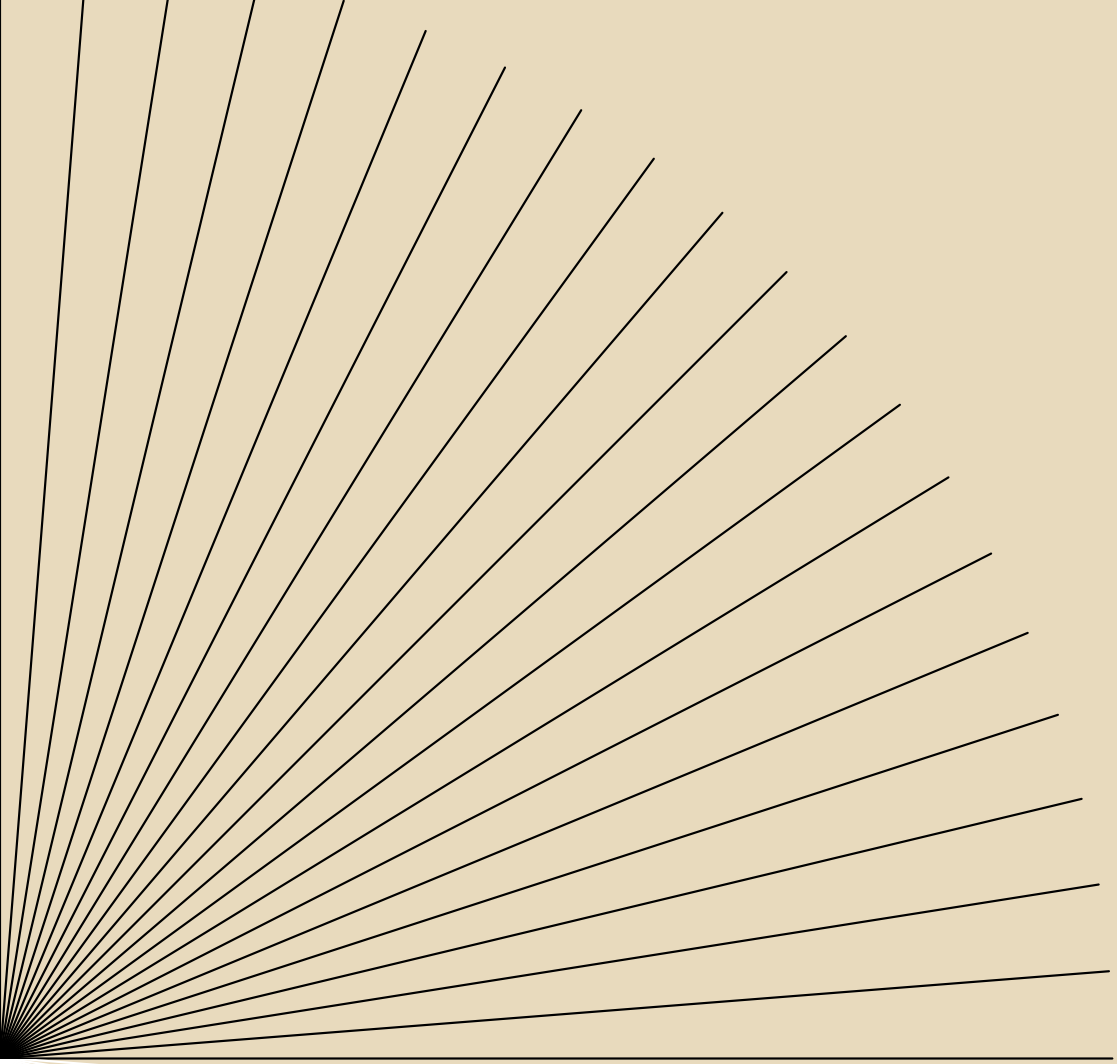
Premier's Sustainability Awards 2020

Celebrating Victorians leading the way
in innovative sustainable practices



Images featured were taken prior to public health measures in Victoria.

Contents

A message from the Premier

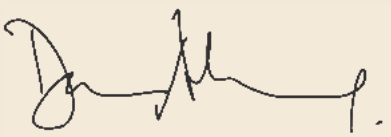
Every year, the Premier's Sustainability Awards recognise the achievements of some incredible Victorians.

Across different fields, industries and communities, every single one of you is helping to create a brighter future for tomorrow.

In 2020, from our suburbs to our most remote rural town, these efforts matter more than ever.

As a Government, we're very proud to back your contributions – and back a more secure and sustainable future for our state.

On behalf of all Victorians, congratulations and thank you.



The Hon Daniel Andrews MP
Premier of Victoria

A message from the Minister

Lily D'Ambrosio MP
Minister for Energy, Environment and Climate Change
Minister for Solar Homes

Victorians are shaping the state of the future through sustainability – and we're leading the way nationwide.

We're on track to meet both our legislated 2020 renewable energy target of 25 per cent and our 2025 target of 40 per cent, plus our legislated target of net zero emissions by 2050.

Our investment in renewable energy is creating thousands of jobs and stimulating the economy – all while delivering new, clean, affordable electricity for all Victorians.

Thanks to our landmark Solar Homes program, more than 79,000 Victorians have installed rebated solar panels, batteries and solar hot water systems since the program began in 2018.

The Victorian Government has built a strong foundation for transitioning our waste industry, through funding of more than $300 million for Recycling Victoria: A new economy. Our plan will overhaul Victoria's recycling sector, create 3,900 jobs and reduce waste going to landfill. More than that, it will drive a fundamental shift in our economy towards waste reduction and using resources to their full potential.

Victoria will benefit from reforms including a state-wide, four-bin recycling system, a container deposit scheme, nearly $100 million in funding to drive research and expand local processing, a Business Innovation Centre to develop innovative solutions to waste problems and an education program to help households, businesses and councils transition to the new system.

It's the largest package of recycling reforms and investment in Victoria's history – giving Victorians a truly circular economy and recycling system they can rely on.

We're supporting councils to build innovative infrastructure and make the most out of recycled materials in new infrastructure projects through our $2.6 million Sustainable Infrastructure Fund. This builds on our Recycled First program, which boosts the use of recycled and reused materials in construction projects in Victoria.

Our new online directory, Buy Recycled, features local products containing recycled content to help procurers and buyers easily research, review and access products with recycled content.

In the latest round of e-waste funding, we are investing up to $2 million in projects that improve the recovery and collection of e-waste across the state. This is part of our $15 million funding boost to help councils and facilities across the state upgrade their e-waste collection, processing and storage facilities.

The state-wide Know Your Recycling campaign kicked off in July this year to educate Victorian households on recycling correctly to reduce contamination. This comprehensive behaviour change program also provides Victorian households and businesses with the information and tools they need to reduce waste by reusing, sharing, repairing and recycling products.

In 2019–20 the ResourceSmart Schools program worked with 636 schools, representing over a quarter of all Victorian schools, students and teachers. Since 2008, participating schools working to embed sustainability in their communities have saved over $30 million through energy, waste and water savings, and have avoided generating more than 89,000 tonnes of greenhouse gases.

As a government, we can't go it alone. Our state's sustainability achievements belong to those Victorian individuals, organisations and businesses who are leading by example.

Now in its 18th year, the Premier's Sustainability Awards recognise Victorians who are spurring innovative change within their communities – reducing emissions, increasing resilience to the impacts of climate change and creating more liveable cities.

I'd like to congratulate this year's finalists and winners across the ten categories.

Together, you're helping to shape a cleaner, greener state to ensure a prosperous and sustainable future for all Victorians.

Supporters

A special thank you to the Premier's Sustainability Awards 2020 independent judges:

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EPA VICTORIA

A new era for environmental protection

In 2021, Victorians will see the biggest change in 50 years to our environment protection laws. A change that will help EPA prevent harm from pollution and waste for generations to come.

We look forward to working together with Victorians to address the environmental and public health issues that matter to them – now, and into the future.

To find out what our new laws mean for you, visit **epa.vic.gov.au**

VICTORIA State Government

Driving Victoria's Circular Transition

Victoria's recently launched Circular Economy Business Innovation Centre is bringing together businesses, industry groups, research institutions and not-for-profit organisations to create solutions to reduce waste, increase reuse, and generate new revenue for Victorian businesses.

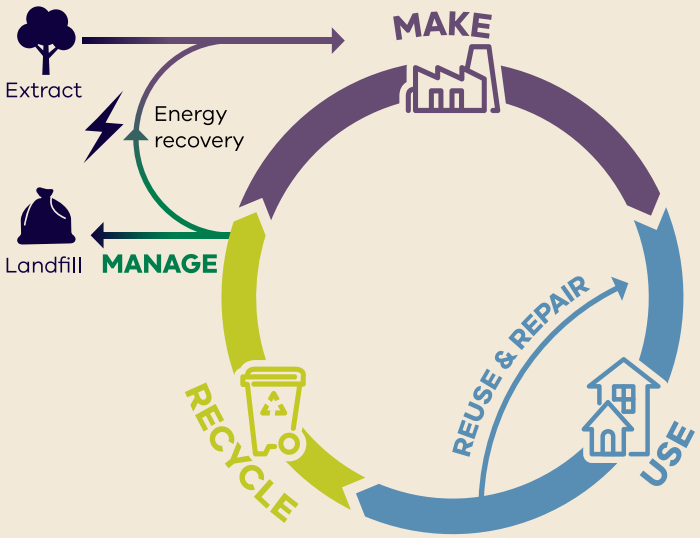
The centre works with a variety of businesses, to streamline the way they operate, reduce waste, and improve efficiency.

Research, expert advice and resources are available through a virtual hub. The hub is the place to go to find upcoming events, and view grants and support for businesses. Sustainability Victoria also offers one-on-one meetings and the opportunity to share your knowledge through the contact us page of the hub. The virtual hub also links to relevant circular economy events, opportunities and funding sources outside of the Circular Economy Business Innovation Centre.

Victoria's circular economy vision

The vision is for a circular economy that continually seeks to reduce the environmental impacts of production and consumption, while enabling economic growth through productive use of natural resources.

A circular economy allows us to avoid waste with good design and effective recovery of materials that can be reused. It promotes more efficient business models that encourage intense and efficient product use, such as sharing products between multiple users, or supplying a product as a service that includes maintenance, repair and disposal. The value we obtain from the resources used to create goods and services will increase.



The vision fosters innovation and productivity that invigorates existing businesses and creates new ones, delivering more jobs, more growth and more social inclusion to the local, regional, state and global economies.

To find out more about the Circular Economy Business Innovation Centre visit cebic.vic.gov.au

Take action to fight food waste at home, school and in business

In Victoria, we are renowned for our diverse cuisines, quality fresh produce and award-winning food products. Food and our love for it is a unique part of our identity.

On the other hand, we face a significant challenge when it comes to food. We produce one-quarter of Australia's food waste.

Most of this waste occurs at consumption. Households alone create around 250,000 tonnes of avoidable food waste every year. That's enough to make a pile as a big as the Eureka tower.

Food waste is an unsustainable use of resources. When we waste food, we also waste the water, land, fuel and energy that went into nurturing, harvesting, processing and transporting the food. Food in a landfill emits greenhouse gas. It has a significant impact on both human and planetary health by contributing to climate change. If food waste were a country, it'd be the world's third highest emitter.

The good news is that we all have the power to fight food waste. Our everyday actions at home, school and at work can prevent food waste and make our state's future a sustainable, thriving one. The Love Food Hate Waste Victoria website is a free resource to support you to get started. Join the fight on food waste today.

At home

Victorian households throw away an estimated $2,100 a year in wasted food. By planning meals, sticking to your shopping list and eating or freezing leftovers, families can save food and money. Check out some of the recipes and tips on our website to reduce food waste at home.

In hospitality businesses

Owners, managers and chefs can be leaders in their industry by reducing food waste across their business, reducing costs and being the sustainable business consumers are looking for. Join the free Love Food Hate Waste Business program to receive resources and information to reduce food waste in your business.

At school

Teachers can help their students understand the problem of food waste and how to reduce it, while learning practical food management skills that will benefit them over a lifetime. New curriculum resources about food waste are available for years 1–8 at lovefoodhatewaste.vic.gov.au

What your recycling is being turned into

You might be surprised to know that your past recycling is in plain sight every time you visit your local supermarket or get a tasty takeaway treat.

Tambo Waste is one of many local recovery facilities that takes recycling, sorts it and sends it off to local manufacturers to be made into something new.

At the Gippsland facility, an emptied cereal box or old envelope is sorted from other recyclables and sent to manufacturers. There it's moulded into egg cartons or wine-dividers found at local stores.

Recycled paper and cardboard can also be made into packaging for shipping, takeaway packaging and office paper.

Once these items are used, they go through the recycling process again – collection, sorting and processing.

Recycled plastic is finding even more inventive ways to go unnoticed, by mimicking the look of other materials. Milk bottles made from HDPE plastic are being used to make outdoor decking, park benches and even wheelie bins.

Plastic from soft drink bottles is being recycled and used again as soft drink bottles and containers for salads and sandwiches.

Coloured plastic bottles aren't as versatile as their transparent counterparts, as their colour can't be removed. Instead, they are used as construction materials for buildings and infrastructure.

These are just some examples of your recycling being turned into new products. If you would like to know more, visit Know your recycling.

Tambo Waste received funding through Sustainability Victoria's Recycling Industry Transition Support grants to upgrade their facilities to sort commingled kerbside recycling into separate high grade materials.

Environmental Volunteering in Victoria

You can help the places & plants animals, you love.

Environmental Volunteering connects community to nature and to each other. Become one of the thousands of Victorians caring for our environment. It's in our nature!

Visit environment.vic.gov.au/volunteering

to check out some ideas about how you can get involved.

Photos L-R: Barwon Estuary Monitoring; Friends of the Prom weeding sea spurge; Spotted Marsh Frog, Geoff Heard; Helmeted Honeyeater, Zoos Victoria; Planting day, Water for Victoria, DELWP.

VICTORIA State Government | Environment, Land, Water and Planning


ALD SUN
GREAT WEST
southgate

Premier's Recognition Award

WINNER

Yarra Riverkeeper Association and Cleanwater Group

Litter and Polystyrene Pollution in the Yarra

Recognising the diabolical effects of litter and polystyrene pollution on the health and appearance of the Yarra River, Yarra Riverkeeper Association partnered with Clearwater Group to negate these impacts.

Four large-scale Yarra Blitz community clean-up events held in 2019 removed 17,500kg of vacuumed waste and 665kg of community collected waste. The clean-ups were undertaken and supported by local and state governments with members of the public, volunteer and community environment groups who cleaned sections of the Yarra on foot and in kayaks.

Field investigations identified the sources of polystyrene and litter pollution. By mapping the hot spots and facilitating the Yarra Blitz clean-up days, the Yarra Riverkeeper Association and the Cleanwater Group engaged and educated the public and developed recommendations to prevent future pollution.

Premier's Regional Recognition Award

WINNER

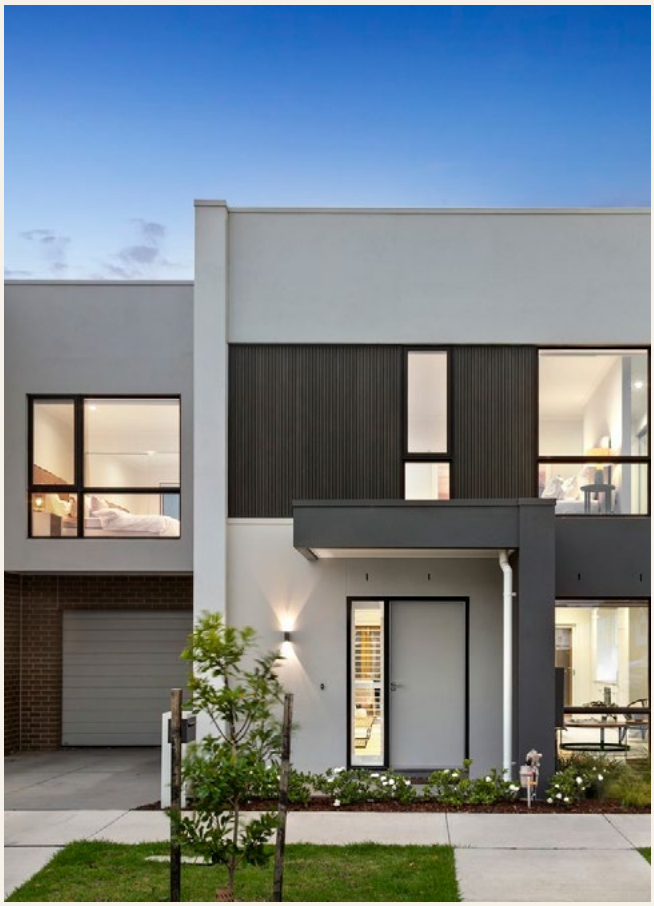
Totally Renewable Yackandandah

Yackandandah Virtual Power Plant

Totally Renewable Yackandandah have set the goal for the town's energy to be 100% renewable by 2022. To undertake the introduction of community energy, the group engaged with business, community, and council to help deliver The Yackandandah Virtual Power Plant. The plant currently includes solar generation on ten public buildings with battery storage installed in three of the public buildings, including the town's fire station.

The project resulted in the installation of 74kW of solar across the Totally Renewable Yackandandah footprint, which has a 14km effective radius. This will generate an extra 104MWh of clean energy, reducing carbon emissions by an estimated 88 tCO2e per year.

The Yackandandah community is highly engaged in sustainability and are setting an example for others. The many community groups who worked across Yackandandah to achieve this shared outcome of efficient renewable energy are setting an example for Victorian communities, while strengthening the economy of their town.



FINALIST

Mirvac Group

PROJECT

The House with No Bills

Mirvac's fully electric House with No Bills looks just like any other home in the development but uniquely employs multiple sustainability features that enable residents to reduce and potentially eliminate their energy bills.

All appliances installed are selected to be the highest star ratings available at an affordable price. The home features solar PV and battery storage, upgrades of glazing, insulation, LED lighting, zoned air conditioning and heat pump hot water, achieving energy savings of 92% over a year.

FINALIST

Swinburne University of Technology
Wyndham City Council

PROJECT

Recycled waste plastics and glass fines in concrete footpath

In a Victorian first, Swinburne University collaborated with Wyndham City Council to produce 339 metres of footpath at Geddes Crescent Park in Hoppers Crossing. It included 2.2 tonnes of recycled kerbside waste plastics and 4.8 tonnes of glass fines, equivalent to 199,000 plastics and glass bottles.

The research project and resulting footpath garnered significant national and international credibility. It is estimated the approach used resulted in approximately 1700kg of carbon savings compared to utilising traditional materials in a concrete footpath of the same length.

WINNER

Frasers Property Australia

PROJECT

Burwood Brickworks Shopping Centre

Frasers Property Australia set out with an ambitious target to redefine the retail sustainability benchmark, and their Burwood Brickworks Shopping Centre is on track to be the world's first Living Building Challenge (LBC) accredited shopping centre. The LBC accreditation is the most rigorous sustainability performance measure in built environment – only 24 buildings worldwide have achieved full certification. A vast array of stakeholders including consultants, tenants and the project build team were engaged early in the process to help understand how to overcome the challenges of building to meet the LBC sustainability standard.

With a 6 Star Green Star Design rating, Burwood Brickworks' self-sufficient qualities include: 100% renewable energy; 100% repurposed rainwater – stormwater and water within the buildings is captured, treated onsite and repurposed back within the building for irrigation; 99% of construction waste diverted from landfill; and an impressive 2,500sqm rooftop urban farm revolutionising urban environment agricultural benefits.

Frasers Property Australia have participated in multiple workshops with the City of Melbourne with a focus on the project as a case study to influence future planning scheme amendments relating to green projects.

FINALIST

Port Phillip EcoCentre and Werribee River Association

PROJECT

Living Water Workbees

Living Water Workbees built a calendar of community action and combined this with a network of water sensitive infrastructure for school and residential properties, to activate distinct 'Water Sensitive Urban Design' (WSUD) for the Port Phillip Bay precinct. The installed WSUD infrastructure has a total tanks capacity of 191kL and an estimated annual water diversion of 2.3 million litres.

In 2019 a total of 132 Workbees were delivered, engaging 2626 volunteers. Workbees also removed 4.2 tonnes of litter, planted 3156 plants and conducted 14 citizen science biodiversity surveys.

FINALIST

Queenscliff Music Festival

PROJECT

QMF's War on Waste

Queenscliff Music Festival's (QMF) War on Waste program was a true community effort, educating attendees and locals in sustainable waste practices and exemplifying what is possible for similar events with 95% of waste generated being diverted from landfill.

Partnering with Feed Me Bellarine and food vendors, the festival saw 500kg of excess food salvaged and delivered to citizens in need.

Additionally, over 500 families were engaged through Bellarine Catchment Network in festival activities, including propagation of seedlings which were later planted across the local dune system.

WINNER

Totally Renewable Yackandandah

PROJECT

Yackandandah Virtual Power Plant

Through the installation of a Virtual Power Plant, Totally Renewable Yackandandah (TRY) have set the goal to enable Yackandandah to operate off 100% renewable energy by 2022.

TRY engaged 10 community groups to install solar panels and smart controllers on 10 public buildings, three with batteries. It was a substantial undertaking to partner with mainly volunteer-run organisations and accommodate their schedule of works and differing organisational ambitions.

The Virtual Power Plant project saw the installation of 74kW of solar across a 14km radius network of publicly-owned buildings to generate, store and share electricity to build a robust, localised, low-carbon and resilient electricity supply. The plant generates an extra 104MWh of clean energy, reducing carbon emissions by an estimated 88t CO2e per year, the equivalent of removing more than 17 cars off the road annually. A core consideration was to ensure key assets across the area would provide electricity during outages and emergencies.

The project normalised clean energy for the community, with engaging displays at each of the installations explaining the project to people and demonstrating how energy efficiency and local generation can become part of their daily lives.

Education

FINALIST

Monash Climate Change Communication Research Hub

PROJECT

Changing Climates: Victoria's first dedicated local climate column

Changing Climates is Victoria's first dedicated local climate column and was published weekly to 1.5 million readers across 25 local newspapers.

Funded by the Lord Mayor's Charitable Foundation, the columns saw sustainability initiatives of local residents and businesses profiled and celebrated. Bureau of Meteorology data from a selection of suburban weather stations was displayed as simple graphs to support the column's content.

Readers of the columns demonstrated a 15.82% increase in pro-mitigative behaviours, such as choosing sustainable transport over driving or eating less red meat, indicating a shift in behavioural response to climate change messaging.

FINALIST

Mount Waverley Primary School

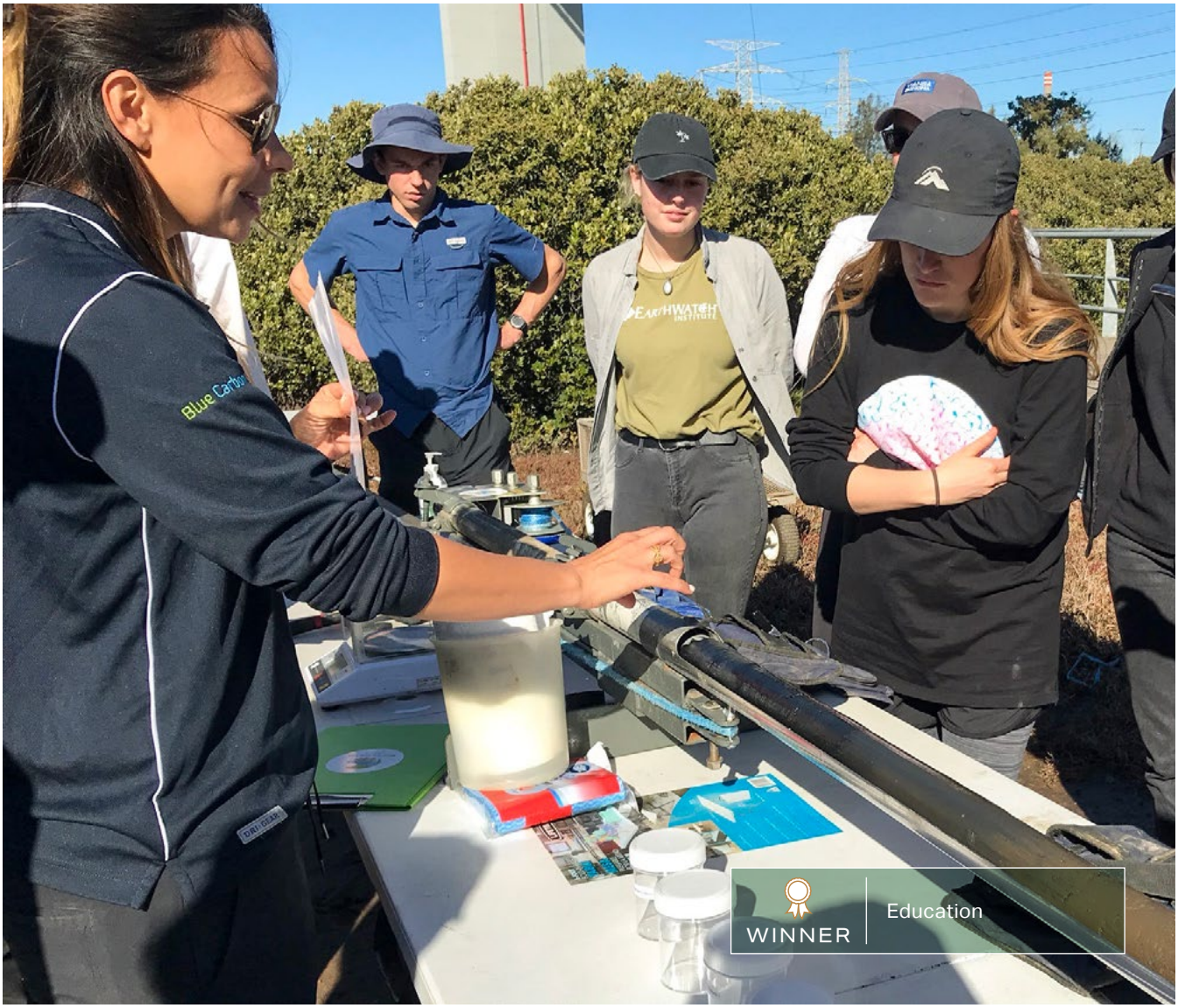
PROJECT

MWPS Sustainability Hub

Mount Waverley Primary School built the Sustainability Hub for students and staff to learn about sustainability and become environmentally aware, responsible citizens.

The outdoor and nature-based learning Hub saw engagement in nature, gardening, cooking and waste reduction. The space is a showcase of sustainability initiatives with water tanks, a five-stream recycling system and drought tolerant indigenous gardens.

The Sustainability Hub has successfully brought all aspects of the sustainability programs together in one space: physically, emotionally, mentally and educationally.



WINNER

Deakin University – Blue Carbon Lab

PROJECT

#BlueCarbonArmy: Education by immersive wetland citizen science

The HSBC Blue Carbon Citizen Program – funded by HSBC, Deakin University and Earthwatch – empowers leaders to build a sustainable future and value Australia's coastal ecosystems. The program has educated more than 300 corporate executives (#BlueCarbonArmy) from HSBC and industry partners on climate change science and research.

By swapping suits for gumboots and providing an immersive experience into coastal wetland research, the #BlueCarbonArmy connects executives with nature – leading to scientifically documented sustainable behaviours.

The program was designed as a full-day immersive experience combining educational talks, discussions and research activities on local wetlands. The active engagement of the participants in coastal research was designed to build scientific trust and generate key data to advance nature-based climate solutions in Victoria.

By educating Australia's high-level executives in climate change literacy, this program facilitated sustainable changes within organisations and empowered financial decisions that lead to a greener future.

Environmental Protection

FINALIST

Port Phillip EcoCentre and Yarra Riverkeeper Association

PROJECT

Clean Bay Blueprint – Microplastics Trawls

Clean Bay Blueprint – 'Microplastics trawls' is a 3-year research project funded by the Port Phillip Bay Fund to help deliver the Port Phillip Bay Environmental Management Plan.

The Port Phillip EcoCentre and the Yarra Riverkeeper Association implemented a range of initiatives including river trawls to identify how much plastic pollution reaches Port Phillip Bay from Melbourne's Yarra and Maribyrnong rivers.

Monitoring the changes in litter loads, one-off pollution events and effectiveness of anti-litter initiatives supports the design and implementation of litter source reduction plans.

FINALIST

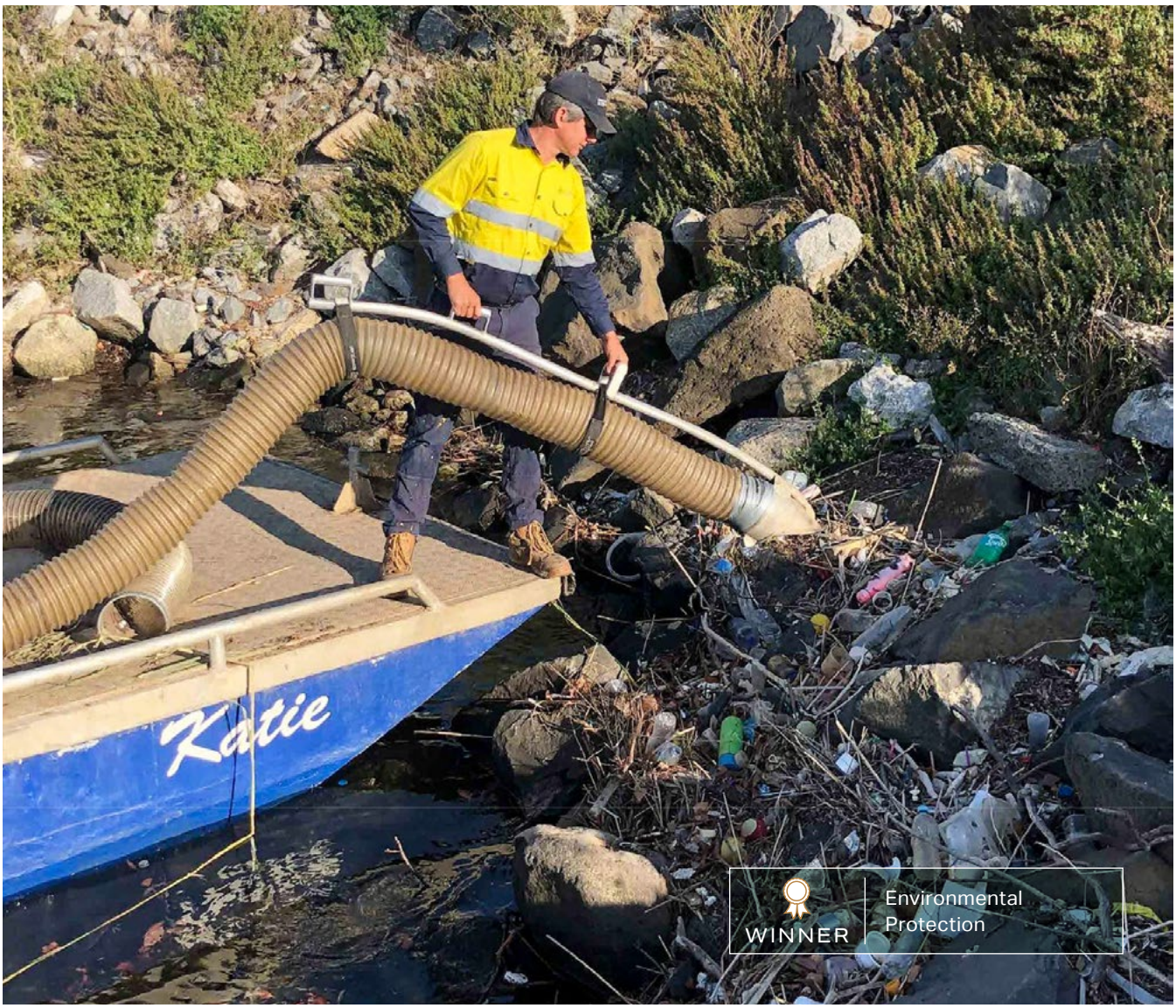
Queenscliff Music Festival

PROJECT

QMF's War on Waste

Queenscliff Music Festival's concerted War on Waste effort to improve their sustainability credentials was a resounding success, seeing 95% of waste generated by the event was diverted from landfill.

With a 24,000 attendance, just 178kg of waste was sent to landfill – a staggering 82% year-on-year decrease. The event achieved this through being the first of its size to become fully reusable, with all vendors serving reusable crockery, cups and cutlery, upcycling build waste and actively ensuring cleaner grounds for patrons to encourage more conscious waste disposal behaviour.



WINNER

Yarra Riverkeeper Association and Cleanwater Group

PROJECT

Litter and Polystyrene Pollution in the Yarra

Recognising the diabolical effects of litter and polystyrene pollution on the health of the Yarra, Yarra Riverkeeper Association in conjunction with Clearwater Group sought to combat these negative impacts.

Four large scale Yarra Blitz community clean-up events held in 2019 removed 17,500kg of vacuumed waste and 665kg of community collected waste. This was achieved by individual members of the public, volunteers and community environmental groups cleaning sections of the Yarra on foot and in kayaks.

To identify potential sources and distributions of polystyrene on the Yarra River, data on polystyrene manufacturers, high-volume users, recyclers and distributors was collected using desktop research. These potential sources were then mapped using an interactive geographic information system which also included data on major polystyrene hotspots on the Yarra River (informed by the Yarra River Blitz project), drainage catchments, stormwater outlets on the river, and the locations of each litter trap in the Yarra.

By identifying and mapping these hot spot sources of pollution and subsequently facilitating the clean-up days, the initiative not only removed significant amounts of waste from the Yarra River precinct, but further engaged and educated the public and developed recommendations to prevent future pollution.

Environmental Volunteering

FINALIST

Sea Shepherd Victoria

PROJECT

Sea Shepherd Marine Debris Campaign Victoria

Sea Shepherd's Marine Debris Campaign set out to create action opportunities through clean-up events, collection of data for research, supporting community groups in their conservation efforts and bringing awareness to the key issue of plastic and its damaging impact on the environment.

The campaign hosted 34 community clean-ups across Victoria with the support of 1,978 volunteers and removed 4018kgs of litter from the marine environment. The clean-ups recorded litter collection data for conservation research and inspired change and the adoption of more environmentally responsible behaviours.

FINALIST

Volunteers of Greta Valley Landcare Group

PROJECT

Paddock trees – The lonely battlers of our landscape

Greta Valley Landcare Group volunteers set out to protect and enhance large old remnant paddock trees that harbour significant biodiversity, productivity and cultural benefits.

The team achieved the protection and enhancement of 46 remnant trees in the catchment, using fencing as well as planting over 1500 native shrubs and 300 new paddock trees across 20 different properties.

The project also delivered lasting agricultural productivity and biodiversity benefits, with the new trees providing important shade and shelter for stock and increasing local biodiversity.

WINNER

Volunteers of Bellarine Catchment Network and Volunteers of the Queenscliff Music Festival

PROJECT

QMF's War on Waste

The Bellarine Catchment Network (BCN) has a long-term relationship with the Queenscliff Music Festival (QMF) and its community of volunteers. BCN is a not-for-profit group that includes more than 30 community groups who supported the QMF volunteers to develop and plan a range of sustainability initiatives.

The 2019 festival saw an 86% increase in the number of community volunteers. The festival went 'fully reusable' for all vendors and the 24,000 attendees, resulting in only 178kg of waste sent to landfill over the three-day festival.

The use of the 'Be a Local Hero' campaign imagery and messaging provided a connection to the impact of waste on wildlife and the sensitive environment surrounding the festival site; assisting in driving patron engagement to keep the site waste free. Over 500 families took part in sustainability activities including seed propagation, litter and fishing games, beachcombing and wetland awareness.

To manage food waste QMF partnered with Feed Me Bellarine, a volunteer community driven food sharing program. Across the event approximately 500kg of surplus food was rescued and delivered to people in need.

Government

FINALIST

Bass Coast Shire Council

PROJECT

Bass Coast Biolinks

Bass Coast Shire recognised Biolinks were imperative in improving vegetation cover across the shire.

Through enhancing vegetation and wildlife corridors along waterways – capturing and retaining water in the landscape – the 200 Biolinks improve capacity for native plants and animals to adapt to predicted climatic impacts of higher temperatures and extreme weather events.

380,000 indigenous plants have been planted across the shire resulting in an increase of 189 hectares of native vegetation. Retaining native vegetation cover has contributed to significant landscape change and connects high-value ecological areas.

FINALIST

Department of Health and Human Services

PROJECT

EnergySmart Public Housing Research Project

Acknowledging that tenants of public housing are among the lowest income Victorians, the EnergySmart Public Housing Research Project assisted residents of 1500 public housing dwellings to effectively reduce their electricity bills, have a more comfortable home and reduce their environmental impact.

Interventions were designed to save tenants money, reduce greenhouse gas emissions and establish more comfortable temperatures inside the home. This included careful selection of efficient appliances and building shell improvements to deliver tenant benefits.

The project achieved substantial benefits for tenants and reduced environmental impact for the state of Victoria.

WINNER

City West Water

PROJECT

Stormwater Harvesting for a Greener West

Through increasing accessibility to stormwater for public open spaces, greening the urban environment and improving liveability, City West Water's Stormwater Harvesting initiative offers a holistic approach to urban greening.

The program established guidelines – that also act as a blueprint for future infrastructure – to encourage the introduction of innovative products including modular storage chambers and compact pumping kiosks.

As part of City West Water's Integrated Water Management program, stormwater harvesting projects aim to deliver enhanced social and economic benefits to the community by keeping public parks, gardens and sporting fields green.

Initiatives like Stormwater Harvesting and Recycled Water help improve the liveability and wellbeing of communities; benefitting the community and demonstrating responsible urban water management.

The program reduced water bills for customers by $26,000 per year, provided alternative water for irrigation, improved waterway health and vegetation, and minimised flooding and erosion impact on the sites and further downstream.

City West Water additionally set up a delivery model that can be adopted by other water utilities seeking to partner with local governments in their service area.

FINALIST

Alfred Health

PROJECT

Alfred Health War on Waste

When monthly waste contractor reports and waste audits showed poor results, Alfred Health implemented a War on Waste (WoW) strategy to improve their sustainability credentials and minimise waste.

With goals to avoid and reduce waste, improve segregation and reduce contamination, Alfred Health rolled out waste signage systems, stringent bin colour coding labels and a carefully considered bin layout.

Also encompassing staff education, the implementation of the WoW strategy had multiple benefits. Recycling rates improved by 50%, a reduction in clinical waste followed and broader staff engagement with environmental sustainability was evident.

WINNER

Bendigo Health

PROJECT

Reducing Waste to Landfill via Recycling Curtains

To maintain hospital grade condition, bed curtains require replacement each year. Recognising that the curtains were marketed as recyclable, Bendigo Health took considered steps toward ensuring recycling could take place. The anti-mould and anti-mildew impregnated component of the material proved to be a deterrent for general recyclers.

After much research to locate a recycler who would accept the polypropylene curtains Bendigo Health found that the Ballarat Replas facility processed large quantities of polypropylene materials in the manufacture of recycled products such as bollards, tables and signage.

To meet sanitation requirements, Bendigo Health developed a method of bailing the curtains to ensure no physical contact or handling needed to take place and the bale could be forked directly into recycling.

A three-year stockpile of the curtains (approximately one tonne) was successfully diverted from landfill in 2019. Bendigo Health are currently working with recyclers to find solutions to further divert their medical waste materials from landfill.

Posters displaying the suitability initiative throughout the facility foster a sense of patient and employee pride, a positive outcome for the hospital's culture and community.

Innovative Products or Services

FINALIST

Green Eco Technologies

PROJECT

WasteMaster

Green Eco established WasteMaster to retain the 'goodness' of food and organic waste, reducing overall waste in the commercial and high-density residential sectors.

The WasteMaster reduces food waste by up to 80% in 24 hours using low levels of energy. The pathogen-free by-product produced is a valuable resource that is both safe to handle and store, significantly improving health outcomes associated with handling food waste.

An impressive reduction of 84% in greenhouse gas emissions is achieved when compared to disposing of the same waste to landfill.

FINALIST

Schulz Organic Dairy

PROJECT

Schulz Organic Dairy Milk in Glass Bottles

Located in Timboon, south west Victoria, Schulz Organic Dairy set out to bottle their milk in reusable glass bottles.

Following a sell-out trial of hand bottled milk at Farmers' Markets, Schultz crowd-funded to purchase equipment and produce quantities required to retail their milk in the broader Victorian market.

Schulz now delivers 3,000 glass bottles of organic milk weekly, to over 50 retailers Victoria-wide, with an excellent return rate of 95% of bottles refilled and reissued.
The initiative has averted 10,068kg of plastic bottles from landfill.

WINNER

Repurpose It

PROJECT

Australian First Washing Plant

With the ambition to deliver a positive environmental outcome, Repurpose It (RPI) identified an opportunity in the construction and demolition waste sector to recover sands and aggregates from waste soil, including contaminated soil which had not been previously recycled in Australia.

Product accreditation was obtained across key stakeholder sectors including water agencies, Yarra Valley Water and City West Water, for the use of recycled sands, glass and aggregates materials. Approval was obtained from the Department of Transport to produce industry-first engineering materials that support road construction using the recovered clay from the washing process.

In 2019 RPI diverted 148,567 tonnes from landfill in its washing process and produced 141,000 tonnes of materials to substitute virgin extractive resource. Based on an independent LCA (Life Cycle Assessment), for each tonne of contaminated soil diverted from landfill and processed at the facility, 168kg of CO2-e is diverted from the atmosphere.

The relationships formed with key stakeholders has led to other partnership success stories, including RPI's remediation of the former glass recovery services site, where more than 50,000 tonnes of glass has since been recovered.

FINALIST

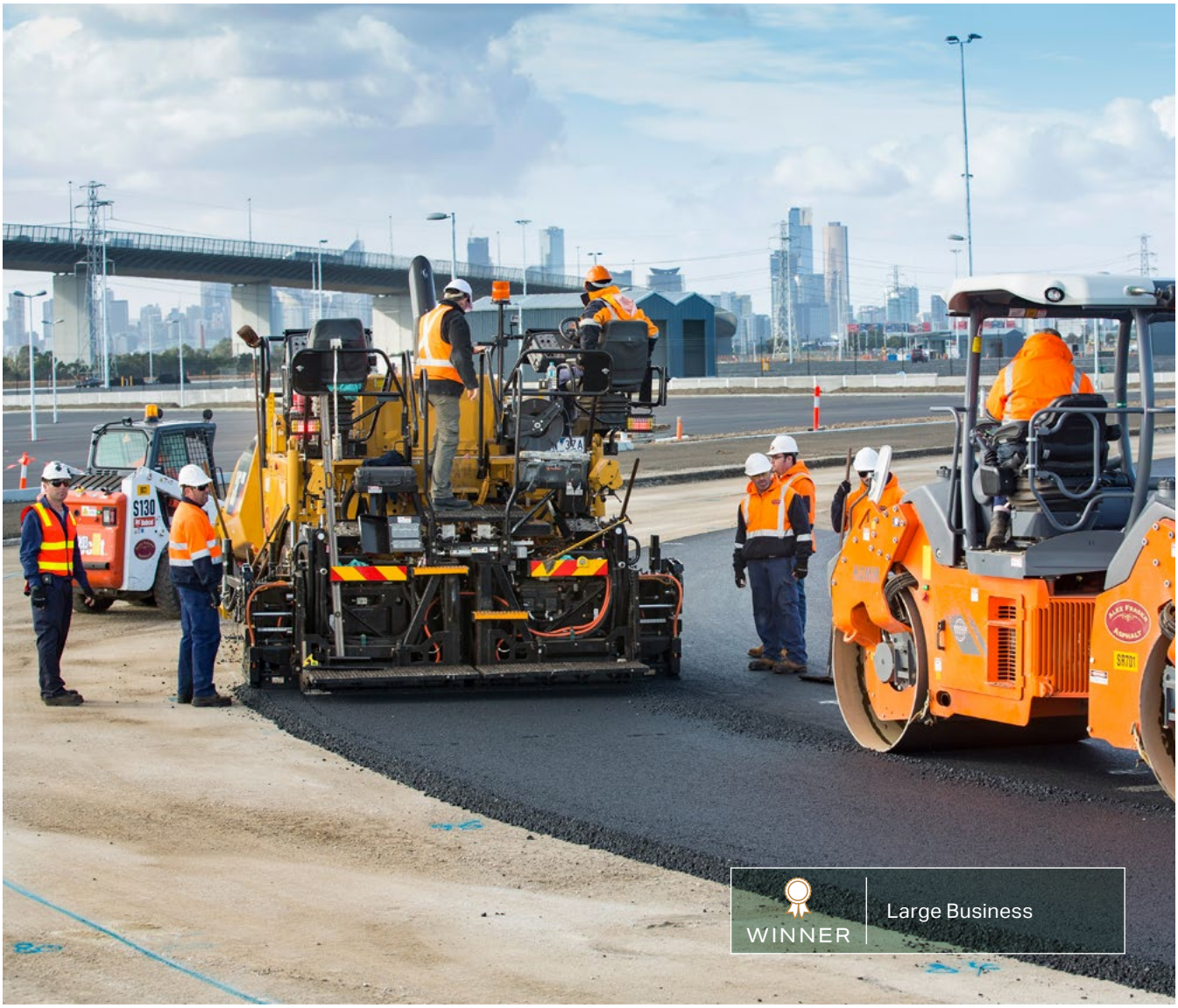
Woolworths Group

PROJECT

Woolworths at Burwood Brickworks

Woolworths partnered with property developer Frasers to test its ability to meet ambitious sustainability standards and go beyond built form to pursue a holistic sustainability strategy across store operations.

As a tenant at Burwood Brickworks, which is on its way to become the world's first Living Building Challenge accredited shopping centre – Woolworths adopted 44 sustainability initiatives with results including a 14% reduction in energy consumption compared to an average store, 68% food recovery and 330 kg of soft plastics recovered by month six of operation.



WINNER

Alex Fraser

PROJECT

Laverton's Sustainable Supply Hub

Established in 2019, Alex Fraser's Sustainable Supply Hub (The Hub) recovers diverse, high volume, priority waste streams to recycle high quality end products needed for infrastructure development.

The Hub is one of the world's largest recycling facilities, producing over 1,000,000 tonnes of material annually, to provide the construction industry with sustainable alternatives to depleting earth resources. It markedly reduces landfill, carbon emissions and the need for transport and extraction. The Hub incorporates an integrated High Recycled Technology asphalt plant, an innovative glass recycling plant and a construction and demolition recycling plant.

Recovered glass, asphalt, brick and concrete are recycled at The Hub to make new asphalt, road base and sand for civil construction. The glass recycling plant produces 800 tonnes of construction sand per day. It supplies the asphalt plant, producing up to 500,000 tonnes of recycled asphalt per year.

The Hub's annual environmental outcomes include 200,000 tonnes of glass waste recycled into sand, saving 1 million kg of CO_2, and 390,000 tonnes of high recycled asphalt, saving 3.3 million kg of CO_2. The Hub has established strong end-markets with an urgent demand for recycled products.

Small and Medium Enterprises

FINALIST

MANRAGS

PROJECT

MANRAGS Textile Recycling Initiative

Upon learning about the amount of textile waste generated by Australians each year, MANRAGS undergarments decided to take responsibility for the entire lifecycle of their products and launch its sock recycling program.

They partnered with a Victorian textile recycler to learn about the process, then engaged a packaging company to supply printed compostable satchels for customers to mail back old and unwanted socks.

Since launching in September 2019, a community of 40,000 members have saved an incredible 13,000kg of socks from going to landfill.

FINALIST

SJD Homes

PROJECT

Z-Range

SJD Homes' mission is to deliver zero net carbon homes at affordable prices.

With the average home producing 7 tonnes of greenhouse gas per year, SJD Homes recognised the need for a new model of housing that was sustainable, affordable and familiar – resulting in the Z-range.

Z-range homes are actively contributing to a sustainable future, generating an average $653 in energy bills per year as compared to $4,000 for a typical home in suburban Melbourne, reflecting not only a reduction in greenhouse gases but an achievement for reducing cost of living.

WINNER

Repurpose It

PROJECT

Australian First Washing Plant

Through extensive market research across the globe Repurpose It identified an opportunity in the construction and demolition waste sector to recover sands and aggregates from waste and contaminated soil, this had not previously been recycled in Australia.

Based on their three key objectives 1, to deliver a positive environmental outcome for the state of Victoria 2, to establish a niche in the construction and development waste materials arena, and 3, to position themselves and Victoria as leaders in construction and demolition resource recovery. Repurpose It successfully launched their Washing Plant which diverts large volumes of construction waste that has historically been sent to landfill.

The washing plant has diverted 148,567 tonnes from landfill and produced 141,000 tonnes of materials to substitute virgin extractive resource.

After being awarded the first EPA licence to process category C Waste, product accreditation was obtained across key stakeholder sectors for the use of recycled sand, glass and aggregate materials that had not previously been approved for use. Repurpose It also attained approval from the Department of Transport to produce industry-first engineering materials that support road construction using the recovered clay from the washing process, this is unique to their operation.

Commercial Tippers is filling a gap in Victoria's recycling infrastructure

When developing new properties and buildings, waste material is created. This includes bricks, metal, rubble, soil and timber. These materials can be recycled into new products and used again but there are limited facilities that handle mixed waste generated from construction sites. Sustainability Victoria is supporting the sector to increase its ability to recycle mixed materials, so valuable materials don't end up in landfill.

In Victoria, 13% of construction and demolition waste ends up in landfill – some of this is mixed waste that could be recycled. While the construction and demolition sector has one of the highest rates of diverting waste from landfill, the need to manage this waste is growing. Victoria is the fastest growing state in Australia, with the population expected to reach 11.2 million by 2056.

With support from Sustainability Victoria's Resource Recovery Infrastructure Fund, Commercial Tippers have built additional capacity to separate and recycle construction waste and recover valuable materials.

Commercial Tippers, in collaboration with business partners SMART Recycling, converted an old landfill into South East Melbourne's largest high-tech construction waste sorting facility that recycles 90% of all waste and reprocesses up to 60 tonnes of material per hour. The facility is reprocessing timber, soil, concrete and brick waste from new construction sites, as well as waste that was left on the old landfill site.

The site was home to piles of bricks from the '80s and '90s, that are now getting a new lease on life. The vintage bricks were recovered and mixed with other recycled bricks and crushed into brick chips or finer particles used for new construction projects and manufacturing. Recycled soil from the site is used as a landscaping product after it's blended with compost material.

Recycling bricks and soil reduces the demand for virgin materials from mines and quarries. Old timber from housing construction sites is chipped and made into quality mulch suitable for landscaping and garden supplies.

Inspirational teachers celebrated at ResourceSmart School Awards

Behind every ResourceSmart School there's an inspiring teacher who believes that fostering environmental awareness is a crucial part of a well-rounded education.

These teachers enable students to connect with nature, understand sustainability, and develop skills and lifelong values. Thanks to them, younger generations learn that working together is a fun way to contribute to their wellbeing and to the future of the planet.

The ResourceSmart Schools Awards includes a category for those educators who excel in delivering sustainability education in their school. The Teacher of the Year Award provides an opportunity for teachers to be recognised for empowering their students to become sustainability leaders. 2020 saw teachers from both the primary and secondary sectors honoured.

To learn more about ResourceSmart Schools and to view all the winners in the 2020 ResourceSmart School Awards visit sustainability.vic.gov.au/schools

Judith Stewart (centre) at the Lowanna College vegetable garden

Stephanie Young
St Columba's Primary School

Stephanie Young, Primary Teacher of the Year, played a pivotal role in the sustainability journey of St Columba's Primary School in Elwood. In her role she has mentored student environment leaders, promoted school achievements and led engagement with the community.

Stephanie oversees a range of programs at St Columba's, like the STEAM Clean the Bay Program, Take 3 for the Sea, the kitchen garden classroom and No Waste Wednesdays.

She has been instrumental in increasing resource efficiency and reducing waste on campus through nude food days and the introduction of e-waste disposal. As a result, the school's general waste is kept to less than three wheelie bins per week!

Stephanie's leadership within the community has ensured the school is actively engaged in volunteer opportunities in the local area. This has developed a strong sustainability spirit at St Columba's – which is in turn fostering sustainability leadership amongst students.

"I feel amazingly blessed to have the role of Sustainability Leader at our school and to see how passionate our school community is in trying to better our environment and our world!" – Stephanie Young

Judith Stewart
Lowanna College

Judith Stewart, Secondary Teacher of the Year, forged strong connections with community organising a Green Tradies program with community volunteers and developing a student-led sustainable garden initiative. The program provided the opportunity for students to work with volunteers to learn about gardening, composting, harvesting and cooking with produce from the school vegetable garden.

Judith developed the Sustainable School Management Policy, the Green Purchasing Policy and the garden program, which teaches students how to plant seasonal vegetables using sustainable wicking beds. Students were so enthusiastic that they took some of the barrel gardens home.

"That outcome was probably what made me the happiest, knowing that students would be able to continue the gardening program in their home. It's valuable when you know that the wicking gardens are at least 50% more water efficient than traditional flat-bed gardens, so will be saving lots of water and money."

Her enthusiasm for sustainability spills into the curriculum, where she's embedded sustainable technology into classroom activities, such as teaching students how to make a saltwater battery and develop solar energy cars. Judith collaborated with students to run a school energy audit where students went room to room, measuring appliances, lights, light levels, heat levels, and heat and air losses.

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