

#### 4 October 2016

### **ASX Market Announcements**

# **Imagine Intelligent Materials**

## Imagine IM Signs MOU with Leading Global Geosynthetics Company

Pacific American Coal Limited (ASX:PAK) is pleased to provide shareholders the latest Imagine Intelligent Materials (Imagine IM) update. PAK holds a 40% equity interest in Imagine IM, which forms the cornerstone of the Company's investment into technology companies. Imagine IM is focused on delivering value through the commercialisation of graphene based technologies.

### The Imagine IM Market Update – includes the following highlights:

- Imagine IM is expanding the commercialisation opportunities for graphene-based geotextile coatings into the USA market.
- MoU signed with TenCate Geosynthetics, the largest geotextile company in the USA.
- Next step is to modify the imgne X3 masterbatch to suit TenCate's materials and confirm performance in field trials.
- Significant progression of Imagine IM's capability, taking it from PET non-woven geotextiles into polypropylene geotextiles

For information further on the Imagine IM Market Update, please contact:

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**Imagine Intelligent Materials Pty Ltd** 

By visiting http://imgne.com/

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# **Imagine IM Signs MOU With Leading Global Geosynthetics Company**

4<sup>th</sup> October 2016

### **Highlights**

- Imagine IM is expanding the commercialisation opportunities for graphene-based geotextile coatings into the USA market.
- MoU signed with TenCate Geosynthetics, the largest geotextile company in the USA
- Next step is to modify the imgne X3 masterbatch to suit TenCate's materials and confirm performance in field trials.
- Significant progression of Imagine IM's capability, taking it from PET non-woven geotextiles into polypropylene geotextiles.

Imagine IM has signed a Memorandum of Understanding with TenCate Geosynthetics, the leading geosynthetics company globally, to develop and demonstrate a modified imgne® X3 coating for their specific range of polypropylene non-woven geotextiles.

This is a logical next step for Imagine IM as the company continues to commercialises graphene through the development of coatings and compound materials for industrial textiles.

According to research company, Markets & Markets<sup>1</sup>, TenCate is a global leader in geosynthetics, with a 15% market share. TenCate does not currently offer a "leak-detection" product. By demonstrating that their non-woven geotextiles can be adapted to become a leak-detection solution, Imagine IM intends to prove that imgne® X3 can be modified to be effective when coated on polypropylene geotextiles, and so that TenCate can determine whether entry into the leak-detection market is warranted.

Imagine IM believes that the ability to deliver continuous conductivity in polymers is a significant step on the way to developing of a new class of "sensing" materials that will be at the heart of the Internet of Things.

Imagine IM is focused on developing functionalised graphene to deliver conductivity to textiles and synthetic materials for industry and consumer applications enabling materials to both sense and communicate information about stress, temperature and moisture.

Leak detection is the first commercial application that Imagine IM has delivered through the release of its imgne® X3 coating which is being used by Geofabrics Australasia initially. Imagine IM anticipates that once there is full market take up in Australia of Geofabrics Bidim with imgne® X3 there will be a continuing year on year demand of between 2 and 10 tonnes of functionalised graphene in Australia alone. Australia represents approximately 3% of the global market for leak detection products.

Imagine IM is also developing graphene based coatings and compounds that deliver static dissipation for packaging and other industrial applications.

Graphene is a material with incredible potential. Imagine IM is making the possibilities into realities.

For further information contact:

 $<sup>^{1}</sup>$  Geosynthetics Market - Global Trends & Forecasts to 2018, © 2013 Markets and Markets



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### About graphene

Graphene's discoverers were awarded the Nobel Prize in 2010. Graphene is the first two dimensional material and is classed as a "super-material" offering extremely high electrical and thermal conductivity, hydrophobicity, strength, and impermeability to all gases.

### **About Imagine Intelligent Materials:**

**Imagine IM** is the leading Australian developer of graphene-based coatings for industrial textiles and fibres. It was founded in 2014 by a group of scientists led by Chris Gilbey and Phil Aitchison, with a vision to create disruptive products and solutions that use graphene. Imagine IM has developed a licensing and certification model to ensure that participants in the supply chain are required to meet a set of standards of materials quality. Imagine IM is the first company in the world to develop conductive geosynthetic materials using functionalised graphene.

### **About TenCate Geosynthetics:**

**TenCate Geosynthetics** develops solutions and systems for transportation, infrastructure, water management and environmental applications, delivered through synthetic woven, nonwoven, and knitted products. TenCate Geosynthetics has production locations in the Americas, Europe and Asia.