# Health promotion and sustainability:

transitioning toward healthy and sustainable futures
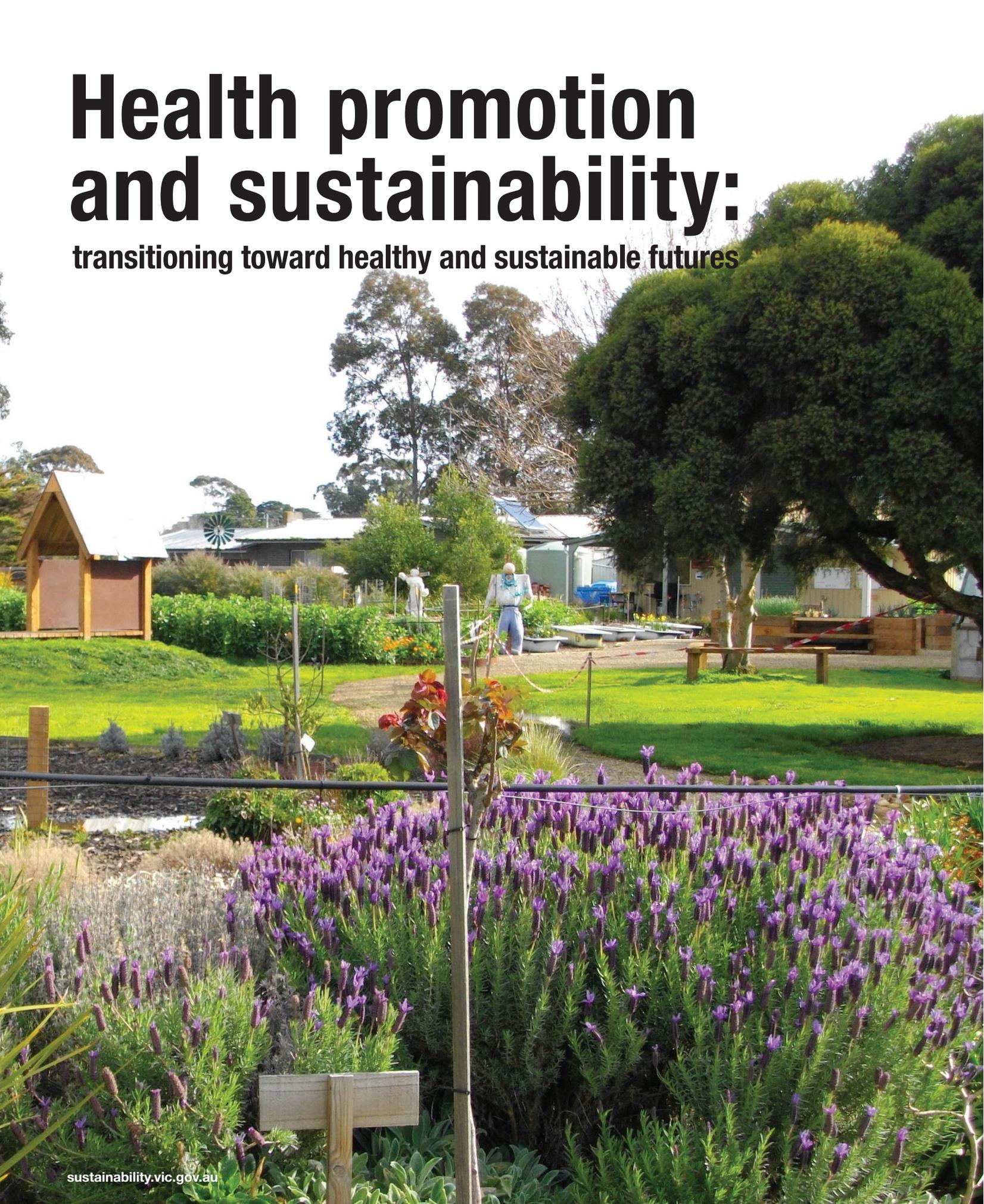
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Endorsements

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Cover photo: Community gardens in the hospital grounds of the Kooweerup Regional Health Services (Photo: Teresa Capetola)

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Preface

It was the best of times, it was the worst of times; it was the age of wisdom, it was the age of foolishness; it was the epoch of belief, it was the epoch of incredulity; it was the season of Light, it was the season of Darkness; it was the spring of hope, it was the winter of despair; we had everything before us, we had nothing before us; we were all going directly to Heaven, we were all going the other way.

Charles Dickens, *A Tale of Two Cities* (n.d., p. 14)

In times of great societal changes or 'transitions', an era is often named after the benefit of hindsight. So the 'Industrial Revolution', 'Great Depression' and 'Digital Age' were named after the height of activity for those epochs that changed in profound ways how people and societies thought and functioned. As awareness and experiences of contemporary environmental changes escalate, the time in which we live will also be categorised as a period of 'great transition'. How we respond to the challenges of environmental degradation today will determine how this era will be recalled.

This report explores the potential for health promotion activities and sustainability principles to come together and contribute to the 'great transition' we are all in the process of constructing. Some social commentators see this era as an opportunity for reassessing values and priorities at global and local levels towards a 'new sustainability paradigm' characterised by a revised model of development and increased community engagement (Raskin et al. 2002, p. 16). There is great hope that the increasing articulation of health promotion action with sustainability principles will positively shape this period of transition.

Public health has a history of responding to environmental threats to population wellbeing. One of the earliest and most celebrated associations of public health with environmental awareness was the case of the London surgeon, John Snow, requesting a handle be removed from the Broad Street water pump in Soho, which he correctly surmised was the source of the cholera outbreak in 1854 (Raftery 2004, p. 127). With that singular act, John Snow illustrated how human health is inextricably linked to the physical environment. Since that time, the public health and health promotion movements have progressed to articulate the myriad of variables which influence health – social, environmental, physical, economic and more; in short, the 'determinants' of health, famously documented by Wilkinson and Marmot (2003) in their landmark research, *The Solid Facts*, and born out of the New Public Health movement.

It is also perhaps no coincidence that health promotion employs an environmental metaphor to illustrate its fundamental tenet of ill health prevention – working 'upstream'. In 1975 McKinlay described the futility of standing on the shore of a 'swiftly flowing river' and rescuing drowning people, when what was really needed was 'to see who the hell is upstream pushing them all' (McKinlay 1979).

Water is an essential determinant of health for people, plants and animals. Over time the threat to fresh water availability has escalated – due to drought, global warming, urbanisation and water contamination. This has compelled health promoters to do more than 'remove the handle from the pump' or to observe who is 'drowning' but to examine the health of the river itself. Consecutive

international health declarations[1] and movements have progressively tasked health promotion to consider the health of the environment and health of people as inexorably connected in a union of mutual benefit.

Traditionally in health promotion practice, 'sustainability' was a term that referred to 'maintaining' health programs and activities. However, in the same way that the New Public Health movement has reoriented the approach to public health based on the increase in globalisation and decrease in social equity, so too does health promotion need to address a meaning of sustainability that goes beyond its original utilitarian meaning. To truly embrace the tenets of promoting health, the practice needs to embrace environmental sustainability principles. Definitions of sustainability abound, but in the following definition similarities between health promotion principles and sustainability imperatives are clearly visible (these are also elaborated in Section 1.5):

> *Ensuring continuity for current and future generations; maintaining integrity of ecological life-support systems; practising the precautionary principle; and monitoring social and economic impacts on environmental resources.*

> (Brown et al. 2005, p. xvi)

As health promotion practitioners adapt and improve their skills and knowledge to address the new challenges posed by environmental change, a new water metaphor may be needed to give meaning to the work we do. Like the water cycle – in constant change, renewal and harmony, and inextricably connected to life – so too the work of the health practitioner, within sustainability imperatives, will be characterised by these features. As the necessity and wisdom of this momentum grows perhaps this period of 'great transition' will also be remembered as the era of adaptability and connection.

Figure 1   Wetlands in the Kooweerup Regional Health Services community gardens (Photo: Teresa Capetola)

We forget that the water cycle and life cycle are one. Jacques Cousteau

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[1] Refer Baum 2008, p. 32, Figure 3.1.

Introduction

Is this report for you?

This report is primarily for health promotion and primary healthcare practitioners but will also be useful to anyone working in the public health sector.

It is designed to encourage agencies to work in inter-sectoral partnerships, particularly with other agencies outside the health sector.

What new information does this report offer?

Transition times are characterised by uncertainty but also enthusiasm and motivation to create a better future. This report presents some guidance and inspiration to help address the health of populations in an era of significant environmental and social challenge.

This paper is unique in that it sets out in one place the following:

- Rationale for integration of environmental sustainability and health promotion practices within healthcare settings.
- Practical information that explicitly demonstrates the benefits, linkages and opportunities for the health promotion sector in addressing environmental sustainability.
- Case studies in healthcare settings illustrating models of practice which demonstrate ways of linking sustainability and health.
- A focus on other possibilities for collaborative work integrating health and sustainability using food as the focus.
- A checklist of the key questions and steps to assist organisations to embed sustainability throughout service delivery and health promotion.
- A list of current and appropriate resources, policy and research in this area.

How do I navigate this report?

The report is in three sections.

Section 1

Provides the rationale for this work, including material that can be used to support project proposals.

Section 2

Contains six case studies illustrating diverse examples of connecting health with sustainability.

Section 3

A checklist and guide to further resources for integrating sustainability into program planning.

Figure 2   Wetlands and Indigenous inspired community art in the Kooweerup Regional Health Services community garden (see Section 2.2) (Photo: Teresa Capetola)

Section 1: Why sustainability is core business for health promotion

1.1 Resources for health: The public health context

> This section provides the policy and practice justification for practitioners to incorporate sustainability within their health promotion work.

The overall guiding principle for the world, nations, regions and communities alike is the need to encourage reciprocal maintenance – to take care of each other, our communities, and our natural environment.

(Ottawa Charter, World Health Organization 1986)

Public health has a history of concern with environmental factors, particularly in relation to the provision of clean air and water, and uncontaminated environments. Since the late twentieth century, health program planners have worked with the concept of determinants of health and the value of community connection, and started to explore the role of nature in mental health, the importance of livable communities and active transport for promoting health, and the interconnection of ecosystems and health. This broadening of scope is the hallmark of the New Public Health movement and was first articulated in the blueprint for health promotion action in the *Ottawa Charter for Health Promotion*.

In 1986 the Ottawa Charter explicitly stated that any health promotion strategy should include protection of the natural and built environments and the conservation of natural resources. The Ottawa Charter proposed a socio-ecological approach to health that recognises the interdependent relationship between people and the environment. Despite this powerful call to action more than two decades ago, practice that addresses health and sustainability has been slow to develop. Now, as community concerns about global sustainability and climate change grow, there is an increasing recognition in the healthcare and health promotion sectors that environmental sustainability needs to be part of core business.

The Ottawa Charter also renewed our understanding that spiritual, mental and physical health is the product of our relationships with the physical and social environments, as depicted in Figure 3.
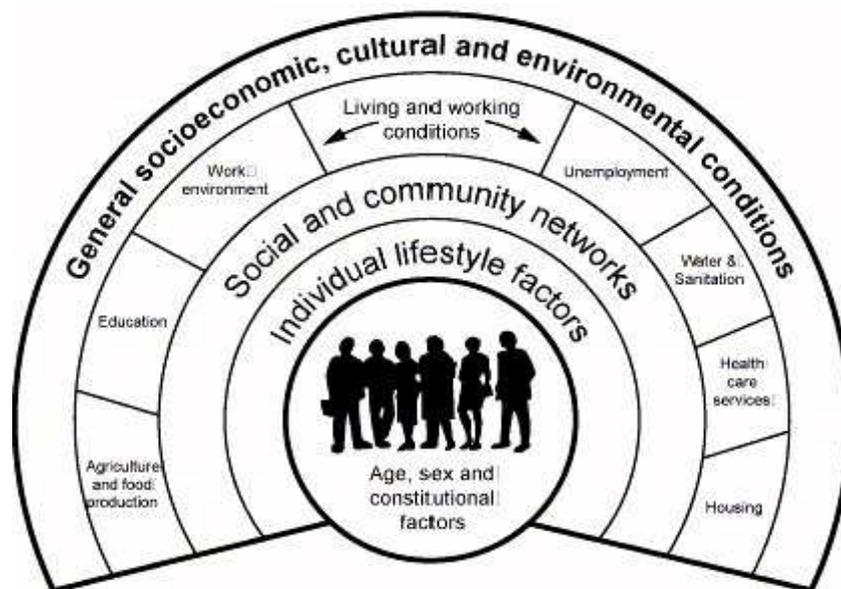
Figure 3 Determinants of health model (Dahlgren & Whitehead 1991)

Examples of the health promotion sector explicitly linking health and sustainability can be found in the Healthy Cities Program initiatives which put the Ottawa Charter principles into operation (Kickbusch 2010). Section 2 of this report highlights examples from the local and community health level of environmental and health concerns being addressed simultaneously.

As both a contributor to the problem of environmental degradation through its large ecological footprint and tasked with the responsibility of protecting human health, healthcare is well placed to make a difference. Healthcare contributes to the problem of unsustainable resource use but can contribute to solutions (Coote 2006). Healthcare's large ecological footprint can be tackled through strategic planning and environmental management across all aspects of an organisation. *ResourceSmart Healthcare* has been developed by Sustainability Victoria and the Department of Health (2010) to assist with this process.

However, health promotion practitioners can do more than this. Skills and knowledge can be used to address climate change and to support communities to adopt sustainable lifestyles. For example, they could 'engage with individuals and communities to understand the health consequences of climate change and encourage sustainable living' (Catford 2008, p. 107). This is distinct from the public health practitioners' roles 'managing the public health consequences' of climate events such as increased hospitalisation due to heat stress, and gives a specific niche in terms of prevention. The health promoter's responsibility is to 'mobilise the capacity of the health sector in developing mitigation strategies and adaptive measures that concentrate more on the causes and determinants' (Catford 2008, p. 106).[2] Health promotion practitioners' work would include:

- Integration of climate change mitigation and adaptation strategies into health program plans and delivery. For example, organisational health promotion plans and health promotion projects.

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[2] '**Climate mitigation** is any action taken to permanently eliminate or reduce the long-term risk and hazards of climate change to human life and property. **Climate adaptation** refers to the ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damage, to take advantage of opportunities, or to cope with the consequences' (Global Greenhouse Warming n.d.).

- Strengthening partnerships with environmental groups and those responsible for managing built and natural environments.

   (Catford 2008)

Climate change is part of the challenge for future population health and a broader view of the future sees sustainability as the goal, and includes looking at water, food, ecosystems, and consumption and production as part of program planning.

1.2 Government and lead agency initiatives

> This section describes higher level policy-related initiatives that are shaping the directions for health and sustainability work at the community level.

The environment and health sectors have started to appear as partners in existing and emerging government commitments and policies. In Victoria, documents that have influenced health promotion practice, especially in environmental sustainability, are summarised below.

Environment

Our Environment Our Future: Environmental Sustainability Framework (2005) was a previous Victorian Government commitment to build environmental sustainability into state government operations and agencies. *ResourceSmart Healthcare* was part of that objective. This document complements *ResourceSmart Healthcare*.

Securing our Natural Future: A white paper for land and biodiversity at a time of climate change (2009) acknowledged the need for urgent action to safeguard the environment and build resilience to cope with climate change impacts. This longer-term, strategic framework focused on ecosystem and environmental health, climate change adaptation, and engaging and educating communities about the environment.[3] The key objectives were to support local communities to:

- reduce emissions
- build community resilience to adapt to climate change
- trial and/or promote new ideas to help tackle climate change.

The Victorian *Climate Change Act 2010* includes a legislated target to cut Victoria's greenhouse gas emissions by 20% by 2020'. A suite of initiatives will be needed to achieve this target, and one of these is the commitment to a five-star energy rating for all Victorian homes. Another promising development is *Living Victoria,* which focuses on creating more livable communities and includes funding for community projects to improve the health of local environments (Liberal Victoria 2010).

Health

The public health portfolio is Victoria's largest consumer of resources in government. It is also the portfolio with the most to gain from embedding sustainability throughout its core business, not only through reduced recurrent costs but ultimately through better health outcomes.

Capital Projects and Service Planning (CPSP), within the Department of Health, has responsibility for 'leading environmental sustainability in the health sector' (Department of Health 2010b), and

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[3] Communities can be involved through the Climate Communities initiatives, supported by Sustainability Victoria through a grants scheme.

has recently adopted a strategic priority for the next two years to 'drive environmental sustainability objectives through design, performance monitoring and supporting behavioural change in the health sector'.

The Victorian Health Department's Environments for Health Framework (DHS 2001) also provides the basis for a broader view of 'environments' that encompasses sustainability. This framework, used by local government to guide municipal public health and wellbeing planning, promotes an understanding of the environment across the natural, built, social and economic domains. This framework has been evaluated and was found to have had significant impact on the conceptualisation and coordination of health planning at a local level.

Environments for Health has also been used at a state government level to guide municipal planning approaches to the development of heatwave plans. The Department of Health has developed a heatwave framework and planning guide for local government in order to reduce the impact of heatwaves on the health and wellbeing of the community.

The department also funds a range of community and womens' health agencies to undertake health promotion activities focused on a number of priority areas including promoting physical activity, accessible and nutritious food and promoting mental health and wellbeing.[4] Action taken to address these priorities may also contribute to environmental sustainability, for example, activities focused on active transport and food security.

The Victorian Health Promotion Foundation (also known as VicHealth) funds research and programs to improve health and wellbeing and to prevent chronic disease. With a strong commitment to social justice, VicHealth has investments in food security projects that have relevance to sustainability, including one funded project which investigates the impact of different types of local food systems on nutrition, the environment, society and the economy

The 2010 International Union for Health Promotion conference focused attention on the need to integrate health promotion and sustainable development, exemplified by the first of a series of white papers, *Exploring the Food System* (Kickbusch 2010).

Active transport is another issue where the nexus between health and sustainability is being addressed through inter-sectoral partnerships, policy development, research and practice innovation. *Healthy Places and Spaces* is an example of collaboration between the Australian Local Government Association, National Heart Foundation of Australia and the Planning Institute of Australia. *Healthy Places and Spaces* produced a national guide for planning, designing and creating healthy and sustainable communities with a focus on active transport and community level change. In Victoria, the Department of Health has worked in partnership with the Department of Transport to increase walking in Victoria and will continue this work into the future.

All these developments point to an increasing level of activity for exploring synergies between health and environmental sustainability.

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[4] The Victorian state-wide health promotion priority areas for 2007-12 are:
1. Promoting physical activity and active communities
2. Promoting accessible and nutritious food
3. Promoting mental health and wellbeing
4. Reducing tobacco-related harm
5. Reducing and minimising harm from alcohol and other drugs
6. Safe environments to prevent unintentional injury
7. Sexual and reproductive health

1.3 Why we need to act now to secure the future

This section highlights the need for programs in sustainability and health in Victoria.

All Victorians have a role to play in deciding what kind of future we will have. There are hard decisions ahead. These decisions must be based on what we value and what kind of environment we want to have and leave for the future.

(EPA Victoria & Commissioner for Environmental Sustainability 2008)

Over the past 200 years, Victorians have become one of the most urbanised people on earth and dramatically transformed the state's environment. Humans are increasingly separated from natural systems, and have exploited them without consideration of their long-term sustainability, seeing the environment as 'other' and human and environmental health as separate realms (EPA Victoria & Commissioner for Environmental Sustainability 2008). And yet the two are highly interconnected. Human health is based on access to good quality air and water, and productive land for food but, equally, the health of local and global ecosystems depends upon the social and economic systems that are adopted now, that either support long-term sustainability or threaten social and environmental futures.

As earth's finite resources are taxed by human activity beyond its capacity to 'bounce back', the world has become fragile and unpredictable. The potential impacts of climate change are described elsewhere (*ResourceSmart Healthcare* fact sheet). They include the physical and mental devastation experienced after catastrophic climate events such as storms and floods, bushfires and droughts that are becoming increasingly common; and health impacts such as heat-related illness and death, the spread in the geographical range of vector-borne diseases, increased food- and water-borne diseases due to warmer temperatures, and related mental health problems in rural communities. However, the focus in this report is broader than climate change (see Figure 4). This report is a call to action, highlighting how the health promotion sector can play a role in contributing to sustainable Victorian communities.
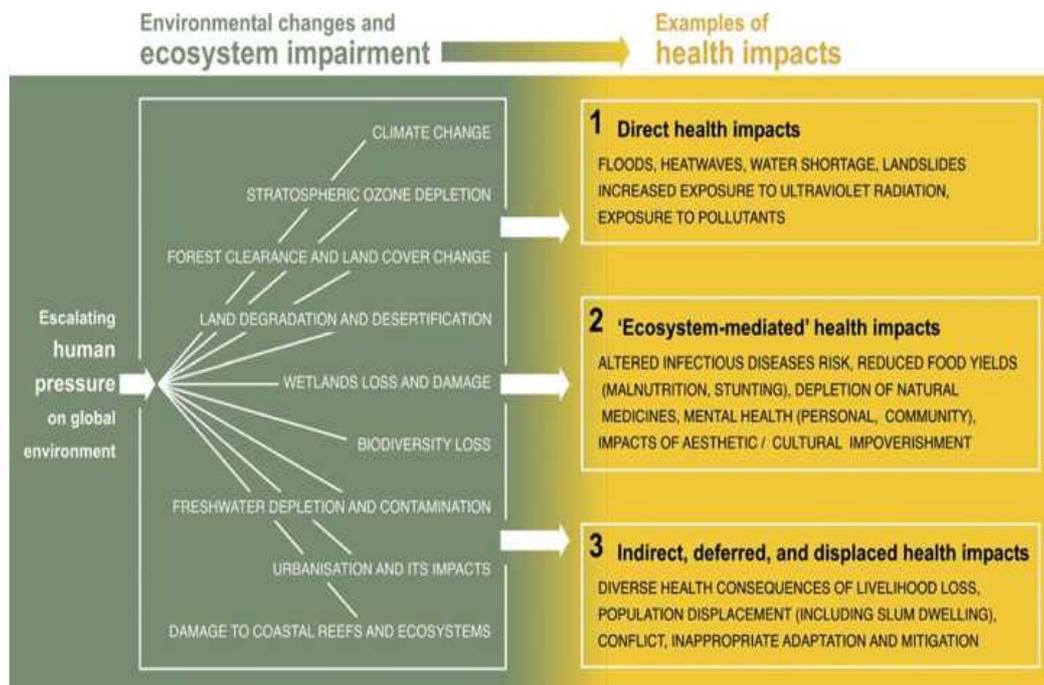
Figure 4 Ecosystem impairment and health impacts (Corvalan, Hales & McMichael 2005)

'Business as usual' is not an option

According to the Victorian Commissioner for Environmental Sustainability (2008), urbanisation, affluence, consumption and population growth have created unsustainable pressures on the environment. These drivers work in conjunction to make Victorians some of the most profligate users of resources on the planet. It is estimated that if every human consumed at the level of the average Victorian, we would need four planets to house the current world population (EPA Victoria & Commissioner for Environmental Sustainability 2008).

Furthermore, Victoria's environment is significantly degraded. Almost two-thirds of the state has been cleared of native vegetation and most of the rivers are sick or dying (DSE 2009). In cities and towns, most of the 'natural' ecosystems vital to future health have been eliminated. Fragmentation of vegetation, inappropriate natural resources management and urbanisation are threats to ecosystems and biodiversity (DSE 2009).

To secure the future we need to start working toward rebuilding ecosystems and reducing human pressures on the environment.

In many cases the best choices for the environment are also the best choices for the planet, and the most ethical and environmental choices are also good for health.

(Kickbusch 2010, p. 7)

1.4 Best bets: promising areas for work on sustainability

> This section focuses on programs around nature and mental health, food and health, and sustainable and resilient communities.

In Victoria, through *ResourceSmart Healthcare* and other initiatives, many community health and health promotion services have worked to reduce their resource use of energy and water, and to reduce waste. The next challenge is to extend program delivery to contribute to community sustainability outcomes.

Nature and health

There is now a significant amount of evidence to support the view that interaction with the natural environment is health promoting (Newton 2007, p. 4; Townsend & Weerasuriya 2010, p. 1). Contact with nature improves general health and wellbeing and can help to tackle mental health problems, obesity and coronary heart disease (Townsend & Weerasuriya 2010, p. 2). One study in Melbourne primary schools found that children who participate in nature-based activities exhibit a variety of social and mental health benefits including psychological resilience, enhanced self-esteem and self-confidence, greater calmness and reduced disruptive behaviour, improvements in neurobehavioral disorders such as ADD, and positive environmental and social attitudes – such as caring for living things – which assists in the development of empathy (Townsend & Weerasuriya 2010, p. 3). This is in addition to physical health impacts.

The idea that contact with nature has beneficial impacts on wellbeing is prevalent across many cultures and societies (Newton 2007, p. 13). Indeed for the world's indigenous populations the natural and spiritual worlds are closely intertwined. Research into the impacts of participation by Indigenous Australian communities in park management has found reductions in substance use, improved economic participation and increased school engagement (Parks Forum 2008, p. 17).

Emerging evidence indicates that being active in natural environments leads to positive environmental outcomes. Research from Australia and the United Kingdom (UK) on green exercise, nature-based activities and conservation volunteering 'indicates a positive relationship between connectedness with nature, environmental behaviors and adoption of environmentally friendly behaviors' (Hine et al. 2008, p. 42). The *Feel Blue, Touch Green* project in Victoria's Geelong and Surf Coast region involved community members who experienced depression, anxiety and/or social isolation in conservation and land management groups. The project's evaluation demonstrated not only significant health, development and wellbeing outcomes for participants but also a variety of benefits for local ecosystems and a reportedly heightened environmental awareness, and pro-environmental behaviours and attitudes (Townsend & Ebden 2006). Here we see that nature-based interventions at an individual and community level have the potential to address health and sustainability priorities.

This evidence-based link between nature and health presents an exciting and relatively untapped opportunity for health promotion practitioners working in a range of settings, including healthcare settings. Particular opportunities lie in forming new partnerships between the health and environment sectors. A leading example is Victoria's own *Healthy Parks, Healthy People* initiative, a campaign involving Parks Victoria, Royal Australian College of General Practitioners, the Asthma Foundation, the National Heart Foundation and Arthritis Victoria to promote the message, *Good Health, Naturally*. This partnership promotes the message that the environmental health of parks results in a healthy community and that spending time in parks and nature is health promoting (Parks Victoria 2010).

Food, health and sustainability

> *Protecting fertile farm lands is a vital component in the patchwork of land, soil, water and biodiversity conservation. Together with our national parks, farming lands are essential to maintain environmental and community health associated with natural resources under extreme threat from climate change, subdivision and property development.*
>
> (Bushell; cited in Knowd et al. 2009, p. 31)

The area of healthy eating challenges health promotion practitioners to develop programs that reduce the impact of the food system on the environment at the same time as promoting healthy eating behaviour. Fortunately, a diet low in meat, high in plant foods and low in processed foods is not only healthier but more favourable to the environment. Food security and/or healthy eating are already part of many health service programs (e.g. see some of the case studies in Section 2.2). Sustainability thinking encourages consideration of what and how we eat; how and where food is grown, processed, transported and sold to consumers; how food is consumed; and how waste and cost can be minimised (see Table 1).

In Victoria, the food system represents the biggest impact individuals have on the environment, estimated at between 28% and 35% of the total ecological footprint (EPA Victoria & Commissioner for Environmental Sustainability 2008; Larsen et al. 2008). The amount of embodied water in food (e.g. 1000 litres to produce a litre of milk – Water Footprint Network 2010) is particularly worrying in a dry continent.

At the same time, Victorians' eating patterns are linked to increasing levels of obesity and chronic disease (Morgan 2009). Victorians consume too much of foods high in energy and low in nutrition, and food waste is significant. A 2003 study estimated annual waste at 2.2 million tonnes (Hamilton et al. in Victorian Women's Trust 2007, p. 51). Health promotion programs that promote thoughtful purchase, storage and consumption of minimally processed food will benefit human health and the environment.

Community gardens promote mental health and connectedness and also contribute to sustainable ecosystems and communities (Holland 2004). Supporting farmers markets and direct farm sales helps urban consumers to learn more about food production and seasonality, to build social connection with producers, and possibly to reduce 'food miles' as well as supporting primary producers by paying them a fair price (Larsen 2008; Low et al. 2005).[5] Conventional community gardens and newer food production projects provide opportunities for communal activity focused on food production and connection to the environment, and help build social capital locally (Hopkins 2009; Dixon et al. 2009). Stephanie Alexander's school kitchen gardens model, linking food production with preparing and eating meals as a group, is based on understanding the potential for food as a focus for environmental awareness as well as social connection (Alexander 2008; Campbell 2008).

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[5] Farmers markets and other initiatives that bring primary producers further down the retail chain can lead to more significant financial returns for the producer, who currently receives an inadequate share of retail prices in Australia – a share that does not reflect the price of production (Campbell 2008).

The Hawkesbury Food Program (see Section 2.4) demonstrates the potential of local communities taking control of the local food system with a shared health and environmental framework. Current research on urban food production promises further possibilities for localised and distributed food systems in cities as alternatives to the current resource intensive and vulnerable industrialised model.[6]

Figure 5   Alan Eagle, Hawkesbury Harvest Farmers Market (Photo: Ian Knowd)

Critical to human wellbeing and food production is access to water in sufficient quality and quantity (VWT 2007). Water sensitive urban design and safeguarding catchments and rivers are crucial, and are also potential sites where sustainability imperatives and health promotion action can converge.

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[6] See the Victorian Eco-Innovation web site for work on food systems and food sensitive urban design, www.ecoinnovationlab.com.

Table 1 Sustainable food systems: health issues and related health and environmental goals

Health issue	Health promotion goal	Environmental goal
Prevention of obesity, cardiovascular disease, diabetes	Increase in consumption of sustainably produced fruit and vegetables Decrease in meat consumption, and foods high in fat, sugar and salt (processed foods) Physical involvement in food production (primary produce)	Decrease in resource intensive food production (esp. meat and dairy and foods low in nutrition) Support for urban food Sustainable agriculture
Social inclusion, mental health and wellbeing	Community gardens and food sharing initiatives Farmers markets Education of consumers Physical involvement in food production and preparation (primary produce)	Increased knowledge of sustainable food production Farmers markets Education of consumers Fair price and demand for cleaner produce supporting innovation
Food security: promotion of local supply	Local Food Council to support a sustainable food system Reduced waste through promotion of local and seasonal food Access to cheap produce otherwise wasted at farm during peak production	Local Food Council to support a sustainable food system Retain and protect land for peri-urban sustainable food production Reduced dependence on fossil fuels Reduced waste, including local sale/U-pick etc. for overproduction Food recycling
Demand for 'cleaner' food	Reduced exposure to pesticide/herbicide residues Higher food/husbandry standards for animals	Improved biodiversity and ecosystem health Reduced risk of disease Long term land health/productivity
Access to safe, clean water	Increase in water-drinking Access to nature e.g. recreation at rivers and bays	Healthy rivers and catchments Decreased bottled water (waste and energy use in production/transport etc.)

Sustainable and resilient communities

The best example of environmentally aware health promotion in action is the Healthy Cities movement (Kickbusch 2010), which developed out of a shared health and environmental agenda. Hawkesbury Harvest Inc. (see Section 2.4) is an example of how a Healthy Cities multi-sectoral partnership can utilise a range of strategies to work toward long-term sustainability outcomes.

Another example of community organisation is the relatively recent grass roots movement, Transition Towns.[7] Transition Towns aims to create resilient, low-carbon communities that produce food locally using a permaculture philosophy, and that use closed trading systems such as bartering to build a partially self-sufficient local community. Its philosophy is clearly outlined in Hopkins' *The Transition Handbook* (2009), which includes Australian examples, and on the Transitions Town web site.[8] Central to Hopkins' thinking is building resilience:

> *Resilience refers to the ability of a system, from individual people to whole economies, to hold together and maintain their ability to function in the face of change and shocks.*

(Hopkins 2009, p. 2)

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[7] The transition refers to moving away from dependency on fossil fuels.

[8] http://transitiontown.com.au/

The idea of resilience is increasingly accepted as a way to think about adapting to an uncertain future in which climate change is occurring and demand for fossil fuel exceeds supply. The principles of building strong local communities and promoting human and environmental rights including equitable access to nutritious food, clean air and water are central to health promotion and a sustainable future. Examples of where Transition Towns is being embraced in Victoria include Banyule, Darebin, Angelsea, Torquay and South Barwon.

1.5 Parallels between health and sustainability frameworks

This section shows how sustainability and health promotion share frameworks and concepts including integrative approaches to governance which can facilitate collaborative work.

The environment and health sectors share the tenets of inter and intra-generational equity and advocate the use of the precautionary decision-making principle for dealing with population health and environmental risks. There are also clear parallels between the New Public Health movement's Healthy Cities program and the Local Agenda 21 framework for sustainable development in urban settings.

These frameworks are a good place to start when planning integrated action for health and sustainability.

Both the environmental and health sectors are concerned with people disproportionately affected by environment degradation and the impacts of climate change. In Australia, these vulnerable groups include people with low socioeconomic status, people from culturally and linguistically diverse backgrounds, people with chronic illnesses, the elderly, single women and children (WHO 2008). In Deakin University's 2008 cross-sector study of climate change mitigation and adaptation interventions which target 'at risk population groups' it was found that the health and environmental sectors also had common strategies (Patrick, Capetola & Nuttman 2008). Strategies included organisational development, behaviour change, community engagement and social marketing techniques. Similarly, the competencies inherent in environmental management are akin to those in public health and health promotion (Brown, Ritchie & Rotem 1992). These include the ability to conduct a needs assessment or audit, planning for evidence-based strategies, developing effective partnerships and communication strategies, as well as strong evaluation and research skills (Patrick 2010). Table 2 clearly shows these parallels.

Table 2 Parallels between health and environment principles and practices

Health	Environment
Principles	
Ecological principles and sustaining diversity Planning across generations	Ecological integrity and biodiversity Intergenerational equity Precautionary principle
Frameworks	
New public health initiative (Healthy Cities) Health Promoting Schools	Sustainable Development (Local Agenda 21) Sustainable Schools
Population groups	
Low socioeconomic status Culturally and linguistically diverse (CALD)	Urban and rural poor Climate change refugees
Core strategies	
Community development Health behaviour change	Community mobilisation Behaviour change
Competencies	
Needs assessment Health impact assessment	Environmental audit Environmental impact assessment

(Brown et al. 2005, Box 1.5: Parallels between sustainability, health and environmental frameworks; and Brown et al. 1994, p. 53, Figure 1: Matching public health and environmental frameworks to health and environmental goals)

The take-home message from this section is that there is a solid basis for a coordinated, inter-sectoral response to addressing socio-ecological sustainability. The following section of the report will showcase examples of how and where common goals for health and sustainability are being developed.

Section 2: Strategies for integrating health and sustainability

> This section showcases exciting initiatives in the health sector and more broadly where health intersects with sustainability.

2.1 Introducing health and sustainability case studies

Anecdotally we know that health promotion practitioners are addressing environmental determinants of health and issues of environmental sustainability in a variety of settings. However, there is limited research and public documentation of what this practice looks like, particularly within the Victorian healthcare sector. For example:

- How are healthcare agencies extending in-house sustainability initiatives into the community?
- What are some of the key strategies used by practitioners?
- What are the opportunities to develop co-benefit programs?

In order to address these questions, the authors undertook a qualitative research project.

From August to October 2010 interviews and focus group sessions were conducted with key stakeholders, as well as with health promotion practitioners and their colleagues involved in environmental initiatives in healthcare agencies. In order to develop a snapshot of work in this area, five Victorian healthcare agencies were selected. The following criteria were employed to guide a broad representative sample from the Victorian healthcare sector:

- A diversity of health promotion practice addressing environmental sustainability (i.e. by target group, by strategy, by issue).
- A geographic dispersion of agencies (i.e. rural, regional, urban).
- Cases from within particular types of healthcare settings (i.e. community health agency, women's health agency, primary care partnership).
- Cases which demonstrate 'inspiring' practice.
- Examples of where in-house environmental sustainability programs have been planned for or extended to the community.

A sixth case study from New South Wales (Section 2.4) was also included as a longer-term community sustainability initiative. Although situated outside the health sector, it demonstrated successful partnering with health agencies. This case study also exemplified interdisciplinarity, integration, systems thinking and engagement with a broad range of partners resulting in positive health and sustainability outcomes.

2.2 Case studies from within healthcare

The following case studies give a feel for the current range of practices in Victoria which simultaneously promote health and address sustainability issues. In addition they provide inspiration and key learning points. Each case study begins with a brief overview of the agency and a standout 'enabling' feature, followed by a summary of key elements.

Figure 6 Children from the local schools add character to the community garden at Kooweerup Regional Health Services (see the fifth case study) (Photo: Teresa Capetola)

North Yarra Community Health

North Yarra Community Health (NYCH) in inner Melbourne has a longstanding commitment to addressing environmental issues. It is a not-for-profit organisation providing primary health and welfare services from four sites to the culturally and linguistically diverse communities of Carlton, Collingwood, Fitzroy and Abbotsford (Olaris 2008). NYCH has a strong commitment to health promotion, particularly among those members of the community that experience disadvantage and discrimination.

What is interesting about this case?

Recognition by senior management that addressing climate change and environmental sustainability is a core responsibility of the organisation.

✓ Despite NYCH's predisposition to addressing environmental issues, sustainability only became an integrated core service feature once it was identified as an organisational health promotion strategic priority.

✓ The service has a long history of research and advocacy on environmental issues. For example, the agency sponsored a study of metropolitan community health services' capacities to address climate change. This has enabled advocacy at a sector-wide level.

✓ An environmental sustainability working group has driven internal environmental policy and practice initiatives. Environmental sustainability is embedded in NYCH's strategic plan, and there is an environmental policy, green committee budget, and monitoring and reporting mechanisms where the committee reports to the board of management.

✓ The work spans the continuum of individual- to population-based approaches.

✓ It is resourced in part by community and women's health funding because of its links to some of the seven state-wide health promotion priorities.

✓ Work has commenced on an adverse weather events response plan (featuring a heatwave strategy) for public housing residents and features policy development to protect the health and wellbeing of outreach staff.

✓ The service has a suite of active and sustainable transport initiatives for staff and the community. A key outcome of the staff behaviour change program has been a $5000 saving due to reduced petrol consumption in the 2009–2010 year. This was as a result of strategies including the implementation of a staff bike fleet and changes to the organisation's transport policy, which now promotes walking, cycling and public transport use. The key outcomes of the bike education program in local public housing estates include an increase in cycling by residents from 33 minutes to four hours per week; a reduction in the number of car trips per week; a significant increase in residents' confidence to use a bike within the local area; an increase in knowledge of Australian road rules (41% of program participants reported they understood road rules 'fairly well' and 44% reported understanding road rules 'very well'); and improved social connectedness as demonstrated by increased interaction between different cultural and language groups.

✓ Food security initiatives have been augmented with a partnership for low food miles and fresh food in local public housing estates.

✓ NYCH provides leadership in developing an environmental network to support other local agencies embarking on similar work.

✓ It has facilitated political advocacy and public education in the healthcare sector, across sectors and among the general community.

✓ Initiatives are underpinned by value-based decision-making including a commitment to social justice and active community participation.

✓ A focus on reducing the environmental footprint of the whole organisation has led to reductions in paper, water and electricity use. In the last 12 months the switch to recycled paper and enforced double-sided printing across all sites has led to a 10% reduction in paper use.

Significant reductions in electricity use have been achieved through a switch to green energy, installation of power boards across all sites, a lighting replacement scheme and a behaviour change program to reduce the number of computers left on overnight.

For more information, contact:
Health Promotion Team Leader
North Yarra Community Health
03 9349 7312

Caulfield Community Health
– Environmentally Sustainable Communities

Caulfield Community Health Service (CCHS) is located within Caulfield Hospital in metropolitan Melbourne and operates as a part of Alfred Health (a hospital network). One of the service's strategic goals is to 'excel in health promotion' through integrated health promotion planning and developing capacity for health promotion. Under their current Integrated Health Promotion Plan, *Environmentally Sustainable Communities* is a health promotion priority. The priority is closely aligned with their primary care partnership (Inner South East Partnership in Community and Health) priority, 'sustainable living and environment'.

What is interesting about this case?

Environmental sustainability moved from a dot point on a plan, to a strategy and finally to a health promotion strategic priority over a three-year period.

✓ The work has been driven by health promotion qualified and funded staff with a personal and professional commitment to environmental sustainability.

✓ Their original approach was to role model organisational commitment and change prior to expanding environmental sustainability to community service delivery.

✓ Early on, the CCHS approach took the form of organisational and workforce development and featured audits, evidence searching and staff awareness campaigns. The idea was to mobilise support among staff and to facilitate management buy-in. The Green Committee's overarching (health promotion and sustainability) vision is to broaden the scope of the green strategy to its co-located services.

✓ They engaged a Green Steps intern from the Monash Sustainability Institute to undertake an organisational audit and staff survey of environmental attitudes and behaviour.

✓ The initiatives are now spanning to community health promotion initiatives with a view to 'improving environmental behaviours in the local community'. The core strategy is to develop a community garden on the site of Caulfield Hospital where the community health centre is located. The consultation and stakeholder engagement processes are underway and the project promises to demonstrate a multidisciplinary, integrated approach to health and sustainability across the healthcare continuum.

✓ Evaluation has demonstrated that 80% of staff have increased awareness and subsequently altered their behaviour to be more environmentally friendly. Management commitment to the CCHS green strategy is seen as a key success factor. Staff are also reporting a more positive attitude across CCHS and a sense of empowerment in taking action on environmental issues. The program evaluation demonstrates that the CCHS workplace is now more responsive to the needs of the environment and the green strategy has increased the capacity of CCHS to further respond to environmental issues.

For more information, contact:
Team Leader – Population Health
Caulfield Community Health Service
03 9076 6235

Southern Grampians and Glenelg
Primary Care Partnership (PCP)

The Southern Grampians and Glenelg Primary Care Partnership (PCP) is located in south-west Victoria, 300 km west of Melbourne. The PCP features a membership of 18 primary care agencies and, as part of the integrated approach, facilitates a Health Promotion Reference Group (primarily made up of health promotion practitioners). The Health Promotion Reference Group's mandate for action includes championing integrated health promotion innovation and facilitating partnerships with the non-health sector. In 2007, the PCP was responsible for the development of a strategic health promotion framework designed to guide local multi-sector responses to climate change and rural adjustment. In 2009 the PCP was funded (by the Department of Human Services, and by support for research through the RMIT Handbury Fellowship program) to undertake a demonstration project to look at local adaptation to climate change, including addressing energy efficiency as it relates to community resilience, heat waves and the social determinants of health. This project was undertaken in the Glenelg Shire town of Merino.

What is interesting about this case?

Community development approach was at the core of the initiative.

✓ Demonstrates the potential influence of health promotion representatives on the PCP Health Promotion Reference Group to mobilise action on environmental sustainability and climate change.

✓ PCPs are well placed to conduct demonstration projects around health and sustainability.

✓ Direct response to community needs, using a health promotion framework (Ottawa Charter) to guide action.

✓ Community engagement strategies used household energy, personal comfort and money saving incentives rather than confrontational climate change rhetoric.

✓ Executive officer of PCP had a background and qualifications in environmental sciences.

✓ Project clearly linked the two issues of heat wave (adaptation) and energy efficiency (mitigation).

✓ Emphasis on connecting vulnerable community with services.

✓ Extensive networking and partnership development with non-health sector: businesses, government, universities, sustainability experts.

✓ Demonstration project *Pass the Parcel* rolled out to all member agencies.

✓ Clearly enacts the tenants and goal of the PCP Climate Change Framework.

✓ Provides welcome examples of where barriers related to geography and service delivery in rural settings were overcome.

✓ The reported sustainability outcomes were significant improvements in household energy efficiency (through behaviour change and the installation of insulation) leading to decreased energy costs. The health outcomes resulting from community participation in the program were increased social connection, a sense of empowerment, improved personal comfort during heatwaves and positive mental health. Community capacity for ongoing local adaptation initiatives was also strengthened through engagement of 18 PCP partner agencies and new 'sustainability partners', including Portland Sustainability Group, South West Climate Change Forum, Greenhouse Alliance, Lions Club Light Globe Project, Sustainability Victoria and the Water and Energy Task Force.

For more information, contact:
Southern Grampians & Glenelg Primary Care Partnership
03 555 18471
www.sggpcp.com

Women's Health in the North
– Promoting climate change awareness with women

Women's Health in the North (WHIN) is a regional health service addressing the needs of women in northern metropolitan Melbourne. It provides a range of programs, training and community services as well as research and advocacy to culturally diverse communities. In 2009, WHIN identified 'the impact of climate change on women' as one of its core strategic priorities.

What is interesting about this case?

Core strategies used are research (providing an evidence link between women's health and climate change) and advocacy (arguing at the sector level that women be considered in planning and responding to climate change).

✓ The responsibility for driving the climate change agenda is now located with the health promotion worker.

✓ WHIN has couched the problem as 'climate change' rather than environmental sustainability.

✓ Former executive director was a political champion for environmental and climate change causes.

✓ Since nominating climate change as a key priority, they have seized a range of opportunities to raise community awareness of the issues. For example: WHIN's 2010 International Women's Day event focused on climate change.

✓ In the process of positioning themselves to best respond, with limited resources, to the impacts of climate change in their community.

✓ Strong links with local government and environmental networks.

✓ Addressed their climate footprint through an in-house environmental sustainability audit and program of change in 2007.

✓ WHIN submitted a response to the *Victorian Climate Change Green Paper* to highlight the potential health and gender inequities that need to be addressed when developing state government policy on climate change. This advocacy strategy was a locally based action influencing broader state policy to achieve mitigation and adaptation action without compromising the physical, emotional and economic health of vulnerable groups of women.

For more information, contact:
Women's Health Promotion Worker
Women's Health in the North
03 9484 1666

Kooweerup Regional Health Services

Kooweerup Regional Health Services (KRHS) is situated in South Gippsland, Victoria and as a public entity is responsible to the Department of Health. Services consist of an acute hospital (12 bed); residential care; health promotion; early parenting; community care incorporating district nursing services and allied health (physiotherapy, social work, occupational therapy, diabetes education). Since the appointment of a health promotion officer in 2007, KRHS has developed a range of dynamic community-based programs and activities such as the Community Hub Area (including a men's shed and community garden and kitchen). This has invigorated the hospital grounds into a vibrant hub of community engagement for diverse population groups in the region, and also successfully marries health needs with environmental benefits.

What is interesting about this case?

Health promotion position facilitated building capacity for staff which enabled support for the various projects.

✓ A community consultation identified community needs, including the paucity of accessible and affordable fresh food outlets in the district.

✓ Strong partnership with community and other stakeholders led to successful funding applications with local government and the private business sector in the region.

✓ Collaborative work with the primary care partnership (South Coast Consortium; South East Healthy Community Partnerships) which in 2009 developed a three-year plan for the region prioritising climate change; mental health and wellbeing; healthy food and food security; and physical activity.

✓ The sustainability agenda was initially peripheral to the health agenda but when the Services joined *ResourceSmart Healthcare* in 2009, synchronicities between the two agendas emerged. For example the men's shed provides social engagement and inclusion for older men in the region, addressing mental health; it also acts a conduit for health education sessions such as cardiovascular health, stroke and dementia. The men's shed also provides repair and maintenance services for the hospital and community (in wood and metal work) so that the need for 'new' goods is minimised. In addition, it acts as a repository for recycling and reusing old batteries and cork. Members of the men's shed participate in the community garden and have taken a leadership role.

✓ Engaging 'champions' in the community to support the Community Hub Area within the Services supported several key purposes: validation of community members' knowledge and expertise; ownership of the project; and transfer of knowledge to other community members ensuring the Community Hub Area's longevity.

✓ Enterprise initiatives within the Community Hub Area, such as a seasonal community market and seedling sales, support the self-sufficiency of the programs and activities.

Figure 7 Community gardens in the hospital grounds of the Kooweerup Regional Health Services (Photo: Teresa Capetola)

✓ The establishment of the Community Hub Area in the hospital grounds has also facilitated community involvement in a variety of programs including the men's shed, walking group, community kitchen and community garden. More than 50 participants in these programs (many from hard-to-reach groups such as the socially isolated, low socioeconomic status, public housing residents and those with mental health issues) reported substantial improvements in mental and physical health and general wellbeing. Other gains included decreased levels of medication, depression and social worker support, and increased levels of social connectedness and laughter!

✓ Collaboration with the local secondary college has enabled integration of the community garden into the Year 9 curriculum. It has also meant that community events held in the garden, such as the art show and market, have been supported.

✓ Participants in the men's shed planted trees and shrubs to create a wildlife corridor which has seen the return of the Southern Brown Nosed Bandicoot to the newly established habitat

✓ Co-benefits for health and environment have also been demonstrated through initiatives to promote active transport and decrease carbon emissions. KRHS lobbied for a local bus service to modify its route, enabling outlying students to attend the local secondary school in Kooweerup. This resulted in at least 70 fewer car trips per school day and improved connectedness for the community in general, which also benefited from the modified bus route.

For more information, contact:
Health Promotion Practitioner
Kooweerup Regional Health Service
03 5997 9679

2.3 Interesting features across the healthcare case studies

Together, these case studies show that healthcare agencies can and do work to address issues of environmental sustainability within their health promotion core business. Some work has evolved organically across time in response to environmental and social determinants of health, whereas other programs have been systematically planned to address community sustainability. A key feature of all the case studies was that health promotion practitioners were significant participants in or drove organisational environmental sustainability.

The link between health and environment as well as the co-benefit opportunities of addressing environmental sustainability through health promotion was well understood by participants in the study. In addition to submitting for additional funding, health promotion funds were used to expand existing initiatives or open up health and environmental sustainability priority areas.

All the agencies had either addressed internal agency environmental sustainability concerns prior to or simultaneously with the implementation of community level interventions.

Food was a common interest across agencies and both hospital networks (Caulfield, Kooweerup) had identified their own grounds as a setting for community gardens. Partnership development in and across sectors was perceived as a vital strategy for addressing community sustainability issues.

The prominence of primary care partnerships[9] was also illustrated in both initiating action on sustainability and health (e.g. SG&GPCP) and facilitating action for agencies (e.g. KRHS).

However, there were some clear practice and priority distinctions between the agencies. Issues being addressed varied, as did the population groups and settings targeted in the programs. The decision to focus on 'climate change' or 'environmental sustainability' was another point of difference. The length of time the agency had been championing environmental issues varied; so too did the degree to which there was senior management support.

These similarities and differences are presented in Table 3.

2.4 Case study from outside the health sector

The following case study about Hawkesbury Harvest was included as it features many of the characteristics of what is considered good practice in food, health and sustainability. It provides guidance for alternative and community-wide approaches to addressing environmental, social and economic sustainability.

Figure 8 Hawkesbury Harvest Farmers Market (Photo: Ian Knowd)

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[9] 'Primary Care Partnerships (PCPs) are made up of a diverse range of member agencies. All PCPs include hospitals, community health, local government and divisions of general practice as core members of the partnerships. Other types of agencies such as area mental health, drug treatment and disability services are also members of PCPs. The partners can also be specific to local issues and needs. For example, some PCPs have engaged with the police, schools and community groups' (Department of Health 2010a).

Hawkesbury Harvest Inc.

The Hawkesbury Food Program was established in 1997 in the semi rural area on the western periphery of Sydney as part of a Healthy Cities Project. As the precursor initiative of Hawkesbury Harvest it was a partnership between district and area health services, Hawkesbury City Council, the University of Western Sydney (Hawkesbury), NSW Agriculture, Hawkesbury Skills, Earthcare, Food For All and local community agencies. In 2000 a public meeting was held to broaden local engagement and it attracted farming, health and wider community constituencies. Hawkesbury Harvest was formed to link food, farms and community through agritourism. Since then it has extended its Farm Gate Trail to cover all of Sydney's rural hinterlands and its seventh edition map will include regions in south-west coastal NSW. It is also active in planning and policy arenas relevant to rural landscapes and peri-urban development, especially the health of the Hawkesbury Nepean River, and planning for agriculture in the Sydney Metropolitan Strategy. The target groups are primary producers and the local community and, increasingly, Sydney residents as well.

After a decade of building the local food networks, the program has established direct sales from producers to the public, farmers markets, school programs, local restaurants and provedores. While the health sector has played a role, the next strategic plan will have a bigger focus on food security and lifestyle-related disease. New partnerships are being forged with local- and state-level health agencies to engage schools and reawaken the health dimension to the project. This is possible because the original goals of the project included a commitment to health as well as community and environmental goals.

Health issues addressed

- Aims to improve access to and consumption of safe, nutritious and affordable food, and strengthen local sustainable agriculture (i.e. food security and nutrition).

- Through the value placed on rural amenity and community engagement, aims to address mental health (connection to nature) and sustainable communities.

Sustainability issues addressed

- Sustainable agriculture and rural amenity, sustainable rural communities (food production, employment and so on).

What is interesting about this case study?

This project grew out of community concern about the health of the environment and human health, in particular around food security and food quality.

✓ Grounded in environmental sustainability and health promotion frameworks (Rio Local Agenda 21; Ottawa Charter and Healthy Cities). These frameworks continue to provide a basis for strategy.

✓ A rich partnership owned by all partners from the different sector interests.

✓ To secure food production, land and skills for future food production, it initially focused on strengthening the local rural economy by building local food tourism and protecting rural land through advocacy.

✓ To obtain resources it has taken advantage of funding available for regional development (notably rural tourism) and skills and expertise from each sector as well as the university (planning, health and tourism). With growing community and government interest in food-related disease, food security and food systems, new sources of health funding are emerging.
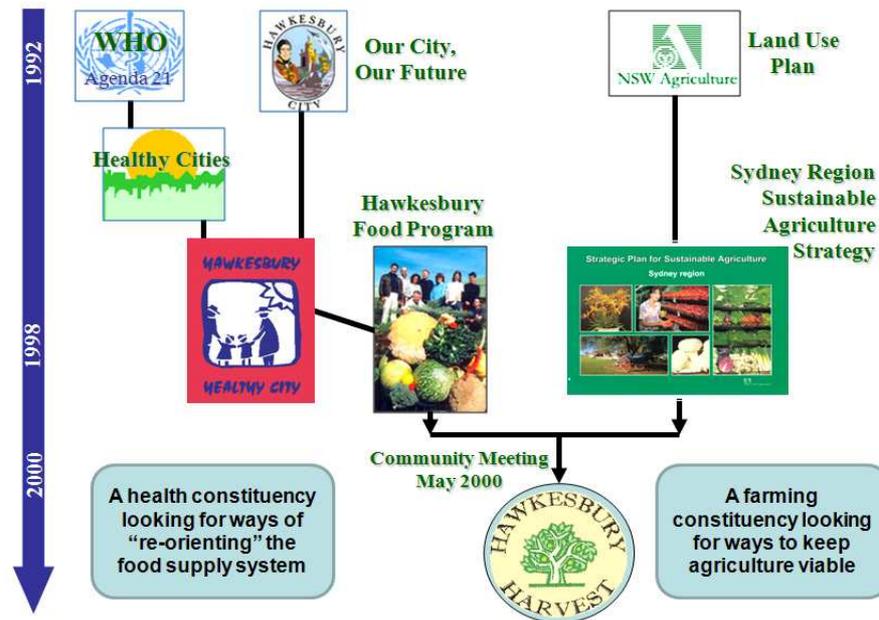
Figure 9   Health and farming agendas converge (Knowd 2010)

Protecting fertile farm lands is a vital component in the patchwork of land, soil, water and biodiversity conservation. Together with our national parks, farming lands are essential to maintain environmental and community health associated with natural resources under extreme threat from climate change, subdivision and property development. It [Harvest] is also an exemplar of collaboration and cooperation amongst many stakeholders – public and private, volunteer and private enterprise – for the benefit of many. This is what sustainable development is about, working together with an infectious vision and a passion for the common good, and providing leadership and a bench mark for others.

(Associate Professor Robyn Bushell, PhD, Centre for Cultural Research, Associate Head of School, School of Social Sciences, University of Western Sydney; www.hawkesburyharvest.com.au)

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Hawkesbury Harvest Inc www.hawkesburyharvest.com.au
info@hawkesburyharvest.com.au

Table 3 Summary table of interesting characteristics – snapshots of current practice (October 2010)

	North Yarra CHS	Caulfield CHS	Kooweerup Regional Health Services	Southern Grampians and Glenelg PCP	Women's Health in the North	Hawkesbury Harvest (see Section 2.4)
Type of agency	Stand alone community health	Hospital network, community health	Hospital network, community health	Primary care agency partnership	Women's health service	Community incorporated organisation – precursor agency: Hawkesbury City Council Food Program
Location	Inner urban	Inner suburban	Regional	Rural	Urban, regional	Peri-urban
Issues addressed	Organisational (resources and facilities)	Organisational (knowledge, behaviour change, resources and facilities)	Organisational	Climate change and rural adjustment – food	Climate change	Food
	Climate change and heat wave	Food and social connection	Food	Water		Rural adjustment, sustainable communities
	Active and sustainable transport		Transport	Transport		
	Food		Nature and mental health	Community resilience		
			Community resilience, climate change	Energy efficiency and heat wave		
Population groups	Low SES, CALD	Staff, clients and general community	Men, children and young people, women, low SES, rural and regional populations	Low SES, farm families	Women	Farm families, local community
Program settings in community	Public housing estates	Hospital	Hospital and service grounds	Rural towns	Local agencies	Farms, agritourism, markets, local business
Stage of implementation	• OD – 15 years • Heat wave – needs assessment	• OD – 4 years • Community garden – consultation and needs assessment	• Community garden / hub • Men's shed • Community bus	• Climate change and rural adjustment – 4 years • Energy efficiency – project evaluated and extended to member agencies	• OD – 4 years • Community awareness and advocacy – 2 years	• WHO Healthy Cities and Penrith food project – 15 years • Hawkesbury Food program and Sydney Regional Agriculture – 12 years • Hawkesbury Harvest Inc. – 10 years
Origin of work (who initiated it)	CEO, allied health, HP	HP team	HP officer	PCP executive officer, PCP Health promotion Reference Group	Executive director, health promotion	Hawkesbury District Health Service, Council, University of Western Sydney

Table 3 Summary table of interesting characteristics – snapshots of current practice (October 2010)

	North Yarra CHS	Caulfield CHS	Kooweerup Regional Health Services	Southern Grampians and Glenelg PCP	Women's Health in the North	Hawkesbury Harvest (see Section 2.4)
Origin of work (what triggered it)	Heat wave	Increasing staff awareness of health impacts of climate change	Community food security issues, community mental health issues	Drought, climate change	Concern for disproportionate impact of climate change on women	Penrith Food Project diffused to Hawkesbury City to address Local Agenda 21, food security, rural amenity and sustainable agriculture
Resources (financial)	DoH HP funds, grants	DoH HP funds	DoH HP funds, grants	DoH PCP funds, grants	DoH HP funds	Various local, state and federal funding (i.e. regional development funding)
Resources (human)	HP staff, site reps	Population health team and reps from across CCHS		Executive officer and health promotion consultant	Health promotion staff	Volunteers
Evaluations completed	Yes	Yes	Yes	Yes	No	Yes
Program documentation	Yes	Yes	Yes	Yes	No	Yes
Core strategies (health promotion)	OD, upstream, advocacy	OD, midstream	Midstream – upstream; community action, settings and supportive environments	Midstream – upstream; community development	Upstream – advocacy, research	Upstream – community action, community development
Core strategies (environmental sustainability)	Mitigation and adaptation	Mitigation	Mitigation and adaptation	Mitigation and adaptation	Mitigation	Systems thinking
Partnerships	Internal – multidisciplinary External – health, welfare, local govt	Internal – multidisciplinary	Internal External Across sectors	Interagency Across sectors – business, university, government, sustainability sector	Across sectors – environment, government, health and welfare	Across sectors – tourism, business, university, government, health
Program reach – staff – clients – broader community – sector	Staff, clients, sector	Staff and clients / broader community when community garden established	Clients, broader community	Staff, clients, sector	Sector, clients	Broader community, various sectors
Ecosystem health			Restored biodiversity through establishing the wildlife corridor			

2.5 Enablers of practice

The case studies and literature reveal there are a range of factors facilitating the successful combination of health promotion practice with environmental sustainability initiatives.

Transferring health promotion competencies

The overwhelming message was that health promotion competencies are highly transferable to current and future work on environmental sustainability and climate change. Where practitioner confidence, knowledge and skills shortages were identified they were generally overcome through participation in professional development, multidisciplinary teamwork and engaging 'sustainability experts' in program design. For example, WHIN's staff had undertaken a range of formal and informal professional development opportunities, including participation in the various forums instigated by the Victorian Council for Social Services (VCOSS).

Funding issues

Funding issues were in part resolved through seeking out funding from less traditional sources (e.g. Sustainability Victoria, corporate sector). Seed funding for demonstration projects was seen as one way to develop an evidence base and a case for embedding work into core funding structures.

Health promotion funds, sourced from the Department of Health's scheme, was another means of resourcing environmental sustainability initiatives, permissible when these activities are linked and integrated with activities focused on the department's health promotion priority areas. This is highlighted in the case of Caulfield Community Health. However, the research did indicate that lack of long-term secure funding sources, to facilitate integration of sustainability into core service delivery and for capital/operation improvements, were significant barriers to practice.

Engaging senior management

Executive and senior management support was a significant enabler for securing broader organisational change. Those agencies with environmental champions in managerial positions found that organisation-wide commitment was more readily achieved, and a more systematic approach could be employed. North Yarra Community Health is a good example, where the Deputy CEO has been instrumental in greening the agency. Equally as inspiring are the health promotion practitioners and 'green' staff committees (e.g. Caulfield Community Health) that used organisation and behaviour change approaches to influence change within their agencies.

Understanding community interest and need

An understanding of emerging community needs based on regular consultation and community profiling activities was another enabler of this work. The Southern Grampians and Glenelg PCP and Kooweerup Regional Health's engagement with local agencies and community members on climate change and rural adjustment provided their respective regions with strong cases to progress work in this area.

Adapting health promotion tools, frameworks and processes

Health promotion capacity was leveraged in most of these agencies. The *Integrated Health Promotion Resource Kit* (DHS 2003) and the *Ottawa Charter for Health Promotion* (WHO 1986) were some of the frameworks used to guide planning and strategy development. Various frameworks and health promotion processes were adapted to suit local context and issues, as in the case of Caulfield Community Health Service.

2.6 Opportunities for emerging practice

> ***Alice:*** *Would you tell me, please, which way I ought to go from here?*
> ***The Cat:*** *That depends a good deal on where you want to get to.*
>
> Lewis Carroll, *Alice's Adventures in Wonderland* (1865)

At the first international conference on health promotion in 1986, three tasks central to health promoters' work were identified: mediate, advocate, enable. These activities were immortalised in the *Ottawa Charter for Health Promotion*, which grew out of the landmark conference. After nearly a quarter of a century these tasks still hold centre place in health promoters' core activities. Tasked with mediating, advocating and enabling, health promoters, over the decades, have courageously embraced the successive list of challenges to human health – tobacco, obesity, violence, HIV/AIDS and so on – in a context of social justice and equity. In the face of new environmental and climatic challenges to human health, the three core activities of mediate, advocate and enable will hold health promoters in good stead in two significant and interrelated contexts.

First, health promoters' traditional skills will be needed to address the adaptation responses to climatic variations as they impact on health directly (e.g. heat waves, vector borne diseases) and indirectly (e.g. food insecurity, mental health associated with stress, loss of employment). The second context in which the three core activities will bolster health promoters' work is in mitigating the effects of climate changes and other environmental challenges. In order to address the threats to human health from increasing environmental degradation, health promoters, in their remit as preventers of ill health, are needed to address the source of the problem upstream – that is, mitigating or lessening the escalation of resource depletion and environmental destruction or, in short, embracing sustainability principles.

Commonalities abound between health promoter's skills and strategies for sustainability. For example, central to the pursuit of sustainability are an integrated approach, systems thinking and interdisciplinary partnerships. Health promoters are versed in mediating action across sectors to secure optimum health outcomes. In addition to advocating for health, health promoters are tasked with enabling individuals and population groups to access the prerequisites for health. In this momentous period of transition, embracing sustainability as an integral and central tenet of health promotion practice serves to locate both a key determinant of health as well as the process by which to secure the determinant. That is, a healthy environment is essential for good health and the process of maintaining an optimum environment brings health rewards.

Figure 10 Where to from here? A scarecrow in the Kooweerup Regional Health
Services community garden (Photo: Teresa Capetola)

Like Alice in Wonderland seeking directions from the Cat, health promoters searching for guidance
in uncertain times can reflect on their core tasks and know that the road lies in that direction.

Section 3: Getting ready for action

3.1 Making a plan

The following table and checklist show how you can adapt the *Integrated Health Promotion Planning Framework* (DHS 2003) to include sustainability thinking in your program development. It is designed to assist with the initial stages of planning (visioning, problem definition, solution generation and capacity building). It contains a set of key questions with prompts for possible implementation techniques. At the end of the checklist is a list of useful web sites and references that you can use to develop a strong case for your initiative or program.

The table is based on the Victorian Department of Human Services integrated health promotion resource kit (2003):

www.health.vic.gov.au/healthpromotion/evidence_res/integrated.htm

MAKING A PLAN Stages and questions	Possible techniques
1. Vision setting	
What is our role as health promoters in addressing sustainability issues locally and further afield? *Should we be addressing sustainability if we are working with a holistic view of health (the New Public Health)?* *Should we be leaders, facilitators, participants or partners?*	Scenario planning Back-casting
What sort of healthy community do we want to help to build? *Our current Western lifestyle is acting against good health (overconsumption, inactivity and separation from nature). How does working toward sustainability help us to address this?*	Guided visualisation workshop
Who should be involved in creating a healthy community? *The New Public Health implies a multi-stakeholder approach, including those focused on creating healthy natural environments – who should we work with?*	Environmental officers and other natural resource/science professionals Local council – parks and gardens, planners etc.
How do we involve the community in creating visions? *What sort of community development are we involved with?* *Are we highlighting the links between health and sustainability?* *Can we work outside primary settings?*	Community survey or consultation and engagement

MAKING A PLAN Stages and questions	Possible techniques
2. Priority setting and problem definition	
What is the problem?	Independent research and data collection
As well as reviewing existing data, what emerging health and sustainability issues do we need to consider?	State and regional data on the health of the community and the health of the environment
Climate change, mental distress about the future, increased food and utilities prices, congestion and pollution, heat waves and illness, new disease issues …	This resource!
Who is the problem affecting?	Map using Figure 3: Determinants of health
Which groups are most affected? e.g. low income, residents of public housing, elderly.	
What are the broader determinants of health that contribute to the issues?	
How does sustainability link with the determinants; e.g. Vulnerability and equity? Access to public transport? Inefficient housing? Lack of access to fresh fruit and vegetables? Pollution from vehicle emissions? Inequitable pricing policies for power and water? Lack of public open space? Fast food outlets?	
Are there opportunities for us to address the problem?	Community consultation and awareness raising
Does the community think sustainability is important and what does it think we should be doing about it?	
If it doesn't think it is important, should we play an educational role? Or can we reframe the discussion in terms of 'social connection', 'food security', 'active transport' etc to make it more meaningful?	
Do we need more information?	Audit policy and plans
How do sustainability goals align with our organisational strategy and corporate vision?	
Does the way that we have we defined 'health' and 'promoting healthy environments' constrain us or give us scope to consider sustainability?	
Are there opportunities to address these problems?	Consider opportunities for integrated action for health promotion and sustainability in the priority setting process.
Does the health promotion team have time?	
What would be the implications of dropping other work?	Adapt existing health promotion programs to address sustainability needs
Is anyone else already working in this area, and is there an advantage to working together?	Partner with other organisations already undertaking relevant work.
Goal setting – Do I have enough information to set goals (long-term outcomes) and program objectives (what you will do to achieve the goals and what the short term outcomes/impact be)?	Talk to people who are planning or implementing existing local initiatives
What change is needed to solve or lessen the problem?	Develop goals and objectives which integrate health and sustainability
What should the focus be? (Sustainability or health, food or families etc.)	
How will you define success?	Devise co-benefit indicators
What do you (or the organisation) need to achieve to think the effort was worthwhile? What about the community or other partner groups?	

MAKING A PLAN Stages and questions	Possible techniques
3. Generating solutions	
Has anyone done this before?	Refer to the reference list and case studies in this publication
How can you apply health promotion skills to include thinking about sustainability objectives and strategies? *Competencies that are useful in addressing sustainability include community development, behaviour change, and advocacy.*	Conduct a skills audit
Which mix of interventions is useful in addressing health and sustainability objectives simultaneously? *What constitutes good practice in sustainability and the environmental fields?* *Find examples of co-benefit programs that can demonstrate health and sustainability impacts; i.e. active travel promotes physical activity and reduces carbon emissions.*	Online evidence searches; visit sustainability and environmental organisation web sites; search for government publications of demonstration projects
What strategies do key stakeholders think will be best? *What do the experience and needs of the local community suggest about what would be appropriate?* *What do partner agencies and sustainability 'experts' think might work in the community?*	Talk to community representatives, other health promotion practitioners, local councils and environment groups
Are there opportunities to support the work and investments of other local agencies? *Would it be more affective to add value to existing sustainability initiatives in the area?* *Where is possible to work collaboratively and in an integrated way?*	Join existing initiatives and community committees
Are there opportunities to generate new or innovative responses? *Does working on sustainability issues mean that we need to work differently?* *What strategies from non-health sectors could we trial?* *How can we engage with agencies and non-health sector organisations?*	Develop partnerships with organisers of existing local initiatives Developing sustainability initiatives at a PCP level Futures thinking

MAKING A PLAN Stages and questions	Possible techniques
4. Capacity building – support and resources	
What skills and capacities need to be developed? *What does our current workforce need in terms of knowledge, skills and values to work effectively in sustainability?* *How can we ensure we have the right mix of people with the right mix of competencies?*	Undertake *ResourceSmart Healthcare* training Partner with other organisations that already have these competencies (eg local government).
What resources are required to make the program work (human, physical, financial)? *What new sustainability funding streams could we tap into?* *How could we use the organisation's health promotion and core funding stream?* *What settings can be re-used for this program? (i.e. community gardens, schools, public housing estates)*	See Sustainability Victoria and government initiatives such as Cities for Climate Protection, Local Sustainability Accord, Climate Communities (SV)
Are senior management and other key decision makers on board? *Who are your sustainability champions in the upper levels of management? How can you develop them?*	See case studies in this publication Implement organisational change strategies
Are there structures and systems in place to sustain the initiative? *Have you a 'green' committee'?* *How will this committee facilitate organisational change?* *Where will the committee sit in relation to the board of management?* *At what stage will you engage community representatives?*	Set up a cross-program green committee Develop terms of reference See Sustainability Victoria web site for examples
Are there policy and strategic areas of core business that need to be reviewed? *Do we have an environmental sustainability policy?* *Are existing policies and protocols in conflict with environmental sustainability objectives?* *Where can sustainability integrate into the organisation's strategic plan?*	See case studies in this publication

MAKING A PLAN Stages and questions	Possible techniques
5. Planning for evaluation and dissemination	
How will you evaluate your efforts? How will the evaluation be coordinated? How will the data be analysed and interpreted? How will the results of the evaluation be communicated to key stakeholders, funders and community groups?	Develop an evaluation plan with key stakeholders that includes evaluation indicators, evaluation methods and key timelines.
How will the findings be integrated back into future planning to ensure sustainability?	Develop an evaluation dissemination strategy.

3.2 Conclusion

Human health is intimately linked to the health of the environment.

There are worrying predictions of increased morbidity and mortality as a result of lifestyle diseases such as obesity, diabetes, cardiovascular diseases and cancer. These same lifestyles practices responsible for the burden of disease worldwide have also contributed to environmental degradation, including global warming. In addition, rapid urbanisation and population growth have exacerbated food insecurity and social isolation. Human disconnection from the natural environment contributes to mental health problems and ongoing environmental degradation. New approaches are needed to build a healthy future. This includes promoting increased levels of physical activity and decreased dependency on cars for transport. Promoting diets low in sugar, fat and processed high density foods is needed to encourage consumption of fresh fruit, grains, vegetables and water. From this, an increased appreciation for and connection to nature will develop.

Sustainability goals are aligned with health goals. Cross-sector partnerships offer the opportunity to create new approaches to tackling these complex challenges. Interdepartmental government-funded initiatives, such as this report, are one example of government joining with peak associations, academia and healthcare agencies to support policy development, practice innovation and research. Cross-sectoral and interdepartmental approaches to health and sustainability provide the much needed direction to address the health and sustainability nexus. Primary care partnerships are a good starting place for this work.

Health promotion practitioners have the skills, interests and community connections to facilitate this collaborative work. As demonstrated by peak association and academic endorsement of this report, the important role of health promotion in addressing community sustainability concerns is increasingly being understood. However, more research and debate in the area of core competencies and good practice is required if broader health and sustainable goals are to be achieved. Within healthcare agencies, management support will be critical in building projects of sufficient scale to make an impact, and to build an evidence base around health promotion and sustainability. The way to a healthy future is clear.

3.3 Links to research and programs

The web links below contain research and tools that will assist your organisation to plan for health and sustainability initiatives.

Deakin University Nature and Health Research Group (NiCHE)
NiCHE is an online nature and health clearing house with information about projects from around the world.

www.deakin.edu.au/hmnbs/hsd/research/niche/index.php

Healthy Spaces and Places
Contains national guidelines for planning, designing and creating sustainable communities that encourage healthy living. Features case studies, and design and planning guidelines.

www.healthyplaces.org.au

International Union for Health Promotion and Education
Look up the 2010 IUHPE 20th *World Conference on Health Promotion: Health, Equity and Sustainable Development*. Features include presentation and plenary downloads on food, health and sustainability.

www.iuhpeconference.net

Monash Sustainability Institute

Look up *Promoting Social Inclusion in Adaptation to Climate Change: A discussion paper*. Features Victorian research and approaches to inclusion for at-risk communities.

www.monash.edu/research/sustainability-institute

Parks Victoria

Look up the *Healthy Parks, Healthy People* initiative. Features research, local links and programs within Victoria.

www.parkweb.vic.gov.au

People and Parks Foundation

Look up *The Health Benefits of Contact with Nature in a Park Context*. Features research and programs for reconnecting people with nature.

www.peopleandparks.org

University of Melbourne social justice initiative

Look up *Climate Change: Local Responses*. Features climate change research and projects about social justice, community capacity building and resilience.

www.socialjustice.unimelb.edu.au

VicHealth – Planning healthy environments

Look up the publications page for planning healthy environments. Features papers on built environment, transport and wellbeing.

www.vichealth.vic.gov.au

Victoria 2008: State of the Environment Report

Provides a detailed and readable account of the condition of Victoria's environment and recommendations and directions for improvement including behaviour change.

www.ces.vic.gov.au/CES/wcmn301.nsf/childdocs/-FCB9B8E076BEBA07CA2574F100040358?open

World Health Organization

Provides links to information about climate change science and human health.

www.who.int/topics/climate/en/

World Health Organization – Europe

Look up *Community Participation in Local Health Sustainable Development: Approaches and techniques*.

Features activities and tools for community participation in health and sustainability initiatives.

www.euro.who.int

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