

WELCOME TO SUSTAINABILITY WA



Sustainability WA is a travelling exhibition that will visit more than 30 regional centres throughout Western Australia between February and May 2002. This exhibition, created by the Department of Premier and Cabinet and MuseumLink at the Western Australian Museum, tells the stories of people who are working now to achieve a sustainable future. They are tales of Sustainability in Action...

The Earth and our part of it in Western Australia has many questions hanging over it...

Population – Can the rapid growth of world's population be sustained?

Climate Change – Can we reduce greenhouse gas emissions from our usage of coal, oil and gas, and from land clearing?

Loss of Species – Can WA prevent the loss of many species close to extinction?

Salinity – Can we avoid losing a third of the Wheatbelt to rising salt?

Water – Can we adapt to reduced rainfall seasons in the long term?

Settlements – Can we make our suburbs and towns more environmentally friendly?

Jobs – Can we change in a way that creates more jobs?

Quality of Life – Can we do this and be healthier and happier in our communities as well?

To address these issues we must link environmental and community goals with economic development

A Sustainable future for Western Australia would be:

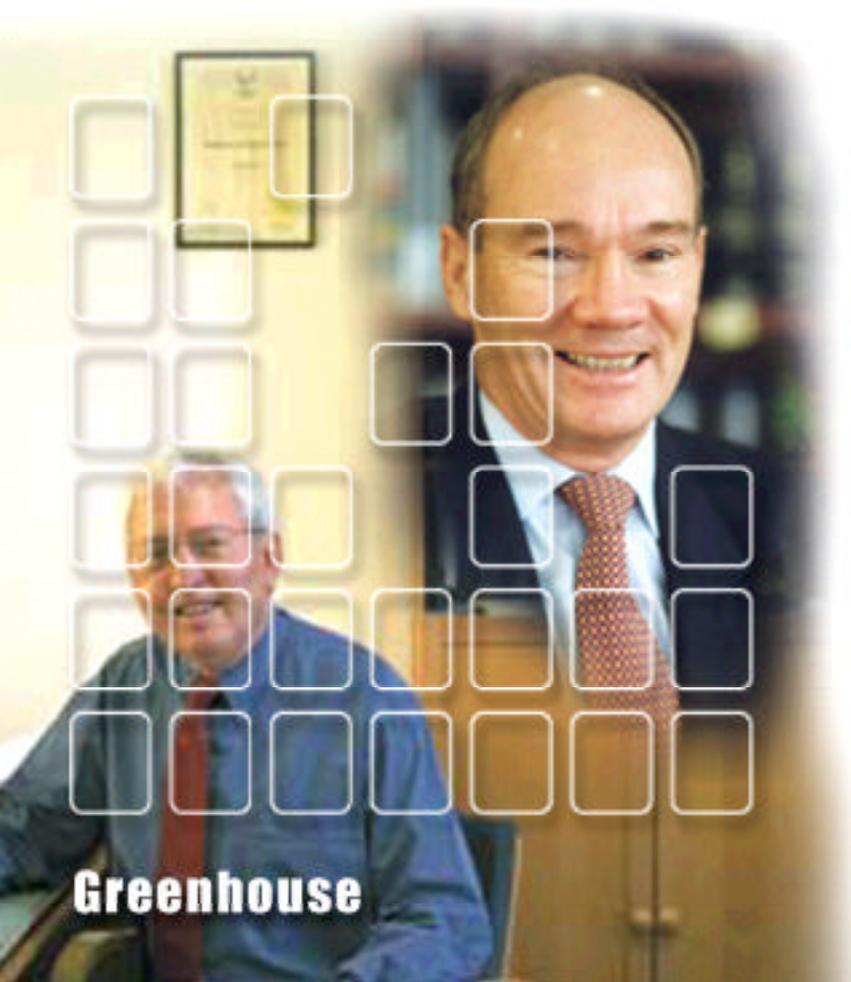
- **More Prosperous**
- **More Just**
- **Cleaner and Healthier and**
- **Less Demanding on the Earth**

It would offer a better quality of life for us, our children and our grandchildren and would contribute to a better world.

The State Sustainability Strategy tries to help us deal with these issues...



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Greenhouse

Garry Baverstock (left)

is the Director of Ecotect-Architects. Garry is committed to designing buildings that use materials, energy and water resources efficiently. He has built more than 700 houses based on these principles in Western Australia.

“As an individual you have the power to make a difference. The challenge is to realise it and choose a role. The best way to reduce greenhouse gas emissions is to use less fossil fuel by energy conservation. Solar and renewable energy is now technically and economically able to provide this ‘green’ source of power.”

Greg Bourne (right) studied at the University of WA with a scholarship from BP Kwinana. He worked overseas before returning to Australia as BP Regional Director, Australia and New Zealand in 1999. BP is investing in cleaner fuels and greenhouse abatement initiatives, and is the largest solar company in the world.

“Climate change, caused by the increase of greenhouse gases in our

atmosphere, is one of the biggest issues facing us today. If we are serious about protecting this planet, we all have a role to play.

The journey will be a long one and not all of us in business are yet on the road. However, I believe that society is telling business, governments and institutions, it is time we got our act together.

FACTFILE

- There is strong evidence that most of the global warming recorded over the past fifty years is caused by human activities.
- About 75% of human-derived greenhouse gases is due to burning fossil fuels. The rest is mainly caused by land clearing.
- South West Western Australia will become hotter and drier in coming decades and the North will be hotter, wetter and have more cyclones.
- Western Australia has new industries and technologies that can help reduce greenhouse gas emissions.

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Rivers and Seas

Diane Mathews (left) coordinates river-care activities with CRREPA, the Canning River Residents Environment Protection Association, formed in 1994. Volunteers test water-quality, collect seeds, propagate plants, remove weeds, undertake revegetation projects, lead informative walks and represent local concerns to Government.

“I became active in environmental matters by putting my hand up and saying ‘I’ll do that’, and then finding out how to do it! The inspiration and generous hearts and minds of the others keeps me going. Our soils, air and water, and our very special Australian plants and animals cannot be sustainably managed without everyone’s goodwill and active participation.”

Kailis & France has helped the Western Australian rock lobster industry achieve Certification by the Marine Stewardship Council as an ecologically sustainable fishery. **George Kailis** (right) has also formed a co-operative, ERA, the Environmentally Responsible Agriculture Farming Company, which works with more than 1400 farmers in WA to reduce chemical dependence and maintain yields.

“For too long we have just taken from nature. I’ve long argued in the family

fishing business for us to take a long-term, enduring approach to catching and processing fish – a natural resource of the oceans. Organic, low-tech sustainable practices are the solution. I believe most of our environmental problems stem from a lack of connection to our deeper being. Sustainability is life affirming and brings us back to spiritual realities as well as how we can compete in international business.”

FACTFILE

- Many Western Australian rivers are threatened by increases in salinity, decreases and alterations in flow, algal blooms fuelled by nutrients from catchments and loss of native fringing vegetation.
- Seventy five per cent of the wetlands on the Swan Coastal Plain has been lost.
- Western Australia has 12,500 km of coastline and a rich marine life that needs protection.
- Sustainable fisheries management has protected the State’s valuable rock lobster stocks. We need to manage the State’s other fish resources at sustainable levels.

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Mike Hill (left) is a traditional owner of his mother's country, the Bubbulmun-Wardandi, where he lives in the Busselton area, and of his father's country through the Wollum family in the Wheatbelt. He is on the United Nations' roster of experts on coastal and aquatic biodiversity and has been a delegate to national and international forums on the rights of indigenous peoples, in debates on biodiversity, intellectual property, and customary land management practices.

"Biodiversity, conservation, indigenous caring for country, stewardship and sound practices of sustainable environmental management are the cornerstones of the social and cultural order and well-being of indigenous peoples.

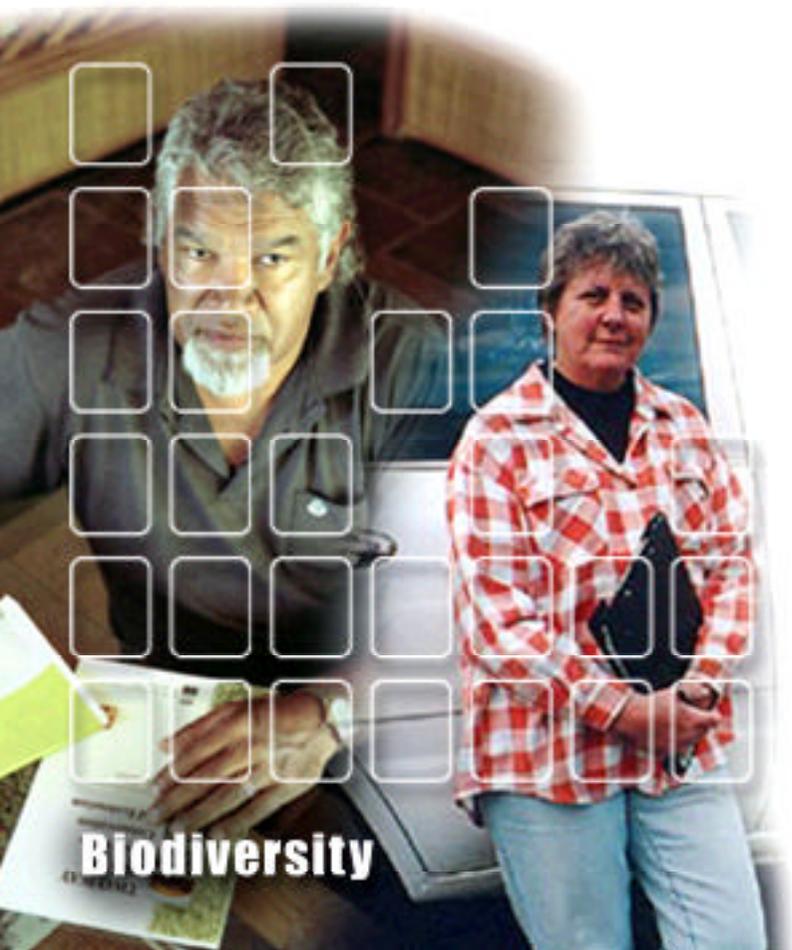
Such is the inter-relatedness that to destroy one is to destroy the other. The state of the environment also reflects the state of the community. Indigenous knowledge about traditional land management practices needs to be acknowledged and incorporated in the principles of caring for country. Those who possess this knowledge are precious living libraries of information."

Susanne Dennings (right) is a fourth generation wheat and sheep farmer at Ongerup. She is also the secretary of the Malleefowl Preservation Group, dedicated to protecting this ground dwelling bird and conserving its habitats.

"I remember when you could see malleefowl on the way to school. Not so any more. In 1992 I joined the first bush meeting to discuss the decline of the gnaw (the Noongar name) or malleefowl. As farmers we have an important role to play in ensuring our own long-term survival by conserving species like the malleefowl and the valuable bushland we still have. It's 'gnaw' or never!"

FACTFILE

- Western Australia has a wide variety of plants and animals and is home to some unique and very ancient species.
- The South West is called a biodiversity 'hot spot', meaning that it is one of the most biologically diverse places on earth.
- Our biodiversity is under pressure. We have altered and destroyed habitats by activities such as over-clearing, and the introduction of weeds, feral animals, and plant disease.
- Some endangered species like the numbat, have been brought back from the edge of extinction.



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Better Farming

Aaron Edmonds (left) is a fourth generation farmer at Calingiri, who studied agricultural science at the University of WA. He recently travelled across the country looking at sustainable farming practices and alternatives, and is working to apply these ideas on his family's farm.

“As a kid I remember my Dad saying things like, ‘we used to crop that and it was terrific’, and I would be looking across at salt land. We have planted native species including bush tomatoes, sandalwood, quandongs, desert limes and desert figs, as well as timber trees, to halt rising salinity and create a more sustainable farm, and community. These new crops also provide an environment for native species, such as the endangered Carnaby's Cockatoos that nest on our property.”

Rob Mitchell (right) is the fourth generation of his family to run sheep on Barnong Station. He has been involved with the Yalgoo Landcare Group and is a member of the Regional Environmental Management Program (REMP) of the Gascoyne Murchison area.

“When we took over the property in early 1980 we realized that, if we or our children were going to be here in the future, we had to run it in an

environmentally sustainable way. We started monitoring the health of the vegetation, participated in the goat eradication program and developed strategies to reduce grazing pressure in dry times. Also, we have been involved in the Environmental Management Unit, which teaches pastoralists new ways to view and monitor biodiversity and environmental health on the rangelands”.

FACTFILE

- Salinity is now the greatest environmental threat facing Western Australia. It has already impacted on biodiversity, rural infrastructure such as roads and buildings, and current and future water resources.
- 1.8 million hectares of south-west agricultural land are already affected by salinity. It is predicted that six million hectares will be affected eventually.
- Without action, 450 plant species endemic to the region will become extinct and there will be a serious decline in waterbirds.
- 85% of Western Australia's land mass is rangeland. Grazing has caused widespread soil erosion and land degradation. Uncontrolled grazing has damaged wildlife habitats and led to siltation of rivers.

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City Living

David Wake (left) lives in Quinns Rocks. Once a small town surrounded by bushland, it is now part of growing suburbia. David started a local environmental group when he was 14 and still lobbies to protect bushland and stop unsustainable development. He works with the Conservation Council of WA, promoting sustainable transport for cleaner air and liveable communities.

“I think we can live more lightly on the planet. Communities can make a difference, that’s why I work in my local area and through my job to change things for the common good. Perth is lucky to have biodiverse bushland, clean coastal waters and breathable air, but the quality of our environment and liveability of our city is threatened. Growing car use, sprawling urban growth and increasing resource use shows that we’re on an unsustainable path.”

The Dracup family (right) of Subiaco – Miles, Geraldine, James and Rebecca – substitute car use for more sustainable means of transport such as cycling and walking. Miles is a strong proponent of using bikes for transport in the city.

“Each day I ride to work, a comfortable 30 minute ride. It is only five to ten minutes slower than using the car and it

means I exercise. It also saves on transport costs and I am doing my bit to reduce pollution, congestion and noise. Like most families, our life is busy and often requires a car for transporting children to activities. We try to use bikes or walk, car pooling when necessary. As a family we assess whether the car is really needed for a journey before getting into it.”

FACTFILE

- The State’s population is expected to rise from 1.8 million to 3 million by 2029, with Perth’s population increasing to 2 million. Perth’s suburbs stretch 90kms along the coast and 40kms inland.
- As well as greater air pollution, urban expansion has caused the destruction of bushland and increased land and water pollution.
- Perth has 20% more car use per person than Sydney. Cars are the largest contributors to Perth’s air pollution.
- Innovations in public transport, such as the rail revival, and planning, such as Liveable Neighbourhoods, have won international praise.

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Future Forests

Louise Duxbury (left) helped set up the Denmark Environment Centre, established the statewide organization Green Skills and has worked for many years as a member of regional bodies such as the South Coast Regional Initiative Planning team.

“How do we create ‘green’ jobs? By developing a positive vision for the future, believing change is possible, convincing others to come on board, and getting on with projects that give life to the vision. We set up Green Skills to act as an environmental training, project development and employment agency. We can develop jobs in farm forestry, ecotourism, renewable energy production and maintenance, organic horticulture, to name a few. These jobs provide an income with minimal or positive impact on the environment.”

Gina Litton (right) was 19 when she first camped in the forest. In 2001, Nelson Mandela presented her with the Athena Foundation’s first Earth Champions Award. Gina is one of many thousands who campaigned successfully for an end to logging in old growth forest in Western Australia.

“I lived for many months in a magnificent ancient forest, hoping to protect it from bulldozers and chainsaws. At night I

would sleep at the foot of a towering karri, or sometimes on a narrow platform high in her branches. I fell in love not only with the forest, but with life. At the same time I came to realise that our present path is unsustainable, with deepening social and ecological crises, and Earth itself crying out for change. There is a choice, and the time has come for each of us to make it.”

FACTFILE

- There were about 50,000 km² of forest in Western Australia in 1829. Now only half that amount is left and most has been cut at least once.
- The State Government has declared that no more logging of old growth forests will take place.
- New jobs are emerging in the South West in tourism and forest related industries. Employment in the environment is one of the fastest growing labour market areas worldwide.
- Many other jobs are being created in new, green and clean industries such as renewable forms of energy, waste reduction, pollution control technologies and sustainable agriculture.

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Mining Visions

Dr Sunil Samaraweera

(pictured) coordinates a rehabilitation project for Argyle Diamond Mine, in the Kimberly. As well as improving rehabilitation techniques, the project is developing long-term opportunities for Aboriginal people.

“At Argyle, we are working on rehabilitating mined land with traditional bush medicine plant species. Local people are trained in seed collection and application, and nursery work. Research with indigenous people has identified species used traditionally as medicines – work is underway with Curtin University examining the possibility of cultivating medicinal and other useful plants using excess mine water.”

The Granny Smith mine, near Laverton, has been producing gold from ore since 1990. **Phil McEvoy** works for the company in a cross-cultural community program. Since 1997, this program – jointly-run by four mining companies – has put 60 people a year, Aboriginal and non-Aboriginal, into employment.

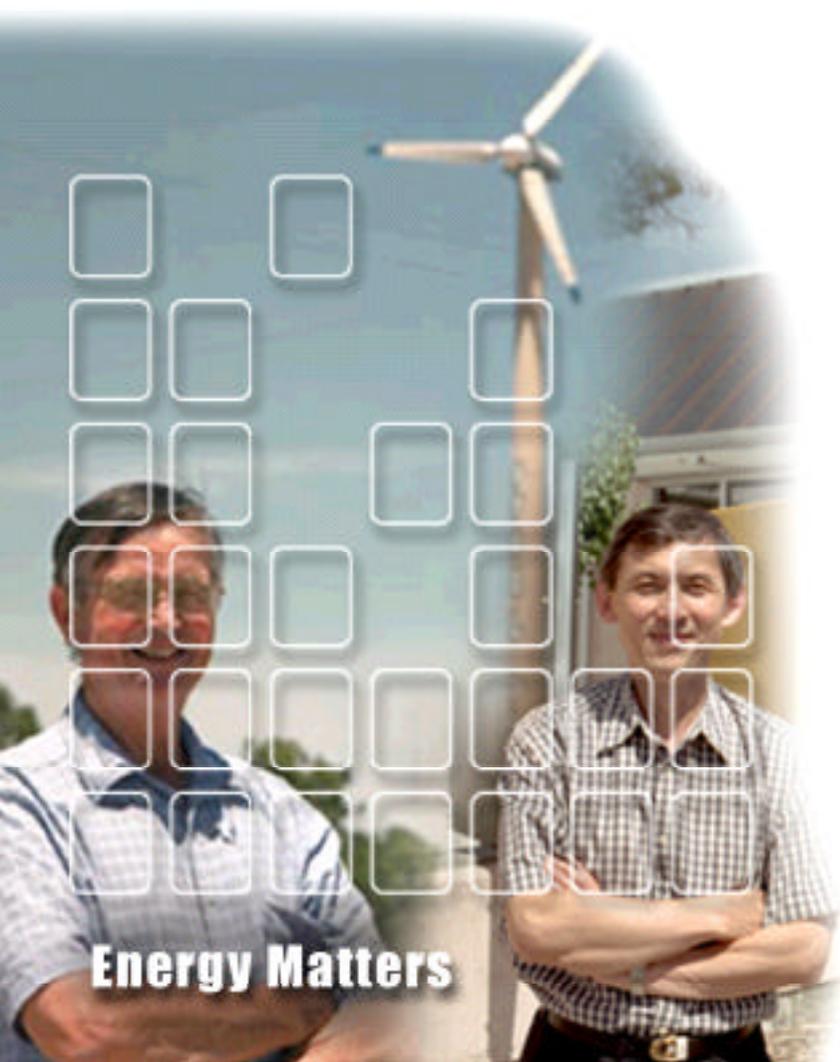
“We believe that the mine is a part of the community. That means accepting responsibility to offer employment and other opportunities to local people, particularly the indigenous community. And it means working in a sustainable

way in environmental terms. We are looking at diversifying the local community’s income sources, by supporting the sale of indigenous crafts, and through olive farming and aquaculture. We are doing more than just mining.”

FACTFILE

- There were more than 270 mine sites and petroleum fields in Western Australia in 2000. These sites produced minerals and energy valued at more than \$17 billion.
- Minerals, natural gas and petroleum are non renewable resources. A sustainable society will use resources more efficiently, reduce waste, and rely more on recycling, reuse and renewable energies.
- The mining industry is setting new standards in efficiency, environmental management, minesite rehabilitation and pollution control.
- Some mining companies are undertaking more open and transparent engagements with communities, particularly Aboriginal communities.

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Energy Matters

Geoff Hill's (left) company in Armadale diversified from making potters' wheels and craft goods to developing wind power turbines. He built the first wind farm at Esperance and exports turbines to Japan, North America and Europe.

"I am fascinated by the work of harnessing the wind to meet our energy needs. This is one of the windiest places on Earth – wind power is a terrific source of alternative energy in many parts of Western Australia. There is something inspiring about using natural sources of energy, rather than fossil fuels. If we want to secure a more sustainable future, then developing alternative energy sources like wind and solar power is something we must do. We simply have no choice."

Professor Goen Ho (right) has been at Murdoch University for 25 years. He has developed the Environmental Technology Centre to the point where it was recently recognised as a Regional Centre for the United Nations Environment Program.

"The Environmental Technology Centre is part of a global process of sustainable development. Through our links to the United Nations we are able to help bring WA environmental technology to the world, especially to poorer parts.

The ETC building is a living demonstration of the new world of sustainability. It has 60 new technologies built into it and is made almost entirely from recycled materials. WA is full of ideas that can help make a more sustainable world."

FACTFILE

- Population growth and consumption are putting pressure on our global natural resources. Technology and aid for development is needed to help solve both problems.
- Western Australia largely depends on coal, oil and gas for its energy, with less than 2% coming from renewable sources.
- New projects in solar, wind, and biomass energy generation represent leading edge renewable technologies.
- Environmental technologies are a new WA export industry with the potential to assist in global sustainability.

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Living Green

Karen Charlton (left) travelled the world before returning to Western Australia to attend Curtin University as a mature age student. She loves the outdoors and is a regular scuba diver, rock climber and bushwalker.

“Ecological footprinting is a way of understanding our impact on the Earth. It gives us a measure of how many resources we use to maintain our lifestyle. My research shows that the footprint of Western Australians is very high when you look at other nations round the world. The more we understand environmental, social and economic issues, the more chance we have of trying to balance these needs in the future.”

Don Harrison (below, second from left) is a renewable energy scientist with Western Power. His house – designed by architect Garry Baverstock – has most of the windows facing the northern sun. Sunlight can enter the house in winter, keeping it warm, but the eaves keep the windows in shade during the summer. Inside, the family uses low-energy appliances, long-life lights and a solar hot water system.

“We decided to build a passive solar energy house about 10 years ago. You

cut your energy bills and reduce your impact on the environment. And it is so comfortable – warm in winter, cool in summer, all by understanding the power of the sun. We also recycle, all organic waste is composted in ‘green cones’, and the garden is mostly planted with native species, reducing water needs. Moving towards a sustainable future takes one step at a time. These are steps everyone can take.”

FACTFILE

- We are producing more solid, liquid and gas wastes than at any other time in our history. More than three million tonnes of waste were dumped in Perth landfills in 2000.
- About 60 percent of all scheme water in Perth is used on lawns and gardens.
- Australians have a large ecological footprint relative to other nations. Western Australia’s ecological footprint is between 17 and 31 ha per person (depending on whether pastoralism is included).
- Each of us can make simple changes in how we live to move towards a more sustainable society – producing less waste, reduced and more efficient use of water in our homes and in the garden, and recycling and buying recycled goods.

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The State Sustainability Strategy aims to focus and mobilise efforts to create sustainable communities in Western Australia.

It aims to link environmental, social and economic needs to achieve a balance that can develop and endure.

We want you to have your say about this important initiative. Fill out one of the cards (available at the exhibitions) and make a submission, or e-mail us with your thoughts/ideas (below).

If you want to know more about Sustainability, contact the

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Sustainability Strategy

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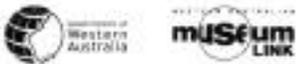


Have Your Say Now! e-mail your comments to:

sustainability@dpc.wa.gov.au

Or send this postcard:

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Name and Address (optional)	More to say? Make a submission
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