



ACN 109 200 900

## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT

1 SEPTEMBER 2016

### CORRECTION OF ERROR IN INVESTOR PRESENTATION

Eden Energy Ltd has identified an error in the Investor Presentation announced earlier today. The date in the title on slide 13 was incomplete and should read “GDOT I-20 Field Trial – Update August 2016”. A copy of the updated corrected Investor Presentation is now attached.

**Gregory H. Solomon**  
Executive Chairman



# **Investor Presentation**

**1 September 2016**

**Greg Solomon**

# Disclaimer



## FORWARD LOOKING STATEMENTS

**This presentation includes certain forward-looking statements of Eden's management.** Forward-looking statements are statements that contemplate the happening of possible future events and are not based on historical fact. Forward-looking statements may be identified by the use of forward-looking terminology, such as "may", "shall", "could", "expect", "estimate", "anticipate", "predict", "probable", "possible", "should", "continue", or similar terms, variations of those terms or the negative of those terms. Forward-looking statements should not be read as a guarantee of future performance or results and may not be accurate indications of when or whether such performance or results will be achieved. Forward-looking statements are based on information known to Eden when those statements are made or management's good faith belief as of that time with respect to future events and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. The forward-looking statements specified in this presentation have been compiled by Eden's management on the basis of assumptions (which may or may not turn out to be accurate) made by management and considered by management to be reasonable. Eden's future operating results, however, are impossible to predict because of risks and uncertainties, and no representation, guarantee, or warranty is to be inferred from those forward-looking statements. You are cautioned not to place undue reliance on these forward-looking statements.

### **Forward-looking statements include, but are not limited to, the following:**

Statements relating to Eden's future production capacity and sales levels, and business and financial performance; Statements relating to future research and development results and regulatory approvals of Eden's products; Statements relating to Eden's competitive position; and Other statements relating to future developments that you may take into consideration.

Actual results of Eden's operations may differ materially from information contained in the forward-looking statements as a result of risk factors some of which include, among other things: global economic stability, continued compliance with government regulations regarding production and use of carbon nanotubes in the U.S. or any other jurisdiction in which Eden conducts its operations; changing legislation or regulatory environments in the U.S. and any other jurisdiction in which Eden conducts its operations; credit risks and product sales affecting Eden's revenue and profitability; exposure to product liability claims; changes and new competitive products in the specialty concrete admixture industry; the level of market acceptance and demand for EdenCrete™; Eden's ability to effectively market all the product it can produce; Eden's ability to manage its growth, including implementing effective controls and procedures and attracting and retaining key management and personnel; changing interpretations of generally accepted accounting principles; the availability of capital resources, including in the form of capital markets financing opportunities; and general economic conditions.

**This presentation has been prepared as a summary only and does not contain all information relating to Eden's assets and liabilities, financial position and performance, profits and losses and prospects: it should be read in conjunction with all of the publicly available information in relation to Eden which has been released to the Australian Securities Exchange (ASX Code: EDE).**

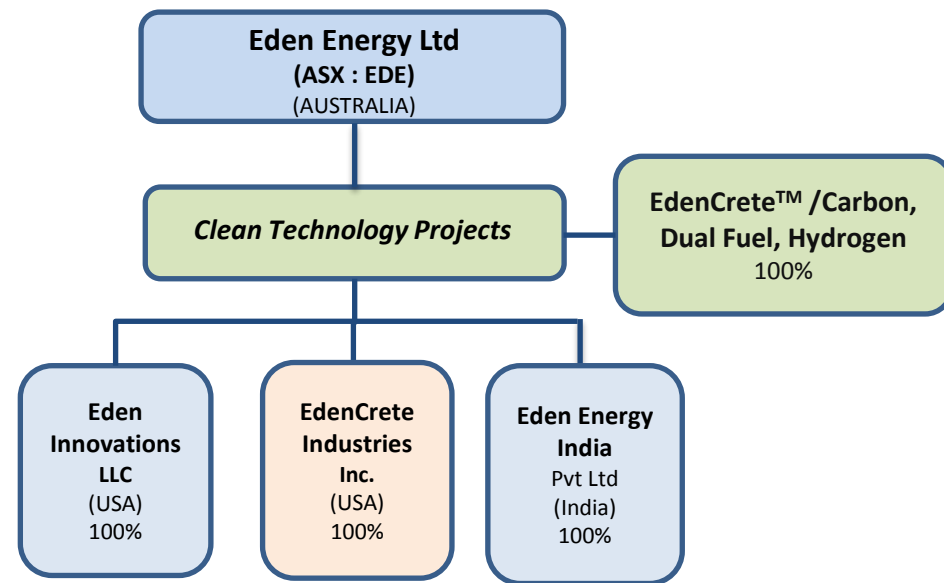
# Investment Highlights



# Company Overview

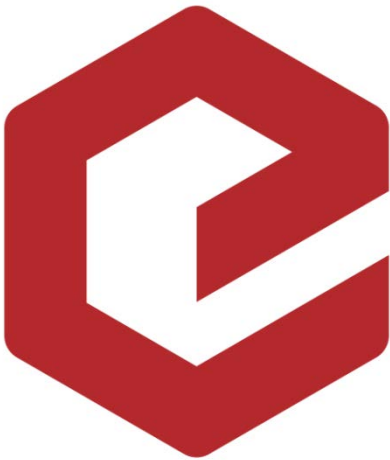


<b>Issuer:</b>	Eden Energy Limited
<b>Exchange / Symbol:</b>	ASX: EDE
<b>Stock Price<sup>(2)</sup>:</b>	A\$0.20
<b>Market Cap<sup>(2)</sup>:</b>	A\$233 million (EDE only)
<b>LTM EBITDA<sup>(1)</sup>:</b>	A\$(3.2) million
<b>LTM Net Profit/(Loss)<sup>(1)</sup>:</b>	A\$(3.3) million
<b>Cash<sup>(2)</sup>:</b>	≈A\$9.5 million
<b>Debt:</b>	A\$0.0 million



- 1) As of 30 June 2016 (Audited)
- 2) As of 31 August 2016

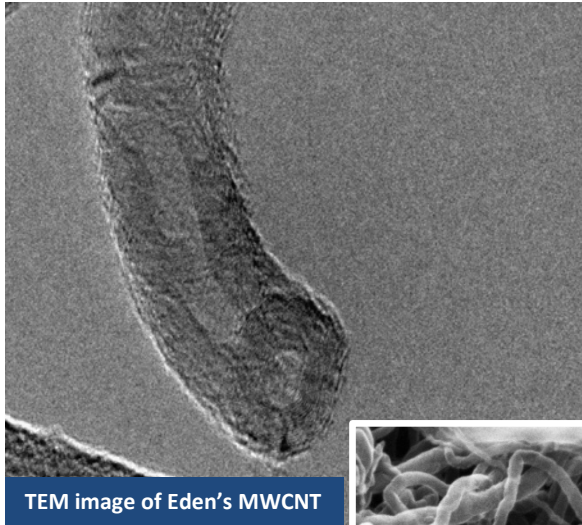
## EdenCrete™



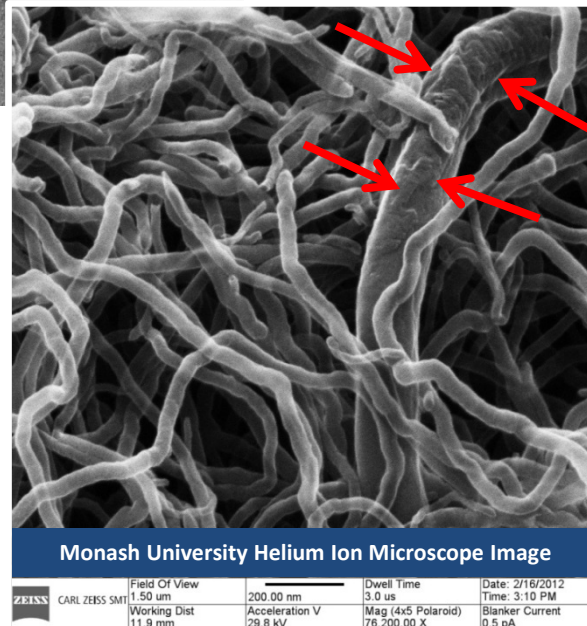
[www.edencrete.com](http://www.edencrete.com)

- **EdenCrete™ is a revolutionary concrete admixture using carbon nanotubes (CNT)**
- **EdenCrete™ outperforms other admixtures by optimizing strength and other characteristics**
- **Permits the use of less concrete and/or steel reinforcement for the same structural integrity**
- **Translates directly into cost savings (material & labor)**
- **Both lab and field testing have shown dramatic results**

# Carbon Nanotubes (CNT)



- **Tensile strength** 200-300x steel
- **Weight** ~17% of weight of steel
- **Strengthens concrete, plastics**
- **Produces more durable concrete**



**Build-up of dense, hydrated cement on surface of CNT (see image)**

- **CNT provide:**
  - Nucleation points for cement hydration
  - Ultra-strong nano-scale fibre reinforcement
- **CNT facilitate denser, tougher and stronger cement**

# Benefits of EdenCrete™



## EdenCrete™ builds strength with excellent workability

Products	Increases Compressive Strength	Increases Split-Tensile Strength	Increases Flexural Strength	Reduces Shrinkage	Reduces Permeability	Increases Abrasion Resistance	Drawback
<b>EdenCrete™</b>	●	●	●	●	●	●	None
Fibers (PP, PVA, Acrylok)		●	●	●			Reduced workability, difficult to handle
Shrinkage Reducers				●			Strength reduction, expensive, reduces workability
Steel Reinforcement	●			●			Vulnerability to corrosion, and weight
Surface Hardener					●	●	Compatibility issues (alkali-silica)
Silica Fume, Fly Ash	●				●	●	Expensive, increased water, hard to handle
Steel Fibers	●						Reduced workability, difficult to handle



# CNT in Concrete Applications

## Global Applications

- **Increased Abrasion Resistance**
  - Road & bridge surfaces, pavements, floors
- **Lower Permeability/ Lower Shrinkage**
  - Roads, bridges, runways (esp. freeze/ thaw and salt conditions)
  - Coastal and marine applications
  - Dams, spillways, sewer/water pipelines
- **Increased Compressive and Tensile Strength**
  - High rise buildings, bridges, retaining walls, pre-fabricated

## Pour In The Strength In These Key Areas



Abrasion



Flexural



Shrinkage



Permeability



Tensile



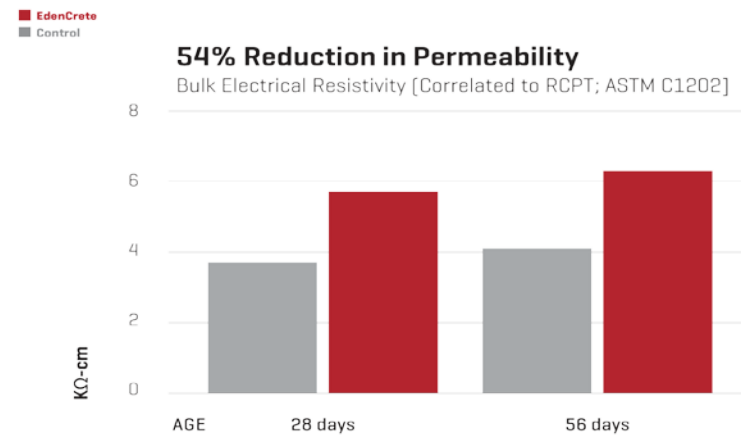
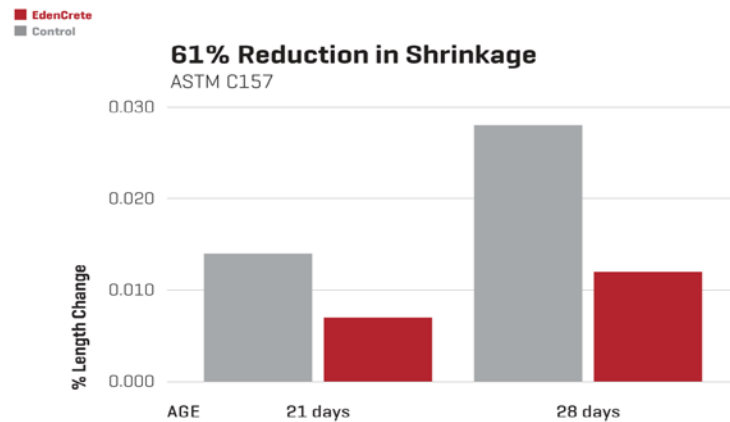
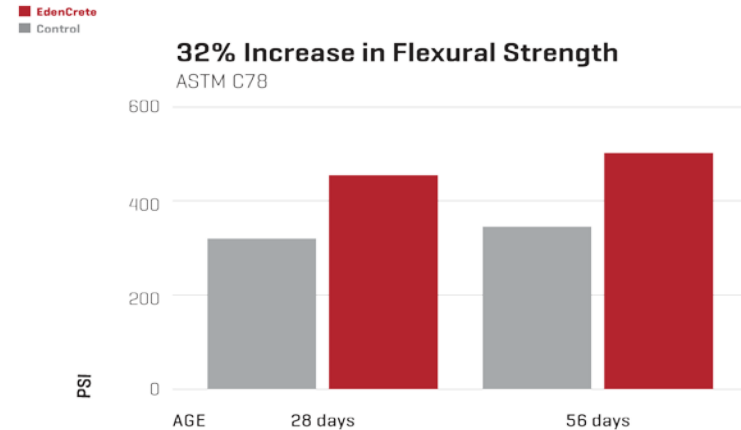
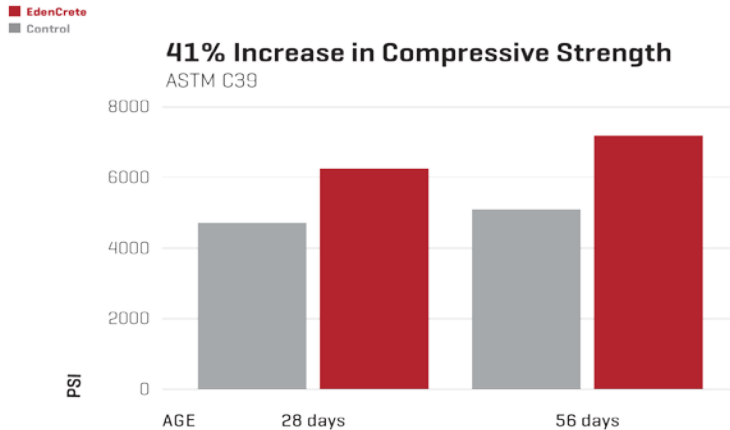
Compressive



Staining



## U.S. and Australian Concrete Trials – 2015-16

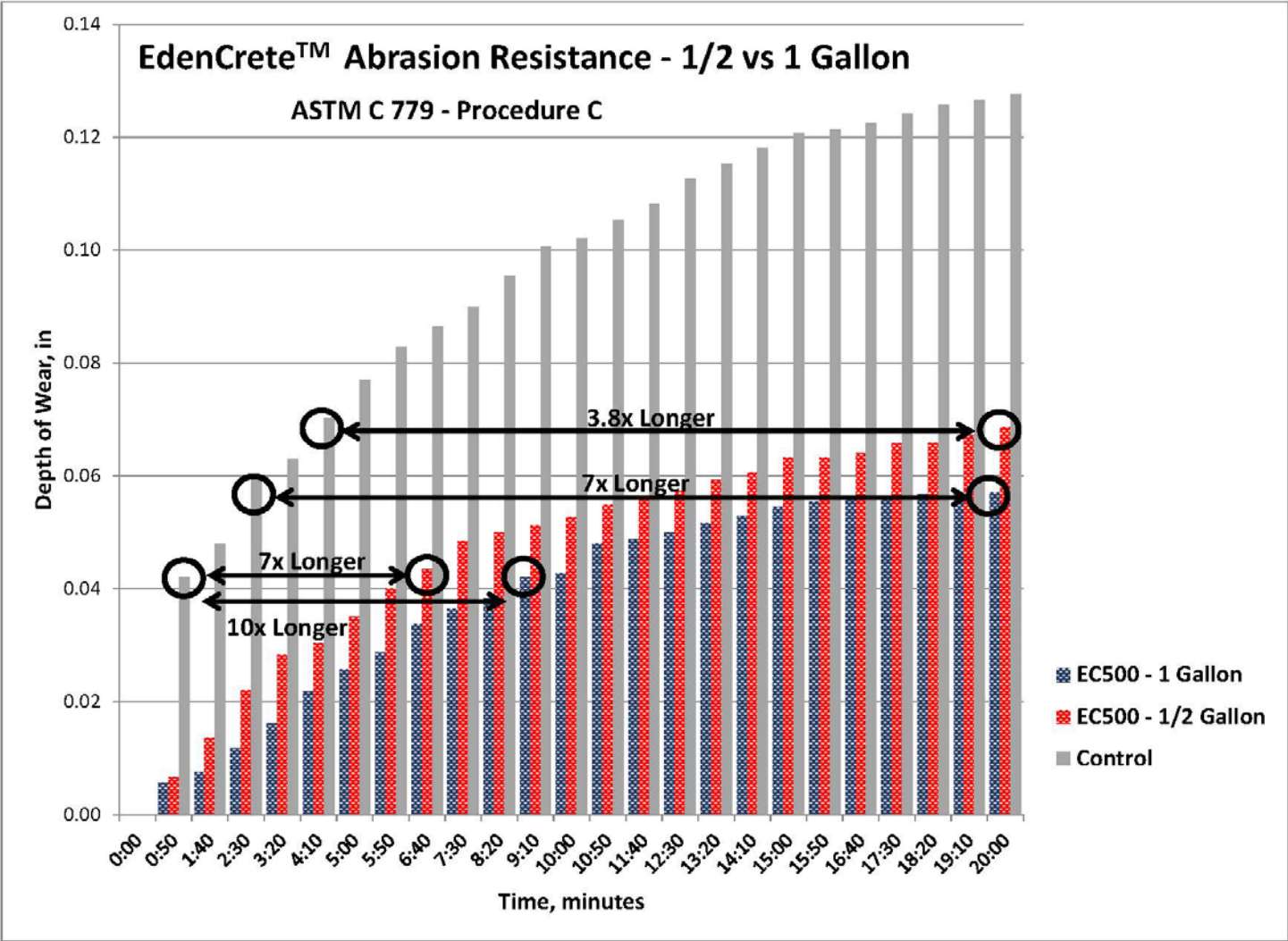


# ASTM C494 “S” - Results to 180 Days

EdenCrete™ ASTM C494 Results (Reported by Intelligent Concrete LLC)								
Test	% Increase of EdenCrete (4gal/yd. <sup>3</sup> ) over Reference							
	Age (Days)							
	1	3	7	28	56	90	180	365
Compressive Strength (ASTM C39)	25%	35%	39%	41%	41%	39%	38%	12/1/16
Flexural Strength (ASTM C78)		25%	19%	32%	Complete			
Split-tensile Strength (ASTM C496)				29%	22%	Complete		
Abrasion Resistance (ASTM C779 Proc C)					56%	59%	Complete	
Length Change (ASTM C157; Shrinkage)	61% reduction; Complete							
Time of Set (ASTM C403)	Reduced: Initial Set 3 min, Final Set 4 min; Complete							
Freeze/Thaw Resistance (ASTM C666)	Reference=88.0, EdenCrete=96.4. 9.5% enhancement; Complete							

- Testing by Intelligent Concrete LLC. Intelligent Concrete is entitled to receive royalties on sales of EdenCrete™

# EdenCrete™ – Abrasion Resistance Performance Improvement vs Dose



# GDOT I-20 Field Trial – August 2015



Picture from August 2015 GDOT I-20 Field Test



## % Improvement with EdenCrete™<sup>(1)</sup>

- Compressive Strength - 45.8% at 56 days
- Abrasion Resistance - 56% at 56 days (20 Minute Trial)

## Outcomes

- GDOT Approval To Use in 24hr Mix / B Class Concrete
- 2nd Field Trial, Class A Concrete Q2/Q3 2016

## EdenCrete™ - Cost/Benefit Analysis<sup>(2)</sup>

- EdenCrete™ current price is \$25 per gallon
- Cost per yard determined by application rate<sup>(2)</sup>
- Anticipated Extra Cost  $\approx$  3%-20%<sup>(2,3)</sup>
- Anticipated Increased Service Life >100%
- Anticipated IRR  $\approx$  50%

Georgia Department of Transportation (GDOT)

(1) 90 Days - 4 gallons

(2) Application Rate will vary for different targeted applications

(3) Based on total GDOT costs per yd<sup>3</sup>



# GDOT I-20 Field Trial – Update August 2016



**EdenCrete™ - No Visible-Cracking**



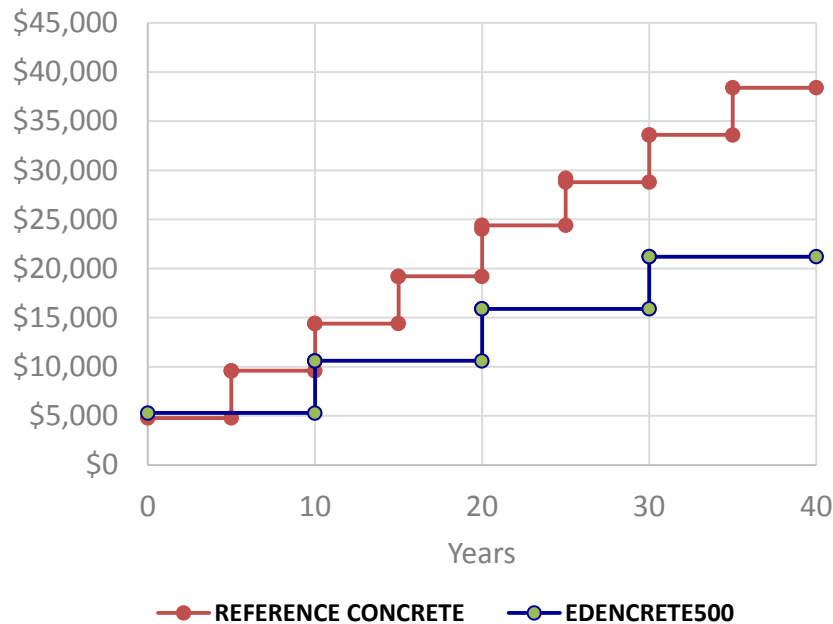
**Control - Visible Crack Developing**

**Outcome - GDOT to specify use of EdenCrete™ in tenders for several state highway repair projects**

# GDOT I-20 Cumulative Cost Analysis



## Anticipated Cumulative Cost Comparison



- Using EdenCrete™ for 25 years, 60% more repairs can be achieved on the same budget<sup>(1)</sup>

(1) Based on GDOT actual costs for I-20 Field Trial

## Cost Benefit Analysis

- **Projected Extra Cost For GDOT**
  - Based on total GDOT costs per yd<sup>3</sup> ≈ 3% - 20% (depending on dosage rate)
  - Dosage Rate will vary for different targeted applications
- **Anticipated Increased Service Life >100%**
- **Anticipated IRR < 50%**

# EdenCrete™ — First Commercial Project



## Ultra High Wear and Abrasion Resistance Application



Control Trial Slab after 6 months  
Significant cracks and evidence of wear



EdenCrete™ Trial Slab after 6 months  
No cracks or evidence of wear

### 6 month field trial - no cracking or visible wear - results in commercial order:

- 50% thinner than new ultra high strength slab
- Only EdenCrete™ (no steel mesh or rebar)
- No significant sub-base preparations
- At least a comparable 5-year service life
- Total cost saving of approximately 45%



Typical ultra high load / abrasive application at test site



# EdenCrete™ – First Infra-structure Project



## First Commercial Infrastructure Contract for EdenCrete™

### Georgia- New State of Art MARTA Bus Garage

- Very heavy duty wear/abrasion from 200 buses
- EdenCrete™ used in  $\approx 160 \text{ yds}^3$  (17 truckloads)
- MARTA - annual maintenance budget is US\$400m/planned US\$2 billion expansion of light rail system



**MARTA Brady Mobility Facility – Trial Concrete Slab  
Heavy Duty Wear/ High Abrasion Application**

**EdenCrete™ Trial Slab**



# US Marketing Update- Initial Targets

## US Infrastructure (Highways /Bridges/MRT)

## Other Applications: Pre-Cast & Ready Mix Concrete, Coastal and Marine

### Interstate Highways (73,000kms\*)

- Use **≈48mt of cement p.a. (≈ 40% of US cement)\***
- **≈\$40 billion p.a. preservation/maintenance bill\*\***

### Georgia Infrastructure

- **14,700 bridges - 2,600 Structurally Deficient/ Functionally Obsolete \*\*\***
- **GDOT \$1.1bn annual budget-planned-76 lane miles trucks- \$2.06bn**
- **MARTA-\$400m pa repairs- planned-US\$2.6bn expansion**
- **Fixing America's Surface Transportation Act 2015- US\$225.2 bn highway investment over 5 years**

\* Source: U.S. Geological Survey Fact Sheet 2006-3127

\*\* Source: FHWA Highway Statistics 2013

\*\*\* Source: U.S. Department of Transportation - DOT Fact Sheets Highlight Grim State of U.S. Roads and Bridges (July 9, 2015)

## US Infrastructure

### GDOT

- **1<sup>st</sup> GDOT Field Trial** I-20 Interstate Highway- no cracking
- **GDOT approval** for use in 24-hour repair mix/ B Class mix
- **GDOT proposes to specify use of EdenCrete™ in forthcoming tenders**
- **2<sup>nd</sup> GDOT Field Trial** approved - Class A Mix- new construction- 2018
- **Other DOTs to be approached**

### MARTA

- **1<sup>st</sup> MARTA contract-** Brady Mobility Facility- May 2016
- **Further orders awaited**

# US Production Scale-Up

## Estimated Costs / Timetables / Outputs

Location	Est. Cost US \$	Estimated Output p.a.	Estimated Value <sup>(2)</sup> US \$ p.a.	Start Date	Date To Complete	Anticipated Source of Funds
<b>Colorado Stage 1</b>	Funding completed	<b>108,000 galls p.a.</b>	<b>\$2.7m</b>	Q1 2016	Q2 2016	Equity (completed)
<b>Colorado Stage 2</b>	≈\$3.5m	≈2.4m galls p.a.	\$50m-\$62m	Q2 2016	<b>Q1 2017</b>	Equity (completed)
<b>Georgia Stage 1a<sup>(1,3)</sup></b>	≈\$37m	<b>12.5m galls p.a.</b>	<b>\$312.5m</b>	Q4 2017/ Q1 2018	<b>Q1/Q2 2019</b>	Equity/ Cashflow/ Incentives/ Debt
<b>Georgia Stage 1b<sup>(1,3)</sup></b>	≈\$35m	<b>50m galls p.a. (including Georgia Stage 1a output)</b>	<b>\$1.25 billion</b>	2019/2020	<b>2020-2022</b>	Cashflow
<b>Georgia Stage 2<sup>(1,3)</sup></b>	≈\$60m	<b>100m galls pa (including Georgia Stages 1a/1b output)</b>	<b>\$2.5 billion</b>	2020 / 2021	<b>2022-2023</b>	Cashflow

(1) Land in Georgia is sufficient for expansion up to 10 stages (i.e. 500m galls. p.a. output).

(2) Based on Current Selling Price of EdenCrete™ - US\$25/ gallon- assumes all targeted production can be achieved and sold.

(3) Eden proposes to establish its large scale global production plant in Augusta, Georgia. The State of Georgia and the Augusta Economic Development Authority have agreed to provide a combined US\$24.7 million worth of financial incentives, including an IRB-financed grant of 112 acres of suitable industrial land worth approximately \$2.8 million, construction commitments aggregating approx. \$4.2 million and the balance being largely by way of abatement of future taxes and levies. Eden proposes to supply from Georgia, EdenCrete™ to the entire North American market and also export it to the rest of the world through the Port of Savannah.

## **Sales Team- Continental US**

- **5 appointed - 2 managers/ 3 salesmen- 109 years experience**
- **6 under negotiation**

## **Marketing – many trials anticipated**

- **Ready Mix Concrete**
- **Pre-Cast/ Fabricated Concrete**

## **Sales**

- **Increasing sales anticipated over next six-12 months**

## UQ/ Eden- ARC Linkage Research Project Highly Encouraging Preliminary Results with CNT in Nylon 6

- **Excellent combination of high modulus (stiffness) and outstanding ductility.**
- **Superior ductility /comparable tensile strength** vs super-tough commercial Nylons.
- **Higher tensile strength** vs comparable Nylon materials with similar ductility.
- **Excellent dispersion of CNT.**
- **Visual clarity and transparency** – potentially suitable for a super-tough-film grade.
- **Relatively low-cost processing method.**
- **Possible suitable future markets - automotive and packaging markets.**



**ASX: EDE**

**Greg Solomon**

**Executive Chairman**

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