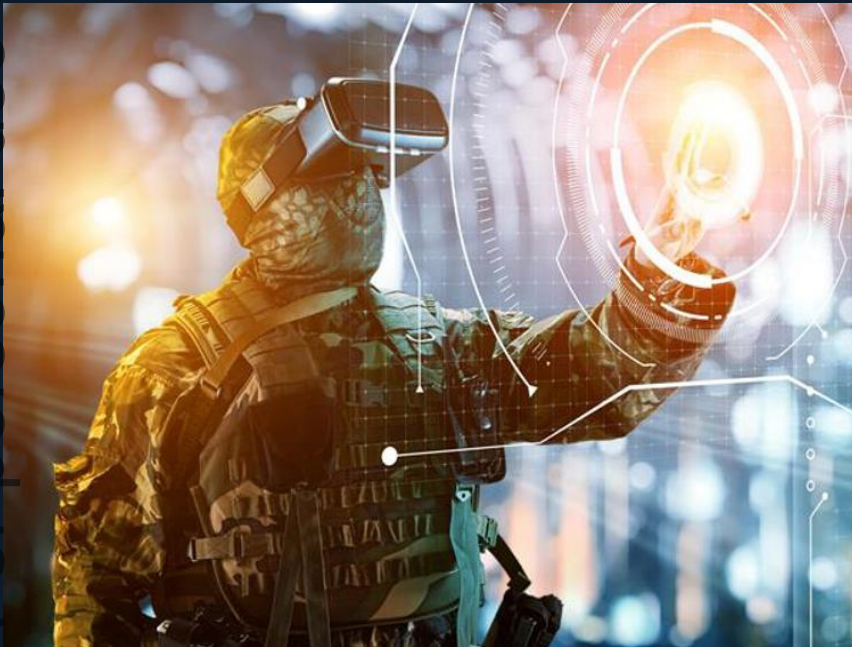
Weight-Reduction for Aerospace & Mobility



Utilising Thermal Management into the defense sector

# Overview – Defence Applications

Relevant Across DoD Systems



## Sustained Edge Compute

Enable higher peak power and burst engagement

## Higher-Duty RF Systems

Improve reliability, reduce system vulnerability

## Autonomous Platforms

Support mobile platforms and operational stealth

## Power Density Electronics

Higher power density without thermal penalty

# Placement

\$3,000,000 Equity Placement | Subject To Shareholder Approval | Expected End April 2026

**\$3,000,000**

Placement Raise (before costs)

**\$0.25 per share**

Issue Price | 12,000,000 shares to be issued

## USE OF PROCEEDS

Follow-up exploration and drilling programs at the Garnet Hills Graphite Project

Exploration of Kilarney, Mt Monger, Yandal and Yundamindra Projects; and general working capital

Advancement of metallurgical and beneficiation studies to progress carbon downstream strategy initiatives to benefit the company, including the Rice University collaboration

For personal use only

# PURE

RESOURCES

---

High-Flux, Low-Mass Thermal Management

[www.pureresources.com.au](http://www.pureresources.com.au)

+61 8 9388 0051

22 Townshend Road, Subiaco WA 6008

ASX Presentation · April 2026