SA CLIMATE CHANGE COUNCIL SA CLIMATE LEADERS AND AND SALVANDERS



WINNERS AND FINALISTS 2018

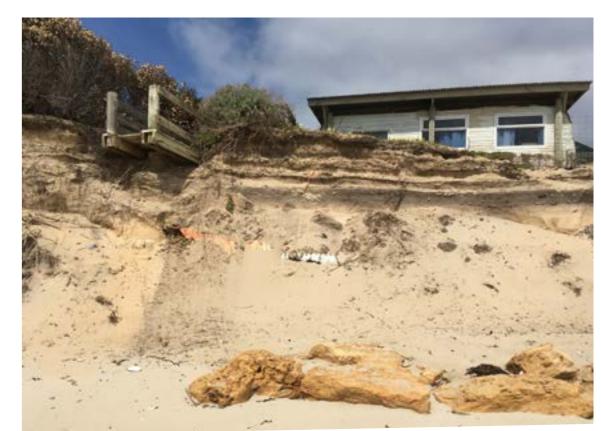




WATTLE RANGE COUNCIL

WORKING WITH LOCAL COMMUNITY TO DEVELOP A COASTAL ADAPTATION STRATEGY FOR SOUTHEND

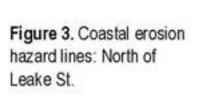




GOVERNMENT CATEGORY

Figure 1. Coastal erosion hazard lines: Western beach (Note: Coastal hazard Lines Immediate ZWI, 2050 Almost Certain ZR and 2100 Almost Certain are located in the same position).

hazard lines: Outlet groynes to Leake St.





"Wattle Range Council's Southend Adaptation Strategy is an excellent example of planning with the community to identify options to adapt to climate change. The community and the Council have bravely tackled the issue, and resolved to have 'managed retreat' in some areas rather than pursuing further engineering solutions."

Fiona Rasheed, Presiding Member, South East Natural Resources Management Board



The Wattle Range Council worked with their local community to develop a coastal adaptation strategy for Southend, creating a plan for the future with strong community ownership.

Coastal assets, land and infrastructure are experiencing increased storm damage, erosion and inundation risk, which will be exacerbated by sea level rise.

A long term strategic management approach was needed.

The local community were involved in reviewing the likely impacts of a range of scenarios, so they were able to express

the changes that they could live with, and the values that they wanted to protect. The process meant greater community acceptance of some difficult decisions.

The project provides a 'template' demonstrating a best practice approach for other coastal council's or towns to follow.

The project was supported by the Coast Protection Board and the Local Government Association of SA.

PREMIER'S CLIMATE CHANGE COUNCIL **SA CLIMATE LEADERS AWARDS OVERALL WINNER & WINNER – GOVERNMENT** 2018

CORENA

COMMUNITY ENERGY TRAILBLAZERS MAKING A DIFFERENCE FOR NOT-FOR PROFITS



COMMUNITY CATEGORY



"When CORENA started there were no funders of this nature in the market. It's quite amazing that less than 1,000 people around Australia have built a fund that has delivered \$313,000 worth of investments in greenhouse emission reductions."

Margaret Hender, Chairperson, CORENA



CORENA is a South Australian based charity that started as an idea on the walk-for-solar from Port Augusta to Adelaide in 2012. Those on the walk wanted to create a way to empower ordinary people to do something practical to tackle climate change. CORENA was born with members and supporters from around Australia.

CORENA's model is a crowd-funded revolving fund. Donors can chip-in any amount to support a project that reduces greenhouse gas emissions, typically through rooftop solar and energy efficiency investments.

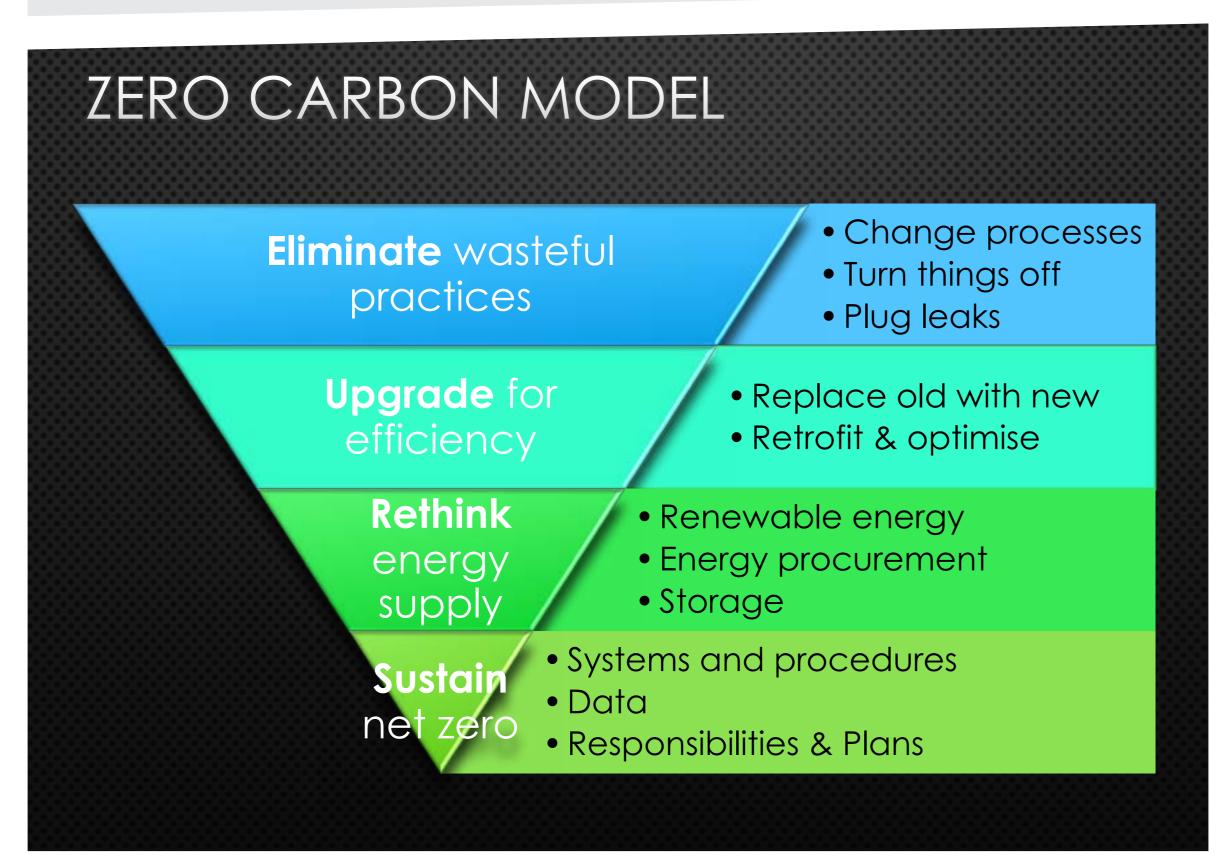
The most successful projects have been 'Quick Wins' that support community organisations to reduce energy bills with no-interest loans. Having just started fundraising for their 24th project, CORENA's revolving fund has invested more than \$313,000 into projects over the last 5 years and reduced emissions from 500MWh of electricity. Every dollar lent to CORENA's first project has now been invested 2.4 times.

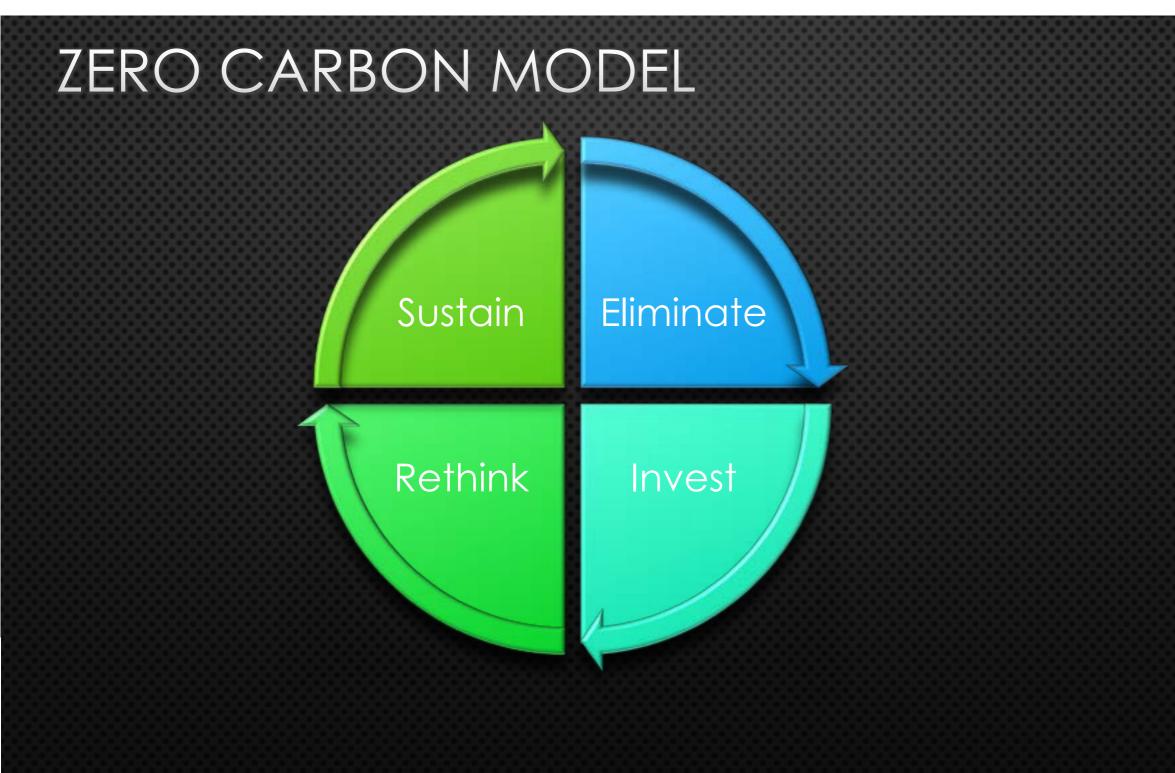
Five CORENA projects have been delivered in South Australia, with almost \$74,000 lent. The projects have saved 65MWh of electricity and reduced emissions by 40-70 tonnes per year. With an average payback of 5 years, the projects will soon be repaid, saving around \$15,000 per year for participating organisations.

SA CLIMATE LEADERS AVVARDS WINNER-COMMUNITY 2018



INDUSTRY AND BUSINESS CATEGORY





"2XE thrives on the challenge of transforming Zero Carbon ambitions into a new and better way of doing business. We've turned a lean start-up into a nationally recognised consulting firm, proving that South Australia leads the way on climate change leadership."

Nick Palousis, CEO, 2XE



2XE is a business productivity consultancy that specialises in helping businesses, organisations and industry sectors to reduce energy and carbon while increasing productivity leading to long term business sustainability.

2XE has developed a 'Net Zero Carbon Model' for businesses across Australia and believes that a net zero carbon strategy is a necessary strategy for almost all businesses.

Their goal is to help businesses look at a carbon constrained world as an opportunity

to improve the health of their business, adopt innovation and restructure stale business models, ready for an exciting future.

Over the past 12 months, 2XE has supported over 40 South Australian businesses to achieve 20,622 MWh of electricity savings, and 12,082 tonnes of greenhouse gas emissions.

PREMIER'S CLIMATE CHANGE COUNCIL SA CLIMATE LEADERS AVARDS

WINNER - INDUSTRY AND BUSINESS 2018

A/PROFESSOR SETH WESTRA

INSPIRING FUTURE LEADERS IN SUSTAINABILITY AND CLIMATE RISK

INDIVIDUAL CATEGORY



"I believe that training the next generation is the most critical means of achieving long-term sustainable outcomes."

A/Professor Seth Westra, Associate Dean, University of Adelaide



Associate Professor Seth Westra is a leading researcher in the fields of hydrology, water resources and climate risk.

As the Associate Dean of Research and Innovation in the faculty of Engineering, Computer and Mathematical Sciences at the University of Adelaide, he has an impressive 17 years of research and consulting experience spanning both academia and industry.

Seth has made deep contributions to understanding how climate change is intensifying the global hydrological cycle, with over 90 peer-reviewed publications, including three in Nature Climate Change. Seth has created a lasting impact through his work supporting Australia's flood engineers and planners to account for the impacts of climate change, and through his development of free and open-access software tools for stress testing climate-sensitive systems.

Seth has worked with over 80 collaborators worldwide, and co-chairs the Australian Energy and Water Exchange (OzEWEX) Research Initiative—a national initiative that represents a network of over 1,000 researchers and end-users on issues related to continental-scale climatic processes.

Through his research, public lectures and regular media commentary, Seth contributes to highlighting and raising awareness of the implications of climate change, including how we can better prepare for what have often been (incorrectly) viewed as 'unforeseen' climate events.



GOYDER INSTITUTE FOR WATER RESEARCH

PROVIDING RESEARCH AND EXPERT ADVICE TO SUPPORT WATER AND CLIMATE CHANGE POLICY IN SA

GOVERNMENT CATEGORY





"Partnership and collaboration at every level is what makes the Goyder Institute and the Climate Action Impact Area unique."

Kane Aldridge,
Director,
Goyder Institute
for Water Research





The Goyder Institute's Climate Action projects aim to ensure South Australia's sustainability by understanding and helping to mitigate climate change impacts, preparing systems to adapt, and providing accessible information.

Highlights of their work includes:

- Climate Ready downscaled climate projections covering all regions of South Australia
- Tools to identify ways to address climate-related vulnerabilities and identify mechanisms for adaptation (CRAFT project)

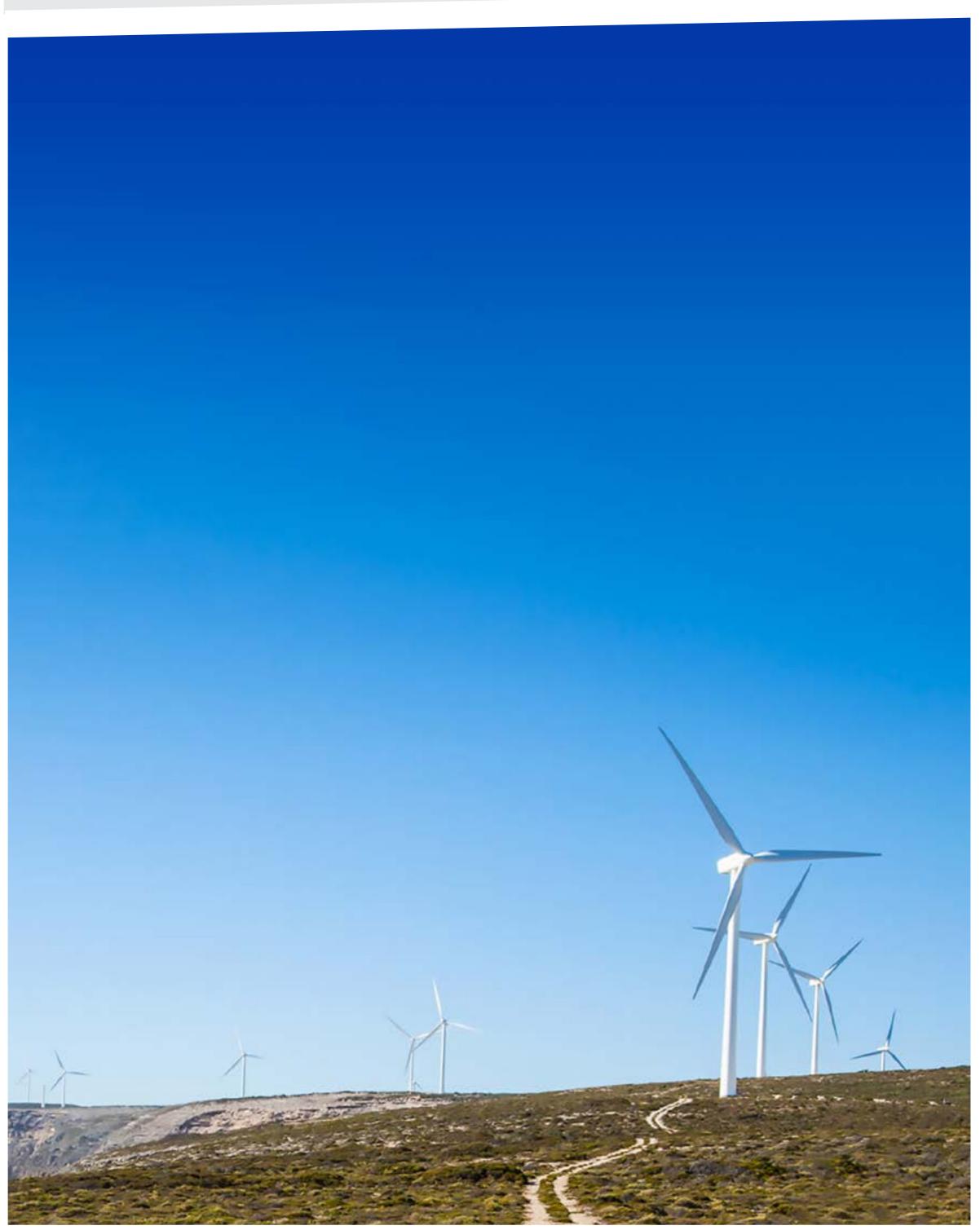
- The 'Coastal–C and Salt to C' initiative investigating the impact of coastal restoration, management, and human activities on the carbon offset potential of coastal habitats
- Exploring the carbon offset potential of increasing soil organic carbon in clay-modified soils.

The Institute is committed to maximising the impact of their research, raising awareness and increasing the local knowledge base through training events, workshops, webinars, publications and social media.

REGIONAL DEVELOPMENT AUSTRALIA WHYALLA & EYRE PENISULA

BUILDING A WORLD FIRST GREEN HYDROGEN INDUSTRY IN EYRE PENINSULA

GOVERNMENT CATEGORY



"Green hydrogen will transform the world's energy economy and significantly reduce greenhouse gases contributing to climate change. Our project demonstrates that reducing greenhouse gases can make money – not cost money."

Peter Scott,
Economic Development Manager,
Regional Development Australia
Whyalla and Eyre Peninsula



Hydrogen from renewables is a direct replacement for fossil fuels and emits no greenhouse gases during production or use.

RDA Whyalla and Eyre Peninsula's project aimed to attract green hydrogen investment to firm up Eyre Peninsula's electricity supply, and locally produce green fertiliser for farmers, green explosives for miners, and green hydrogen for vehicles. The project promotes Port Lincoln and Eyre Peninsula as a location at the forefront of the green hydrogen economy.

A partnership with Port Lincoln solar installer Eye Energy, The Hydrogen Utility

and RDA Whyalla and Eyre Peninsula was created following media and community interest in the state-wide "black out" in 2016, providing the kick start for the \$480 million hydrogen demonstration project in Port Lincoln – the first green hydrogen demonstration plant in the world.

While the technology is readily available, it has never been used to demonstrate a business case to create green fertiliser, explosives, and vehicle fuel supply chains for export to low carbon markets.



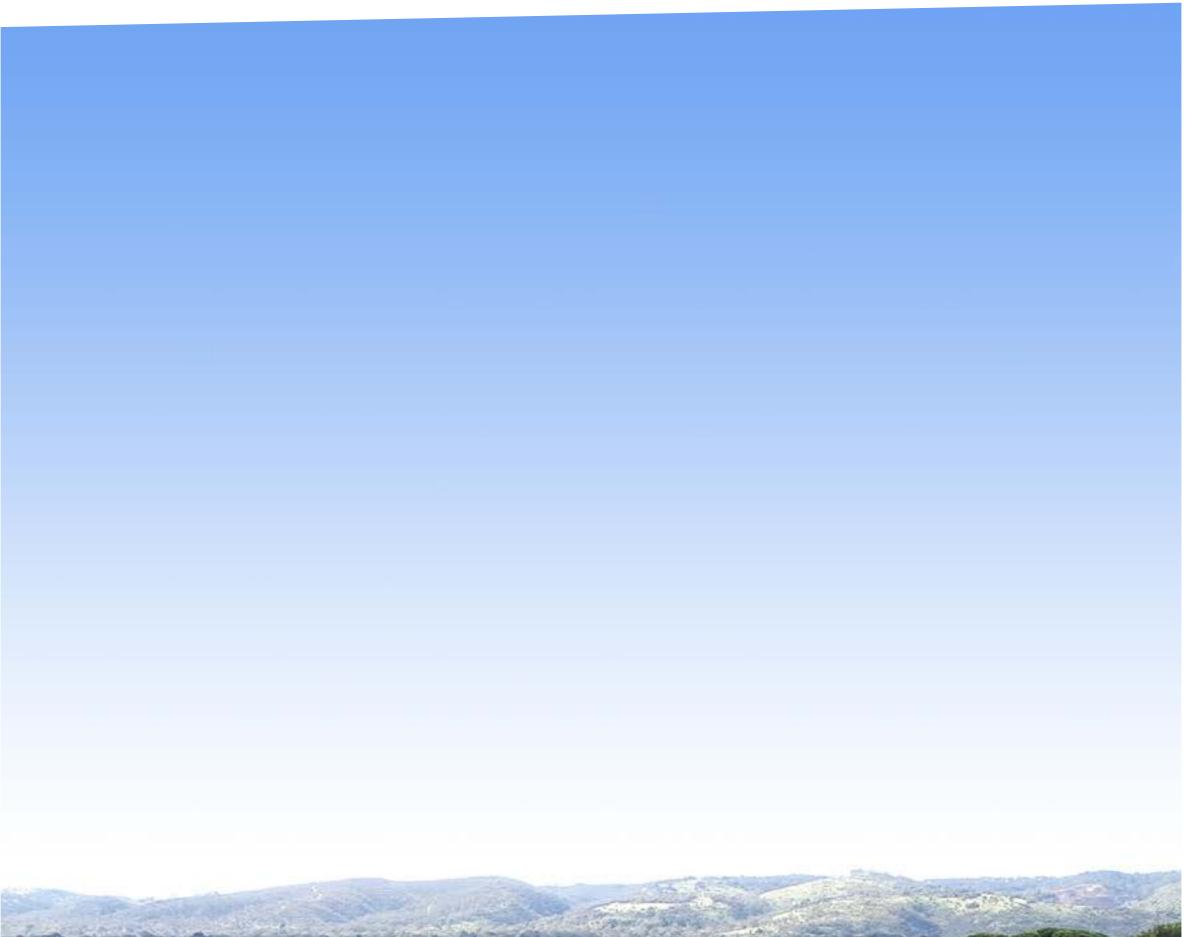
SA WATER

LEADING THE AUSTRALIAN UTILITIES SECTOR TO ACHIEVE ZERO NET ELECTRICITY COSTS





GOVERNMENT CATEGORY



"Our investment in renewable energy generation and storage will provide long-term sustainable outcomes and benefits for our business and our customers, helping achieve our goal to provide our customers with world class water services while keeping prices as low and stable as possible."

Roch Cheroux, Chief Executive, SA Water





As one of the state's largest electricity users, SA Water's energy-intensive pumping and treatment operations consumed around 220 gigawatt hours in 2016-17 at a cost of around \$55 million.

SA Water's 'Zero Cost Energy Future' initiative includes large scale investment in solar photovoltaics and battery storage, energy efficiency initiatives and more efficient use of biogas storage and scheduled generation.

SA Water is also working with local companies to trial cutting edge technologies in South Australia, such as testing silicon

thermal storage at the Glenelg Wastewater Treatment Plant. Other innovative and emerging technologies being trialled include flywheel energy storage, largescale floating solar photovoltaics and predictive energy management.

This approach will transform SA Water's energy management to achieve \$0 net electricity operating costs from 2020-21.



MARK BACHMANN

A SOUTH AUSTRALIAN WETLAND WARRIOR





INDIVIDUAL CATEGORY



"Peat wetland restoration is a key activity that demonstrates climate change leadership in temperate regions of SA. My philosophy is simple: 'Just add Water...'"

Mark Bachmann **Ecologist**



Mark is an environmental restoration scientist who has dedicated much of his life to re-establishing and protecting significant sites across the state.

Over the past 22 years, Mark has personally purchased and permanently protected six bushland properties. In 2012, Mark also led the launch of the science-based eNGO, Nature Glenelg Trust which has since restored wetlands on public and private land across over 3000 hectares in South Australia and Victoria, and also owns and manages several properties restored for their environmental values.

Nature Glenelg Trust's Mount Burr Swamp property in the South East of South Australia is significant in that it provides an opportunity to restore a tract of peat wetlands previously drained for agricultural purposes.

Peat is a carbon-dense sediment type that contains a high percentage of the world's soil carbon, and hence the drainage of wetlands is a key risk for global carbon dioxide emissions.

The project is reversing that process by returning water to the drained wetlands, re-saturating the peat and, at the same time, triggering a self-sustaining biodiversity response as the wildlife returns to the restored wetland habitat.

SA CLIMATE LEADERS AVVARDS FINALIST 2018

DR MANUEL PETER SOLIS

NEW GROWTH FOR LAW AND CLIMATE CHANGE AT THE UNIVERSITY OF ADELAIDE





INDIVIDUAL CATEGORY







"Gaining official observer status from the UNFCCC to participate at COP events is significant, as it recognises the solid educational and research contribution of the University of Adelaide to the climate change discourse, particularly from a South Australian perspective."

Dr Manuel Peter Solis, Law Lecturer, University of Adelaide



As a University of Adelaide Law lecturer, Dr Solis has advocated to progressively integrate climate change into the law curriculum and is working towards making South Australia a recognised leader in climate change education and research.

Since its maiden offering in 2017, about 100 law students from diverse backgrounds, including indigenous students, completed Climate Change Law with the number expected to grow in the coming years.

As a leading institution of learning and teaching, he believes that the University of Adelaide should be at the heart of where impactful, global decision-making occurs.

To this end, Dr Solis successfully championed for the university to gain official observer status at the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP) events – the first for a university in South Australia and the first university in South Australia to send a delegation to a COP event – offering opportunities for knowledge sharing and international, national and state linkages and partnerships.

SA CLIMATE LEADERS AVVARDS FINALIST 2018

HEATHER SMITH

INSPIRING SOUTH AUSTRALIA'S COMMUNITY ENERGY SECTOR





INDIVIDUAL CATEGORY



"While government holds all the levers, and markets monopolise the resources, communities are learning to wield their power as voters and customers."

Heather Smith
Community Energy Advocate



Heather consults, advocates and educates in energy and climate change. With a background in industrial energy efficiency and climate change policy, over the last four years she has been working in the community energy sector and exploring changes in energy markets through the lens of local action.

Heather has recently commenced a PhD on microgrids and implications for our energy future.

She volunteers for the Coalition for Community Energy (Acting Chair) and for Citizens Own Renewable Energy

Network Australia (CORENA), two organisations that are leading the charge in transforming our energy landscape.

Heather is a Churchill Fellow and TEDx speaker.

Her work has built a foundation of support for community energy across
South Australia and she believes we can expect to see the models and institutions established over the coming years to bring her community energy vision to fruition.



ADELAIDE SUSTAINABILITY CENTRE

INSPIRING, CONNECTING AND SUPPORTING ADELAIDE'S RESIDENTS TO LIVE MORE SUSTAINABLY





COMMUNITY CATEGORY



"A city-based natural resource centre was chosen by the Adelaide and Mount Lofty Ranges NRM Board as part of its vision to reach a growing urban audience. Centres like this are designed to build the resilience of residents so they can individually and collectively be advocates through their networks."

Diane Salvi, Coordinator, Adelaide Sustainability Centre



The Adelaide Sustainability Centre aims to inspire, connect and support collective learning and action for our sustainable future.

Located in Adelaide at 'The Joinery' on Franklin Street, the Centre runs events, workshops and children's activities to help connect people with nature and sustainable urban living, and provides information and resources in a space for people to connect and collaborate.

Showcasing climate adaptation and practical 'what can be done' activities in urban environments has been a core part the Centre's activities. The Centre is actively reducing greenhouse gas emissions through diverting waste from landfill through

programs including Terracycle, Repair Café, Boomerang Bags groups, clothes swaps and workshops which give people tools to reduce their ecological footprint and resource use.

So far, the Centre has held over 130 events, with over 3,200 participants. A further 2,000+ people have visited to access information and resources.

A 'Brains Trust Network' comprising 23 of the Centre's most loyal supporters and ambassadors work closely with the Centre coordinator and funding partners – Natural Resources Adelaide and Mount Lofty Ranges and Conservation Council SA.

SA CLIMATE LEADERS AVVARDS FINALIST 2018

BIRDS OF AUSTRALIA – GLUEPOT RESERVE

A SOUTH AUSTRALIAN NATURAL TREASURE BEING CARED FOR BY COMMUNITY

COMMUNITY CATEGORY



"Partnerships have been the key to success in the 20 years of Gluepot Reserve's operation and this includes our large team of volunteers from across Australia and the world who are the cement, or 'life blood' that bind together the fabric of the Reserve."

WD Mackenzie, Gluepot Management Committee Chair, Birds of Australia



Gluepot Reserve is Australia's largest community managed conservation reserve. Located in South Australia's Riverland, the 54,000 hectare reserve is owned by Birds of Australia and is run entirely by volunteers.

It is part of the largest block of intact mallee left in Australia and home to 22 nationally threatened species of birds, 53 species of reptiles and 12 species of bats, some of which are nationally threatened.

Many of Gluepot's research projects are helping solve problems of land degradation, loss of biodiversity and climate change and are raising awareness of the environmental issues surrounding this highly endangered area of Australian wilderness. By managing the reserve as a model that other conservation organisations can adopt, Gluepot has proven to be enormously successful in Australia and around the world. There is great demand for the Volunteer Ranger positions which are booked out for 3 years.

Gluepot was also the first organisation to obtain the highest level of certification – 'Climate Action Leader' – under the 'Climate Action Australia Certification Program' of ecotourism operators.

REPOWER PORT AUGUSTA

COMMUNITY POWER BRINGS SOLAR THERMAL TO PORT AUGUSTA



COMMUNITY CATEGORY





"Part of our message all along was that apart from the 200,000 tonnes of CO2 per year for approximately 40 years that the project would save, this project would significantly add to the reliability and security of SA's power supply, and give a significant boost to South Australia's economy."

Gary Rowbottom, Repower Port Augusta



Repower Port Augusta is a local community group formed by Port Augusta residents in 2012 with a mission to advocate for a concentrated solar thermal with storage power station to be built in Port Augusta.

A strong community-led campaign to make this dream a possibility showed imagination and initiative right from the start.

The campaigning began with a 'Solar or Gas Vote', followed up by a 14 day 'Walk for Solar' to Adelaide that attracted attention in the media and in political circles. More campaigning followed, with trips to Parliament House in Canberra, together with a strong social media presence, TV appearances, public forums, TV and billboard advertisements, petitions

and banners to raise awareness of the campaign and demonstrate widespread public support. The campaign was even a major theme in a movie, "2 Degrees".

In 2017, the SA Government awarded a 20 year generation project agreement to Solar Reserve to construct a 150 MW concentrated solar thermal power station with storage in Port Augusta. The \$650 million 'Aurora project' is expected to provide 650 construction jobs and 50 permanent jobs after construction is complete.

ADELAIDE AIRPORT / CIM ENVIRO

GETTING SMART WITH ENERGY MANAGEMENT



HWB0005 - Hot Water Boiler Ambient Temperature Lockout ---AHU00018-1 - Simulti and Cooling --- AHU_ HWB0008 - Heating Call AHU00029-1 - Poor Z AHU0001 - Mismatch Alarm -Temperature --- AHU AHU_01-01-06 AHU000 - Economy Mode Leakage When The C Optimisation -- ALL AHUs AHU00029-1 - Faulty Valve And Return Air I ZoneTemperature Sensor-AHU_02-02-23A outside air damper po CWP00010 - CWP Speeds Are Fixed FCU00014-1 - Unnecessary Cooling When The Space Temp Is Lower AHU00030 - Hot Wate Than It's SP --- FCU-06 Hunting --- AHU 03-0 fWB0002-1 - Low Delta T Across lot Water System --- HWB-02-02

MC PH Join Board

INDUSTRY AND BUSINESS CATEGORY



"The project is on track to deliver savings of 600 tonnes of greenhouse emissions and 933MWh of electricity for a 7-month payback, demonstrating the benefits of big industry collaborating with emerging innovations that deliver more for less."

Stephanie Bolt, Sustainability Manager, Adelaide Airport



Adelaide Airport is on the way to becoming a global airport industry leader, and their SMART building analytics initiative has set an encouraging benchmark for South Australian building owners to follow.

Following the completion of the largest solar photovoltaic installation at an Australasian airport, Adelaide Airport's sustainability team turned their attention to optimising the biggest consuming assets on the books – heating, ventilation and air-conditioning.

With a commitment to both sustainability and fostering the new generation of

Australian technologies, Adelaide Airport partnered with CIM Enviro to deploy SMART building analytics, becoming one of the first companies in South Australia to partner with this emerging Australian property-tech industry.

The initiative has optimised the operation of the Airport's major emission-emitting assets beyond a level that existing technologies could offer, and is helping to reduce emissions, peak demand management and improve the condition and lifecycle of equipment.

AUSTRALIAN GREEN CLEAN

SA BUSINESS STRIVING TO MAKE WASTE TO LANDFILL A THING OF THE PAST





INDUSTRY AND BUSINESS CATEGORY



"The Green Loop Program™
began in 2016 in collaboration
with WOMADelaide and Art
Projects South Australia. Our
program results in lasting and
necessary behaviour changes
required for a sustainable future
where people work together in
adapting to the impacts of
climate change."

Charlie Aykroyd, Business Development Manager, Australian Green Clean



Australian Green Clean is a South Australian owned cleaning and waste management provider with a mission to make waste to landfill a thing of the past.

They are an innovative company providing a range of services at events and major festivals, education facilities, venues and commercial facilities across Australia. With a major sustainability focus, they have the capability to manage venues and festivals up to 800,000 people.

Their Green Loop Program™ is a unique project that provides clients with a tailored green vision of a zero waste to landfill site. The program provides a step by step

circular process that carefully manages and diverts waste from landfill, with goals to send 100% of waste is to organic, recycling and alternate fuel waste streams.

Their recently launched Environmental Volunteer Program, an addition to the Green Loop ProgramTM, places 'Bin Buddy' volunteers amongst bin systems at festivals, to help educate the public on which waste stream rubbish can go into. There are no other private companies providing this service in South Australia.



SUHO

PLANS FOR ADELAIDE'S FIRST TEN STAR ENERGY EFFICIENT HOME



INDUSTRY AND BUSINESS CATEGORY



"The overall aim is to promote sustainability and encourage a better building industry. This building will showcase that the homes we live in are essentially living with us, providing resilience through air quality and thermal comfort."

Ruth Nordstrom, ESD Consultant, SUHO



SUHO has been committed to pioneering sustainability in the built environment, innovating systems and bringing emerging trends to South Australia since its establishment in 2003.

SUHO plans to build Adelaide's first ten star energy efficient home demonstrating a range of new and emerging technologies.

The house, titled 'Sagacious' (meaning wise and insightful) is representative of SUHO's forward-thinking initiative, improving the process of design construction and resilience in the built form.

With the construction industry being a major contributor of greenhouse gas emissions, SUHO wants the house to showcase better solutions for residential

dwellings. SUHO will be using sustainable products, materials and systems to ensure that waste on site is kept to a minimum.

SUHO is dedicated to opening the dialogue between design, construction and community sectors. The house will be open for the community, students and construction industry to visit, providing a unique type of display home that showcases the possibilities in designing and constructing a sustainable home.

SA CLIMATE LEADERS AWARDS FINALIST 2018

TEYS

CAPTURING BIOGAS FROM WASTEWATER TO POWER PROCESSING PLANT





INDUSTRY AND BUSINESS CATEGORY



"Teys is committed to taking a role as a sustainability leader and actively supports the red meat industry achieving carbon neutrality by 2030."

"Developing baseload renewable energy technologies is critical to improving energy security in South Australia."

Amelia Simony,
Group Environmental Manager, Teys



Teys is a family operated Australian Beef Processing company, located in Naracoorte, South Australia. As the town's largest employer, the plant is also one of the region's largest energy consumers.

Teys is working on a project to generate and capture biogas from wastewater, which will be created naturally from the meat processing activities at the Naracoorte plant. Rich with energy, this wastewater will be contained in a Covered Anaerobic Lagoon. The lagoon will convert this wastewater into biogas and the biogas will then fuel cogeneration

equipment. This change will result in a clean, renewable energy source that will produce electricity and heat within the plant.

The project has many benefits for Teys, consumers and the local community, including reducing energy costs and carbon emissions, reducing dependence on the electricity grid and peak demand usage, increasing site energy security, and reducing waste and operating costs.

