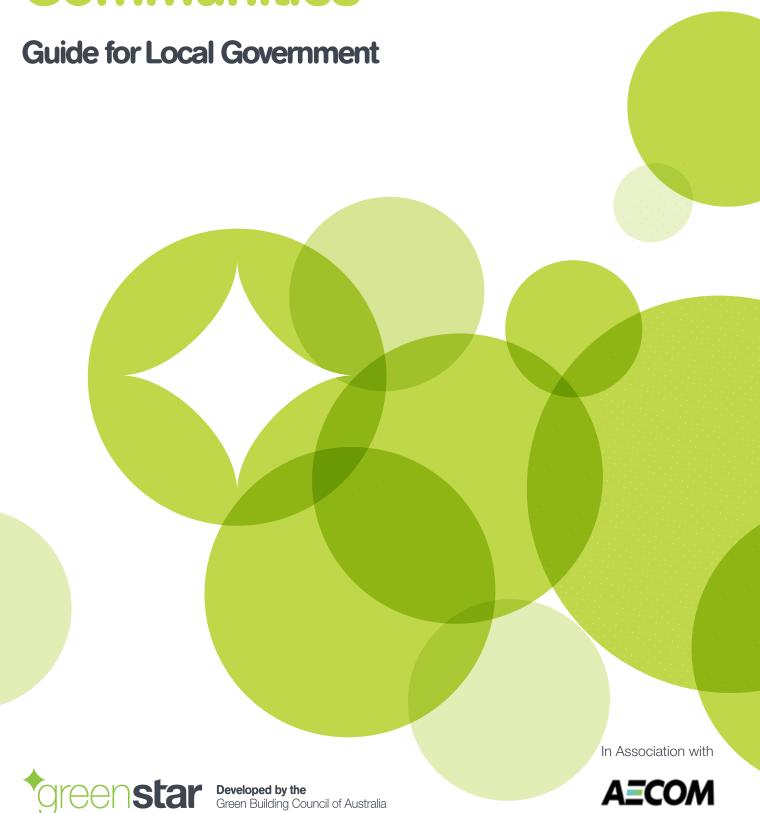


## **Green Star Communities**



## **Foreword**

Development in Melbourne, like so many other Australian cities, is advancing rapidly. Local governments play a significant role in balancing such growth with improving the liveability and sustainability of our cities.

The City of Melbourne is committed to sustainability and providing leadership in this area, and the City of Melbourne is home to some of the world's greenest buildings.

I'm proud of the fact that the City of Melbourne was an early supporter of the Green Building Council of Australia's Green Star – Communities rating tool and sponsored its development in 2012.

This rating tool and the Green Star – Communities Guide for Local Government gives councils the knowledge, resources and benchmarks they need to make sustainability central to what they do.

I endorse the Green Star – Communities rating tool and the associated guide and encourage every Australian municipality to utilise and embrace it.

Robertsyle

Robert Doyle Lord Mayor







#### A sustainable vision for Australia

The way our cities and towns are planned, designed and built has an enormous impact on our economy, our wellbeing and our environment.

Local governments across Australia will play an integral role in implementing and administering the planning controls, policies and programs that will ensure we 'get it right' for existing and future communities.

#### **About this guide**

The Green Star – Communities Guide for Local Government is a resource for local governments to encourage community development projects in their local government areas (LGAs) that will enhance liveability, contribute to local economic prosperity and deliver sustainable outcomes.

This guide explains how councils can use the Green Star – Communities national framework and the Green Star – Communities rating tool to support and achieve better economic, social and environmental outcomes across the built environment.

## **About the Green Star – Communities national framework and rating tool**

Developed by the Green Building Council of Australia in consultation with industry stakeholders, the framework consists of five principles that define a sustainable community in Australia and the rating tool sets benchmarks that enable community development projects to be assessed and rated against the framework's five principles.



The framework can be used on its own to guide local government planning or in conjunction with the rating tool to indicate and measure success in delivering sustainable development.

## **Green Star - Communities opportunities for local government**

The framework and rating tool present a unique opportunity for local governments across Australia. It is the first time a nationally developed, industry-led and government-supported rating system for the planning, design and construction of community development projects has been produced in Australia. Local governments can use the national framework and the rating tool to:

- Demonstrate a commitment to long-term sustainability
- Deliver more liveable, prosperous and sustainable communities
- Achieve more effective planning outcomes through the plan-making process
- Reduce infrastructure delivery and asset maintenance costs
- Foster community engagement and participation
- Work collaboratively with private sector developers to ensure the best possible community outcomes
- Ensure credibility through independent, third party verification of best practice outcomes or above.

## The Green Building Council of Australia

The Green Building Council of Australia (GBCA) is the nation's authority on sustainable buildings and communities. Our mission is to accelerate the transformation of Australia's built environment into one that is healthy, liveable, productive, resilient and sustainable. We work together with industry and government to encourage policies and programs that support our mission. We educate thousands of people each year on how to design and deliver best practice outcomes for our buildings, communities and cities. We also operate Australia's only national, voluntary, holistic rating system for best practice buildings and communities - Green Star.

#### **About Green Star**

Launched by the GBCA in 2003, Green Star is an internationally recognised built environment rating system. From individual buildings to neighbourhoods, precincts and entire communities, Green Star is transforming the way our built environment is designed, constructed and operated.

#### About AECOM

Working closely with the Green Building Council of Australia to develop this guide for local governments, AECOM believes Green Star – Communities will provide a great foundation for improved urban development outcomes.

AECOM is a global provider of professional technical and management support services to meet client needs across property, urban development, infrastructure and local government. With approximately 45,000 employees around the world, we provide a blend of global reach, local knowledge, innovation and technical excellence in delivering solutions that create, enhance and sustain the world's built, natural and social environments.

We aim to deliver smarter and more-efficient solutions to our clients' most complex challenges and look forward to continuing to work with local governments across Australia to deliver positive change for our communities.

#### Thank you

The GBCA would like to thank the following stakeholders for supporting the Green Star – Communities rating tool and assisting in the development of this guide:

- AECOM
- United States Green Building Council (USGBC)
- The GBCA's Local Government Task Group
- City of Melbourne
- City of Sydney
- Brisbane City Council





## A sustainable vision for Australia

The way our cities and towns are planned, designed and built has an enormous impact on our economy, our wellbeing and our environment

In 2010, the Australian Treasury advised the incoming government that 'getting it right' with cities has significant potential, not just from a pure economic perspective but also from a social and environmental perspective. Getting it wrong is likely to be very costly economically, socially and environmentally.'1

Local governments across Australia will play an integral role in implementing and administering the planning controls, policies and programs that will ensure we 'get it right' for existing and future communities.

## **About this guide**

The Green Star – Communities Guide for Local Government has been developed by the GBCA with support from AECOM.

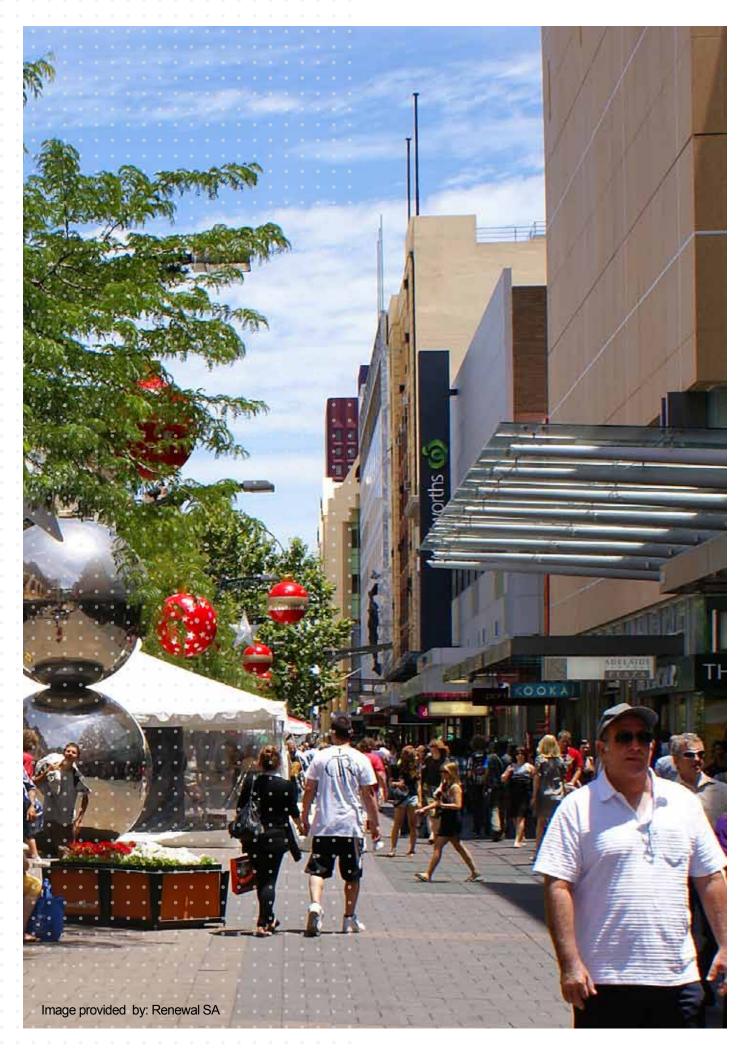
This guide is a resource for local governments to encourage community development projects in their local government areas (LGAs) that will enhance liveability, contribute to local economic prosperity and deliver sustainable outcomes.

This guide explains how councils can use the Green Star – Communities national framework and the Green Star – Communities rating tool to support and achieve better economic, social and environmental outcomes across the built environment.

The guide is a valuable resource for local government staff across a range of disciplines, including:

- Strategic planning
- Master planning
- Town planning
- Development control

- Social planning
- Sustainability and environment
- Economics
- Asset management



## **Green Star – Communities**

In 2009, in response to calls from industry and government, the GBCA asked stakeholders across Australia to identify how we could shift the focus from the design and construction of best practice buildings, to the planning, design and construction of best practice precincts, neighbourhoods and cities. The feedback we received was definitive: Australia needed national best practice principles and a rating tool that would enable community-scale developments to be measured and certified against economic, social and environmental benchmarks.

After extensive consultation with industry stakeholders from social planners to agronomists, the Green Star – Communities national framework and Green Star – Communities rating tool were developed. The framework consists of five principles that define a sustainable community in Australia and the rating tool sets benchmarks that enable community development projects to be assessed and rated against the framework's five principles.

The framework and rating tool have already made a significant impact on the Australian development industry. The PILOT rating tool was released in 2012 and a number of community-scale development projects across Australia have now registered to achieve a rating. These projects range from small infill developments of 300 apartments through to expansive greenfield developments of up to 20 000 new homes.

Developers that incorporate the principles of the framework into community planning and design and those that go on to seek Green Star – Communities certification will not only be recognised for their leadership, but more importantly, they will ensure their communities are on a clear path to achieving:

- Diverse, affordable, inclusive and healthy places for residents
- Business diversity and opportunities for economic development and innovation
- Developments that provide value for money through whole-of-life cost savings
- A reduced environmental footprint through the protection, maintenance and restoration of local natural environments.







# Green Star – Communities opportunities for local government

The Green Star – Communities national framework and rating tool present a unique opportunity for local governments across Australia. It is the first time a nationally developed, industryled and government-supported rating system for the planning, design and construction of community development projects has been produced in Australia.

Local governments can use the national framework and the rating tool to:

- Demonstrate a commitment to long-term sustainability
- Deliver more liveable, prosperous and sustainable communities
- Achieve more effective planning outcomes through the planmaking process
- Reduce infrastructure delivery and asset maintenance costs
- Foster community engagement and participation
- Work collaboratively with private sector developers to ensure the best possible community outcomes
- Ensure credibility through independent, third party verification of best practice outcomes or above.

## About the Green Star – Communities national framework

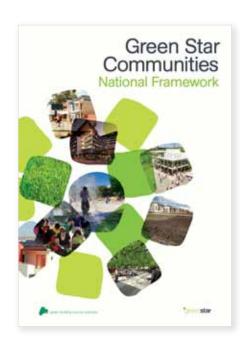
The Green Star – Communities national framework was developed by the GBCA in consultation with over 4000 stakeholders throughout 2009 and 2010. The development of the framework saw government and industry collaborate in a way rarely seen in Australia. The objective of the national framework is to:

- Provide a national, consistent definition and common language around best practice sustainable communities
- Encourage innovation and excellence in the creation of communities of the future
- Promote integration across the spectrum of community sustainability issues
- Facilitate stakeholder engagement during the evolution of sustainable communities
- Provide a basis for the ongoing assessment and evaluation of sustainable communities.

The framework provides five principles, which form the vision and definition for a sustainable community in Australia. The principles define a sustainable community in Australia as one that:

- Enhances liveability
- Creates opportunities for economic prosperity
- Fosters environmental responsibility
- Embraces design excellence
- Demonstrates visionary leadership and strong governance.

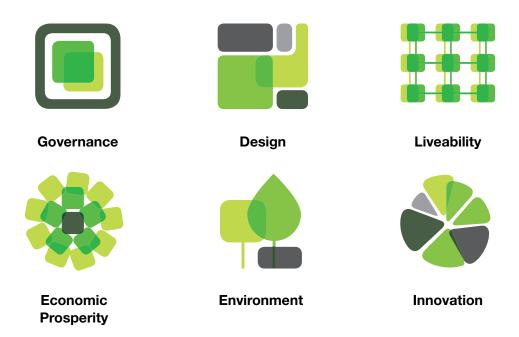
The framework can be used in its own right to guide local and state government planning strategy. It can also be used in conjunction with the rating tool, which provides benchmarks that indicate and measure success in delivering sustainable development.



View the national framework at www.gbca.org.au/ nationalframework

# About the Green Star – Communities rating tool

To underpin the framework, the GBCA released the Green Star – Communities rating tool in June 2012. The rating tool assesses the planning, design and construction of community and precinct-level developments against the five framework principles and an additional 'innovation' category:



The rating tool follows in the footsteps of other precinct and community-scale rating tools that have achieved success internationally, including:



The Leadership in Environmental and Energy Design for Neighbourhood Development (LEED-ND) rating tool administered by the USGBC



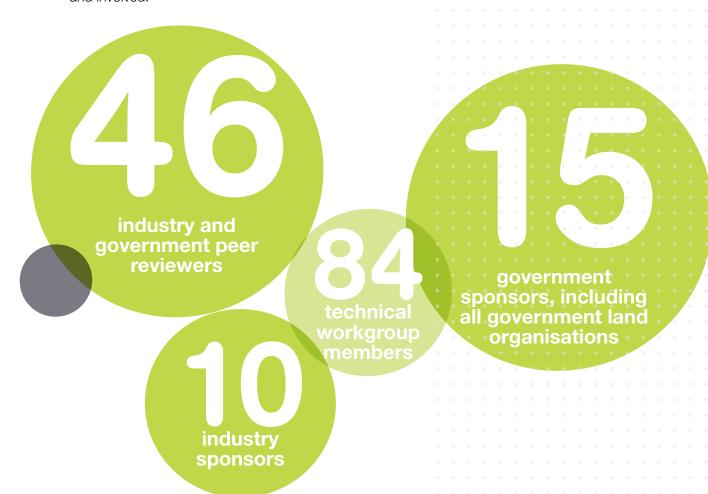
The Building Research Establishment Environmental Assessment Method for Communities (BREEAM) rating tool from the United Kingdom



The Estidama Pearl Community Rating System from Abu Dhabi.



These international tools were used to guide the development of a rating tool specific to the Australian market and regulatory conditions. The rating tool was also developed through industry consultation and involved:





Gov-1 Accredited Professional



Responsibility



Gov-3 Sustainability Awareness



Gov-4 Engagement



Gov-5 Operational Governance



Gov-6 Adaptation and Resilience



Gov-7 Environmental Management



Des-1 Site Selection



Des-2 Site and Context Analysis



Des-3 Site Planning and Layout



Des-4 Urban Design



Liv-1 Access to Amenities



Liv-2 Community Development



Liv-3 Healthy and Active Living



Liv-4 Access to fresh food



Liv-5 Safe Places



Liv-6 Culture, Heritage, and



Liv-7 Accessibility and Adaptability



Econ-1 Employment and Economic Resilience



Econ-2 Education and Skills



Econ-3 Return on investment



Econ-4 Community Investment



Econ-5 Affordability



Econ-6 Incentive **Programs** 



Econ-7 Digital Economy



Econ-8 Peak **Electricity Demand** 



Env-1 Site Sensitivity



Env-2 Ecological Enhancement



Env-3 Heat Island Effect



Env-4 Light Pollution



Env-5 Greenhouse Gas Emissions



Env-6 Green Buildings



Env-11 Transport





Inn-1 Innovation



Env-9 Materials Env-10 Waste Management



#### What is a rating tool credit?

There are 38 credits within the Green Star – Communities rating tool. Each credit addresses a specific aspect of planning, design or delivery of sustainable communities.

Credits are labelled according to the category to which they belong. For example the first credit in the Environment category is labelled is Env-1 'Site Sensitivity'.

For more information about the 38 rating tool credits please visit www.gbca.org.au.

#### Relationship with the Green Star building rating tools

Since 2002, the GBCA has been rating the sustainability of Australian buildings with our Green Star rating tools. While the Green Star – Communities rating tool does not rate buildings, it acknowledges that best practice buildings can contribute to making a community healthier and more sustainable. Through the Env-6 'Green Buildings' credit the Green Star – Communities rating tool rewards community development projects that include certified environmentally sustainable buildings such as buildings that achieve a Green Star – Design, Green Star – As Built or Green Star – Performance rating.









#### How the rating tool works

The Green Star – Communities rating tool rates the 'plan of development' for a community and the implementation of that plan through the design and construction phases. The rating tool can be applied to many different types of communities, from industrial or commercial zones, residential or mixed-use developments and infill, brownfield and greenfield development projects that include a minimum of four buildings.

- 1
- Register Developers (private and public) register development projects for certification under the rating tool and implement various initiatives throughout the planning, design, and construction phases to achieve benchmarks (or 'credits') under each of the framework principles governance, liveability, design, economic prosperity, environmental sustainability and innovation.
- 2
- **Submit** The team working on the development project must provide documentation to the GBCA to demonstrate how their project meets the credit criteria outlined in the Green Star Communities rating tool.
- 3
- Assessment An independent assessment panel appointed by the GBCA awards points to the development project based on how successfully it meets the aims of the 38 credits. A total of 100 points is allocated across the 38 rating tool credits.
- 4
- **Certify** Once a point score is determined by the independent panel, a Green Star rating is awarded according to the rating scale below. The Green Star Communities rating tool only rewards development projects that achieve best practice sustainability (4 Star Green Star) or above.
- 5
- **Re-certify** A key feature of the rating tool is that once certification is achieved, development projects must re-certify every five years to demonstrate that commitments made at the planning and design stages are actually delivered.



"So often within our communities, a lack of engagement with stakeholders during the planning phase has resulted in inefficient, under-utilised or over-subscribed infrastructure. The 'Engagement' credit within the Green Star - Communities rating tool will encourage developers to take community stakeholders' needs into account, and to take a truly triple bottom line approach to community development."

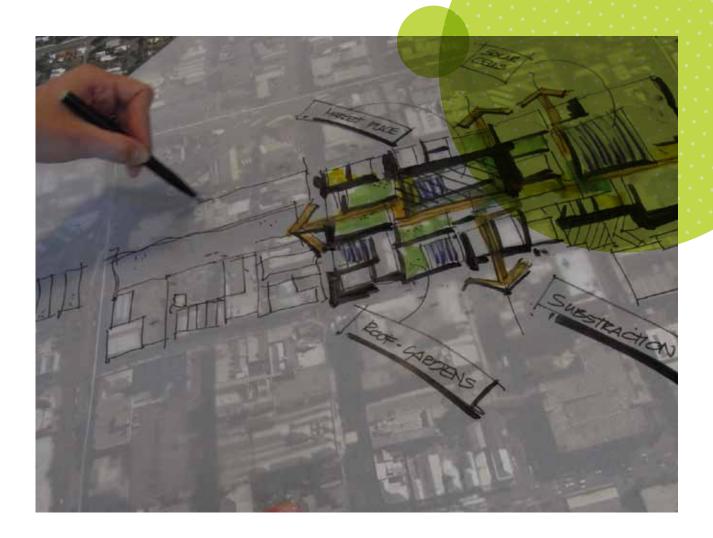
**GBCA Chief Executive - Romilly Madew** 

## What does a Green Star – Communities development look like?

Every Green Star – Communities certified development will look different. The rating tool doesn't prescribe how streets should look or the types of buildings it should contain.

What all Green Star-rated communities will have in common is that during the planning, design and construction phases, considerable thought and effort will be given to delivering best practice governance, urban design, liveability, economic opportunities, environmental sustainability and fostering a culture of innovation.

Developers seeking certification can choose which rating tool credits they wish to target. The more credits a project pursues, the better the sustainability outcomes and the higher the rating score is likely to be. Benchmarks within the rating tool credits are likely to change over time as industry advances and definitions of 'best practice' change.





#### Governance

The Governance category aims to ensure Green Star – Communities projects have a strong governance framework in place by setting benchmarks that encourage developers to operate transparently and provide evidence that:

- Their community is being delivered by a project applicant that is transparent and accountable
- A stakeholder engagement strategy has been prepared and implemented according to best practice standards
- Sustainability information will be shared with community stakeholders to help local residents get the most from the social, economic and environmental initiatives implemented
- Effective climate adaptation and community resilience planning has taken place and is documented.



#### Governance credit spotlight: Engagement

A community can only be considered truly sustainable when stakeholder groups are engaged, and consensus has been reached on the community's collective goals, identity and improvement implementation strategies. The Gov-4 'Engagement' credit has been developed in recognition of this, and rewards developments that can demonstrate the implementation of effective stakeholder engagement, capacity building strategies and the development of a shared community vision.

The Green Star – Communities 'Engagement' credit has been developed in line with the International Association for Public Participation Australasia (IAP2)'s goal to facilitate the involvement of the public in decisions that impact their lives.

Involving people in decisions that impact their lives helps to ensure better resource efficiency, and increased resilience through the provision of the infrastructure that is useful and relevant to the community.



"Each and every community is different, and it is unrealistic to think that one community's vision of what a liveable and prosperous neighbourhood looks like will mirror any other. This is why it is so important to engage with community members. When consensus is reached, commitment to improvement follows, and that can only mean better environmental, social and economic sustainability outcomes in the long term."

#### **Design**

The Design category aims to encourage sustainable urbanism. It does so by setting benchmarks that encourage developers to:

- Choose sites that have been previously developed wherever possible
- Undertake comprehensive analysis of the site and its context
- Undertake site planning, layout and urban design supported by a design review panel process, so that best practice and continual improvement are promoted.



#### Design credit spotlight: Urban Design

The Des-4 'Urban Design' credit aims to promote world-class urban design practices in planning and designing communities. The credit encourages development projects to embody the principles contained in 'Creating Places for People, an Urban Design Protocol for Australian Cities'; a document developed by government, the private sector and non-profits throughout Australia. The Urban Design Protocol seeks to ensure that the spaces and places we design take advantage of the social and economic contributions they can make.

To achieve this credit, project designs will be assessed by a built environment expert. This design review process will promote continuous improvement and will ensure that designs integrate the principles contained within the Urban Design Protocol and other outcomes specific to the local area.



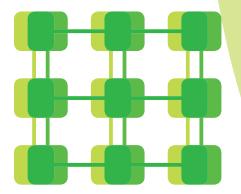


#### Liveability

The Liveability category aims to ensure development projects are diverse, affordable, safe, inclusive and improve the wellbeing of those that live, work and play within them. It does so by setting benchmarks that encourage developers to deliver:

- A range of amenities within close proximity to where people live and work, including fresh food, community gardens and everyday amenities
- Buildings and spaces that promote equity, are easy to enter and move around in and are capable of cost-effective adaptation

- Facilities, programs and events that promote community cohesion and celebrate places of cultural heritage and significance
- A mixture of footpaths, bicycle paths and recreational areas to support 'active travel' and health living
- Safe places that have been designed in alignment with the principles of crime prevention through environmental design.



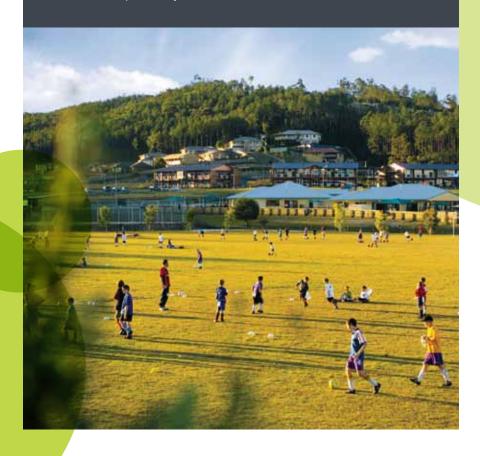
#### **Liveability Credit Spotlight: Healthy & Active Living**

Research from around the world consistently indicates that neighbourhoods that encourage physical exercise and offer contact with nature deliver better physical, mental health and social outcomes.

Here in Australia, research indicates that living in a mixed land-use community that has infrastructure to encourage walking significantly reduces the odds of obesity<sup>2</sup> and switching from cars to walking could save an individual 14.8 cents per kilometre travelled<sup>3</sup>.

The Liv-3 'Healthy and Active Living' credit encourages and rewards developments that design and deliver publicly accessible infrastructure to support active living and facilitate positive community health outcomes.

To be eligible for points under the Liv-3 'Healthy and Active Living' credit, footpaths must be provided for the majority of streets within a project. Beyond this, a project must provide bicycle paths and bicycle parking within all train stations, major bus stops, public transport interchanges and recreational areas within close proximity.

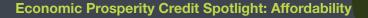




#### **Economic Prosperity**

The Economic Prosperity category aims to ensure development projects facilitate business diversity, education, skills development and productivity. It does so by setting benchmarks that facilitate the delivery of communities that:

- Provide a net percentage increase in the number of local area jobs and provide close access to higher education facilities
- Demonstrate that cost benefit analysis practices are incorporated in decision making
- Invest in infrastructure that benefits the community including digital infrastructure and technology to reduce peak electricity demand
- Provide affordable and diverse housing stock and provide incentives to encourage initiatives that reduce the costs of living and working.



A recent housing affordability study found that Australia's housing markets are among the most unaffordable in the world. In fact, nine of the nation's housing markets are in the 20 most unaffordable markets worldwide<sup>4</sup>. In addition to huge up-front housing costs, there are the ongoing costs of lighting, heating, cooling and energy use to consider

In recognition of this, the Econ-5 'Affordability' credit encourages and rewards projects that promote housing affordability and effectively address the issue of housing stress. Points are awarded based on the number of housing affordability strategies implemented within a project including lot diversity and affordable housing stock. The credit also promotes ongoing living affordability by rewarding local food production, sustainable transport, reduced energy and water consumption and provision of local jobs.





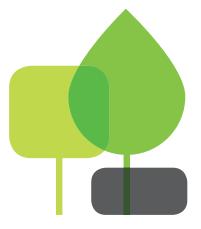
"Unaffordable housing is socially and environmentally unsustainable. Giving people affordable housing options within sustainable communities will not only alleviate housing stress and improve people's quality of life, it will also improve sustainability outcomes by facilitating more sustainable lifestyles among commun members."

**GBCA Executive Director – Green Star Development and Operations, Jorge Chapa** 

#### **Environment**

The Environment category aims to ensure development projects are less resource intensive and prioritise practices that reduce a community's impact on land, water and the atmosphere. It does so by setting benchmarks which rewards projects that:

- Avoid or minimise impacts on environmentally sensitive sites and enhance the ecological value of site through improvements to ecological value and biodiversity
- Reduce heat island effect
- Minimise the adverse impacts of light pollution and stormwater on urban development and receiving water bodies
- Minimise the greenhouse gas intensity of energy supplied to the community and minimise the consumption of potable water
- Provide green buildings in the development that lower operational costs
- Demonstrate that the concrete, steel, asphalt and PVC materials used come from responsible sources
- Minimise the impacts of waste at the demolition, construction and operational stages of the community development life cycle
- Take measures to reduce the impact of transportation, reduce parking spaces and facilitate mass transport use by community inhabitants.



#### **Environment Credit Spotlight: Greenhouse Gas Emissions**

The built environment is responsible for a significant percentage of greenhouse gas emissions. Research shows that if 'upstream' emissions from heat and electricity are included, emissions from building equate to 20 per cent of global greenhouse gas emissions<sup>5</sup>.

The Env-5 'Greenhouse Gas Emissions' credit awards points to development projects that achieve reductions in greenhouse gas intensity of the energy supplied to the community.





#### **Innovation**

All Green Star rating tools contain an innovation category as a way of encouraging innovative practices, processes and strategies. The Innovation category in the Green Star – Communities rating tool rewards projects that:

- Incorporate an Australian or world 'first' sustainable development technology or process
- Facilitate sustainable development market transformation
- Improve upon the benchmarks within the Green Star – Communities rating tool
- Exceed the scope of the Green Star Communities rating tool
- Respond to one or more of the Innovation Challenges listed on the GBCA website.

More information about Green Star – Communities rating tool credits and benchmarks is available in the Green Star – Communities Submission Guideline, which is available at <a href="https://www.gbca.org.au">www.gbca.org.au</a> or by contacting the GBCA team.



# How local governments can use Green Star – Communities

The following section outlines some of the ways in which the Green Star – Communities national framework and rating tool can assist your council to deliver best practice developments in your LGA and achieve better economic, social and environmental outcomes for your community.

#### Lead by example

Great leaders lead by example. Encourage future developments within your LGA to provide improved liveability, sustainability and economic outcomes by leading the way, with council's own operations, policies and projects.

Councils can use the framework and rating tool to set objectives and targets for policies, programs and development projects. By providing clear benchmarks the rating tool can help local governments to communicate expectations to the community and developers.

Local councils are already leading by example and aligning their master plans with the framework and rating tool. In doing so, these councils are aligning with agreed best practice and ensuring development success can be measured.



#### Take action: how your council can lead by example



#### Develop a sustainability policy

Defining and clearly communicating sustainability goals and outcomes for the built environment is the first important step towards ensuring that these goals are realised. You can use the framework to help you arrange and articulate the goals and priorities within your sustainability policy or strategy. You can also use the rating tool credits to establish quantitative and/or qualitative targets and measure success.



#### Incorporate best practice principles into planning

The framework principles can be used to guide your strategic and community planning principles, goals and objectives. The rating tool credits can then be used as performance indicators to assist you to measure the progress and success of your planning efforts.



#### **Embrace best practice community engagement**

As important facilitators of community and stakeholder engagement, local governments can lead by example by adopting the rating tool approach to community engagement activities.

The framework and rating tool also provide a common language for talking with stakeholders about sustainable communities, which can help you to develop a common vision and consensus among local stakeholders about what they want from their community.



#### Plan for economic success

Local governments play a significant role in the creation of viable and sustainable economies within their LGA. You can use the rating tool's 'Economic Prosperity' category to inform the development of new (or revise existing) economic policies which foster economic opportunities and ensure your local area remains economically viable.

You can do this by asking developers to perform a complete analysis of the direct and indirect costs and benefits of a proposed development in line with the Econ-3 'Return on Investment' credit to ensure there will be a return on investment for the developer but also for the community. The Econ-3 credit indicates that performing a holistic analysis ensures that long-term benefits to productivity, health and other social and environmental issues are captured and that economic opportunities are not missed.

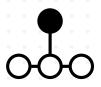




#### Adopt a sustainable and long-term approach to asset management

Local governments can use the rating tool to assess where capital is best invested when it comes to assets like roads, open spaces, public transport, stormwater, potable water and sewerage infrastructure. This can help local governments to invest in solutions that meet the needs of the local population and ensure longer-term issues such as heat island effect and rising energy and water costs are considered.

For example, the Env-3 'Heat Island Effect' credit can inform your approach to material selection and specifications across community infrastructure assets, to reduce the long-term risk of heat island effect for your local area.



#### Embed sustainable community principles in your supply chain

When calling for tenders for planning, design and construction projects you can use the rating tool to clearly communicate the governance, social, economic and environmental aspirations of the project. Referring to the rating tool within tender documents will ensure you communicate to industry using their language and that they understand the objectives you are trying to achieve and how their success will be measured.



#### Demonstrate what best practice is and how it is done

Local governments can register to achieve a Green Star – Communities certification for development projects on land you own or intend to sell. Investing in and delivering demonstration projects is the best way for local governments to lead by example and to build better industry planning and design skills in your local area.



#### Create a climate adaptation policy

Adaptation and resilience measures are an increasingly important aspect of local government planning work. The rating tool can help you to plan for and mitigate against the impacts of climate change and natural disasters by providing a framework for effective climate adaptation planning and community resilience reporting.



#### Leading by example: case studies

#### Parramatta City Council sets its sights on a better future

Parramatta Square is a \$1.6 billion, three hectare mixed-use urban renewal project and was the first local government development to register to achieve Green Star – Communities certification. The six-stage development will incorporate a new civic building, community centre and library as well as commercial, residential and retail developments. A 5 Star Green Star ratings target for all buildings across the six stages of the development has also been set

For Parramatta City Council, comitting to achieve a Green Star – Communities rating for the development will provide independent proof to residents, businesses and investors that Parramatta Square delivers economic, social and environmental sustainability.



### Mount Barker Council assesses for liveability and design

The Morphett Hutchinson project in South Australia included the design of a key intersection and public precinct aimed at connecting the main retail area to future retail and commercial precincts. Mount Barker Council in South Australia has informally assessed the Morphett Hutchinson project against the Liveability and Design categories of the Green Star – Communities national framework and rating tool to determine project performance against current best practice.

For Mount Barker Council, the framework and rating tool provided a common language to clearly communicate the project brief and to consult effectively with an interdisciplinary team of council staff. The assessment has influenced design outcomes and the council's approach to incorporating sustainability into future projects.



The Syracuse Art, Life and Technology (SALT) district in New York has been the traditional home of a rich arts community and an industrial salt works. To alleviate poverty in the area and transform underused industrial and commercial buildings into vibrant places, a revitalisation project was undertaken using the USGBC's neighbourhood development rating tool (LEED-ND) as a guiding framework.

The existing SALT district was assessed against the LEED-ND rating tool to produce a scorecard and a clear picture of the strengths and weaknesses of the local area. Plans and policies were then developed to address district issues and prepare for future development projects.

A set of plans are now in place to guide future development and ensure the delivery of walkable streets, compact development with mixed-use green buildings, neighbourhood shops and businesses, a centralised school and park and public art. The ultimate aim for the revitalisation projects is to ensure a better community and to achieve a LEED-ND Gold rating.

For more information on the the SALT district project visit: www.saltdistrict.com

### The Australian Government's National Urban Policy and Green Star

In 2011, the Australian Government released its National Urban Policy. The policy provides a blueprint that governments can draw on to ensure their communities are productive, liveable and affordable. This policy and the Green Star – Communities national framework are aligned to ensure we get the most out of our cities. For more information on the National Urban Policy please visit www.infrastructure.gov.au.







## Remove the barriers and pave the way

Local governments that want to attract best practice development projects in their area should ensure planning controls, policies, standards and guidelines do not prevent or deter best practice from occurring. By using the Green Star – Communities rating tool local governments have access to nationally agreed best practice benchmarks, which can guide and inform the planning process.

In some areas, state policies and codes or local government planning controls may be more stringent than the best practice benchmarks within the rating tool. Green Star – Communities is not designed to override or replace more stringent state or local government controls, but where controls are less stringent, the rating tool sets national best practice benchmarks for developers to follow voluntarily.

#### Some common barriers to delivering sustainable developments in Australia include:

- Delays in the development approval process
- Subdivision standards that set excessive block lengths, road corridor widths, reduce pedestrian access and specify other site layout provisions that reduce walkability and accessibility
- Car parking requirements based on minimum thresholds rather than maximum thresholds
- Zoning codes that require complete separation of land use types
- Standards that block natural stormwater management and green infrastructure solutions

- Built form design guidelines that are prescriptive rather than performance measure-based that can stifle innovation or the delivery of best practice outcomes
- Open space provisions that encourage large single open space sites rather than smaller dispersed parks that improve urban design and landscape quality
- Development controls that restrict the installation of green technologies, such as solar panels or rainwater storage tanks.

#### Take action: how your council can remove barriers and pave the way



#### Complete a planning gap analysis

By using the rating tool to complete a gap analysis of your local planning scheme and controls you can identify:

- Controls that may prevent the delivery of best practice outcomes or act as a disincentive for best practice solutions to be incorporated into new developments
- Areas of control that can be amended to align with current best practice.



#### Prepare a sustainable community or sustainable neighbourhood code

You may consider preparing a 'sustainability code' that is applicable to key development sites within your LGA (the following case study on Cleveland, Ohio provides a good example of a local government that has done this). Your code could be aligned with the broad principles of the framework or key rating tool credits could be referenced to ensure sustainable outcomes in the area.



#### Best practice zones, codes and master plans

You can align your council's plans with the principles of the national framework to help developers to deliver best practice outcomes and to facilitate the Green Star – Communities certification process.

You can also align specific codes and controls with relevant credits from the rating tool. For example, your stormwater code could be written to align with the rating tool credit Env-8 'Stormwater' (remembering that the rating tool credits will change over time as best practice changes). Green Star – Communities can also inform performance criteria, acceptable solutions and targets within codes and other local planning controls. This may include the incorporation of broad category principles such as 'Liveability', or specific credit criteria for measurement and improvement.



## Align your development assessment process with Green Star – Communities documentation

To improve efficiency and to facilitate the achievement of Green Star – Communities certifications within your LGA, you may wish to align the documentation requirements of Development Approval with the rating tool.



## Removing barriers and paving the way: case studies



## Identifying barriers to better neighbourhood development: Cleveland City Council, Ohio

Three major development projects in Cleveland, Ohio aim to revitalise underutilised city sites and establish mixed-used neighbourhoods. To support these projects the Cleveland Mayor established a team to review council codes and identify barriers to sustainable development and achieving LEED-ND certification. The team held monthly meetings to dissect LEED-ND requirements and to identify and reconcile roadblocks to certification. The council has now also developed a Green Design Overlay (GDO) and is paving the way for sustainability success by offering incentives for developments seeking LEED-ND certification, including tax abatement and reduced parking requirements.

## **Encouraging sustainability from** the outset: Palo Alto City Council, California

Palo Alto City Council has introduced a requirement for major renovation projects and development proposals larger than three dwelling units to undertake a planning review against the LEED-ND rating tool. Prior to the design review, applicants must submit a checklist detailing how their project meets or will face challenges in meeting-LEED-ND prerequisites and credits. The goal is for projects to be eligible for at least 30 points under the rating tool. Projects that cannot earn 30 points are not disqualified from development application; the process is intended rather to encourage developers to consider sustainability from the outset. Projects already pursuing LEED-ND do not need to fill out the checklist and can simply provide evidence of their engagement in the certification process.

The Council reports that many projects that have completed the checklist to date have included significant detail in their responses. This indicates that the process has been successful in encouraging applicants to give careful consideration to best practice development principles.



#### Offer incentives

The provision of incentives (financial, procedural or regulatory) to developers and builders that commit to best practice is an important mechanism to encourage more sustainable development.

In Australia, some local governments are already offering incentives for best practice building design. For example, Gold Coast City Council offers plot ratio bonuses for building proposals that show cutting edge or innovative ecologically sustainable design.

For councils thinking about offering incentives to encourage better community-scale outcomes, the Green Star – Communities national framework and rating tool can provide examples of desirable benchmarks that developers should meet and a method of measuring the results.

#### Take action: incentives that your council can offer



#### Planning bonuses and concessions

You may choose to offer bonus floor space or height allowances for developers that commit to delivering initiatives that are aligned with the framework or rating tool. You can also offer car parking concessions (most relevant in major cities and areas well serviced by public transport) and approve smaller lot sizes and more flexible land use zoning to support affordable housing and mixed-use developments.



#### **Grants and financial incentives**

You can offer financial incentives for development projects that align with the national framework or commit to certification under the rating tool. Some examples include grants or rebates for developers, waiving development application fees and reductions in council rates and utility charges. Councils can also offer cost offsets to developers who commit to delivering developments that will reduce long-term costs to government (energy, water, transport or community infrastructure). The following Brisbane City Council case study demonstrates how grants have been provided in the past for best practice development.



#### **Fast-tracked approvals**

It may be possible for local councils to streamline the development assessment process for developers who commit to delivering a Green Star – Communities certified project.



#### Marketing and public relations

Your council might wish to offer marketing or promotional support, joint events and other opportunities to community-scale development projects that deliver best practice community outcomes.



#### **Technical support**

Provide technical assistance to development teams to help them understand and meet your planning requirements and those of the rating tool.

#### Offering incentives: case studies

#### **Sustainable Development Incentives Program, Brisbane City Council**

From 2009 to 2010, Brisbane City Council offered a Sustainable Development Incentives Program which provided \$9 million in rebates for commercial building developments that achieved a 6 Star Green Star As-Built rating. These cash rebates were provided based on each building's floor area and were capped at \$1 million each. The program aimed to increase the number of best practice buildings in Brisbane and to fast-track industry's capacity to deliver sustainable building design and construction.

#### Green Door Policy, Queensland Government

Between 2009 and 2012, the Queensland Government committed to a fast-tracked development assessment system for projects that demonstrated sustainability. The policy aimed to reduce assessment timeframes, increase the certainty and reduce risk for sustainable projects as well as improve the quality of development applications received and the sustainability outcomes achieved.

#### **Green Neighbourhood Grant Act, State of Illinois**

In 2007, the Governor of the State of Illinois signed the Green Neighbourhood Grant Act, which created state-level incentives for LEED-ND communities. The Act directed the Department of Commerce and Economic Opportunity to fund up to 1.5 per cent of the total development costs for up to three applicable projects per year. To be eligible, neighbourhood developments needed to have LEED-ND certification.



### **Encouraging certification, Oakland Council, California**

The City of Oakland compared its general plan to the USGBC's LEED-ND rating tool and produced an informal report indicating which credits a future development project in the area would be eligible for if it were to target a LEED-ND rating. The council uses this report to encourage developers of larger development projects to pursue LEED-ND standards and certification.

#### **Build capacity**

The momentum for sustainable communities will grow as the knowledge and understanding of what makes a best practice community and how to deliver it expands. Local governments can use the Green Star - Communities national framework and rating tool to facilitate this understanding and build local capacity among council staff and across the entire development supply-chain of developers, designers, transport engineers, planners and product suppliers and manufacturers.

#### Take action: how your council can build capacity



#### **Educate your staff**

Local governments can invest in their own staff by offering training for councillors, managers and officers on sustainable planning, technology and asset management. The GBCA offers a specialised Green Star - Communities training course for local government staff. To express your interest in participating in the course, please contact us.



Work in partnership with developers wanting to achieve sustainable outcomes

> To ensure more sustainable outcomes are delivered it is important that local governments work in partnership with developers, industry and the community. A partnership approach will facilitate improved project outcomes.



#### Offer technical assistance or capacity building programs

To facilitate sustainable communityscale developments in your LGA, you can offer programs that build local capacity and hone the skills of industry professionals such as town planners, urban designers, architects and builders.







#### **Building capacity: case study**

**Building capacity at Bowden Village, Renewal SA, South Australia** 

Renewal SA is developing Bowden Village, a mixed-use community redevelopment project to be delivered over 10 years. Bowden Village is registered to achieve a Green Star – Communities rating. In addition to a Green Star rating for the entire precinct, all multi-unit residential dwellings in the project are to meet a minimum 5 Star Green Star rating (independently certified by the GBCA).

To achieve this, Renewal SA is providing each developer working on projects at Bowden Village with up to 30 hours of technical assistance from local consultants. These consultants will work with project teams to build their capacity to deliver quality project outcomes and provide specific guidance on preparing documentation for the Green Star certification process.

# **Next steps**

To prepare for the future and 'get it right' with our communities, industry and government at all levels must work together to design, deliver and manage best practice developments. Ensure your council is part of the journey towards a more liveable, prosperous and sustainable Australia by:

#### **Contacting us**

Give the GBCA Advocacy team a call on (02) 8239 6200 or email advocacy@gbca.org.au to begin the conversation about ways to deliver better development in your LGA

#### **Learning more**

Review the Green Star – Communities National Framework and the Green Star – Communities Submission Guideline and ensure other staff within your council are aware of these resources.

#### **Registering projects**

Identify council projects that you can register for a Green Star – Communities rating and get in touch with us to begin the registration process.

#### **Engaging locally**

Talk to local developers about the Green Star – Communities National Framework and rating tool and ask them how you can support them to deliver Green Star – Communities certified outcomes.

## **Further information and training**

The GBCA is offering a specialised Green Star – Communities training course for local government to supplement this guide. If you wish to register your interest for this training please contact us.

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# **Appendix**

This matrix summarises the 38 Green Star – Communities rating tool credits and aligns them with the most relevant council function. This matrix can be used to consider how the different functions within in local			Planning and Development						Assets and Operations					
	upport best p asset manag	ractice through planning	Strategic	Master Planning	Development Control	Sustainability/Environment	Social Planning	Economic	Asset Management	Community Facilities	ste	Water and Sewerage		
Credit Name	Credit No.	Aim of Credit	Stra	Mas	Dev	Sus	Soc	Eco	Ass	So	Waste	Wat		
Governance	9													
Accredited Professional	Gov -1	To encourage and recognise projects that promote the active involvement of a GSC Accredited professional.		•										
Corporate Responsibility	Gov - 2	To encourage and recognise projects developed by proponents with defined corporate responsibility values.												
Sustainability Awareness	Gov - 3	To encourage and recognise projects that enhance community and industry knowledge and understanding of sustainability.		•	•	•	•			•				
Engagement	Gov - 4	To encourage and recognise projects that develop and implement a comprehensive stakeholder engagement strategy, specific to the project.		•			•							
Operational Governance	Gov - 5	To encourage and recognise projects that establish community ownership and management arrangement for facilities, programs and infrastructure.	•				•		•	•				
Adaptation and Resilience	Gov - 6	To encourage and recognise projects that are resilient to the impacts of a changing climate and natural disasters.	•	•	•	•	•		•	•		•		
Environmental Management	Gov - 7	To encourage and recognise the adoption of formal environmental management practices.		•	•	•			•		•	•		
Design														
Site Selection	Des - 1	To encourage and recognise projects that are located on previously developed land.	•	•										
Site and Context Analysis	t Des - 2	To encourage and recognise projects that undertake a comprehensive analysis of the site and site context.	•	•	•	•		•	•	•		•		

			Planning and Assets and Operations
Cradit Nama	Credit No.	Aim of Credit	Strategic Master Planning Development Control Sustainability/Environment Social Planning Economic Asset Management Community Facilities Waste Waste
Credit Name  Design	Credit No.	Aim of Credit	
Site Planning and Layout	Des - 3	To encourage and recognise projects that undertake site planning processes designed to facilitate sustainable urbanism.	• • • • • • •
Urban Design	Des - 4	To encourage and recognise projects that apply world-class urban design practices to their developments.	• • • • •
Liveability			
Access to Amenities	Liv - 1	To encourage and recognise projects that provide a high level of access to key amenities.	• • • • •
Community Development	Liv - 2	To encourage and recognise projects that engage in community development activities.	•
Healthy and Active Living	Liv - 3	To encourage and recognise projects that promote healthy and active living.	• • • •
Access to Fresh Food	Liv - 4	To encourage and recognise projects that provide access to local food production and distribution opportunities	• • • •
Safe Places	Liv - 5	To encourage and recognise projects that reduce the likelihood of crime.	• •
Culture, Heritage, and Identity	Liv - 6	To encourage and recognise the interpretation and celebration of places with cultural heritage significance.	• • • •
Accessibility and Adaptability	Liv -7	To encourage and recognise projects that deliver housing and spaces that promote dignified access for all persons.	• • •

			Planning and Development						Assets and Operations				
Credit Name	Credit No.	Aim of Credit	Strategic	Master Planning	Development Control	Sustainability/Environment	Social Planning	Economic	Asset Management	Community Facilities	Waste	Water and Sewerage	
Economic p		7											
Employment and Economic Resilience	Econ - 1	To encourage and recognise projects that have access to local and diverse employment opportunities.	•	•	•			•	•				
Education and Skills Development	Econ - 2	To encourage and recognise projects that provide a range of education and skills development opportunities	•	•			•	•					
Return on Investment	Econ - 3	To encourage and recognise holistic methods to assess return on investment.					•	•					
Community Investment	Econ - 4	To encourage and recognise projects that invest in infrastructure within the development for community benefit.		•	•		•	•	•	•			
Affordability	Econ - 5	To encourage and recognise projects that promote housing and living affordability.	•	•		•		•	•	•		•	
Incentive Programs	Econ - 6	To recognise and encourage projects that provide incentives to encourage sustainable practices that reduce the cost of living and working.		•	•	•		•	•				
Digital Economy	Econ - 7	To encourage and recognise projects that use digital infrastructure to create greater efficiencies in the connection of goods, services, people and information.		•	•			•	•				
Peak Electricity Demand	Econ - 8	To encourage and recognise projects that reduce the need for electricity infrastructure augmentation to address growing peak electricity demand.	•	•	•			•	•				
<b>Environmen</b>	nt												
Site Sensitivity	Env - 1	To encourage and recognise projects that avoid or minimise impacts on environmentally sensitive sites.	•	•	•	•							
Ecological Enhancement	Env - 2	To encourage and recognise projects that enhance the ecological value of the site.	•	•	•	•			•				
Heat Island Effect	Env - 3	To encourage and recognise projects that reduce heat island effect.		•	•				•				
Light Pollution	Env - 4	To encourage and recognise projects that minimise the adverse impacts of light emissions.		•	•	•			•			_	

			Planning and Development				A: O					
Credit Name	Credit No.	Aim of Credit	Strategic	Master Planning	Development Control	Sustainability/Environment	Social Planning	Economic	Asset Management	Community Facilities	Waste	Water and Sewerage
Environmen	it											
Greenhouse Gas Emissions	Env - 5	To encourage and recognise projects that minimise the greenhouse gas intensity of energy supplied to the community.	•	•	•		•		•			
Green Buildings	Env - 6	To encourage and recognise projects that deliver green buildings within the development.		•	•				•		•	•
Potable Water Consumption	Env - 7	To encourage and recognise projects that minimise consumption of potable water.		•	•	•			•			•
Stormwater	Env - 8	To encourage and recognise projects that minimise the adverse stormwater impacts of urban development on receiving water bodies.		•	•	•			•			•
Materials (applicable only to infrastructure and public works)	Env - 9	To encourage and recognise projects that reduce the environmental impact of material consumption.			•	•			•	•	•	
Waste Management	Env - 10	To encourage and recognise projects that reduce the environmental impact of waste.			•						•	
Transport	Env – 11	To encourage and recognise projects that reduce the environmental impact of transportation.	•	•	•				•			
Innovation												
Innovation	Env - 1	Inn - 1 To encourage and recognise projects that adopt innovation in the planning, design and delivery of communities.	•	•	•	•	•	•	•	•	•	•

<sup>\*</sup> This table is based on the credits detailed in the Green Star – Communities PILOT Submission Guideline dated 2 July 2012.

# **Our Sponsors**

The Green Building Council of Australia (GBCA) would like to thank all Green Star – Communities sponsors for their support in the development of the Green Star – Communities PILOT rating tool.

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# **Acknowledgements**

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#### **Project Supporters**

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