



# ecologiQ Showcase

## *Open for Innovation 2023 Conference Trade Hall*

Duy Le, Industry Manager, ecologiQ

I acknowledge the traditional custodians of this land and pay my respects to their Elders past, present and future.



An initiative  
of Victoria's  
Big Build

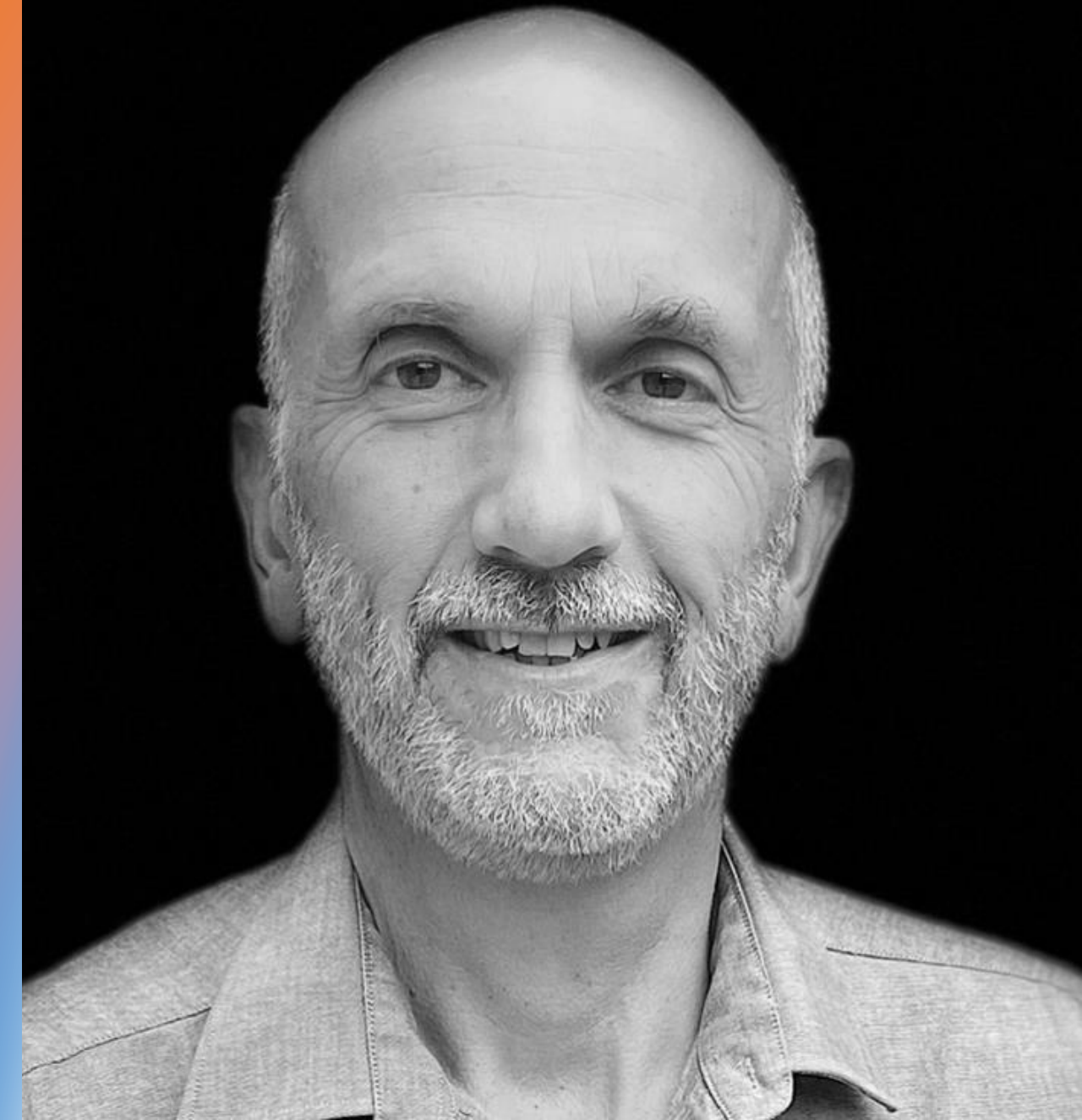


# Welcome!

Acknowledgement to our sponsors, partners and presenters.

*A QR code for you to connect with us and the featured products will be shared at the end of this event*





## Introducing our panellists

**Andrew Papacostas - Principal Engineer – Pavements & Materials, Department of Transport and Planning Victoria**

Andrew Papacostas is the Principal Engineer – Pavements & Materials within the Department of Transport and Planning Victoria. Andrew has 38 years of experience as a civil engineer in the road building and maintenance industry, 30+ years of which have been specialising in road pavement technology including pavement design, rehabilitation, maintenance including materials testing and the preparation of state and national design guides, specifications and standards.

**Shalini Trikha - Technical Manager, ecologiQ**

Shalini Trikha, Technical Manager, ecologiQ, is an innovative leader with 20 years of experience in delivery of infrastructure projects. She leads the Technical stream and has been driving sustainable engineering solutions to maximise the utilisation of waste and recycled materials. Shalini leads Technical reforms, innovations and research partnerships to increase use of reused and recycled materials across Victorias Big Build. She has been successful in embedding this approach as the “new normal” in infrastructure delivery through collaboration across government and industry.





**Shane Cooper - Engineer Manager Track and Civil, V/Line**

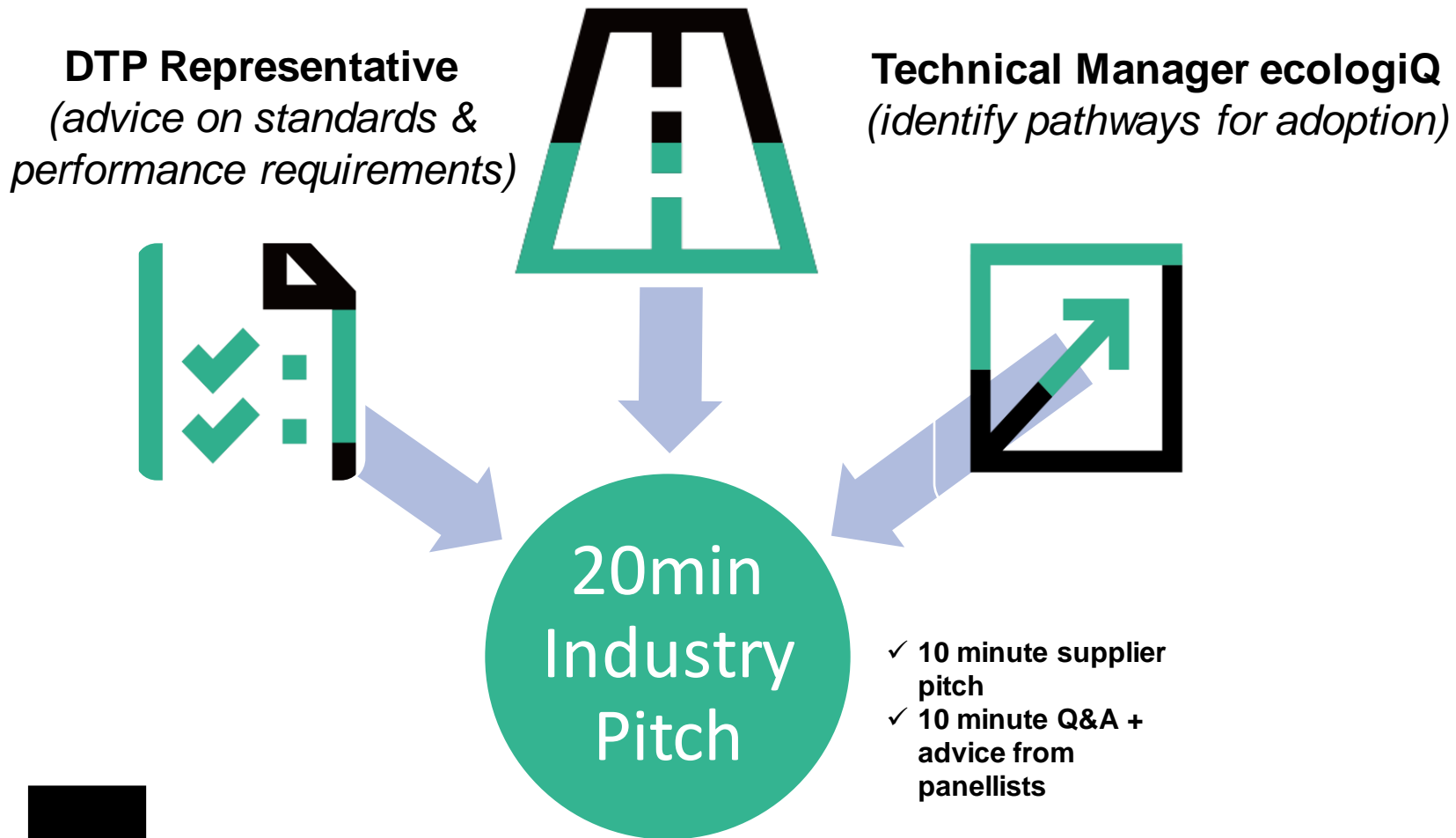
Shane Cooper is a Mechanical Engineer with 30 years' experience, the last 24 years of which has been in regional rail in Victoria. Shane entered the rail industry with privatization in 1999 managing the Major Periodic Maintenance (MPM) program, and has contributed in the transformation of the network from legacy infrastructure largely unchanged from mid 20th century technology, to the modern railway of today. In the role of Engineering Manager for the Track and Civil discipline for V/Line since 2010, Shane has overseen a range of developments in new technology, systems, and practices on the regional rail network, including novel and innovative track components and structures.

# MTIP Road or Rail Director

*(provide advice on barriers to design, procurement, delivery or practice)*

**DTP Representative**  
*(advice on standards & performance requirements)*

**Technical Manager ecologiQ**  
*(identify pathways for adoption)*



Audience : Major infrastructure transport and government representatives & construction contractors



## PEOPLE AND PARTNERS

We have engaged with a range of stakeholders, industries and suppliers to promote the use of recycled and reused materials.



900 knowledge hub members



900 attended 2022 conference



Held 19 industry events, connecting 67 suppliers with over 90 buyers

WE SURVEYED  
29 ORGANISATIONS  
WHO RATED US:

83%

for supporting  
businesses

85%

for customer support  
and communications

ecologia®

Program Highlights  
2020—23



## TECHNICAL INNOVATION AND LEADERSHIP

9X

TRIALS OF  
NEW PRODUCTS

4X

TECHNICAL  
STANDARDS UPDATED

3X

TECHNICAL STANDARDS  
WRITTEN FROM SCRATCH



# Innovation Database demo



Product Name

**Porous Lane permeable pavement**

Category

Asphalt & spray seals

Application

Permeable Pavement

Status

5. Implemented

Supplier

Porous Lane



Product Name

**Rubber T-Lok Barrier**

Category

Fencing, railing & barriers

Application

High speed safety barrier

Status

6. Full Approval

Supplier

Saferoads



Product Name

**Recovered carbon black (rCB)**

Category

Asphalt & spray seals

Application

Asphalt Additive

Status

4. Validation

Supplier

Entyre



Product Name

**Crumb rubber**

Category

Asphalt & spray seals

Application

Open Graded Asphalt (OGA)

Status

4. Validation

Supplier

Any



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## 1. Scope

- 1.1 Austroads Technical Specification ATS 3110 sets out the requirements for the supply of polymer modified binders (PMBs) and crumb rubber modified binders for use in both sprayed sealing and asphalt applications.

## 2. Referenced Documents

- 2.1 The following documents are referenced in this Specification or are relevant to this Specification:

### Australian / New Zealand Standards

- AS/NZS 2341.4: Methods of testing bitumen and related roadmaking products: determination of dynamic viscosity by rotational viscometer
- AS 2341.18: Methods of testing bitumen and related roadmaking products: determination of softening point (ring and ball method)
- AS/NZS ISO 9001: Quality Management Systems: Requirements.





Product Name

**Robovoid**

Category

Reinforcing

Application

A patented void former invention f...

Status

4. Validation

Supplier

Robovoid



Product Name

**StormFLO**

Category

Pipes, pits, conduits, subsoil draina...

Application

Pipe (Under trafficable road)

Status

4. Validation

Supplier

Vinidex



Product Name

**Replas Civil, Safety and Urban s...**

Category

Urban design & landscaping

Application

Bollards, Decking, Dog Agility Fenci...

Status

6. Full Approval

Supplier

Replas



Product Name

**Future Aggregate**

Category

Aggregate & fill

Application

Aggregate alternative designed for...

Status

2. Testing

Supplier

Future Aggregates Pty Ltd





Product Name  
**Roto plastic noise walls**

Category  
Noise walls

Application  
Roadside, rail and other areas wher...

Status  
**6. Full Approval**

Supplier  
Melbourne Rotomould Pty Ltd



Product Name  
**Noise Barrier Wall & Envire ran...**

Category  
Fencing, railing & barriers

Application  
Bollards, fencing, walkways, noise ...

Status  
**5. Implemented**

Supplier  
Integrated Recycling



Product Name  
**RMP Panels**

Category  
Noise walls

Application  
Noise barriers, construction barrier...

Status  
**6. Full Approval**

Supplier  
PACT Group



AUSTROADS TECHNICAL SPECIFICATION ATS 4450  
Plastic Noise Walls



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**Plastic Noise Walls**

- Publication no: ATS-4450-23
- Published: 25 May 2023
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ecologiQ Innovation Database ☆



**Product Name**  
Pak-Pave

**Category**  
Asphalt & spray seals

**Application**  
Asphalt Additive

**Status**  
3. Trial

**Supplier**  
Closed Loop



**Product Name**  
POLYROK®

**Category**  
Aggregate & fill

**Application**  
Aggregate replacement in concrete

**Status**  
5. Implemented

**Supplier**  
Polyrok Australia



**Product Name**  
RMP Panels

**Category**  
Noise walls

**Application**  
Noise barriers, construction barriers a...

**Status**  
6. Full Approval

**Supplier**  
PACT Group



**Product Name**  
TonerPlas

**Category**  
Asphalt & spray seals

**Application**  
Asphalt additive

**Status**  
6. Full Approval

**Supplier**  
Close The Loop



**Product Name**  
Truegrid

**Category**  
Boutique pavement applications

**Application**  
Permeable paving and dust suppressi...

**Status**  
5. Implemented

**Supplier**  
TRUEGRID Australia



**Product Name**  
Duratrack

**Category**  
Sleepers & components

**Application**  
Low speed railway sleeper

**Status**  
6. Full Approval

**Supplier**  
Integrated Recycling



**Product Name**  
Noise Barrier Wall & Envire range...

**Category**  
Fencing, railing & barriers

**Application**  
Bollards, fencing, walkways, noise wal...

**Status**  
5. Implemented

**Supplier**  
Integrated Recycling



**Product Name**  
Patent pending Bar Chair

**Category**  
Reinforcing

**Application**  
A 50-65mm Bar Chair used in concret...

**Status**  
2. Testing

**Supplier**  
Transmutation



**Product Name**  
Renolith 2.0

**Category**  
Stabilisation

**Application**  
Stabilising of sub surface pavement l...

**Status**  
1. Exploration

**Supplier**  
Renolith



**Product Name**  
Rubber T-Lok Barrier

**Category**  
Fencing, railing & barriers

**Application**  
High speed safety barrier

**Status**  
6. Full Approval

**Supplier**  
Saferoads



**Product Name**  
Replas Civil, Safety and Urban sol...

**Category**  
Urban design & landscaping

**Application**  
Bollards, Decking, Dog Agility Fencin...

**Status**  
6. Full Approval

**Supplier**  
Replas



**Product Name**  
Roto plastic noise walls

**Category**  
Noise walls

**Application**  
Roadside, rail and other areas where ...

**Status**  
6. Full Approval

**Supplier**  
Melbourne Rotomould Pty Ltd



**Product Name**  
Beautiful Sustainable Curved Con...

**Category**  
Concrete

**Application**  
Structural and non structural architec...

**Status**  
5. Implemented

**Supplier**  
Curvecrete



**Product Name**  
GreenPave Asphalt Range

**Category**  
Asphalt & spray seals

**Application**  
Asphalt mixes containing a variety of ...

**Status**  
5. Implemented

**Supplier**  
Citywide Asphalt Group (AUS) Pty Ltd

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**Product Name**  
GT Fibrecrete

**Category**  
Concrete

**Application**  
Reinforcement for non-structural con...

**Status**  
4. Validation

**Supplier**  
GT Recycling



**Product Name**  
Megaflor Green

**Category**  
Pipes, pits, conduits, subsoil drainage...

**Application**  
Flexible subsoil drainage

**Status**  
5. Implemented

**Supplier**  
Geofabrics



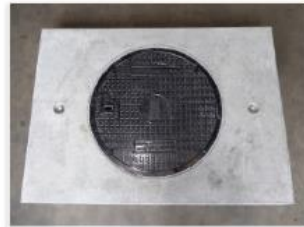
**Product Name**  
Recycled Fibre Hi Vis Vest

**Category**  
Uniforms, workwear & PPE

**Application**  
High visibility orange and yellow pers...

**Status**  
6. Full Approval

**Supplier**  
Assembled Threads



**Product Name**  
Stormwater Pits

**Category**  
Pipes, pits, conduits, subsoil drainage...

**Application**  
Vicroads approved stormwater pit co...

**Status**  
6. Full Approval

**Supplier**  
SVC Products Pty Ltd



**Product Name**  
Thermally Treated Soils

**Category**  
Aggregate & fill

**Application**  
Road base and general fill

**Status**  
2. Testing

**Supplier**  
Suez Earthsure



**Product Name**  
AmbiBlock PFAS Control

**Category**  
Material processing services

**Application**  
Reuse/recycling of materials, such as ...

**Status**  
2. Testing

**Supplier**  
KiStrategies Pty Ltd



**Product Name**  
Coharo Coatings & Tecoblock

**Category**  
Building

**Application**  
Levelling coat and Building blocks

**Status**  
5. Implemented

**Supplier**  
Casafico



**Product Name**  
Durra Panel

**Category**  
Building

**Application**  
Wall and ceiling panel

**Status**  
5. Implemented

**Supplier**  
Ortech



**Product Name**  
EKO Pipe

**Category**  
Pipes, pits, conduits, subsoil drainage...

**Application**  
Reinforced concrete piping under load

**Status**  
6. Full Approval

**Supplier**  
RCPA (Reinforced Concrete Pipes Aus...



**Product Name**  
EKO Soil stabilisers

**Category**  
Stabilisation

**Application**  
Pavement and road base stabilisation...

**Status**  
3. Trial

**Supplier**  
Centre for Pavement Excellence Asia ...



**Product Name**  
Ensmart Power Conversion & Ene...

**Category**  
Site establishment, safety & office pr...

**Application**  
An EV Container that would be equiv...

**Status**  
1. Exploration

**Supplier**  
Social Outcome Solutions Procurement



**Product Name**  
Recycled Concrete Aggregate (RC...

**Category**  
Concrete

**Application**  
Aggregate replacement in structural ...

**Status**  
4. Validation

**Supplier**  
Hanson



**Product Name**  
Resin8 eco-aggregate

**Category**  
Aggregate & fill

**Application**  
Fine aggregate replacement in concr...

**Status**  
2. Testing

**Supplier**  
CRDC Global



**Product Name**  
Robovoid

**Category**  
Reinforcing

**Application**  
A patented void former invention for ...

**Status**  
4. Validation

**Supplier**  
Robovoid

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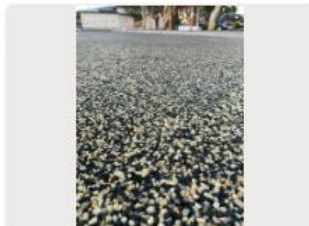
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Product Name  
**OMNIGRIP HF**  
Category  
Aggregate & fill  
Application  
Surface Treatment  
Status  
**4. Validation**  
Supplier  
OmniGrip



Product Name  
**Porous Lane permeable pavement**  
Category  
Asphalt & spray seals  
Application  
Surface Pavement  
Status  
**4. Validation**  
Supplier  
Porous Lane



Product Name  
**StormFLO**  
Category  
Pipes, pits, conduits, subsoil drainage...  
Application  
Pipe (Under trafficable road)  
Status  
**4. Validation**  
Supplier  
Vinidex



Product Name  
**Bio-Binder**  
Category  
Asphalt & spray seals  
Application  
Binder  
Status  
**4. Validation**  
Supplier  
Puma Bitumen



Product Name  
**Crumb rubber**  
Category  
Asphalt & spray seals  
Application  
Open Graded Asphalt (OGA)  
Status  
**4. Validation**  
Supplier  
Any



Product Name  
**Glass in dense graded asphalt**  
Category  
Asphalt & spray seals  
Application  
Dense Graded Asphalt (DGA)  
Status  
**6. Full Approval**  
Supplier  
Any



Product Name  
**Recovered carbon black (rCB)**  
Category  
Asphalt & spray seals  
Application  
Asphalt Additive  
Status  
**4. Validation**  
Supplier  
Entyre



Product Name  
**Recycled materials in backfill**  
Category  
Aggregate & fill  
Application  
Backfill  
Status  
Supplier  
Any



Product Name  
**Recycled PVC Conduit**  
Category  
Pipes, pits, conduits, subsoil drainage...  
Application  
Conduit Pipes  
Status  
**6. Full Approval**  
Supplier  
Vinidex



Product Name  
**Fibre Reinforced Geopolymer bri...**  
Category  
Concrete  
Application  
—  
Status  
Supplier  
Austeng



Product Name  
**Eco Lite**  
Category  
Aggregate & fill  
Application  
Lightweight granules and gravel  
Status  
Supplier  
Expanded Glass Technologies



Product Name  
**Hydromulch**  
Category  
Topsoil, mulch & organics  
Application  
Using Hydromulch to rebuild soil car...  
Status  
**4. Validation**  
Supplier  
EnviroStraw



Product Name  
**Infinity Composite Sleeper**  
Category  
Sleepers & components  
Application  
Mainline Railway Sleeper  
Status  
**1. Exploration**  
Supplier  
Salix



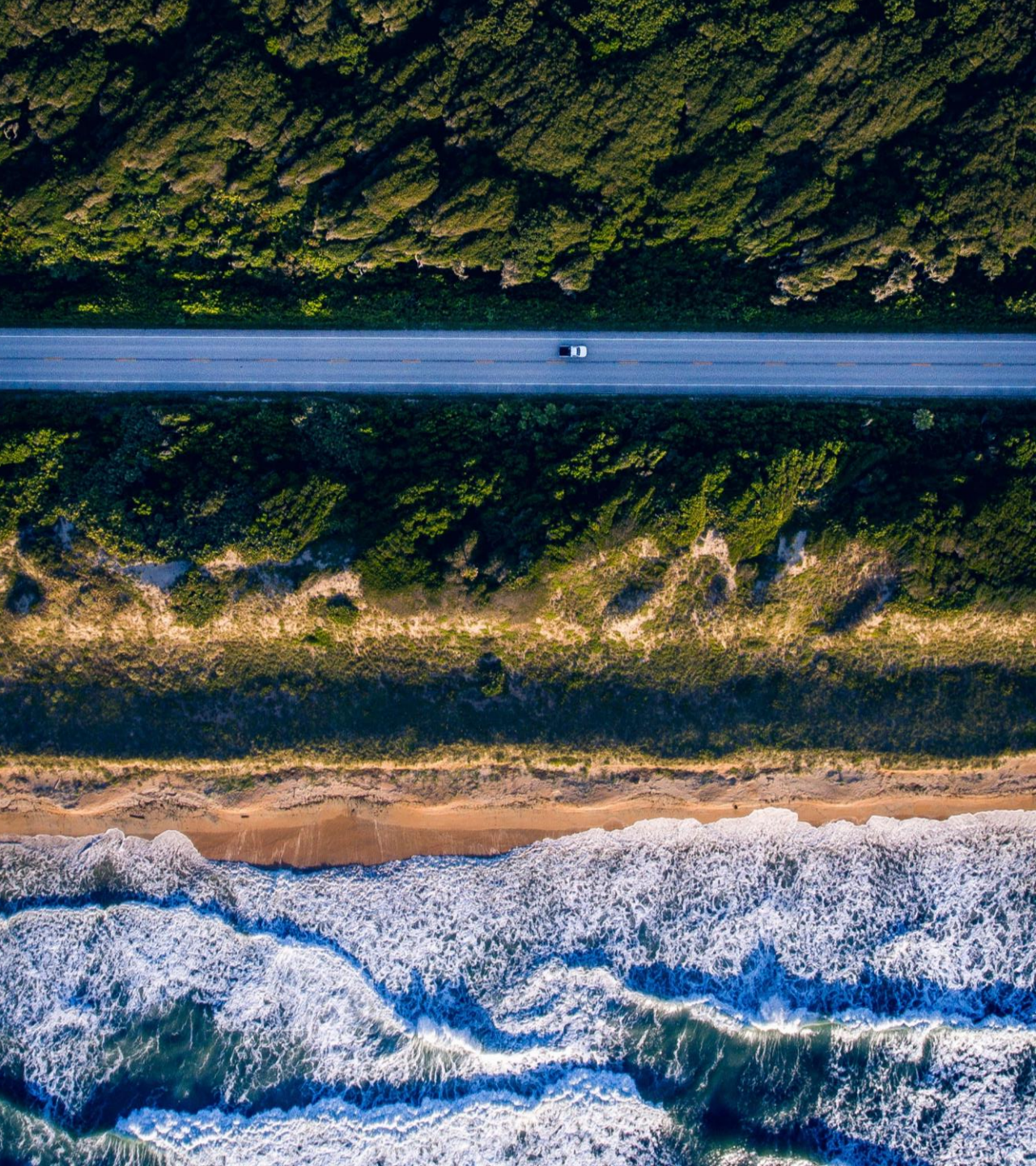
Product Name  
**Eco Site Safety Products**  
Category  
Site establishment, safety & office pr...  
Application  
Site safety bunting, tape and flag poles  
Status  
**5. Implemented**  
Supplier  
Cacti Conserve





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Thank you

Purposely Greener Infrastructure

ecologia