



ACN 009 253 187

**AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT**

**5 JULY 2019**

**EDENCRETE® - INDIAN MARKETING LAUNCHED**

Please see attached an ASX Announcement by Eden Innovations Ltd (ASX: EDE) for further details.

**Background**

Tasman through its wholly owned subsidiary, Noble Energy Pty Ltd, holds 624,334,707 fully paid shares in Eden representing 37.49% of the total issued capital of Eden Innovations Ltd and 14,814,815 EDEOB options (representing 21.26% of the issued EDEOB options).

A handwritten signature in black ink, appearing to read 'Aaron Gates', is positioned above the typed name.

Aaron Gates  
Company Secretary



Innovations that work.™

ACN 109 200 900

## AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT

5 July 2019

### EdenCrete® - Indian Marketing Launched

#### HIGHLIGHTS

- Encouraging laboratory results in US trials
- Strong market interest
- Encouraging preliminary results in first Indian trial
- Strong economic drivers
- Potentially very large market

#### DETAILS

**Eden Innovations Ltd (ASX: EDE) (Eden) has officially launched its Indian EdenCrete marketing campaign, and a strong initial response has been received.**

Eden Innovations India Pvt Ltd (Eden India), Eden's wholly owned Indian subsidiary that was established in 2007, has held discussions over the past three months with a number of India's leading companies involved in the construction, infrastructure and ready-mix concrete sectors and has received strong preliminary interest in the potential use of EdenCrete®.

Initially Eden India arranged for representative samples of Indian cement and fly ash to be sent to Eden's Colorado laboratory for testing, and these were found to be encouragingly responsive to EdenCrete® products. In particular the fly ash mixes were highly responsive to EdenCrete®Pz.

Based on the US laboratory results, and supported by an EdenCrete® technical specialist, follow-up meetings with Indian groups involved in various sectors of the concrete industry have taken place this week in three major Indian cities. In all cases, EdenCrete® was extremely well received, with the groups wishing to now progress to testing it in their own concrete mixes, particularly those that include fly ash or blast furnace slag.

Additionally, the first Indian trial of EdenCrete® in concrete that included fly ash was undertaken in the laboratory of one company. After three days, the test cylinders have shown a very significant, and highly encouraging improvement in early strength. These tests will continue as the concrete cures over the coming weeks.

## Indian Fly Ash Supply

In April 2018, the Indian Ministry of Coal estimated that India had approximately 319 Billion tonnes of Geological Resources, of which 280 Billion tonnes are classified as non-coking coal, including approximately 129 Billion tonnes of non-coking coal that are classified as “Proved/ Measured”.<sup>1</sup>

Indian non-coking coal is mainly used in coal fired thermal power stations to generate electricity, fertiliser plants, cement furnaces and brick kilns.

Much of this non-coking coal contains high levels of silica, that when burnt produces a significant percentage (by weight) of fly ash. To minimise air pollution, the fly ash is largely captured in the smoke stacks of the furnaces, generating very large quantities of fly ash that are sold at very low prices or in many cases given away free of charge. In consequence, it is hoped that the addition of EdenCrete® products to concrete mixes may enable the percentage of the very low cost fly ash to be increased, thereby potentially reducing the cost of the concrete whilst also reducing its Greenhouse Gas footprint due to the fly ash itself being a waste by-product.

## Indian Concrete Market

In India, with a population near 1.3 Billion, the concrete market for all industrial, commercial and infrastructure applications, whilst already being large by global standards, is still growing rapidly.

To put this in context, in 2017, it is reported that the annual cement consumption in India reached 270 Million tonnes<sup>2</sup>. As commercial concrete mixes often contains approximately 20-30% (by weight) of cement, this is estimated to have resulted in the annual consumption of between approximately 800 Million tonnes – 1.3 Billion tonnes of concrete, or approximately 347 Million cubic metres - 565 Million cubic metres of concrete.

With the election commitment to allocate US\$1.2 trillion towards infrastructure by recently re-elected Prime Minister Modi, India is a high priority target for EdenCrete® for infrastructure projects.

Relevantly, during the past four years, the Indian Federal Minister for Transport and Roads (and who was re-appointed to the same portfolio after the recent election), is reported to have driven an increase in the rate at which new Federal highways and roads were built (including a significant amount built using concrete), from two kilometres per day to thirty kilometres per day, and he has recently indicated he would like to double that rate to sixty kilometres per day during the next four years.

## Conclusion

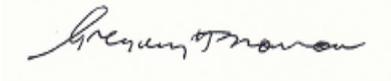
**Whilst Eden is still in the very early stages of marketing and trialling EdenCrete® products in India, the testing to date and the initial market response of potentially large customers involved in all Indian concrete market sectors has been highly encouraging and Eden plans to continue to pursue this exciting market opportunity.**

1. <https://coal.nic.in/content/coal-reserves>

2. <https://www.statista.com/statistics/269322/cement-consumption-in-india-since-2004/>

### **EdenCrete® Background**

*EdenCrete® is Eden's 100% owned, proprietary carbon-strengthened concrete additive, one of the primary target markets for which is improving the performance of concrete used in the construction and maintenance of concrete roads, bridges and other infrastructure. Additionally, it has potential for use in a range of other concrete applications including high-rise building construction, marine and coastal applications, water storage and pipelines, and pre-fabricated concrete structures and products.*

A handwritten signature in black ink on a light yellow background. The signature is cursive and reads "Gregory H. Solomon".

**Gregory H. Solomon**  
Executive Chairman