

Our Environment Our Future

**Victoria's Environmental
Sustainability Framework**

**Creating a healthier environment and a stronger state
April 2005**



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Victoria's Environmental Sustainability Framework

Since time immemorial, Aboriginal people have cared for this land and its natural and cultural resources. This long and unique association continues today through the Aboriginal communities who live and work in Victoria.

Accordingly, the Victorian Government is proud to acknowledge Aboriginal people as the original inhabitants of this land.

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Premier's Foreword



Victoria's rich and diverse natural and built environment are assets of immeasurable worth. Our magnificent coastlines, lands and waterways, spectacular alpine regions and our unique built environments have

intrinsic values that improve our quality of life. They also have direct economic benefits, providing safe drinking water, clean air, fertile soil, shelter and many other services.

However, our environment faces many significant challenges that have resulted directly from the choices we have made in the past and continue to make. Victoria's 'ecological footprint' is huge by international standards. If everyone in the world lived like Victorians, we would require four planets.

In 2002, the Victorian Government committed to making environmental sustainability a priority.

Since coming to office the State Government has led the most comprehensive environmental reform agenda in the State's history. The State Government has spent an additional \$1.1 billion on new environment initiatives since 1999.

In 2002, we established the Department of Sustainability and Environment to position Victoria as a world leader in environmental sustainability.

It is now time to ensure we develop much more sustainable ways of living our lives. It will take a long-term, whole of government approach, and this Framework sets out the challenge that lies ahead.

This Framework provides direction for government, business and the community to build environmental considerations into the way we work and live. I am making environmental sustainability a priority for our government.

I urge every Victorian to join in the drive to make Victoria a more Sustainable State.

A handwritten signature in black ink that reads "Steve Bracks". The signature is written in a cursive, flowing style.

Steve Bracks
Premier of Victoria

Minister's Foreword



A prosperous and liveable Victoria depends on a healthy environment.

For instance, we need the air we breathe to be free of pollution and the water used by industry and agriculture to be clean if we are to improve health and create jobs and wealth for all to enjoy.

These facts demonstrate how intimately our environment and our economic wellbeing are interconnected. In recent years Victorians have made great progress in protecting and repairing our environment.

The Victorian Government has already introduced strategies to improve the sustainability of our rivers and reservoirs, forests and cities. We now need to take the next step, which is to incorporate environmental sustainability principles into all the things we do. This document provides a framework

to help Victorians understand the task ahead and how they can best contribute. For the first time, it includes a comprehensive set of environmental quality objectives and interim targets against which our progress can be measured.









Victorians should be proud of what we have achieved so far in our efforts to become more sustainable.






I now encourage all members of the Victorian community to help turn the directions of the Environmental Sustainability Framework into action.

A handwritten signature in black ink that reads "John Thwaites". The signature is written in a cursive, flowing style.

John Thwaites
Minister for Environment

The fundamental elements of Victoria's Environmental Sustainability Framework

DIRECTION		OBJECTIVE	INTERIM TARGETS
Maintaining and restoring our natural assets		Healthy and productive land	<ul style="list-style-type: none"> - By 2015 there will be a real reduction in the environmental and economic impacts of salinity
		Healthy and productive water systems	<ul style="list-style-type: none"> - Significantly improve the health of Victoria's rivers by 2010 - Return the Snowy River to 21 per cent of its original flow by 2011 and over time to 28 per cent - Recover 500gl of water over five years to improve the environmental flows at 6 icon sites along the Murray River - Over the next five years provide ecologically sustainable water reserves in 21 priority-unregulated rivers.
		Healthy marine and coastal areas	
		Flourishing biodiversity in healthy ecosystems	<ul style="list-style-type: none"> - A reversal, across the entire landscape, of the long-term decline in extent and quality of native vegetation, leading to net gain
		Clean air	<ul style="list-style-type: none"> - Improve air quality and meet the national ambient air quality goals by 2008
		Comprehensive network of parks	
Using our resources more efficiently		Less waste and increased resource efficiency	<ul style="list-style-type: none"> - The quantity of solid waste generated reduced and the amount recovered for re-use, recycling and energy generation increased
		Sustainable forests	<ul style="list-style-type: none"> - As further licences are surrendered or expire, provide further protection to other native forest areas in the Otway Ranges and complete the exit from native forests in the Otways by 2008

DIRECTION		OBJECTIVE	INTERIM TARGETS
Using our resources more efficiently		Increased water, energy and materials efficiency	<ul style="list-style-type: none"> - Increase the efficiency of irrigation systems across the state by 25 per cent by 2020 - Increase waste water reuse in Melbourne to 20 per cent by 2010 - Reduce Melbourne's water usage by 15 per cent on a per capita basis by 2010
Reducing our everyday environmental impacts		Reduced climate impact	<ul style="list-style-type: none"> - Increase the share of Victoria's electricity consumption from renewable energy sources from the current 4 per cent to 10 per cent by the year 2010 - Facilitate the development of up to 1000 megawatts of wind energy in environmentally acceptable locations throughout Victoria by 2006
		Communities with a water, energy, materials saving ethic	
		Liveable cities and towns	<ul style="list-style-type: none"> - There will be a greater percentage of new dwellings located at strategic re-development sites in metropolitan urban areas
		Efficient transport systems	<ul style="list-style-type: none"> - Public transport use in Melbourne as a proportion of trips taken by motorised means will increase from 11 per cent in 2002 to 20 per cent by 2020.

The challenge ahead

Introduction

This Framework has one simple message to the people of Victoria – we must make environmental sustainability a part of everything we do, if we are to:

- maximise our future economic growth
- maintain our quality of life and
- protect our unique Victorian environment.

Victoria is our home. It is the source of our livelihood and the future for our children. We must treat it with respect. We already have in place a broad sustainability framework, *Growing Victoria Together*. Environmental sustainability is the way forward.

Success will require an integrated approach that brings together policies on the natural and built environment, resources, waste, and economic growth.

The UN Conference on Environment and Development in 1992 held in Rio de Janeiro stated:

‘To achieve sustainable development and a higher quality of life for all people, states should reduce and eliminate unsustainable patterns of production and consumption...’

Victoria is proudly playing its part in helping the world meet this objective.

But we have a long way to go before we can claim to be a truly Sustainable State.

Our environmental challenges

Although we have had many successes, Victoria’s environment still faces some serious challenges that have significant economic and social implications.

Taken together, the daily activities of individual Victorians are putting enormous pressure on our environment.

It is time to reflect on our simple daily activities: how much waste we produce, how much water we consume, what products we buy, how we run our businesses and how we choose to travel. Taken separately, each of these decisions seems insignificant, but multiplied by the five million people that live in our state their impact on our natural assets is profound.



Our environmental challenges

There are a number of significant environmental challenges we must meet:

Land health and productivity

The first challenge is improving the health and productivity of our land and soils.

Although Victoria has made significant advances in increasing agricultural productivity overall, past inappropriate land management has led to some of our land becoming less productive¹. This has imposed costs on farmers and disruption to agricultural and rural communities.

- 670,000 hectares of land in Victoria is currently at risk of becoming saline and this could increase to over 3 million hectares by 2050 (Figure 1)²
- it is estimated that land degradation has led to a 5 to 10 per cent reduction in land productivity. Without remedial action it is projected that by 2050 the area of degraded land could double in Victoria.³

Stressed water resources

The second challenge is to better manage our water resources.

Excessive water extraction from our rivers for agricultural and urban use, along with water pollution, has stressed our rivers, wetlands and estuaries:⁴

- while the health of some rivers has improved, only a quarter of our rivers are healthy (Figure 2) and 35 per cent of our wetlands have been totally lost⁵
- Victoria is likely to have less water available in the future due to climate change. In the Murray-Darling Basin, annual temperatures are projected to increase by up to two degrees by 2030 and up to six degrees by 2070. Up to five per cent (1,100 billion litres) less water is estimated to flow into the Murray-Darling system by 2023.⁶

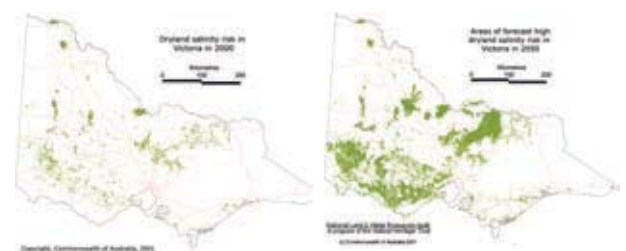


Figure 1
Area of forecast high dryland salinity in Victoria in 2050.
Source: National Land and Water Resources Audit

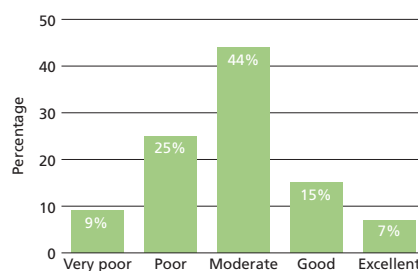


Figure 2
Percentage of stream length classified in each stream condition class for Victorian catchments.
Source: Victorian Catchment Management Council (2002)

1 Australian Dryland Salinity Assessment. National Land and Water Resources Audit (2000) p.26
 2 Australian Dryland Salinity Assessment. National Land and Water Resources Audit (2000) p.26&27
 3 Environmental Sustainability Issues Analysis for Victoria. p.4 &15 CSIRO (2004)
 4 Environmental Sustainability Issues Analysis for Victoria. p.5 CSIRO (2004)
 5 The Health of Our Catchments: A Victorian Report Card. p.32 Victorian Catchment Management Council (2002)
 6 Our Water Our Future: Securing Our Water Future Together p.9 (2004)

Our environmental challenges

Threatened biodiversity

The third environmental challenge we face is maintaining and restoring our biodiversity.

Our lifestyles, our desire for space and transport, and our demand for food, water, energy and manufactured products have put enormous pressure on Victoria's biodiversity.

Clearing Victoria of native plants and animal habitats has resulted in many plants and animals becoming extinct or threatened:

- Victoria's ecosystems are some of the most diverse in the world but they are becoming degraded – they are amongst the most highly stressed in Australia (Figure 3)⁷
- 44 per cent of our native plants and 30 per cent of our native animals are extinct or threatened.⁸

A changing climate

Our fourth challenge is fighting climate change.

Globally, our reliance on fossil fuels for power generation and transportation and the resulting emission of greenhouse gases is heating up our atmosphere and making our climate less stable:

- Australia has among the highest greenhouse gas emissions per person in the developed world⁹ and Victoria's greenhouse gas emissions are predicted to rise (Figure 4)
- the intensity and occurrence of severe weather events linked to climate change (eg. heavy rain, floods and hailstorms) is increasing, and the associated worldwide economic losses are estimated to be US\$150 billion in the next decade. It is estimated that this loss will double every 10 years.¹⁰

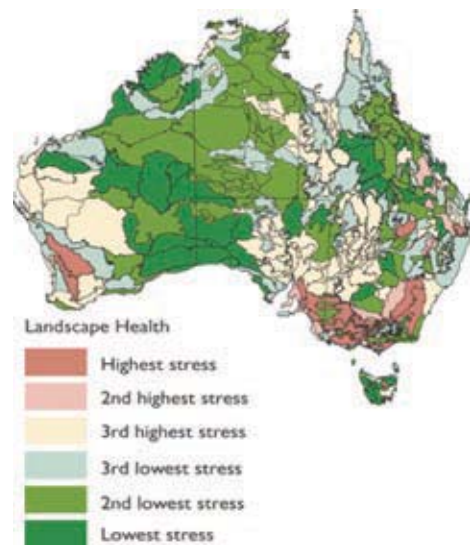


Figure 3
Stress levels of Australian ecosystems
Source: National Land and Water Resources Audit

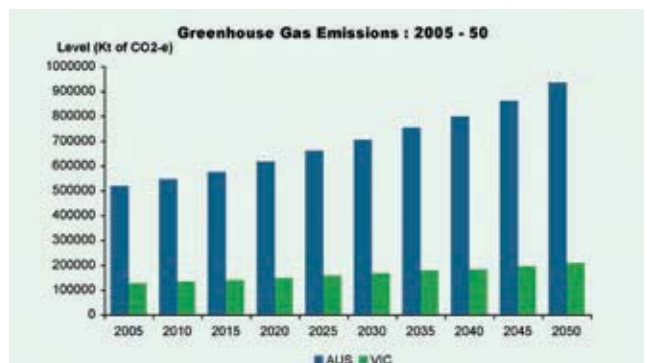


Figure 4
Projected greenhouse gas emissions for Australia and Victoria.
Source: Victorian Greenhouse Gas Inventory

7 Australian Natural Resources 1997 – 2002 and Beyond. P.52 National Land and Water Resources Audit (2002)

8 Environmental Sustainability Issues Analysis for Victoria. P.4 CSIRO (2004)

9 Living Planet Report 2004. P. 14 World Wildlife Fund (2004)

10 Climate Changes and the Financial Services Industry. P.4 United Nations Environment Program (2002)

Increasing waste

The fifth challenge is reducing our waste.

Victorians now recycle more than 50 per cent of their waste. However, despite recent successes, Victoria is still producing too much waste, which is putting pressure on our environment, as well as contributing costs to business and the community:

- Victoria creates around 8.3 million tonnes of waste a year and half of Victoria's waste goes to landfill (Figure 5)
- although Victorians are recycling more waste than ever before, waste levels still need to be reduced. Solid waste increased by 40 per cent between 1992 and 2002.¹¹

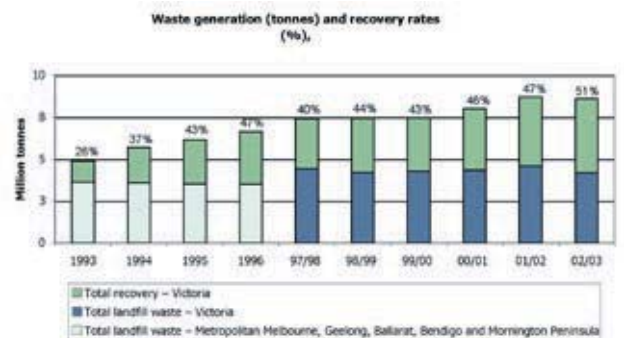


Figure 5
Waste generation and recovery rates from 1993 to 2002. Source: EcoRecycle Victoria (2004)

Population and urban growth

The sixth environmental challenge we face is planning for sustainable population and urban growth.

Population growth is crucial to our economic future because sustainable economic growth and sustainable population growth are inextricably linked.

Victoria's population and our cities and towns are growing rapidly, increasing our demands on natural assets and intensifying environmental impacts:

- over the next 20 years Victoria's population is expected to grow by 25 per cent, or one million people¹². For Melbourne, this growth is expected to require more than 620,000 new houses (Figure 6)
- the average number of people in each household is getting smaller but new houses are larger
 - growing by 25 per cent in the last 20 years.¹³

Projected growth of Melbourne's:
Population (+27% by 2030)
Households (+46% by 2030)

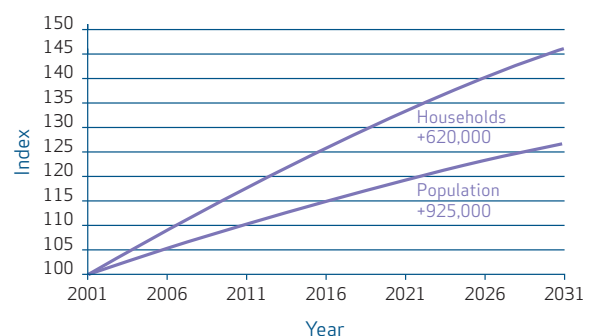


Figure 6
Projected growth of Melbourne's population and households. Source: Melbourne 2030 - Department of Sustainability and Environment (2002)

11 *Environmental Sustainability Issues Analysis for Victoria*. P.28 CSIRO (2004)

12 *Beyond 5 Million: The Victorian Governments Population Policy*. P. iv Victorian Government (2004)

13 *Melbourne 2030: Planning for Sustainable Growth*. P. 15 Victorian Government (2002)

Our progress towards environmental sustainability

Since 1999, Victoria has undergone the most comprehensive environmental reform agenda in the state's history.

The State Government has spent over \$1 billion on new environmental initiatives.

Victorians have responded magnificently and we are now starting to use our natural resources more sensibly and repair the damage we've caused to our natural assets.

As a result, Victoria has already made significant progress towards becoming a more Sustainable State.



Some of our key sustainability achievements have been:

- Reducing logging across the state by 31 per cent
- Leading a 19 per cent reduction in water usage and improving the health of our rivers (including the Murray, Thompson, Goulburn, Yarra and the Gippsland Lakes) through *Our Water, Our Future*
- Reaching a historic agreement with the Australian and NSW governments to boost the flows of the Snowy River from 1 to 21 per cent of average natural flows within ten years and 28 per cent over time
- Establishing 13 marine national parks and 11 marine sanctuaries covering 54,000 hectares of Victoria's marine waters
- Releasing *Melbourne 2030* – a 30-year plan to protect Melbourne's liveability and manage growth



- Contributing to global efforts to address the challenge of climate change through a program of action in the \$100 million Victorian Greenhouse Strategy
- Setting a renewable energy target of 10 per cent by 2010
- Increasing government Green Power purchasing to 10 per cent by June 2006 and introducing 100 Toyota Prius hybrid electric vehicles to the government fleet
- Setting 5 star energy and Victoria's water efficiency standards for all new homes
- 50 per cent of Victoria's waste is now recycled, and diverted away from landfills, compared to 26 per cent 10 years ago
- Establishing Victoria's first environmentally sustainable suburb – Aurora at Epping North
- Setting a 'net gain' target for Victoria's native vegetation
- Appointed Victoria's first Commissioner for Environmental Sustainability
- Leading the development of wind energy across Victoria and commencing work on Australia's biggest wind-farm at Portland
- Introducing world leading greenhouse and energy requirements for Environment Protection Authority licensees
- Releasing a comprehensive plan to reduce greenhouse gas emissions from the energy sector including support for a national emissions trading scheme (*Greenhouse Challenge for Energy*)
- Signed the first Sustainability Covenants between the private sector and the Environment Protection Authority to promote sustainable business practices
- Creating the Sustainability Fund through a levy on waste that goes to landfill, to help business, local councils and regional waste groups to build a more sustainable Victoria
- Supporting the establishment of the GRI Centre for Public Sector Sustainability Reporting in Melbourne and the creation of the Sustainability Index for listed companies (AuSSI).



Environmental sustainability – what it is and why it's important

Victoria has improved its environmental record considerably. We now need to take a more comprehensive and coordinated approach to achieving environmental sustainability.

What is 'environmental sustainability'?

The World Commission on Environment and Development (the Brundtland Commission) in their 1987 report *Our Common Future* defined sustainable development as:

'Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'

Victoria is proud to be one of the most livable places in the world. However, there is a tension at the heart of our liveability.

All Victorians want the benefits of a high quality of life. We want high quality goods and services, but we do not want the drawbacks such as pollution, climate change, congestion and waste.

Collectively the daily actions of all Victorians are having a significant impact on the environment. Inefficient use of resources, poor choices and depletion of our natural environment is a burden on the Victorian economy and businesses.

The State Government believes you can achieve an A-plus for the environment while still retaining an AAA credit rating for the economy.

In Victoria, the environment is crucial to our economy.

For example, Victorian jobs depend on our \$8.5 billion tourism industry and our \$16 billion food industry, both of which are critically reliant on a healthy environment.

Successful sustainability policies have two main features. They take a long-term integrated or holistic approach to protecting the environment, and they operate on the 'triple bottom line' principle – building environmental as well as economic and social considerations into all the decisions those governments, businesses and communities take.

This must be our approach.

For too long we have seen a healthy environment and economic prosperity as being mutually exclusive.

This framework has at its heart, a more sophisticated and creative understanding of relations between the economy and the environment.



This Framework seeks to:

- Mitigate environmental damage, that occurs as a result of the actions businesses and individuals take at no cost to themselves, which forces others to burden the costs.

Globally, we can see this through disappearing fisheries and forests, increasing salinity, pollution connected health problems, decreasing biodiversity, increasing waste, and climate change.

To help prevent these outcomes, we need to change the incentives individuals and businesses face so that they are made aware of, and made to pay for the costs of their actions.

- Support businesses that take clear actions to prevent environmental damage. Businesses that acknowledge and respect our environment are increasingly gaining a competitive edge by capitalising on an increasingly knowledgeable community and consumers who appreciate the contribution of such businesses to the liveability of Victoria and to our economic strength.

A reputation as a responsible business acting sustainability is a valuable commercial asset in the market place. Particularly with respect to world markets, businesses, which are able to respond to consumer preferences and demonstrate their environmental credentials, will be able to secure a competitive advantage.

A strong and sustainable business sector is essential for our long term prosperity, employment and liveability for Victorians.

The Government will seek to achieve this by:

- Encouraging investment in technologies and designs that not only benefit the environment but also increases our global competitiveness and create jobs.
- achieving pricing regimes that induce efficient resource use by businesses and households,
- establishing measures that can track movement in the environmental, social and economic factors central to delivering sustainability.



Why we need to become sustainable

What is good for the environment is good for Victoria.

Clean air and water support our health, productive land and ecosystems support our economy, and environmental industries provide new jobs.

There are a number of reasons why environmental sustainability must be our goal:

A healthy environment means healthy communities

A clean and safe environment is vital for our physical health and wellbeing.

For example, walking is one of the most common forms of exercise for Victorians over the age of 55. Ensuring our natural and built environments are safe, clean and attractive encourages people to venture outdoors and enjoy Victoria's environment. A healthy environment is fundamental to the physical wellbeing of our aging population.

Another example is that poor air quality can result in increased hospital admissions for children with asthma¹⁴ and even premature death for elderly citizens with heart or lung problems.¹⁵



14 Ambient Air Pollution and Daily Hospital Admissions in Melbourne 1994–1997 P.49 EPA Victoria (2001)

15 Melbourne Mortality Study, P. 25–41 EPA Victoria (2000)

16 Victorian Agriculture, Forestry and Fishing Industries at a Glance. P.2 Victorian Government, (2004)

17 Victorian Tourism Industry Strategic Plan 2002–2006. P.11 Victorian Government (2001)

Environmental sustainability will boost Victoria's liveability

Victoria's population is projected to increase by up to an additional one million people by 2025. This means each of us, will have to use Victoria's natural assets more productively to reduce our 'ecological footprint'. If we don't, we risk damaging our reputation as one of the most 'liveable' places in the world.

Maintaining our 'liveability' is crucial to our economic prosperity, helping to attract new investment, skilled workers and tourists.

Victoria's environment is a valuable asset that provides essential goods and services

Our environment provides 'eco-system services' essential to human life. These services include clear air and water and pollination of our crops – none of which can be efficiently or cost-effectively replaced by current technology.

Our water, soils, plants and animals provide irreplaceable services to the economy by supporting our \$7.5 billion agricultural export industry¹⁶ and our \$8.5 billion tourism sector.¹⁷

Case study – ecosystem services

New York City discovered the value of ecosystem services when faced with two choices: build a new water filtration plant at a cost of A\$12 billion, or protect its water catchments and the purity of its water supply.

New York City supported the latter and has spent \$2 billion on buying back land, planting native vegetation, managing housing developments, and initiatives to improve farming practices in the catchment area.

Source: Melbourne Water Magazine, No. 26 (June 2003)

Environmental sustainability delivers economic and social benefits

A first step towards sustainability is challenging the assumption that the environment is always a drag on economic growth. By adopting more appropriate measures of economic success, we can demonstrate that it is possible to protect the environment whilst increasing economic growth and jobs.¹⁸

At times it may not be possible to achieve both environmental improvement and economic growth in the short term. In such cases, government will need to implement appropriate transition arrangements to give people and markets time to shift to more environmentally sustainable practices.

Environmental sustainability creates business opportunities and new jobs

Businesses practicing sustainability principles perform well financially. Over the last decade businesses on the Dow Jones Sustainability Index have often outperformed those listed on the more general Dow Jones Global Index.¹⁹

The strengthening of international environmental regulation is creating an enormous worldwide market for sustainable goods and services.

In Victoria the environment industry already contributes \$4 billion in production each year.

Our capacity to meet tougher environmental standards will boost our international competitiveness. For example, many jurisdictions, including California, are introducing increasingly stringent regulations on motor vehicle emissions. These regulatory measures provide new export opportunities for those organisations able to adapt.

Becoming more sustainable therefore has the potential to create sizeable new domestic and export industries, creating additional wealth and jobs for the people of Victoria.

Victoria's Environment Industry

The annual global environment market is estimated to be worth \$513 billion US and growing.

The Australian environment industry is estimated to be worth \$16.7 billion.

The Victorian environmental technologies industry is estimated to contribute over \$4 billion in production per year.

Victoria's environmental technologies focus largely on pollution management with a lesser focus on resource efficient technologies and resource management.

Source: National Capability Statement on Australia's Environment Industry. Victoria University (2001).



¹⁸ *Are We Consuming Too Much?* Arrow, K. et al (2004). *Journal of Economic Perspectives*, Volume 18 (3): pp 147 – 172.

¹⁹ Mr Aiko Bode presents to United Nations Financial Services Initiative Conference (February 2000); *Press Release*. Dow Jones Sustainability Index P.2 (September 2003)

Cutting costs – now and in the future

More efficient use of resources makes sound financial sense. By cutting costs and freeing up wealth we can invest more productively.

Government, businesses and households can all cut costs. For example, the Paint Factory, a small company in Melbourne, saved \$28,200 on its annual overheads by reducing waste, materials and water. It took only three months for the Paint Factory to get a return on its original investment.²⁰

As householders there are many actions we can take to become more efficient by installing water efficient showerheads or walking instead of driving to the local shops.

Learning to do things smarter and more sustainably now, will save Victorians money today and help avoid bigger outlays for future generations.

Environmental sustainability is a better way of addressing our environmental challenges

Environmental issues – whether they relate to land, air, water, climate, plants or animals – are often interrelated. So unless we adopt a holistic, life cycle approach to addressing environmental issues, our actions may only succeed in shifting problems to other areas.

For example, stretched water reserves have increased public debate about the need for water desalination. While desalination can provide fresh water supplies and reduce the stress on some of our rivers, it is an expensive and energy intensive process, potentially increasing greenhouse pollution.

Sustainable policies therefore require a long-term, integrated approach to help reduce waste at the source.

²⁰ EPA Victoria (2005)

Environmental sustainability helps Victoria meet its national and international obligations

We are all ultimately part of one global eco-system, so inevitably, environmental decisions Victorians make affect other states and other nations. Pollution that enters the Murray River from NSW and Victoria can affect the quality of drinking water in Adelaide. Our greenhouse gas emissions affect the global climate.

Victoria will continue to lead national processes to improve the environment for everyone. A good example is the National Water Initiative. All the States and Territories are also working together to develop a national emissions trading scheme to help fight climate change.

Reducing these impacts is not only a moral responsibility. It is a legal responsibility as well. Australia is party to international agreements on issues ranging from biodiversity protection to ozone depleting substances.

Victoria's environment supports our lives, our lifestyles and our economy.

Victoria's rich and diverse natural and built environment is an asset of immeasurable worth. Our magnificent coastlines, lands and waterways, spectacular alpine regions and our unique built environments all provide us with intrinsic and cultural values as well as enormous economic benefits.

Our environment is our 'natural and built assets' – we need to sustain those assets as we would any other.



Our new approach

The Environmental Sustainability Framework establishes three directions, which Victoria must pursue to move towards being a Sustainable State. These are:

- 1. Maintaining and restoring our natural assets.**
- 2. Using our resources more efficiently.**
- 3. Reducing our everyday environmental impacts.**

Safeguarding Victoria's natural assets is critical to Victoria's long-term prosperity. The first direction focuses on our natural assets – our forests, water, land, plants and animals and climate – and how we can achieve a balance between their use and maintaining the ecosystem services they provide.

The second direction looks at how our natural resources are used in industries, in homes and in work places and outlines the need for greater efficiencies to reduce consumption of resources and generation of waste.

The third direction focuses on what Victorians need to do in their every day lives to reduce their environmental impacts. It focuses on the human elements of environmental sustainability and how our choices can improve the environment.

Adopting these three directions provides the key to a sustainable future for all Victorians.



Measuring our progress

For the first time, the Framework sets out a comprehensive set of 13 environmental quality objectives, which will guide Victoria's progress towards environmental sustainability.

We want to make significant progress in achieving these environmental objectives within one generation.

To measure our progress in achieving these objectives, Victoria has established interim targets. The interim targets included in the Framework are those currently agreed to by the State Government and are listed in Growing Victorian Together, the Victorian River Health Strategy, the Victorian Greenhouse Strategy, and Our Water Our Future – Securing Our Water Future. As our understanding of our environment improves, new interim measures and targets may be set.

Reporting to Victorians

The State Government has committed to independent state of the environment reporting to be undertaken by the Commissioner for Environmental Sustainability.

To complement this process, the Department of Sustainability and Environment will prepare an environment report card biennially that assesses and provides information on how the state is tracking in meeting its environmental objectives and interim targets, commencing 2007.

Strategic Direction 1 – Maintaining and restoring our natural assets

The need for environmental sustainability is based on an understanding that environmental functions must be sustained to support life.

We have a stock of natural assets – air, land, waterways, plants, and animals. These assets provide essential services that support our life, communities, industries, economy and jobs.

Just as investors seek to protect their financial assets while enjoying the interest earned from them, Victorians must also live off the benefits provided by our stock of natural assets without running down the assets themselves.

Environmental sustainability means that we need to consider carefully the full benefits provided by our natural assets (for example in providing ecosystem services) before we make decisions on resource use. When the natural environment is damaged beyond repair, so too is its capacity to provide us with clean air and water, healthy soil and crop pollination, and to absorb our wastes.

Environmental sustainability does not mean locking up our natural assets forever. It means we must be smarter about the way we use them, to ensure their use today does not jeopardise their availability for future generations.



Victoria's key natural assets:

- 22.8 million hectares of land
- 10,000 square kilometres of marine waters
- 2,000 kilometres of coastline
- diverse natural ecosystems
- 3.75 million hectares of parks and reserves
- 22.5 million ML of annual streamflow
- 970,000 ML of annual groundwater
- abundance of minerals, coal, natural oil and gas, gold and other metals, sands, rock, clay and sources of renewable energy
- 3140 species of native plants, 111 species of mammals, and 447 species of birds

The following principles will help Victoria to secure its natural assets:

- sustaining and restoring natural assets to maintain ecosystem services
- using renewable resources in ways that don't irreversibly damage them or the surrounding ecosystem
- carefully managing non-renewable resources
- establishing the real economic value of natural assets and their use in pricing and incentives.

Pricing for sustainability

In order to maintain our natural assets they must be properly valued by the community. This means fully valuing the asset base, including the full range of services that the asset provides to the state.

The Our Water Our Future action plan released in 2004 outlined a new pricing structure for water, to encourage greater conservation by communities, individuals and businesses.

Properly implemented, economic incentives (including charges, levies and tradeable rights) can achieve sustainability objectives more efficiently than other approaches. Economic incentives are most effective where:

- the need to manage a resource is well-understood
- resource users have different needs and they value resources differently
- they send the correct signals to resource users without high administration and implementation costs.

Our objectives and interim targets

We will know that our natural assets have been maintained and restored when we achieve the following objectives:



Healthy and productive land

Victoria's land is used in ways that are productive, profitable, and within capacity and within sustainable yield. Land-based eco-systems are maintained and valued for the range of services they provide.

As part of this objective we seek:

- An improvement in the condition of our land by reducing the impact of salinity and soil degradation
- An increase in the extent and quality of our native vegetation
- Improve the condition of our land by reducing the impact of salinity and soil degradation in line with targets in accredited Regional Catchment Strategies.

Interim target

- By 2015 there will be a real reduction in the environmental and economic impacts of salinity.



Healthy and productive water systems

Victoria's rivers, aquifers, floodplains, and catchments are healthy and capable of delivering a wide range of water services, including water for our homes, farms and industry and environment.

As part of this objective we seek:

- A significant improvement in the health of Victoria's rivers
- High quality drinking water

Interim targets

- Significantly improve the health of Victoria's rivers by 2010
- Return the Snowy River to 21 per cent of its original flow by 2011 and over time to 28 per cent
- Recover 500gl of water over five years to improve the environmental flows at 6 icon sites along the Murray River
- Over the next five years provide ecologically sustainable water reserves in 21 priority-unregulated rivers.



Healthy marine and coastal systems

Victoria maintains the quality of our rich and diverse marine, estuarine and coastal environments as well as opportunities for recreation, tourism, fishing and shipping.

As part of this objective we seek:

- Victorian marine national parks will protect and restore marine habitats where sea life will thrive
- Ongoing wise management of Victoria's marine and coastal areas and improved performance against environmental quality objectives in relevant state environment protection policies
- Improve the condition of estuarine, coastal and marine habitat integrity in line with accredited Regional Catchment Strategies.



Flourishing biodiversity in healthy ecosystems

There are enough populations of Victoria’s native flora and fauna so that our native species can maintain their evolutionary potential over the long-term. This requires making sure there is enough habitat for those populations and the ecological processes that support them continue to function.

As part of this objective we seek:

- An increase in the extent and quality of native vegetation
- Reduced impact from pests and weeds
- An increase in the restoration of important habitat
- Improved status for our threatened species and ecological processes
- Improve the extent and conservation status of selected significant native species and ecological communities in line with targets in accredited Regional Catchment Strategies.
- Reduce the extent and impact of pests and weeds in line with the targets in accredited Regional Catchment Strategies.

Interim target

- A reversal, across the entire landscape, of the long-term decline in extent and quality of native vegetation, leading to net gain.



Clean air

Victoria’s air is of a quality that protects human and environmental health, visibility, aesthetic enjoyment and local amenity.

As part of this objective we seek:

- Continued air quality improvement so we have the cleanest air possible, having regard to the state’s economic and social goals
- Continued contribution to address the depletion of the ozone layer

Interim target

- Improve air quality and meet the national ambient air quality goals by 2008.



Comprehensive network of parks and reserves

Victoria has a comprehensive set of parks and reserves that represent and protect the diversity of Victoria’s ecosystems and provide ecosystems services and enjoyment and wellbeing to Victorians.

As part of this objective we seek:

- All of the state’s major ecosystem types represented and protected in Victoria’s parks and reserves

Strategic Direction 2 – using our resources more efficiently

Significant amounts of natural resources are wasted in the creation of goods and services. We need to use our natural assets as efficiently as possible, just as we do with our money and time.

When Victorians think of waste, they usually think of the rubbish that ends up in their bins at home and at work, such as left over packaging or discarded goods. In fact we waste a lot more than this. One study suggests that humans are more than 10 times better at wasting resources than using them. This study found that only 7 per cent of the materials used to create products end up in the final product.²¹ Moreover, 80 per cent of these products are discarded after a single use.

As Victoria's population and economy grow, there will be greater demand for energy, water and raw materials to build the homes we live in, the buildings we work in and to create the goods and services we buy. However, our consumption of resources cannot continue to grow unabated.



Victoria is already seeing the limits of our natural assets being exposed, including the amount of available water, suitable sites for the disposal of waste and the capacity of the atmosphere to absorb the ever increasing amounts of greenhouse gases that are leading to climate change.

Victoria needs to move towards an economy that uses resources more efficiently. For example, we need to produce and consume energy in a less greenhouse gas-intensive manner. We can begin achieving this by improving energy efficiency and growing the share of energy that is supplied from renewable sources. We also need to increase the level of research and development into energy technologies – such as geosequestration, which may offer a long-term solution to achieving the deep reductions in greenhouse gas emissions needed to avoid dangerous levels of climate change.

Smarter and more efficient means of production and consumption can preserve limited resources, reduce the environmental impacts of resource use, and deliver economic benefits through lower costs to businesses and households.

Doing more with less is not the same as doing without. Victorians can still have the products they need and desire. In fact, they can have even better products – products that are built more efficiently so they last longer, products that cost less in energy and water to run, and products that are recyclable and have minimal disposal costs. This requires innovation and better technology to produce more resource efficient products and services.

This need not be at the expense of economic growth. Far from it, savings from more efficient resource use can be directed towards more productive and sustainable investments.

²¹ Factor Four: Doubling Wealth – Halving Resources Use. P.vi Weizsacker, Lovins and Lovins (1997)

Facts about our resource use

- The waste generated in metropolitan Melbourne would fill the MCG every 12 weeks.
- Appliances on stand by, like TV's and stereos when they are not in use, account for 13 per cent of the energy used in Australian homes.
- Almost half of household garbage is food and garden waste, which can be composted.

The following principles will help Victoria produce more from less:

- developing, seeking out and using resource efficient practices
- identifying and avoiding wasteful practices
- basing resource use decisions on full-life-cycle costs and benefits.

Our objectives and interim targets

We know that we will be using our resources more efficiently when we achieve the following objectives:



Less waste and increased resource efficiency

Victoria produces less waste by avoiding, reusing and recycling.

As part of this objective we seek:

- Reduced environmental impacts of waste discharges

Interim target

- The quantity of solid waste generated reduced, and the amount recovered for reuse, recycling and energy generation increased



Sustainable forests

Victoria's forests provide a full range of products and ecosystem services to Victorians.

As part of this objective we seek:

- Timber harvested at sustainable yields
- Ecosystem services sustained by forests

Interim target

- As further licences are surrendered or expire, provide further protection to other native forest areas in the Otway Ranges and complete the exit from native forests in the Otways by 2008



Increased water, energy and materials efficiency

Victoria has a resource efficient economy, easing pressure on natural assets by using water, energy and materials more productively at home and at work.

As part of this objective we seek:

- Increased resource efficiency
- Smaller ecological footprint

Interim targets

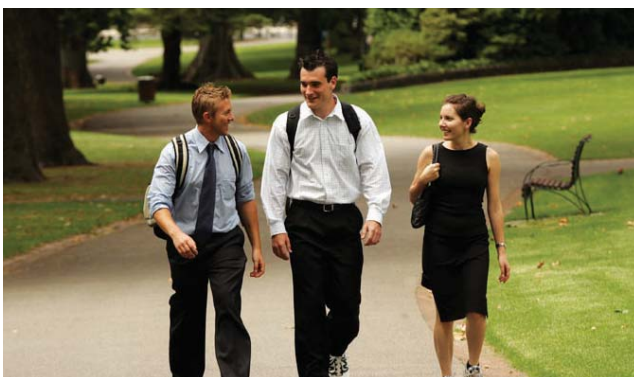
- Increase the efficiency of irrigation systems across the state by 25 per cent by 2020
- Increase 'waste water' reuse in Melbourne to 20 per cent by 2010
- Reduce Melbourne's water usage by 15 per cent on a per capita basis by 2010

Strategic Direction 3 – Reducing our everyday environmental impacts

Everyone has an impact on the environment and everyone has a responsibility to reduce that impact.

Victorians must reduce our impact on the environment. To do this, we will need to design more eco-friendly houses, plan more efficient towns and cities, cut wasteful use of energy and water and produce goods and services more efficiently. It can be done – as Victorians have demonstrated by using water more efficiently. We now need similar victories in other areas.

Every Victorian can reduce their impact on the environment by recycling more, composting organic waste, taking shorter showers, using public transport and buying sustainable goods. To help people make better choices they need better information about the environmental impact their decisions ultimately produce.



How many resources do you or your business use?

Ecological footprint is a measure of how much of the planet is needed to sustain our level of resource consumption and waste disposal, in comparison to how much is available.

The average ecological footprint for an Australian is 7.7 hectares of land per person and for a Victorian it is 8.0 hectares per person.

The world average footprint is 2.2 hectares per person, with only 1.9 hectares per person available for use on the planet.

If everyone in the world lived like Victorians, we would need four planets.

Calculate your ecological footprint at www.epa.vic.gov.au/Eco-footprint

The following principles are pivotal to easing our burden on the environment:

- making it easy for people to do the right thing and harder to do the wrong thing
- measuring, understanding and taking action to reduce our everyday environmental impacts
- considering potential environmental impacts in the early stages of decision-making and seeking the best environmental, economic and social outcome
- working together to reduce our impacts.

Our objectives and interim targets

We know that we have reduced our environmental impacts when we achieve the following objectives:



Reduced climate impact

Contributing to global efforts to reduce greenhouse emissions in accordance with the objectives of the United Nations Framework Convention on Climate Change. This includes working towards a robust, growing economy less reliant on carbon producing resources. The international community also recognises some level of climate change is inevitable. We want our communities to be in a position where they can easily adapt to those associated impacts.

As part of this objective we seek:

- Reduced greenhouse gas emissions from the production and use of energy

Interim targets

- Increase the share of Victoria's electricity consumption from renewable energy sources from the current 4 per cent to 10 per cent by the year 2010
- Facilitate the development of up to 1000 megawatts of wind energy in environmentally acceptable locations throughout Victoria by 2006



Communities with an ethic of saving water, energy and materials

Victorians have changed their behaviour to use less water, energy and raw materials.

As part of this objective we seek:

- Increased adoption of resource efficient actions at home and at work



Liveable cities and towns

Victoria is one of the most liveable places in the world and our cities and towns have a smaller ecological footprint.

As part of this objective we seek:

- Urban growth concentrated in growth areas and activity centres with access to the principal public transport network
- Reduced unwanted noise
- Reduced litter
- Smaller urban ecological footprint

Interim target

- There will be a greater percentage of new dwellings located at strategic re-development sites in Metropolitan urban areas.



Efficient transport systems

Victoria's transport system is well connected and provides sustainable transport options.

As part of this objective we seek:

- Urban growth concentrated in growth areas and activity centres with access to the principal public transport network
- Networks between regional and metropolitan areas strengthened

Interim target

- Public transport use in Melbourne as a proportion of trips taken by motorized means will increase from 11 per cent in 2002 to 20 per cent by 2020.

Putting the Framework into action

Growing the Sustainable State is a challenge for all Victorians.

The Framework does not replace the many specific strategies that exist to address particular environmental issues, such as water or climate change. Instead, the Framework provides the broad strategic context for these strategies and informs future policy initiatives.

This Framework is a call to action for all Victorians. Whether you are a builder, a teacher, a farmer or a business leader, the challenge facing all Victorians is: 'what can I do to safeguard Victoria's environment?'

Everyone's actions to improve Victoria's environment will be different. This Framework does not impose a set of actions but sets directions, guiding principles and measurable objectives that each of us need to make part of our daily routine and decisions.

In providing clear objectives and directions, the Framework is a crucial step on the path towards environmental sustainability. We now need to take the next step towards fully integrating environmental sustainability into all decisions and choices.

The two key ways in which we can turn this Framework into action are:

- (i) building it into our everyday operations – at home and at work
- (ii) consulting with all Victorians on how the Framework should be implemented

Building it into everyday actions

In the same way that we incorporate financial planning into everyday organisational, business and household decisions, we need to incorporate actions to avoid waste, use resources efficiently, reduce environmental impacts and sustain our natural assets (Figure 7).

Victorian businesses, communities and local governments have made great advances in sustainability already. But we must all do more to help create a more sustainable Victoria.

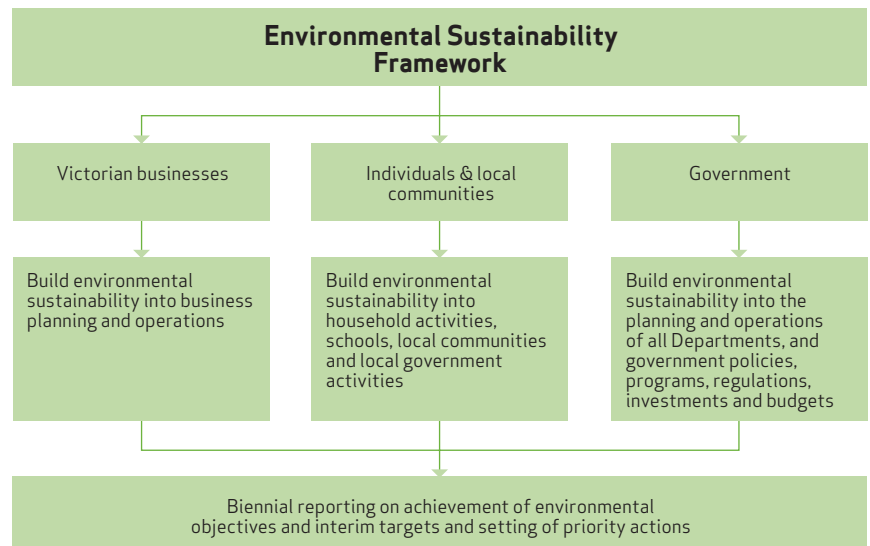


Figure 7

Building the environmental sustainability framework into everything we do

To demonstrate its commitment to this Framework, the State Government will integrate the directions of the Framework in its own day-to-day operations:

- departments and agencies will include the directions of the Framework in all their business and operational planning, including their environmental management systems, from July 2006
- the Department of Sustainability and Environment and its key environmental agencies will assist local government, communities, individuals and industries adopt sustainable practices through its sustainability programs. In particular, government will provide practical advice to enable Victorians to make better decisions for our environment and our future.

Review of Framework, Objectives and Interim Targets

This Framework provides the strategic directions for environmental sustainability for our future. To ensure that the Framework remains relevant, the State Government will undertake a comprehensive review of the Framework and the effectiveness of its implementation in 2010. The Department of Sustainability and Environment will undertake this review on behalf of State Government.

In addition, the Commissioner for Environmental Sustainability will annually review the adoption of the Framework's directions by government departments and agencies in their environmental management systems and business plans.

The Department of Sustainability and Environment will review the state's progress on the objectives and interim targets biennially.

The Next Step: How to have your say

Achieving sustainability will take long-term planning and coordination at the State Government level.

All Victorians must help build a Sustainable State. The State Government encourages comment from businesses and communities on how the Framework should be implemented.

Submissions on the implementation of the Framework will be accepted up until 10 August 2005 and should be forwarded to:

**Environmental Sustainability Framework
Department of Sustainability and Environment
PO Box 500, East Melbourne
VIC 3002**

or sent to:
sustainablestate@dse.vic.gov.au

- Copies of the Environmental Sustainability Framework and the Ministerial Statement on Environmental Sustainability are available from the DSE Information Centre (Ph 9655 8830) or online at www.dse.vic.gov.au

