# Green Star Communities

**National Framework** 







Project partner



Principal sponsor



Government Land Organisation sponsors



















Gold sponsors















Silver sponsors















The Green Star
Communities Framework
is a vision, a set of
principles and aspirations
to help guide and support
the development of
sustainable communities.

The intention of this framework is to provide inspiration and to contribute to a national conversation about how we plan, design, build, maintain and renew sustainable communities.

# **Contents**

A Sustainable Communities vision for Australia	4
What is a community?	5
Opportunities for sustainable communities	6
About this framework	7
Principle 1: Enhance Liveability	8
Principle 2: Create Opportunities for Economic Prosperity	9
Principle 3: Foster Environmental Responsibility	10
Principle 4: Embrace Design Excellence	11
Principle 5: Demonstrate Visionary Leadership and Strong Governance	12
Applying the principles	13
Acknowledgements	15





# A sustainable communities vision for urban Australia

A sustainable community embodies the principles of sustainable development, respecting ecological limits and natural resource constraints, encouraging prosperity and well-being while optimising conditions for human development.

A sustainable community has aspirations for the future that acknowledge the challenges brought about by change. It is liveable, resilient, diverse and adaptable. It strives for a lower carbon and ecological footprint.

A sustainable community evolves through policy and collaborative practice that respects and embraces the aspirations of existing and future community stakeholders.

The GBCA's national principles for sustainable communities are to:



**Enhance liveability** 



Create opportunities for economic prosperity



Foster environmental responsibility



Embrace design excellence



Demonstrate visionary leadership and strong governance.





# What is a community?

For this framework the term 'community' encompasses the ideas of precinct, place, neighbourhood or other geographic areas that may be used by stakeholders to describe their projects.

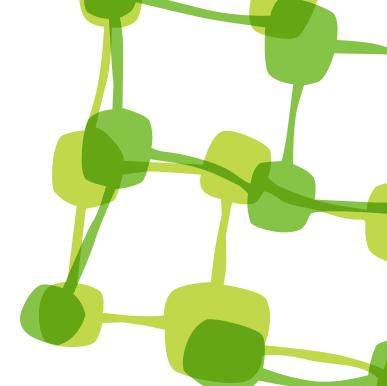
In fact, there are numerous terms that are often associated with sustainable development projects which tend to be used interchangeably, and for some, they draw different reactions, ideas, definitions and outcomes.

For the purposes of this framework, we have identified the following attributes that may be characteristic of communities regardless of size and nature:

- Infrastructure: systems and services which supply our energy and water, manage our waste, communications, technology and provide for mobility
- Buildings: built form that accommodates activities associated with working, living and recreation, both public and private
- Public realm: areas accessible to the public
- People: those who may own, rent, occupy, visit, work, reside, recreate or interact in the area
- Ecology: biological systems within the environment
- Economy: systems supporting the production, exchange, distribution and consumption of goods and services
- Governance: rules, behaviours and structures that shape and influence communities
- Services: information and facilities that are available to people.

Each community will have its own boundary of influence. In applying this framework projects should define the relevant boundary and dimensions of its influence for the above attributes and apply the five principles accordingly.

Whether it is a small precinct or a large city, the idea of community as defined by the five principles should be applicable and scalable across many types of projects.





# Opportunities for sustainable communities

# Australia's sustainable cities agenda

If current trends continue, Australia's population is expected to rise by 60 per cent by 2050, reaching almost 36 million people. Most of us – nearly 85 per cent - will choose to live in cities, with two-thirds of our population residing in our major cities.

This trend in growth will challenge us and be influenced by ecological limits and natural resource constraints, particularly diminishing supplies of oil worldwide, a changing climate, pressures on water supplies, reduction in arable land, the growing need for employment and access to affordable, liveable and enjoyable places. Our demographics will also change, with an ageing population and more immigrants coming to Australia, as detailed in the 2010 Intergenerational Report.

We are, however, in the enviable position of being able to shape the progress of our existing and future communities. This is why the Australian Government is establishing a clear urban cities agenda for the nation, augmented by the *State of Australian Cities 2010 report*, to ensure our cities grow efficiently with respect to major infrastructure networks (such as transport and communication networks), are affordable and liveable, are more compact in their urban form and shape a sustainable legacy for future generations.

# Sustainable cities and the Green Building Council of Australia

Acknowledging the challenges of a growing nation, in 2009 the Green Building Council of Australia (GBCA) commenced a consultation process with its members, government and industry stakeholders to identify potential opportunities for supporting this national cities agenda.

With its core business being the development and administration of comprehensive and robust rating tools for the built environment, government and industry identified the GBCA as the most appropriate organisation to lead the development of a rating tool that could help create a greater demand for more sustainable development projects at a community scale.

The Green Star Communities rating tool is being developed in two stages:

- Stage 1: development of a national framework for sustainable communities that establishes five national best practice principles to guide sustainable communities in Australia; and
- Stage 2: development of the rating tool which provides best practice benchmarks informed by the framework and used for assessing sustainable communities. Stage 2 will also define appropriate governance processes for accreditation, certification, review and continual improvement.





# About this framework

While sustainable community ideas permeate much of the policy and planning we see at various state and local government levels, greater guidance and consistency at a national level is needed. For some time, key industry and government stakeholders have had a vision to establish a nationally consistent language for new and existing sustainable communities, neighbourhoods, precincts and places. With government and industry support, the GBCA has made a commitment to help achieve such an outcome. This framework is the first part of that vision.

The framework is not designed to provide specific development solutions or strategies nor is it intended to provide case study examples of sustainable communities.

The objectives of the framework are to:

- Provide national consistency and a common language around the definition of best practice sustainable communities
- Encourage innovation and excellence in our approach to creating communities of the future
- Promote integration and collaboration across the spectrum of sustainability issues relating to sustainable communities
- Facilitate stakeholder engagement during the evolution of sustainable communities
- Provide a basis for consistent and ongoing assessment and evaluation of sustainable communities.

The framework is aspirational and visionary. It provides a high level framework for structuring sustainability actions and ideas for projects. It does so through its five principles, which are:

- Enhance liveability
- Create opportunities for economic prosperity
- Foster environmental responsibility
- Embrace design excellence
- Demonstrate visionary leadership and strong governance

While these five principles are outcomes focussed, they are not achievable without an integrated approach to their application. Sustainable communities evolve by threading integrated approaches and behaviours throughout our actions. Sustainable communities also require a collaborative approach to development which recognises the complexity of the development process. All stakeholders need to work together towards a shared outcome, or risk the vision for the sustainable community being lost in the complexity of the process.

As such, this framework also establishes a process to ensure the principles can be applied with integrity, by encouraging stakeholders to:

- Apply all five principles
- Define each community's unique boundaries
- Adapt the principles for context
- · Adopt a systems approach
- Acknowledge and apply existing tools, plans, codes and guidelines
- Apply the principles in a transparent and accountable way.

Furthermore, the framework acknowledges that there are numerous existing tools and mechanisms being used in Australia and internationally that help guide the evolution of sustainable communities. This framework does not replace them, but rather provides a broader context for the consideration of them in development and application.

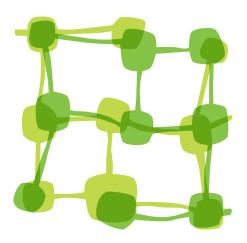
Finally, it is recognised that planning plays a major role in defining the character and development of communities from a structural perspective and this framework serves to enhance that process and provide a mechanism to utilise best practice approaches to deliver sustainable outcomes.





Principle 1:

# Enhance Liveability



Sustainable communities are liveable. They are diverse, affordable, inclusive and healthy; they enhance social interaction and ownership, are safe and caring and improve people's well-being. In applying this principle the following should be considered:

# Providing diverse and affordable living

- Providing a diversity of dwellings, buildings and facilities that reflect the broad socio-economic needs of the community
- Access to local services such as transport, food, health and conveniences

# Creating healthy, safe and secure communities

- Enabling and promoting healthy and safe communities through partnerships and effective planning, urban design and landscape architecture that support physical activity and social engagement
- Providing opportunities for and raising the awareness of healthy activities within the community

### Fostering inclusiveness and cohesiveness

- Providing diverse and inclusive environments for all ages, abilities, cultures and socio-economic backgrounds of the community
- Facilitating community cohesion by developing a shared vision, embracing diversity and tolerance, respecting each others' rights and responsibilities and reflecting these values in the built environment
- Engaging stakeholders in the evolution of their communities, from policy to ongoing revitalisation, evaluation and adaptive management

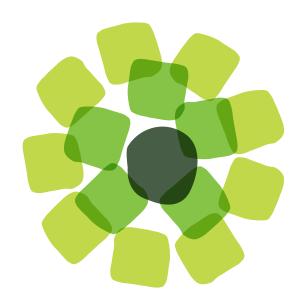
### Building community adaptability

- Building capacity to adapt to changing community and individual needs and expectations whether influenced by the economy, environment, culture or other life circumstances
- Creating opportunities for a diversity of uses and activities that enable communities to meet future challenges.



# Create Opportunities for Economic Prosperity

Sustainable communities prosper. They encourage opportunities for business diversity, innovation and economic development that support local jobs for people in the region. In applying this principle the following should be considered:



# Promoting education and learning

 Providing opportunities for the community to access a variety of education and learning systems

# Enhancing employment opportunities

- Creating diverse employment opportunities that meet the needs of local and regional communities and facilitating access to them
- Encouraging the production and procurement of local goods and services

#### Attracting investment

- Providing key infrastructure that enables community and business connectivity
- Enabling ongoing sustainable and ethical investment in local business opportunities
- Establishing a business case, inclusive of externalities, for green infrastructure systems and jobs and providing a commitment to implementation

# **Encouraging innovation**

- Encouraging business and community innovation through initiatives that recognise and reward local excellence
- Facilitating new business opportunities to enhance competitiveness and innovation

## Promoting efficiency and effectiveness

- Applying lifecycle impact management approaches to encourage resource efficiency and reduced lifecycle costs
- Investing in infrastructure that creates greater urban management efficiencies.



Principle 3:

# Foster Environmental Responsibility



Sustainable communities respect the environmental systems that support them. They protect and restore the natural environmental values of their bio-regions. They are less resource intensive. They promote infrastructure, transport and buildings that reduce their ecological footprint. In applying this principle the

following should be considered:

### Enhancing our natural environment

- Protecting, valuing, restoring and enhancing our natural and cultural heritage assets, both water and land-based
- Promoting biodiversity through the provision of habitats, spaces and environments across the community and urban areas
- Reducing greenhouse gas emissions, contaminants and other pollutants to land, water and atmosphere
- Minimising the risk from extreme natural events and impacts of climate change

# Reducing ecological footprint

- Promoting environmentally efficient systems for water and wastewater management and reuse; sustainable energy generation and distribution; and waste management and recycling
- Encouraging greater resource efficiency within a life cycle context
- Reusing and retrofitting existing sites and buildings
- Providing sustainable transport opportunities and encouraging their use
- Promoting food security and sustainable food production
- Educating communities on their individual and collective impacts by making resource savings and consumption data explicit within the built environment.



#### Principle 4:

# Embrace Design Excellence



Sustainable communities are places for people.
They are desirable, accessible and adaptable. They have their own distinct character and identity and evolve overtime.
In applying this principle the following should be considered:

#### Adopting effective planning practices

- Establishing an integrated planning framework for delivering a shared design vision in collaboration with all partners
- Planning for considered density, mixed use, connectivity and the protection of valuable land uses such as agriculture
- Defining specific design outcomes which are clear and measureable

# Encouraging integrated design

- Understanding the context of a community, precinct or site and its relationship with neighbouring areas as well as the region as a whole in creating of a sense of place
- Responding to land, water and climatic based planning and design constraints and opportunities
- Creating coherent urban structure and connectivity between places
- Providing effective connectivity between transport, communication, social and physical infrastructure systems

# Maintaining flexible and adaptable approaches

- Creating opportunities to retrofit and revitalise existing communities, precincts, places and buildings
- Providing for development and planning flexibility and adaptability that supports continuous improvement of the built environment
- Adapting effectively to changing climatic and other environmental and physical conditions so that people's comfort, health, safety and well-being are enhanced

#### Creating desirable places

- Reinforcing a sense of place, community identity and local character within design
- Creating a sense of connection with nature
- Encouraging a high quality, integrated and safe public realm that meets the needs of the local community
- Providing quality built form and landscapes that are responsive to climate and context
- Conserving and celebrating cultural heritage and archaeological assets across landscapes, places and sites
- Creating functional, vibrant, stimulating and memorable places that evolve for people to live, work and play

#### Promoting accessibility

- Locating higher densities close to public transport and services to encourage active transport, promote public health and enhance public transport use
- Encouraging accessibility, diversity and mixed use development to reflect local values and meet both local and metropolitan needs.





Principle 5:

# Demonstrate Visionary Leadership and Strong Governance

Sustainable communities are characterised by leadership and strong governance frameworks that are transparent, accountable and adaptable. They enable active partnerships to build capacity and achieve a shared vision and deliver stakeholder benefit. In applying this principle the following should be considered:

# Establish coordinated and transparent approaches

- Facilitating coordinated approaches among crosssectoral stakeholder interests
- Establishing transparent and accountable decisionmaking processes through inclusion and provision of information
- Establishing practical standards of responsibility, resource allocation and programming that is accessible to stakeholders

## Build a commitment to implementation

- Developing practically enforceable standards of ownership, accountability and delivery
- Incorporating performance evaluation, feedback and support mechanisms that provide opportunities for continual improvement

#### **Engaging with stakeholders**

- Building a shared vision with stakeholders across community, industry and government
- Monitor progress towards this vision by building community capacity, assessing performance and encouraging ownership and leadership in realising that vision

# Fostering sustainable cultures and behaviours

- Raising awareness among stakeholders and providing education and learning opportunities that enable more sustainable practices
- Encouraging sustainable behaviours and systems for monitoring environmental data, sharing information and allowing for continual improvement mechanisms

## Encouraging and rewarding innovation

- Providing open access information sharing to enable innovation to be enhanced
- Recognising and rewarding leadership in innovation and excellence.



# Applying the principles

It is expected that these principles will be of interest to government, developers, builders, planning and design professionals and communities. The potential application of the principles by these stakeholders is likely to be diverse and some example uses are provided in the table overleaf. Regardless of how stakeholders use the principles, the following steps should be followed:

# Apply all five principles.

A sustainable community applies a broad sustainability lens, making sure environmental, social, economic, design and governance outcomes are achieved. A sustainable community will recognise the benefits of embedding all five principles for all relevant stakeholders within their community. While the issues and strategies underpinning each principle may vary, the overall outcome being sought by each principle should be embodied in each policy, plan or project.

# Define community boundaries.

Each community has boundaries of influence that include geographical, cultural, virtual or place-based, environmental and/or economic. Each community should identify its relevant boundaries and the dimensions of its influence for the purposes of applying the five principles.

### Adapt for context.

The range of issues that underpin the principles will not apply to all communities, nor will they be relevant to each lifecycle stage. It is necessary that each community define how it responds to each principle by considering the issues provided in this document to create a local set of objectives and strategies. In adapting the issues relevant to each principle, the lists provided should be reviewed for their relevance and supplemented or reduced as appropriate. Issues should be refined in detail to ensure they are relevant to the project, but remain contextually relevant to the overarching principle. Finally, a project may wish to prioritise and/or weight the importance of the issues.

### Adopt a systems approach.

In a systems approach, the principles are applied in way that helps optimise the synergies and trade-offs. This requires an understanding of the interactions between, for example, the liveability and environmental principles, prosperity and design principles, as well as how the governance principles influence the achievement of them all.

# Acknowledge and apply existing tools, plans, codes and guidelines.

A community needs to identify and understand how a range of tools, plans, codes and guidelines may assist in successfully applying the framework's principles. Not all tools are the same and often they have very different purposes. Some tools assess performance, some test options and some certify outcomes. Some tools are a vehicle for establishing and demonstrating regulatory compliance while others seek outcomes beyond minimum practice and strive for innovation.

# Apply in a transparent and accountable way.

The best practice application of these principles needs to be in an open and accountable way. The review and refinement of the issues underpinning the principles should be undertaken with relevant stakeholders and be open to public scrutiny and input.



PROJECT STAGE	EXAMPLE USER	POTENTIAL APPLICATION	ANTICIPATED OUTCOMES
Policy making	State government department of planning	Principles are used to inform the development of strategic directions and policies within a regional plan.	Regional policies promote best practice sustainable community development.
Regional and town planning	A consultant planner	Principles are used in the drafting of a new planning scheme, informing the scheme's desired planning outcomes for the region/town.	Planning scheme contains localised best practice strategies for a sustainable city.
	Local government planner	Principles used to assess a community development plan at the statutory planning stage to promote adoption of sustainable communities approach.	Future community development applications assessed against best practice standards.
Community planning	Local government planner	Principles are used to identify the potential components of a new neighbourhood plan, or to review an existing one.	Existing neighbourhood plan updated to include a full spectrum of sustainability initiatives.
	Community members and community organisations, NGO's and activists	Principles could assist in community capacity building and community engagement to ensure that local values are reflected in the planning of a community and local people understand the process.	An informed community that builds ownership in the local constraints, opportunities and solutions for its area.
Design	Government or private developer	Principles are used to brief the design team and their scope, ensuring that detailed assessment methodologies and tools align with the principles contained in the framework.	Design options that address best practice elements of a sustainable community.
Finance	Commonwealth Government	Principles are used as part of funding criteria to ensure that projects optimise sustainability outcomes.	Funding is directed to investments that provide an optimal sustainable community legacy.
Tendering	Owner, developer, government	Principles are used in Request for Tenders or Expressions of Interest for specific community developments.	Contractors are engaged and have embedded sustainability as a core outcome of the community development.
Deliver	Construction contractor	Principles are used to inform the company's research program around community infrastructure delivery.	Continual improvement of delivery practices for sustainable community developments.
Evolve and maintain	Neighbourhood community group, Chamber of Commerce and other member groups	Principles are used to prioritise funding applications for community infrastructure improvements and maintaining dialogue with community members, local agencies and local political representatives.	Ongoing community investment is sustained and focussed on the sustainability issues local to the area.
Revitalise and retrofit	Alliance partnership including local government, design consultants and contractors	Principles are used to structure design workshops for the renewal of buildings, open space, playground and/or community hall facilities.	Scoping of an urban retrofit project that ensures holistic sustainable outcomes.
Marketing	Consumer, the public	Principles are used to assist the public understand what broadly constitutes a sustainable community and the standard applied.	An informed consumer who makes the decision to adopt a more sustainable lifestyle.





# Acknowledgements

#### **Sponsors**

The Green Building Council of Australia would like to thank the following project sponsors for their generous contribution.

Principal sponsor Rock Development Group

Government Land Organisation sponsors Hunter Development Corporation
Land Development Agency
Land Development Corporation
Land Management Corporation

Landcom Landcorp

Urban Land Develompent Authority

VicUrban

Gold sponsors Barangaroo Delivery Authority

Brisbane City Council Brookfield Multiplex Gold sponsors (cont) Grocon

Lend Lease

The University of Melbourne Sydney Harbour Foreshore Authority

Silver sponsors Mirvac

Stockland

Sustainability Victoria City of Sydney

## Project Partner

The GBCA would like to acknowledge the ongoing strategic support and contribution of its project partner, VicUrban.

#### **Project Leader**

Adam Beck

Green Building Council of Australia

#### **Steering Committee**

Romilly Madew (Co-chair)

Green Building Council of Australia

Pru Sanderson (Co-chair)

Vicl Irban

Gordon McAllister

Department of Climate Change and Energy Efficiency

Andrew Cooper (TRC Chair)

Leighton Properties

Sue Holliday

Built Environment Industry Innovation Council

Matthew Inman

**CSIRO** 

Tom Roper

Australian Sustainable Built Environment Council

**Neil Savery** 

Planning Institute of Australia

#### Technical Reference Committee

Andrew Cooper (Chair)

Leighton Properties

Andrew Aitken

Green Building Council of Australia

Mark Allan

Mirvac

Michael Ambrose

CSIRO

Karen Boyd

Northrop

Prof. Laurie Buys

Queensland University of Technology

Rafael Chemke

Sydney Harbour Foreshore Authority

Cate Collins

Lend Lease

Chris Derksema

City of Sydney

Phil Donaldson

South Australia Land Management Corporation

Steve Driscoll

New South Wales Landcom

Maria Efkarpidis

Rock Development Group

Liz Johnson

Municipal Association of Victoria

Evan Jones

Brookfield Multiplex

Caryn Kakas

Residential Development Council

**Brian Moore** 

Grocon

Marcus Mulholland

Brisbane City Council

Peter O'Dwyer

Planning Institute of Australia

Jeff Robinson

Aurecon

Sean Rooney

SKM

Dr. Wendy Sarkissian

Sarkissian Associates Planners

George Tieman

VicUrban

Siobhan Toohill

Stockland

Matt Toon

Queensland Urban Land Development Authority

Tony Watson

Barangaroo Delivery Authority

**Barton Williams** 

Western Australia LandCorp

Ian Wood-Bradley

ACT Land Development Agency

Level 2, 79 Adelaide St Brisbane QLD 4000 T / 07 3229 3299 F / 02 8252 8223

Sydney
Level 15
179 Elizabeth St
Sydney NSW
2000
T / 02 8239 6200
F / 02 8252 8223

Melbourne Level 17 500 Collins St Melbourne VIC 3000 T / 03 8612 2000 F / 03 9614 8338

