



**ecologia** Greener Infrastructure Conference 2023

# ecologiQ Site Tours

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### Immersive site tours – Follow the green road

Our immersive site tours will take you on a journey across Melbourne to get up close and personal with some of Victoria's most innovative and forward thinking recycled material suppliers, infrastructure projects and research facilities.

Talk directly to specialists who manufacture recycled products, learn about the manufacturing process and view the finished products in action. We have carefully curated three tour routes that showcase how Victorian manufacturers are taking problematic waste products and transforming them into resources that are being incorporated into some of our largest infrastructure projects.

We're excited to showcase the latest research and innovations helping us build greener infrastructure.

#### Tour routes

ROUTE 1 Plastics in infrastructure	ROUTE 2 Civil	ROUTE 3 Built environment
Astron Sustainability Cheltenham VIC	Vinidex Sunshine VIC	Ceres Fair Wood Preston VIC
SVC Products, Enviromesh and Polyrok Mordialloc VIC	<b>Construction Sciences Lab</b> Sunshine West VIC	<b>Preston Station – Level</b> <b>Crossing Removal Project</b> Preston VIC
Replas Carrum Downs VIC	National Transport Research Organisation Port Melbourne VIC	<b>KP Hardiman Hockey Field</b> Kingsbury VIC
Aus Group Alliance and Pact Reuse Keysborough VIC	<b>St Kilda Road Bike Lanes</b> Project St Kilda VIC	<b>Curvecrete</b> West Footscray VIC
	Yarra Trams, Omnigrip and Orca Civil Melbourne CBD VIC	





### Route 1: Plastics in infrastructure

The plastics route will take you to four locations across Melbourne to see the many ways plastic can be recycled into construction materials. Meet the makers, users and installers of these innovative products and learn how this problematic waste item can be repurposed to build greener infrastructure.



#### Stop 1: Astron Sustainability

Astron Sustainability is one of the largest plastic scrap recycling companies in Australia. They process plastic waste and provide it to businesses to create new materials.

Tour the recycling centre and learn how plastic waste is processed so it can be used to make new materials and products.

Find out more about Astron Sustainability.

#### Stop 2: SVC Products, featuring Enviromesh and POLYROK®

SVC Products is a precast concrete manufacturer that integrates recycled materials into a range of sustainable concrete products.

The tour of SVC will show visitors the complexities of precast concrete production, demonstrating how sustainable materials and measures have been successfully integrated into a decades-old manufacturing process.

Participants will also hear from two manufacturers of innovative products, to learn how recycled plastic is being used in concrete production and construction:

Enviromesh has been manufacturing recycled plastic reinforcing fibres called eMesh for 10 years. eMesh is widely used in concrete construction in infrastructure projects Australia-wide.

POLYROK® is a manufactured material, made from post-consumer soft plastic packaging. It takes the form of a rocklike shape, which has commercial and environmental benefits across a range of industries, namely construction.

Find out more about <u>SVC Products</u>, <u>Enviromesh</u> and <u>POLYROK®</u>.

#### Stop 3: Replas

Replas is an Australian manufacturer of recycled plastic products that are used for both urban and civil applications.

At the Replas showroom you will see a large selection of the products made from recycled plastic waste including benches, bollards, decking and more. You'll also have the opportunity to learn more about the issues currently facing Australia and the globe due to plastic pollution as well as explore some of the opportunities to recover in the Replas Plastic Education Centre. Lunch and time for networking will be provided at this location.

Find out more about <u>Replas</u>.

### Stop 4: Aus Group Alliance, featuring Pact Reuse

Aus Group Alliance and Pact Reuse (Viscount Rotational Moulding) have partnered to incorporate single use plastic into a range of construction materials. Pact Reuse manufacture rotationally moulded recycled plastic products that are provided to Aus Group Alliance to install.

Participants will have the opportunity to tour Aus Group Alliance's warehouse to see a range of recycled plastic products and hear how they have been used on some of Australia's largest infrastructure projects.

Find out more about <u>Aus Group Alliance</u> and <u>Pact Reuse</u>.

## Route 2: Civil

The civil route will visit recycled product manufacturing facilities, laboratories and projects to showcase the innovative ways waste materials are being incorporated into construction materials.



#### Stop 1: Vinidex

Vinidex is one of Australia's leading manufacturers of recycled plastic pipes and conduits which are being used on a number of major infrastructure projects.

Participants will tour Vinidex's manufacturing facility to discover how plastic waste is transformed into pipe systems that are used across a range of applications. Participants will also learn about Vinidex's ambitious 2025 sustainability targets.

Find out more about <u>Vinidex</u>.

#### Stop 2: Construction Sciences Laboratory

Precast concrete manufacturer Humes and concrete supplier Holcim have partnered with Construction Sciences Laboratory to pioneer the development of sustainable concrete mixes.

Tour the lab and see firsthand how innovative sustainable concrete mixes are being put to the test to see if they are fit-for-purpose. Meet the scientists leading the testing and understand what the results are showing.

Find out more about Construction Sciences.

#### Stop 3: National Transport Research Organisation (NTRO)

NTRO is a leading research organisation that is supporting Australia's transport sector transition to using sustainable and recycled materials.

They inform all levels of government about best practice use and specification development for plastic, recycled glass, reclaimed asphalt pavement, concrete, crumb rubber and more.

Participants will have the opportunity to tour NTRO's purpose-built transport research laboratory, which provides independent, fully accredited materials and performance testing. Lunch and time for networking will be provided at this location.

Find out more about <u>NTRO</u>.

#### Stop 4: St Kilda Road Bike Lanes Project, featuring Orca Civil

The St Kilda Road Bike Lanes Project involves building new concrete kerbside bike lanes along St Kilda Road to separate drivers and cyclists.

We'll travel out to a section of the project where you will hear from representatives from Major Road Projects Victoria, Ace Contractors and Orca Civil about how recycled materials helped deliver a fit-for-purpose solution that met heritage overlay requirements: Orca Civil's polymer concrete bike lane separator is made from up to 80% recycled glass.

Find out more about <u>the project</u> and <u>Orca Civil</u>.

#### Stop 5: Yarra Trams tram stop, featuring Omnigrip and Orca Civil

Visit a tram stop in Melbourne's CBD to learn how Yarra Trams is incorporating recycled materials across the tram network and hear from two manufacturers helping them achieve more sustainable outcomes:

Omnigrip Direct install safe, durable and sustainable surface treatments for bike and bus lanes, pedestrian crossings and more using 100% recycled Australian glass.

Orca Civil manufacture polymer concrete traffic management, bike and tram separators, and drainage solutions utilising up to 80% recycled glass.

Learn more about <u>Yarra Trams</u>, <u>Omnigrip</u> and <u>Orca Civil</u>.

### Route 3: Built Environment

The Built Environment route will take you to meet suppliers and tour public spaces to learn how recycled materials are being used to transform the urban realm into iconic spaces. Hear about new innovative products that are not only good for the environment, but also address complex design challenges.



Map is for illustrative purposes only

#### Stop 1: CERES Fair Wood

CERES Fair Wood is an ethical timber social enterprise that works with infrastructure projects to keep timber from felled trees in its highest order use.

Participants will get to see their timber operations in action and hear about who they work with. You'll also see the extensive and unique product ranges made from sustainable and local sources.

Find out more about <u>CERES Fair Wood</u>.

#### Stop 2: Preston Station Level Crossing Removal Project

Join John Holland on a guided walking tour between Bell and Preston train stations to hear how these level crossing removal projects are incorporating recycled materials to transform open spaces. Learn how procurement helped drive innovation and sustainability outcomes.

Find out more about <u>the project</u>.

#### Stop 3: KP Hardiman Hockey Field

In 2021, Darebin City Council undertook a significant restoration and upgrade of KP Hardiman Hockey Field using recycled products and materials.

At the hockey field, you will learn about the different types of recycled materials used and see how they have performed over the past two years. Be inspired by the City of Darebin's journey and learn how the project has paved the way for recycled materials to be used on other projects. Lunch and time for networking will be provided at this location.

Find out more about <u>the project</u>.

#### Stop 4: Curvecrete

Curvecrete is an advanced manufacturer that has developed robotic technology to create curved low-carbon concrete panelling that can be used for architectural cladding, structural, and infrastructure applications. Tour Curvecrete's manufacturing facility to see their robotic system and how this technology is helping to reduce the amount of material needed to create concrete architectural forms. View samples of the product and how they are being specified for infrastructure projects.

Find out more about <u>Curvecrete.</u>

### More information

For more conference information, visit **ecologiq.vic.gov.au/conference** 

If you have a question, please contact us at <u>ecologiq2023@publicsectornetwork.com.au</u> or on +61 3 8609 0980