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## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT

26 February 2026

# Eden Invests in R&D to expand Carbon Nanotube Technology into AI Data Centres

Eden Innovations Ltd (“Eden” or the “Company”) (ASX: EDE) is pleased to report that it has decided to acquire new research and development (“R&D”) equipment, necessary to enable it to better assist all industries, with a strong focus on data centres, in managing a range of difficult issues, through using higher performance, carbon nanotube (CNT) enriched concrete.

Whilst the increased R&D capacity is intended to help better address these issues when faced by all developers of concrete structures and infrastructure, particular attention will be paid to the unique requirements of data centres, a very rapidly expanding industry, particularly in North America.

Specifically, the inclusion of CNT in concrete used for data centres, can add two enormously beneficial side-effects:

- greatly improved heat dissipation and
- radio frequency shielding (electro-magnetic pulse (EMP) and/or solar flare radiation).

EdenCrete products are able to help resolve, or at least reduce, a wide range of issues, faced when used in concrete for all kinds of infrastructure investment.

Many of these issues can be satisfied, or at least materially improved, when concrete mix designs enhanced with carbon nanotubes (CNT) supplied by one of the EdenCrete admixtures are used for a range of possible performance enhancements.

The decision follows the Company’s transition to a debt-free position (subject to shareholder approval), strengthened balance sheet and record demand for its concrete additives powered by its patented carbon nanotube technology.

## Key Highlights

- Eden has successfully commercialised its proprietary carbon nanotube production process at scale, becoming one of the first companies globally to achieve financially viable CNT manufacturing and real-world large-scale use in concrete.
- Eden has established two key intellectual property moats: a proprietary, low-cost carbon nanotube production platform and a patented dispersion technology that enables uniform integration of CNTs into host materials, maximising strength and performance outcomes.
- CNT-enhanced concrete has been shown to improve and introduce a level of electromagnetic shielding (EMP protection), increased heat dissipation, durability, strength.
- These unique properties make EdenCrete ideal for construction of AI data centres.
- EdenCrete is well proven over the past 11 years, and is ideal for construction and infrastructure generally including roads, bridges, airports, runways, ports, dams and other critical infrastructure, commercial, industrial, and residential buildings, warehousing, waste disposal and waste transfer, high-rise residential, office and hospitality buildings, but not limited.
- CNT-enhanced materials exhibit high thermal conductivity, which may support improved heat transfer and thermal load management in high-performance computing and data centre environments.
- Managing thermal load is one of the key infrastructure challenges facing the rapidly expanding AI data centre sector.
- carbon nanotubes provide superior reinforcement and electrical conductivity at lower inclusion rates and may also contribute to shielding against electromagnetic and radio frequency interference (EMI and RFI) in critical infrastructure environments<sup>1</sup>.
- Data centre construction is one of the fastest-growing infrastructure sectors globally, forecast to more than double over the next decade toward USD 1 trillion+ by 2035 driven by AI, cloud computing, and digital transformation<sup>2</sup>.
- Approved by 20+ US Departments of Transportation, positioning Eden to leverage its established regulatory credibility as it expands into the rapidly growing data centre infrastructure market.

## Data Centres

- Acquiring the new R&D equipment will greatly expand Eden’s capability to further assist data centre design by supplying advice on concrete mix design and EdenCrete product recommendation for carbon nanotube (CNT) assisted heat dissipation through the structural concrete.
- Carbon nanotubes can add significant benefits to concrete performance in general, and more specifically also to concrete applications where the unique thermal and optical properties of the CNT adds huge value if the properties can be made to transfer to the CNT increased concrete after hardening.
- With the acquisition of new equipment, Eden will be exploring methods of enhancing heat transfer of structural concrete by means of CNT addition through use of Eden’s EdenCrete products, to build into the structure a “smart”-functionality that will benefit the construction and lower the cost of operation and maintenance throughout its lifetime.
- EdenCrete products are already used to enhance a number of concrete properties, such as strength, abrasion resistance, chloride protection, and hence general durability. Being able to also quantify the long-term benefits of having improved heat transfer/heat dissipation capability of concrete made with EdenCrete product included, would likely add significant value to a number of concrete applications, for example data centres, along with the usual selling points of strength and durability.

## EdenCrete Enabling the AI Build-Out

Eden is aligning its commercial strategy towards the fastest growing and most capital-intensive global infrastructure segment.

Global AI expansion is driving unprecedented data centre construction, particularly in the United States.

### **CNT-enhanced concrete delivers specific performance advantages for hyperscale and AI data centres:**

#### **1. Electromagnetic Shielding & Heat Absorption<sup>4</sup>**

Concrete by itself has very low electrical conductivity and offers limited shielding against electromagnetic waves. Adding carbon nanotubes significantly increases electrical conductivity, which is the primary mechanism by which materials can attenuate electromagnetic energy. Increased conductivity improves both reflection and absorption of electromagnetic waves.

- CNT reinforcement creates a conductive network within the concrete matrix once a critical concentration (percolation threshold) is reached.
- This conductive network enables the material to absorb and interfere with the propagation of electromagnetic waves, reducing signal strength.

## **Carbon nanotubes help concrete interact with EM waves in several ways:**

Electrical Conductivity: CNTs increase the electrical connectivity of the concrete matrix, enabling electrons to move more freely and disrupting incoming electromagnetic fields.

This leads to reflection and absorption of EM waves depending on frequency and CNT content.

Dielectric Loss & Absorption: CNTs introduce dielectric losses, meaning they convert part of the electromagnetic energy into heat, which also reduces signal transmission through the material.

Multiple Scatter & Reflection: The nano- and micro-structure of a CNT-reinforced concrete can cause multiple internal reflections, scattering electromagnetic energy and further attenuating signals.

### **2. Higher Load Capacity<sup>5</sup>**

- CNTs densify the cement matrix
- Enable support of heavier server racks
- Reduce need for thicker slabs

### **3. Crack Prevention Under 24/7 Loading**

- Micro-crack bridging prevents structural degradation
- Improves long-term stability under constant load and thermal cycling

### **4. Fatigue & Vibration Resistance**

- Superior load transfer improves durability under equipment vibration
- Handles repeated upgrades and load changes

### **5. Reduced Permeability**

- Protects structural floors from moisture and long-term deterioration

EdenCrete® is a drop-in additive requiring no new construction method, making it highly attractive to major contractors delivering hyperscale builds.

Data centre construction is one of the fastest-growing infrastructure sectors globally, supported by AI demand and sovereign digital capability initiatives.

## **EdenCrete® – Smart Concrete for Data Centres & Next-Generation Infrastructure**

EdenCrete® is a carbon nanotube-enriched liquid concrete admixture that materially enhances the strength, durability and functionality of concrete.

Carbon nanotubes (CNTs) are microscopic carbon fibres approximately 50,000 times thinner than a human hair and up to 100 times stronger than steel. When dispersed in concrete, CNTs:

- Enhance electromagnetic shielding (EMP protection)
- Absorb heat
- Fill nano-scale voids
- Bridge and arrest micro-cracks
- Reinforce the cement matrix at the molecular level
- Densify the calcium-silicate-hydrate structure
- Improve internal load transfer

The result is stronger, longer-lasting, “smart” concrete. These unique properties make EdenCrete an innovative and ideal solution for AI data centre construction, among other uses.

### **EdenCrete’s Quantified Performance Benefits**

ASTM-standard testing conducted by Eden in USA and commercial deployments have demonstrated several quantifiable benefits over traditional non-CNT infused concrete, including:

Improved mechanical properties, increased durability, crack reduction, CO<sub>2</sub> footprint reduction,

#### **1. Mechanical Performance of concrete frequently improved with CNT-enriched EdenCrete**

- Compressive strength
- Tensile strength
- Flexural strength

#### **2. Crack Reduction & Durability**

##### **CNT-infused Concrete:**

- Prevents micro-crack formation
- Arrests crack propagation
- Reduces permeability
- Improves resistance to corrosion, salt damage and freeze-thaw cycling

**Infrastructure lifespan extension:**

- Traditional concrete: ~50 years
- CNT concrete: 75–100+ years

**3. Sustainability Impact**

Concrete manufacturing accounts for ~8% of global carbon emissions. CNT-enhanced concrete offers a more sustainable concrete solution and lower carbon footprint via:

- Reduced cement usage
- Lower material volumes
- Extended service life

**EdenCrete is Ready for Immediate Global Commercial Expansion****EdenCrete® is already commercially deployed and approved:**

- **Sales in USA, Ecuador, India, Canada, France, Australia, New Zealand and Israel**
- Approved by 20+ US Departments of Transportation
- Used in roads, bridges, ports, airports and major infrastructure projects in USA over past 10 years

While much of the global CNT concrete market remains experimental, Eden has established significant commercial adoption and giving the Company a material advantage in securing market share.

Eden is accelerating the expansion of its 10-year-old US market, expanding its market share in the broad North American concrete additive market, and is also positioned as the sole, or at least the dominant, commercial CNT concrete supplier in that region. The Company is actively exploring opportunities in other jurisdictions and will advise the market of any updates in due course.

**Global Market Opportunity**

The global concrete admixtures market is projected to exceed US\$44 billion by 2029. The fibre and reinforcement segment alone exceeds US\$1.3 billion annually.<sup>6</sup>

EdenCrete® competes indirectly within this high-margin reinforcement segment.

**Major global participants in adjacent markets include:**

- Sika AG: A\$47 billion market cap
- Cemex: A\$27 billion market cap
- Cabot Corporation: A\$5.5 billion market cap
- Arkema: A\$7.1 billion market cap<sup>7</sup>

North America remains one of the largest commercial CNT concrete markets globally, where Eden has already established market leadership.

Significant expansion opportunities exist across the United States, Australia, Middle East, India, Israel and Asia.

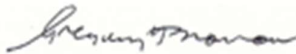
The Company is focused on advancing strategic partnerships, scaling distribution, and targeting large-scale data centre and critical infrastructure projects across priority markets.

Eden believes CNT-enhanced concrete represents one of the most significant technological advancements in structural materials in decades, and looks forward to updating the market on new developments.

**Dr Allan Godsk Larsen, Managing Director of Eden Innovations, said:**

**“ The decision to acquire new R&D equipment, will enable Eden to better assist all industries, and in particular North American data centres, which is a very rapidly growing market, in solving a range of difficult issues such as electromagnetic shielding and heat absorption, through using higher performance, carbon nanotube (CNT) enriched concrete, and is expected to greatly accelerate the expansion of the EdenCrete global market footprint.”**

This announcement was authorised by the below signatory.



**Gregory H. Solomon**

Executive Chairman

For any queries regarding this announcement please contact Greg Solomon on +61 8 9282 5889

### **About Eden Innovations Limited**

Eden Innovations Ltd (ASX:EDE) is an Australian-listed industrial technology company that develops, manufactures and sells advanced materials and energy efficiency solutions globally.

These products are protected by the Company’s patents and trademarks, including a high-value patent covering its proprietary carbon nanotube technology, which underpins Eden’s concrete and plastic additive products.

Eden’s technologies are used across construction, concrete production, power generation and other industrial infrastructure applications in many countries, having generated over \$30m+ in lifetime sales.

### References

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**Forward Looking Statements**

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