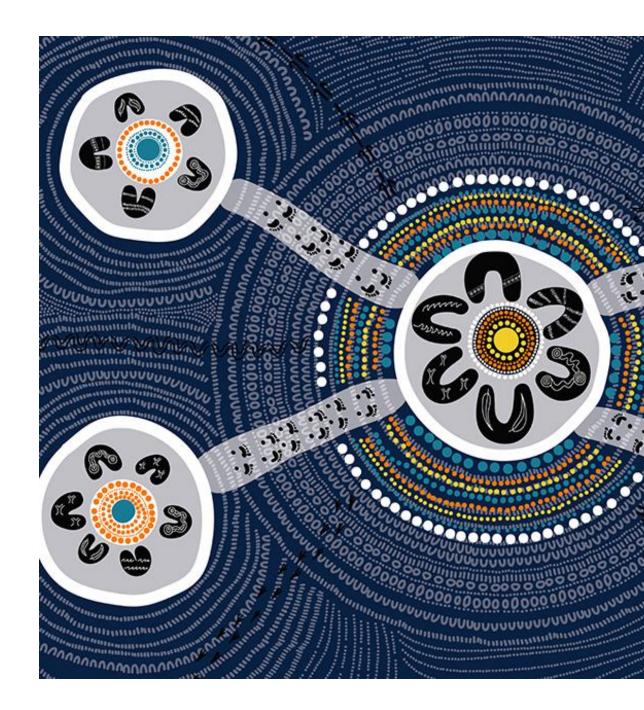


# Suppliers in the Spotlight

21 March 2024

### Acknowledgement of Country

The Infrastructure Sustainability Council would like to begin by acknowledging the Traditional Custodians of the land on which we meet today. I acknowledge their deep connection to land, water and culture, and pay my respects to their Elders past and present.



Agenda				Infrastructure Sustainability Council
	1	Craig Skipsey		
	2	Nicolas Morel	INEIGHT®	
	3	Steph Holland	Resource	
	4	Evan Smith	Holcim	
	5	Jackson Ellis		
3	6	Windsor Fick	JWA	



### **Makinex Renewables**

Craig Skipsey, General Manager – Renewables





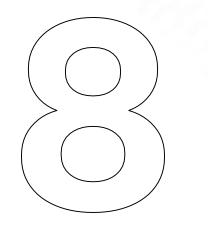
# Decarbonizing Construction

MAKINEX.COM.AU

## **Makinex** History



Australia/USA



out of 12

of the worlds largest hire and rental companies sell our products 

## Years

Rigorous R&D and field testing of our renewables products



SOUTH AUSTRALIA GoldQoast

NEW SOUTH WALES

🗣 Magenta

Canberra

ACT

Goyder substation

📴 Mylor

Nagambie

Charlemont 😳

~35 HPS Currently Deployed

an

# Hybrid Products

Fully integrated system with solar, storage and backup generator





#### HPS15 / HPS20 Single Skid

HPS45 Twin Skid

#### HPS75 Container

# Solar Products

Paired with storage / generator solutions for renewable power generation





Container Top Solar CTS5

Field Solar FS5 Site Shed Solar SPV3

# **Storage** Products

Paired with generator and solar solutions





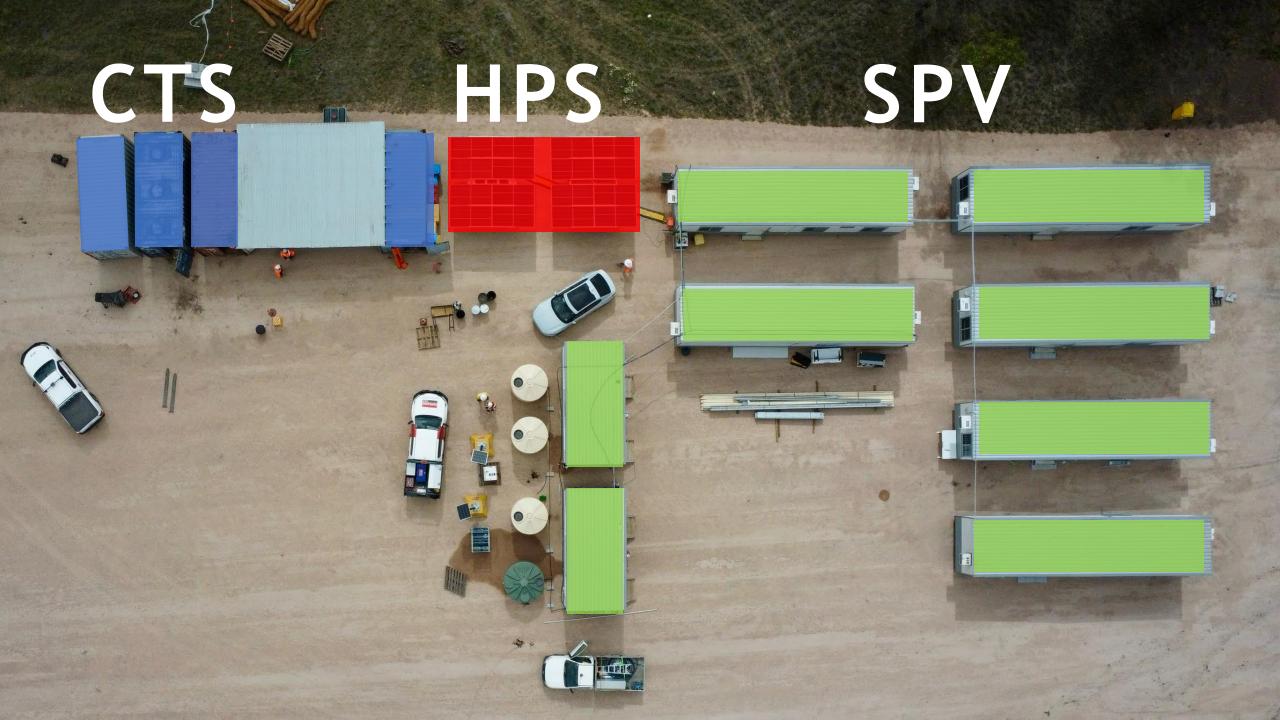




Battery Energy Storage System BESS10

Battery Energy Storage System BESS50 Battery Energy Storage System BESS100







**Direct contribution** 



# Ene-1 Ene-2

Energy and Carbon (Ene)	Ene-1	Energy and carbon monitoring and reduction	To reward monitoring and minimising of energy use and GHG emissions across the infrastructure lifecycle.
	Ene-2	Renewable energy	To reward investigation of, and use of, renewable energy.



Indirect contribution



# Dis-2 Dis-3 Dis-4

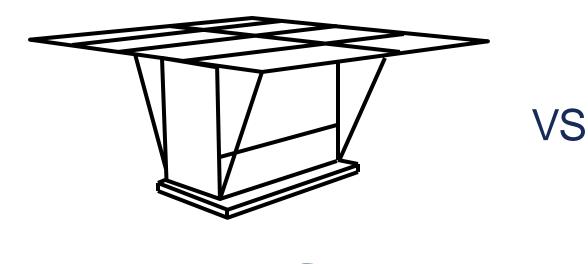
and water (UIS)	Dis-1	Receiving water quality	To reward the management of impacts on local receiving water quality.
	Dis-2	Noise	To reward the management of noise impacts.
	Dis-3	Vibration	To reward the management of vibration impacts.
	Dis-4	Air quality	To reward management of air quality impacts.
	Dis-5	Light pollution	To reward prevention of light spill.

Discharges to Air, Land and Water (Dis)

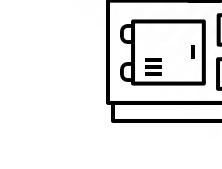
# **HPS Generator** Runtime

Typical genset runtime in a HPS vs BAU Genset





1.2





MAKINEX.COM.AU

# HPS15 Mickleham Road Upgrade



\*Compared to 24/7 Traditional generator over 12 months

# HPS15 Upper South Creek

HPS+15

\*Compared to 24/7 Traditional generator over 12 months

 $CO_2$ 

Savin



# HPS20 Major Road Interchange, Mylor SA



# HPS20 Princes Hwy Corridor Upgrade



## HPS45 Murray Basin Rail Project



# HPS45 Shepparton Line Upgrade



### **Contact Us**

Mauricio Gonzalez Business Development Manager

+61428748240 <u>m.gonzalez@makinex.com.au</u> +61 481 217 521 <u>c.skipsey@makinex.com.au</u>

Craig Skipsey General Manager







**InEight** Nicolas Morel, Business Development APAC, Energy Transition



#### EMPOWERING SUSTAINABLE PROJECT DELIVERY THROUGH

#### CONNECTED DATA

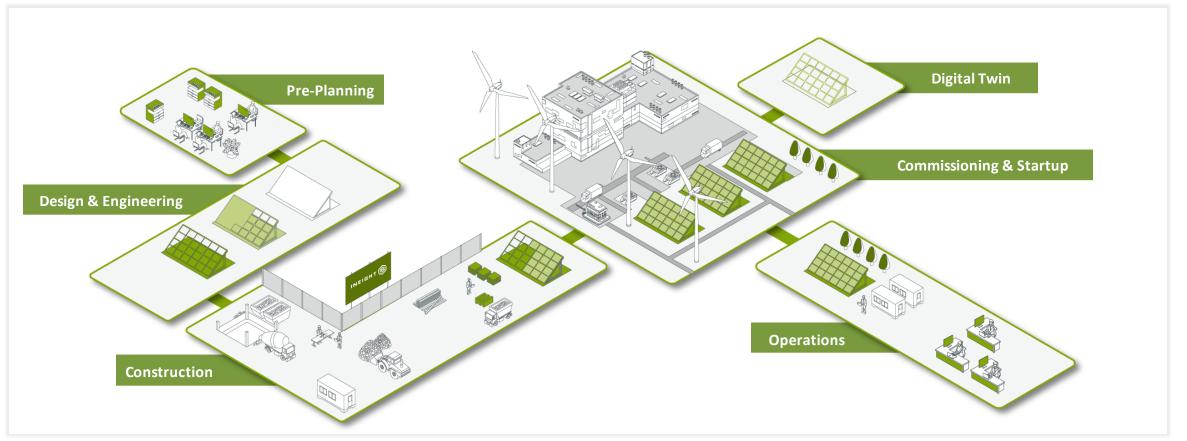
ISC Supplier Webinar | 21 March 2024





#### SUSTAINABILITY ACROSS THE PROJECT LIFE CYCLE

Sustainable Project Management integrates environmental, economic, and social requirements from project inception. Trusted for over 30 years, our industry expertise offers unparalleled insight into the challenges encountered by asset owners, contractors, and engineers. Gain control of your projects, mitigate risk, and boost efficiency with our cloud-based solutions, leading to enhanced sustainability outcomes during the construction phase of your projects.





#### WHO WE ARE AND WHAT WE DO?

InEight is a global leader in project and program management software in the cloud, connecting people, knowledge and workflows through all aspects of capital projects.



#### INEIGHT®

#### **INTEGRATED PROJECT MANAGEMENT PLATFORM**

Business Process Areas

- CAPITAL PLANNING ٠
  - DOCUMENT CONTROL ٠
  - ENGINEERING MANAGEMENT ٠
  - QUANTITY TAKEOFF MANAGEMENT ٠
  - **ESTIMATING & PRICING** ٠
  - COST BUDGETING & FORECASTING .
  - EARNED VALUE MANAGEMENT .

- REVENUE MANAGEMENT ٠
- CONTRACT MANAGEMENT
- CHANGE MANAGEMENT ٠

٠

.

- WORK PLANNING & PACKAGING
- WORK PROGRESSING .
- **HEALTH, SAFETY & ENVIRONMENTAL** ٠ COMPLIANCE

- PROJECT SCHEDULING ٠
- RISK MANAGEMENT ٠
- DESIGN COORDINATION ٠
- QUALITY MANAGEMENT ٠
- **STARTUP & COMMISSIONING** .
- **PROJECT TURNOVER / DIGITAL TWIN** ٠
- **PROJECT & PROGRAM REPORTING** ٠

Core Capabilities



Project Cost Management



& Construction

Planning, Scheduling & Risk

SCH









Connected

Analytics





Safety Quality & Commissioning







### ResourceCo

Steph Holland, Strategy Delivery Manager





### DIVERSE RESOURCE RECOVERY

ResourceCo is a nationwide leader in maximising the value in an extensive range of waste streams.

Our expertise in repurposing construction and demolition, commercial and industrial waste and soils offers our clients integrated solutions to material disposal and re-supply.

With extensive experience and nationwide networks, we manage projects across residential, industrial, commercial, and infrastructure sectors, embracing the operational efficiencies and sustainability benefits of material reuse while reducing costs with integrated end-to-end solutions.



#### **OUR BUSINESS**





YEARS EXPERIENCE



**MILLION TONNES OF WASTE RECYCLED AND REPURPOSED** 



**MILLION TONNES OF WASTE PER ANNUM** 



**CONTRIBUTORS TO CARBON ABATEMENT IN AUSTRALIA** 













#### **TYRE RECYCLING**





#### **SOIL REUSE & RECYCLING**





#### **ENERGY**



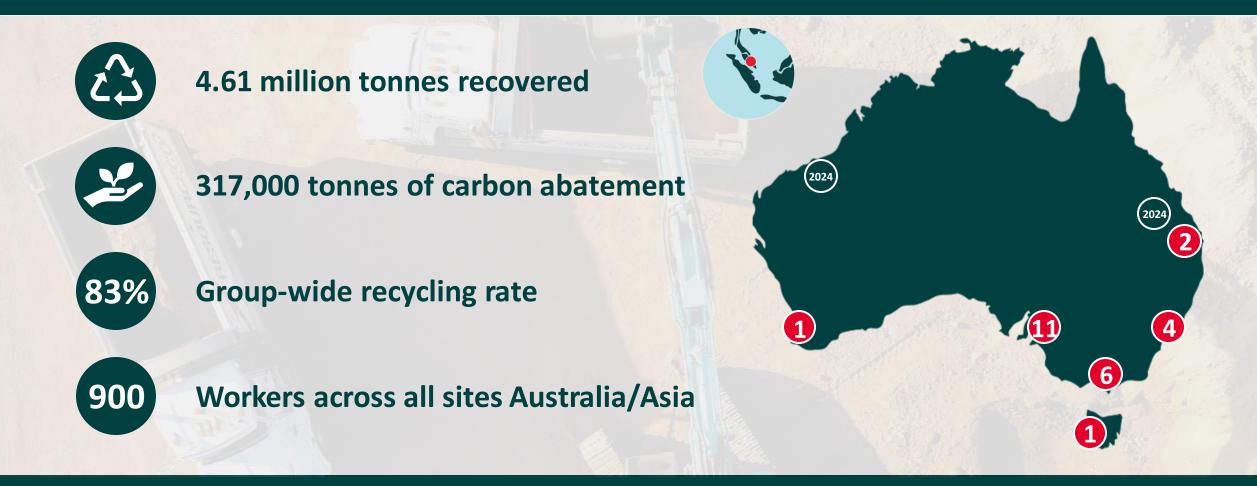


### **RECYCLING & WASTE**





### SUSTAINABILITY HIGHLIGHTS

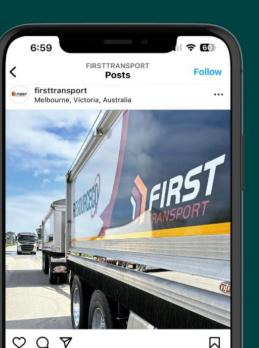




## **INDIGENOUS PARTICIPATION**







18 likes firsttransport A collaboration like no other @resourceco\_ #melbourne #firstnations #earthmoving #naidocweek #infrastructurevictoria #tippertruck #earth #aboriginal #volvotrucks #instagood #smallbusiness #safety #safetyfirst #earth #transport #melbournetippers #kinawaycertifed #supplynation #indigenous #indigenousbusiness #love #wurundjericountry & \*





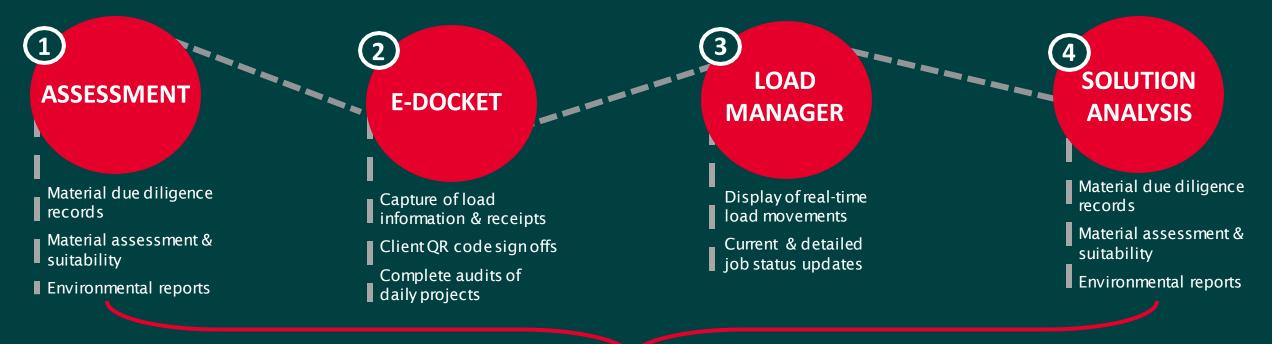
PRACTICAL

PARTNERSHIP





## CHAIN OF RESPONSIBILITY – MATEX SYSTEM







Speed



## **EXPERIENCE**

#### **MAJOR INFRASTRUCTURE PROJECTS**

#### **CURRENT**

#### SPARK North East Link Project

Period: 2022 to current, scope 12 million tonnes spoil.

#### WestConnex M6 (Stage1)

Period: 2022 to current. Manage 127 unique trucks across 8,200 bookings, ResourceCo has exported 800,000 tonnes of material.

#### SPFJV Maribyrnong Main Sewer Augmentation

Period: 2022 to current, supply 30,000 tonnes of Classed Crushed Rock Products. Export 30,000 tonnes spoil.

#### Fleurieu Connections Main South Rd Duplication (Stage 1)

Period: 2023 to current, 320,000 tonnes of material exported.



WORKED ON MANY OF THE COUNTRIES MOST SIGNIFICANT INFRASTRUCTURE PROJECTS

#### **GENERAL CIVIL PROJECTS**

#### LANDSCAPING

#### LAND IMPROVEMENT AND REHABILITATION





Q&A



#### Holcim Evan Smith, National Sustainability Manager – Sustainable Construction





# Holcim - Decarbonizing construction Building progress for people and the planet



### **Speaker**



#### **Evan Smith**

#### Holcim (Australia) - National Sustainability Manager for Sustainable Construction

Evan Smith brings over 21 years of environmental and sustainability experience across the rail, road, infrastructure, construction, and resources sectors. He holds a Bachelor of Environmental Engineering and is recognized as a Chartered Engineer, Green Star Accredited Professional, and Infrastructure Sustainability Accredited Professional.

Additionally, Evan is actively involved as the chair of the Material Embodied Carbon Leaders Alliance working group for concrete and cement, where he leads efforts to address embodied carbon in construction materials and drive industry-wide sustainability initiatives.

Evan played a pivotal role in several ground breaking initiatives, including the delivery of Australia's first Environmental Product Declarations (EPDs) for Ready-mix Concrete, the first Process EPD Certification, and the first Climate Active certification for ready-mix concrete.

# Infrastructure & building materials contribute significantly to emissions



Currently, infrastructure and buildings account for 42% of global CO2 emissions



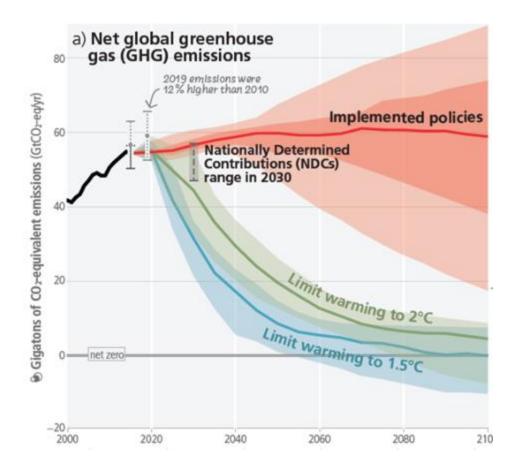
15% of global CO2 emissions



Currently, construction material account for Low-carbon construction material =

A key variable in the decarbonisation of the property and infrastructure sectors in Australia

# The **global construction sector** has a clear mandate



**By 2030,** the embodied carbon of all building and infrastructure construction materials need to be **at least 40% lower.** 

**By 2050,** all new buildings and infrastructure materials need to **'Carbon Neutral'** without the use of offsets.



# Low carbon concrete **made easy.**

# ECG Pact

**Reduced embodied carbon by 30-60%** 

# The features of **ECOPact**.



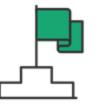
Reduced embodied carbon by 30-60%



Data backed by EPD



Option for carbon offsets



Gain competitive advantage



Align with global direction and momentum



The easy choice for all applications

# The embodied carbon **impact** of concrete

Benchmarking Example:

40 MPa Concrete (Western Australia)

7kg CO <sub>z</sub> e / m3	2kg CO <sub>2</sub> e / m3	2kg CO <sub>2</sub> e / m3	2kg CO <sub>2</sub> e / m3
Plant Operation	Plant Operation	Plant Operation	Plant Operation
			259 kg CO <sub>2</sub> e / m3
			Raw Materials
		Raw Materials	Holcim ECOPact Normal-Class
	Raw Materials		
	Holcim General Main Roads		
Raw Materials			
	459kg CO <sub>2</sub> e / m3	459kg CO <sub>2</sub> e / m3 Holcim General Main Roads Raw Materials 12kg CO <sub>2</sub> e / m3 10kg	459kg CO <sub>2</sub> e / m3 Holcin General Main Roads Raw Materials 12kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 29 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 20 kg CO <sub>2</sub> e / m3 Holcin ECOPact Main Roads Raw Materials 20 kg CO <sub>2</sub> e / m3 Holcin ECOPact

# **ISC IS** benefits



Holcim's ECOPact may allow Holcim's customers to gain additional points in the ISCA IS rating Scheme, including:

- Rso-6 Material Life Cycle Impact Measurement and Management
- Rso-7 Sustainability Labelled Products and Supply Chains
- Inn-1: Improving on credit benchmarks
- Innovation Challenges

ECOPact with carbon offset service option may allow for additional IS rating benefits ECOPact Brochure Download

# THANK YOU



#### **Evan Smith**

National Sustainability Manager -Sustainable Construction

evan.smith@holcim.com







# Cacti Conserve

Jackson Ellis, Director





Cacti Conserve is a Victorian **social enterprise** manufacturing and supplying **Eco Site Safety Products** to projects and workplaces across Australia. Our products are certified **Australian Made** from **recycled materials**, and are designed to help organisations reduce their waste footprint. Our local manufacturing processes engage women and men from non-English speaking backgrounds, and we donate 50% of profits to Australian conservation projects.

Our mission is to to help organisations of all shapes and sizes reduce their waste footprint through better selection of consumables.





**Eco Safety Bunting** 



**Eco Safety Bunting** is designed and manufactured in Melbourne, made from **100% Recycled materials.** Replacing conventional bunting made with PVC coated fabrics which cannot be recycled locally.

End-of-life recycling options cover this entire product through our Responsible Disposal Scheme.

Available in Industry Standard colours, and choice of 8m, 30m or custom lengths up to 500m. for optimal utility on site. With options for custom printing of your project / company message on the flags.



#### Sustainable Safety in action;



Each kilogram of Eco Safety Bunting uses approx. 40 recycled plastic bottles.

**rPET Rope** from 100% recycled ocean harvested plastics, this – Rope is recyclable through textile recycling facilities.

**100% Recycled Polyester Flags** from 100% post consumer recycled plastic bottles, conditioned with environmentally friendly colour fast and water resistant compounds for enhanced outdoor performance and UV resistance. PVC and fluorocarbon free – making this fabric recyclable.

#### **CACTI** CONSERVE Sustainability Benefits

#### Eco Safety Bunting

- Replaces conventional virgin plastic bunting with a 100% recycled product made.
- Harnesses post-consumer plastics in recycled polyester flags, and ocean-bound plastic waste in rPET rope.
- Is PVC free and so can be recycled via local textile recycling streams, available via our Responsible Disposal System.
- Available in custom printing to reduce the temporary signage around site or exclusion zones.
- Supplied in plastic free packaging.

Each 30m reel of Eco Safety Bunting;

- **Consumes:** 0.41kg of recycled plastic (mix of post-consumer and ocean bound)
- **Eliminates:** 0.41kg of imported unrecyclable PVC coated textiles and plastic going to landfill
- **Employs:** 1.8hrs of Social Enterprise labour
- Supports: Training and Employment via partnering Social Enterprise Assembled Threads
- **Creates:** \$2.37 of contribution to Australian Conservation projects

#### ISC Applicable Credits:

- IS v1.2: Inn-1, Mat-1, Was-2
- **IS v2.1:** Inn-1, Rso-4, Rso-6

#### **Rso-4 Resource Recovery and Management**

Eco Safety Bunting is 100% recyclable and has been designed and produced to eliminate the need for safety bunting products from ever ending up from landfill, this mission is supported by the accompanying Responsible Disposal Scheme directions received at time of purchase. Eco Safety Bunting replaces conventional bunting which cannot be recycled and is destined to end up in landfill.





Victorian Regional Rail Upgrades

### VICTORIA'S BIG BUILD



During 2023 and 2024 Cacti Conserve has been supplying Eco Safety Bunting to two the Regional Rail Revival projects as part of Victoria's Big Build. Acciona Rail selected the waste negative bunting over conventional bunting for the environmental protection zones across the long linear project. Working with their enviro teams we developed a custom style bunting which displayed the program / project name, exclusion zone purpose and messaging.

#### Providing these projects:

- Over 18.6km of Eco Safety Bunting
- A reduction of **250kg** of unrecyclable imported plastic
- A social Impact of over 1100 hours of S.E. employment
- A custom printed product meaning an enviro. cadet did not need to spend hours printing, laminating and stapling exclusion zone messaging to the site bunting.









#### www.cacticonserve.com.au

Factory 13 / 69 Acacia Rd, Ferntree Gully VIC

Jackson@cacticonserve.com.au

0406 089 248

Proudly a member of:





#### Thank you for supporting our social enterprise

Cacti Conserve donates 50% of profits to local, Victorian and national Conservation Projects.



A Healthier Planet through Innovation and Conservation.



# JWA Composite Matting

Windsor Fick, Operations Manager







#### **WINDSOR FICK** *Operations Manager*



#### Who is JWA?

We are a small business of around 15 people who specialise in the supply of composite matting proc

We have been supplying matting products to major projects across almost every sector for for over

We are primarily a dry hire business, but do also do sales if required. Our main 2 flagship products

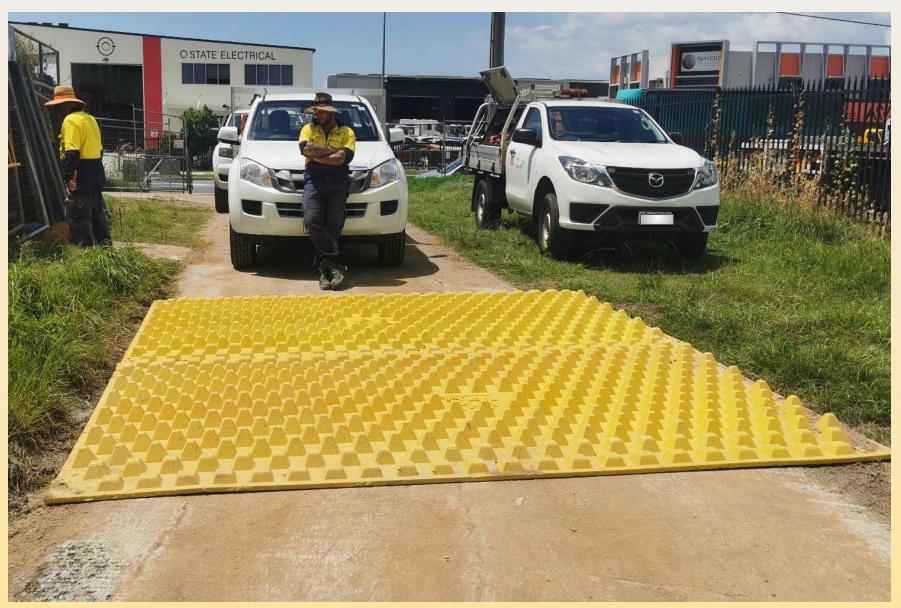
are:

- The surface mounted **FODS Rumble Mat** for site exit sediment control.
- The heavy duty, interlocking **Dura-Base** composite mats for temporary road and pads



# **READY TORUMBLE?**





#### FODS RUMBLE MATS

Length: 3.65mWidth: 2.13mHeight: 9.5cmWeight: 191kg

Pyramidheight: 7.3cm

- Reusable
- 100 % Recyclable HDPE
- 10%+of recycled materials
- Surface mounted
- Easy maintenance

Works by shaking the vehicle like tradition rumble grids but also by tyre manipulation to dislodge debris.

(ISv1.2Dis-4, Mat-1, Was-1, Was-2)



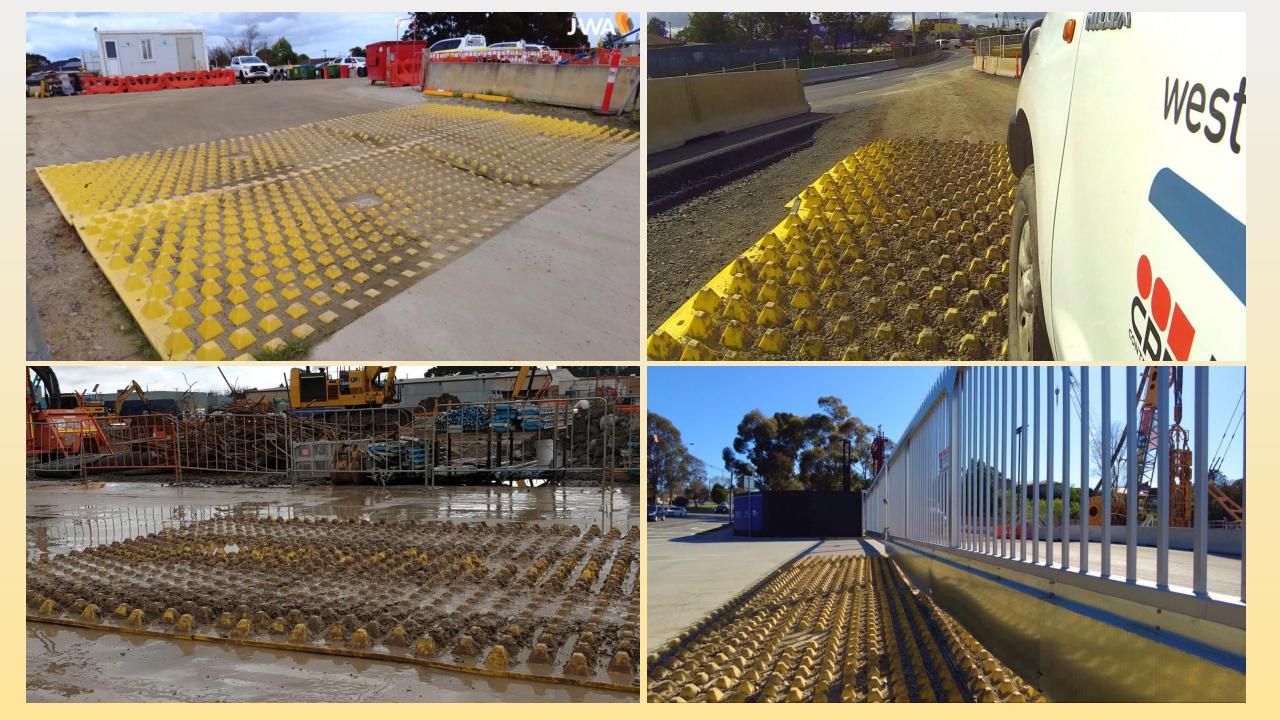
### **RIA Case Study**

- First site to deploy FODS in Australia

- Site did not allow to dig a pit for the traditional rumble grid

- Street sweeper runs were reduced by approximately 40% compared to previous methods

-Received Innovation First in August 2023





Mackay and Sons House Removals and Demolition 20 November 2022 · 😋

Looks Can Be Deceiving 👀

While the topsoil may appear dry, the sublevel was still holding a lot of water. The weight of a Mack Truck, a House Relocation Trailer and an entire house meant that bog mats were crucial for this relocation.



#### Dura-Base® Composite Mat

Length : 4.2m	Width : 2.4m		
Height: 10.5cm	Weight : 454 kg		
Load Capacity : 100+tonnes			

#### An interlocking versatile mat.

- Reusable
- Available for both rent and purchase
- 100 % Recyclable HDPE
- 20+ years life span if cared for properly
- "Gets you out of trouble"

#### (IS v1.2 Dis-4, Mat-1, Was-1, Was-2)

...

### Dulacca Wind Farm Case Study

The project required access and working platforms in sensitive agricultural land.

**Resource Conservation:** 

- Savings of approximately \$550,000 in quarried material costs.

- Elimination of 60% of the estimated costs associated with rock access.

- Installation and removal of the roadway using mats took only 15 days, whereas traditional rock access would have taken 50 days.





#### Soil Conservation:

- Mats helped avoid the need for mechanical removal of imported materials, reinstating removed soil, and achieving compaction levels suitable for safe agricultural machinery traffic. C

- Eliminated the risk of cross-contamination to the sensitive agricultural land.

# **Thank You!**

Contact information:

www.jwaoil.com; www.fods.com.au; 1800 264 628; windsor.f@jwaoil.com









Q&A

# **Contact Details**

Makinex Renewables Craig Skipsey

c.skipsey@makinex.com.au +61 481 217 521

#### InEight Nicolas Morel

nicolas.morel@ineight.com +61 455 318 821

#### ResourceCo Steph Holland

steph.holland@resourceco.com.au +61 459 942 497

Holcim Evan Smith

evan.smith@holcim.com +61 429 790 950 Cacti Conserve Jackson Ellis

jackson@cacticonserve.com.au +61 406 089 248 JWA Composite Matting Windsor Fick

windsor.f@jwaoil.com +61 423 100 523





# Thank You