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### Australia's first road built with

### soft plastics, glass and toner



Cuisine for conservation at Taronga Zoo



\$150 million contract for the Beryl Solar Farm



Building homes for hope



## **Cuisine for conservation** at Taronga Zoo



Aligning themselves with Taronga Zoo's conservation goals, our EPICURE team has taken large steps to ensure the sustainability of its operations, including its commitment to create Australia's first 100 per cent green kitchen and catering service.

EPICURE has implemented several initiatives that include introducing fully biodegradable packaging and reusable poly food baskets, as well as the elimination of single-use straws and individual sauce packets.

Clinton Arthur, Venue Manager at Taronga Zoo, says:

"It has been a long goal at Taronga Zoo to reduce reliance on single-use plastic packaging for food. We are pleased to be in a position where we can help achieve milestones like this and contribute to other environmental sustainability goals Taronga has." Reducing waste is another strong focal point of EPICURE's operations, with the aim to introduce onsite composting machines to process biodegradable packaging and organic food waste from the kitchens. An e-wash water system has been implemented in the Forage and Graze café, and The View restaurant, to ensure waste water is free from chemicals which can negatively impact waterways.

The kitchens have also switched to sustainable palm oil for cooking to contribute to preserving habitats for wildlife at risk of extinction.

Gursu Mertel, the Executive Chef at Taronga Zoo, says: "It's inspiring to create menus that come from a sustainable food approach that you know is having a broader impact.

"We're excited to join in Taronga's vision to be a world leader in wildlife conservation; it only adds to the flavour of the food at Taronga."



First Solar

## \$150 million contract for the **Beryl Solar Farm**

#### Downer has been awarded an Engineering, Procurement and Construction (EPC) contract worth approximately \$150 million for the 87MWac Beryl Solar Farm in New South Wales.

Owned by First Solar, the farm will have 260,000 advanced solar modules with the capacity to run approximately 25,000 homes per year, displacing more than 167,000 metric tonnes of carbon dioxide emissions.

Grant Fenn, CEO of Downer, said:

"Large-scale projects are critical to our regional communities and we are looking forward to partnering with First Solar on this project that will see significant economic and environmental benefits in regional New South Wales."

When in operation, the Beryl Solar Farm will see electricity generated with no water use, no air emissions, and no waste production.

"This project will mean direct and indirect job creation, support for local businesses, and the development of skills in a growing renewable sector," said Grant.





## Australia's first road built with **soft plastics, glass and toner**

#### Downer and Hume City Council have partnered with Close the Loop and RED Group to build the first ever Australian road with soft plastics, glass and toner.

Soft plastics from approximately 200,000 plastic bags and packaging, 63,000 glass bottle equivalents, toner from 4,500 used printer cartridges and 50 tonnes of recycled asphalt were used to build the road in Craigieburn, located in Melbourne's north.

Downer's Executive General Manager Road Services, Dante Cremasco, said: "Together with our customer Hume City Council and our partners, we have proven that with thought leadership and a determined effort to make a positive difference, we can set a new benchmark in our industry when it comes to sustainability by creating new avenues to recycle and repurpose waste materials into new streams of use. It's all about pulling products, not pushing waste.

"What is also pleasing to see is that this sustainable, cost-competitive road has a 65 per cent improvement in fatigue life and a superior resistance to deformation making the road last longer and allowing it to better handle heavy vehicle traffic."







#### ROADS



Pictured above is Jim with two representatives from the NSW Environment Protection Authority (EPA), including Director Resource Recovery Kathy Giunta (middle).

## **Meet Jim Appleby,** General Manager Reconomy

### Jim Appleby is General Manager of Downer's new Reconomy business, part of our Transport and Infrastructure division.

Jim has been with Downer since 2011 and has held various roles within Downer's Roads business, including National General Manager Road Surfacing and NSW General Manager Road Surfacing.

"I really enjoy working at Downer. There is a huge amount of energy and passion for what we do, and you feel this right across the business from the front-line workers up to the senior executives."

Jim has been in his role as General Manager Reconomy for eight months and during this time has worked on several initiatives, including building a road in Melbourne from soft plastics and glass, and opening the new Detritus Processing Facility in Rosehill, NSW.

"Reconomy is all about landfill diversion. It means pulling products, not pushing waste and finding a sensible reuse for the materials that come out of some of our processes. The new Detritus Processing Facility, for example, pulls the waste from street sweepings and stormwater drains and cleans and separates it into several materials that can be reused.

Reconomy has been developed to harness the growth identified within the circular economy, says Jim, who believes the business has an exciting future.

### "Reconomy has the ability touch every facet of Downer's activities and add significant value to our business and our customers."

"The circular economy is very high profile and very important to a lot of our stakeholders. Having a framework to operate a circular economy in our business will, I think, be a key requirement across our projects in the future and offer unprecedented value to our customers."

Jim credits his passion for environmental sustainability to his two young daughters, Ruby, who is eight years old, and Grace, who is 10.

"I want my daughters to grow up in the same natural environment that I have, and I feel obligated to hand them a planet that is sustainable.

"The public is becoming more environmentally conscious than ever, and I think it will be really important to them as they get older. I want to create a world for them that is healthy, and as beautiful as we see it now."



## Funds for **TonerPave**<sup>™</sup>

Downer, Close the Loop and Fuji Xerox have been granted \$38,000 from New Zealand's Waste Minimisation Fund.

The \$38,000 grant will go towards testing the feasibility of using waste toner in the construction of roads through a product called TonerPave™.

TonerPave<sup>™</sup>, an industry-leading sustainable road solution, was originally developed by our New Zealand Research and Development team in collaboration with Close the Loop.

The creation of TonerPave<sup>™</sup> begins with Close the Loop which extracts toner that would normally go to landfill before processing and blending it with recycled oils. The product is then delivered to Downer's road facilities where they blend the toner with asphalt.

TonerPave<sup>™</sup> is a low carbon, durable asphalt that helps to reduce the carbon footprint of a road by up to 23 per cent over its lifetime. The product has also been introduced in Australia.

The TonerPave<sup>™</sup> project is just one of three initiatives being conducted to significantly reduce our waste going into landfill by 2020.



PROJECTS

#### **Downer achieves Australian-first** ISCA sustainability rating

Downer has been awarded the Infrastructure Sustainability Council of Australia's (ISCA) 'As Built' Infrastructure Sustainability (IS) rating for the Ararat Wind Farm.

This is the first IS rating to be awarded to a renewable infrastructure project.

The ISCA's Infrastructure Sustainability rating scheme is Australia's only comprehensive scheme for evaluating the sustainability of the design, construction and operation of infrastructure projects.

Trevor Cohen, Executive Director of Downer's Utilities business, said:

"Downer is pleased to be recognised with Australia's first Infrastructure Sustainability rating for a renewable infrastructure project."

Ainsley Simpson, Chief Executive Officer of ISCA, congratulated Downer on the rating: "Downer is congratulated and recognised for demonstrating leadership in this space, being the only company to date to have achieved Design, As Built and Operations ratings for the various infrastructure projects they have helped deliver and operate."

#### **The Ararat Wind Farm**

Downer was awarded a \$130 million contract for the design and construction of the Ararat Wind Farm in 2015. The Wind Farm is the third largest in Australia, generating electricity to power over 120,000 Victorian homes each year.

### **Spotless takes on the last straw** at 1300SMILES Stadium



#### Spotless' catering team has had the last straw with plastic, joining the war on waste at the 1300SMILES Stadium in Townsville.

The plastic straw is one of the worst offenders when it comes to harming the environment as it can take thousands of years to break down. 1300SMILES is one of many organisations which has removed the harmful item.

"We are always looking at sustainable alternatives in our operations and we are pleased to join the ban on straws," said Jeffrey Ellis, Spotless Hospitality Venue Manager at 1300SMILES Stadium. "However, an alternative was needed when we took into account the stadium's many faithful frozen coke drinkers."

The solution came in the shape of Austraw's ecostraw: a biodegradable, eco-friendly spoon straw that provides the same straw drinking experience.

In addition to the 1300SMILES Stadium, Spotless provides catering services to the Melbourne Cricket Ground in Melbourne and the nib Stadium in Perth.



#### EPICURE

EPICURE, part of Spotless, is an elite catering company that services 14 venues across Australia and New Zealand.

Its service offerings cover all types of venues, from contemporary locations to grand, iconic landmarks. Some of these venues include the Melbourne Cricket Ground (MCG), Taronga Zoo and the Perth Convention and Exhibition Centre.

If you are interested in holding your event at one of EPICURE's venues, contact **events@epicure.com.au** or visit **www.epicure.com.au** for more information.



## World Environment Day

Tuesday 5 June was World Environment Day. Downer proudly supports this day which provides an opportunity to raise awareness on global environmental issues and affirm our commitment to sustainability.

Each World Environment Day is organised around a theme that brings attention to a global environmental issue to which everyone can play their part. The 2018 theme was "**Beat Plastic Pollution**" and its purpose was to challenge people to reduce plastic consumption, improve waste management and create a cleaner and healthier world.

Downer and Spotless championed several initiatives to recognise World Environment Day. Some of the highlights are featured below.

#### Opening of the Detritus Processing Facility

On Tuesday 5 June Downer announced the opening of its new Detritus Processing Facility at the Rosehill asphalt plant in Sydney.

The facility takes waste procured by street sweepers and storm water drains and transforms it into various products and materials, some of which can be used to make asphalt or reused and sold elsewhere.

The event was attended by important industry partners, including Kathy Giunta, from the NSW Environment and Protection Authority (EPA), and Rebecca Gilling, from Planet Ark.

#### **Children's colouring competition**

Downer conducted a colouring competition so that employees' families could get involved in World Environment Day too. Pictured is the talented nine-month old Dexter Smart, from New Zealand, son of Daniel Smart.

Winners of the competition will be notified on 13 July and announced on iDowner.

#### **Beating plastic pollution at home**

Alana McRae, Project Administrator at our Rosehill asphalt plant in Sydney took the opportunity to reduce, reuse and recycle material at her home. Some of her solutions include:

- a compost for vegetables and fruit;
- a coffee tin to collate bottle caps (by themselves they are too small to be recycled but in a bigger container they are recyclable); and
- donating plastic meat containers and paper towel rolls to a local preschool to reuse as paint dishes.







#### COMMUNITY

## Building homes for hope

Habitat for Humanity

As part of Downer's International Women's Day celebrations, volunteers participated in a "Homes for Hope" initiative that invited employees to renovate women's refuges and transitional accommodations in the Sydney area.

Run by Habitat for Humanity, the renovation ran over eight days with a variety of corporate participants, 10 of which were from Downer. The volunteers painted, repaired, and cleaned up the gardens of two houses and three apartments. These houses will assist more than 200 women and children over the next few years.

Luke Schafer, a volunteer from our Transport and Infrastructure division, said:

"It was a fantastic opportunity to meet some new people from across Downer and at the same time to give back to an organisation that provides so much support to those who need it."

#### **Habitat for Humanity**

Habitat for Humanity began in 1976 as a grassroots effort. The housing organisation has since grown to become a leading global non-profit organisation working in more than 70 countries. Worldwide, it has helped more than 9.8 million people obtain safe and decent housing, along with the strength, stability and independence to build better lives.

## Downer's electric cars

Earlier this year our Mining, Energy and Industrial division introduced four Plug-in Hybrid Electric Vehicles (PHEV) cars to Downer's fleet.

Plug-in hybrid electric vehicles combine a gasoline or diesel engine with an electric motor and large rechargeable battery. Unlike conventional hybrids, PHEVS can be plugged-in and recharged from an outlet, allowing them to drive extended distances using electricity. When the battery is emptied the conventional engine turns on and the vehicle operates as a nonplug-in hybrid.

The vehicle in Downer's fleet is the Mitsubishi Outlander PHEV. The Outlander PHEV switches between three drive modes to get the most efficient performance from its twin electric motors and petrol engine.

Grant Campbell, National Plant Manager, said:

"This initiative supports our customers and partners by focusing on alternative, smart transport solutions that are better for our environment, better for our businesses and better for our country."

#### Have you got a story idea? Know how we can make Enviro News better?

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