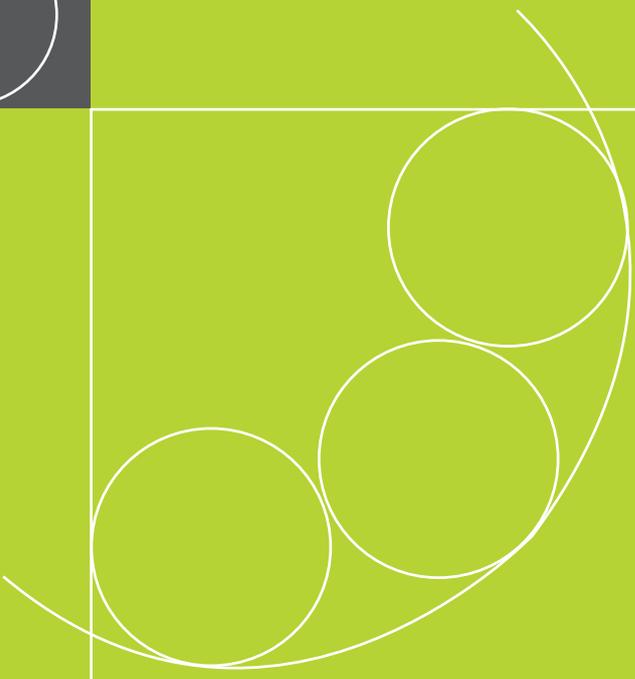


Government Property Group

Australasian Procurement and Construction Council Inc

NATIONAL FRAMEWORK FOR SUSTAINABLE GOVERNMENT OFFICE BUILDINGS





Australasian Procurement and Construction Council
National Framework for Sustainable Government Office Buildings
March 2010

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FOREWORD

Globally the world organisations have been seeking positive outcomes through sustainable development and asset management. By incorporating sustainable principles and practices, asset procurement and management has the potential to reduce negative outcomes for society and the natural environment.

Building construction and operation have extensive direct and indirect impacts on the environment. Buildings use significant resources such as energy, water and raw materials, generate waste (occupant, construction and demolition) and emit potentially harmful emissions. Environmental sustainability and the impact of the built environment upon our climate are important considerations in the planning and delivery of government projects.

Governments as prime users of office space across Australia are well placed to improve the performance of their building stock by adopting sustainable practices.

The Government Property Group (GPG) through the Australasian Procurement and Construction Council (APCC) reports to the Council of Australian Governments (COAG). The GPG is working to make buildings more sustainable through the development of a National Framework for Sustainable Government Office Buildings (Framework).

The purpose of the Framework is to provide a set of national principles to assist the State and Territory governments in the adoption of a national approach to improving the sustainability of the built environment.

Jurisdictions will be able to customise the Framework to suit the management of their respective property portfolios and reflect the principles in the form of policies, guidance material, training and tools for use by practitioners.

The Framework supports and encourages collaboration between government jurisdictions to develop national programmes and tools to promote the principles of sustainable procurement and management of office buildings and to share experiences.

Leadership by governments can provide the necessary incentive for business to adopt innovative and sustainable practices which benefit us all.

Australians have much to gain from the implementation of sustainable office building practices by their governments, that are well placed to lead by example in the promotion and adoption of sustainable practices.

Mal Grierson
Chair, Australasian Procurement and Construction Council Inc

INTRODUCTION

Perceptions of 'green' have evolved across industry and the community and recognition of the need to change is gathering momentum in many arenas. In recent years there has been an increasing awareness of the need for sustainable office buildings.

Across Australia, companies, organisations and governments are strengthening their commitment to sustainability and seeking to reduce the environmental impact of office buildings.

A study commissioned by the Australian Sustainable Built Environment Council found that the building sector is responsible for 23% of Australia's total greenhouse gas emissions (GHG), and energy use in buildings is rapidly growing.¹

Office buildings alone represent 8.8% of the national greenhouse emissions and play a major part in meeting Australia's international greenhouse targets. They also account for as much as 10% of a capital city's water use.

The Government Property Group (GPG) collectively manages more than four million square metres of office space (which is roughly the equivalent of the total area of the Melbourne central business district). Government, therefore, has a major influence on the sustainability agenda through the vast amount of space they occupy and own.

The GPG has developed this National Framework for Sustainable Government Office Buildings (Framework) as a set of agreed national principles to guide State and Territory governments in the implementation of sustainable office building practices.

Implementation initiatives incorporated in this Framework will take in account value for money over whole-of-life considerations rather than just initial cost.

The GPG encourages wider adoption of sustainable procurement and management of office buildings through partnerships between governments, organisations, industry and the not-for-profit sector.

¹ ASBEC, 2008, *the second plank – building a low carbon economy with energy efficient buildings*.



SUSTAINABLE BUILDINGS

Sustainable development can be defined as "meeting the needs of the present generation without compromising the ability of future generations to meet their own needs". This definition first appeared in 1987 in the UN Brundtland Report² which commenced a public discussion that is becoming more active as the consequence of climate change becomes more prevalent.

The definition of **sustainable building** is constantly changing, however common opinions of sustainable or 'green' buildings are that they should be designed and operated to reduce the overall impact of the built environment on human health and the natural environment by:

1. Efficiently using energy, water, and other resources.
2. Protecting occupant health and improving employee productivity.
3. Reducing waste, pollution and environmental degradation.

These elements are reflected in definitions of sustainable buildings by the Organisation of Economic Co-operation and Development (OECD) as well as the Green Building Council of Australia (GBCA).

Sustainability in the asset management of State and Territory government office portfolios should include some of the typical key features of sustainable office buildings such as:

- Integrated building fabric design and building services.
- Climate responsive design and operation.
- Energy conservation, generation and management.
- Water conservation, recycling and management.
- Resource efficiency.
- Re-use of materials, façade, structure, building services and building components (for refurbished buildings).
- Efficient land use.
- Improved indoor environment quality (IEQ).
- Improved social amenity, health and well-being.
- Waste minimisation.
- Sustainable transport opportunities.
- Reduced pollution emissions.

² Brundtland commission, 1987. *Our Common Future*, Brussels: World Commission on Environment and Development.

This framework focuses on an agreed set of principles which should be integrated into business as usual in the development of strategies to implement sustainable government office buildings.

BENEFITS OF SUSTAINABLE BUILDINGS

The benefits of sustainable buildings range from energy and water savings, to increased worker productivity, to overall environmental sustainability and conscientious use of local resources. The public sector, industry and the community have much to gain by governments taking a leadership approach in the implementation of sustainable office building practices. Some of these benefits include:

Economic

- Lower recurrent/operational costs.
- Lower capital costs achieved through improved efficient building performance.
- Improved efficient use of space through higher tenant retention and reduced vacancy rates.
- Reduced risk of obsolescence.
- Longer operating life of building assets.

Environmental

- Reduced greenhouse gases from office buildings.
- Reduced carbon footprint of buildings.
- Support for the achievement of government's broader environmental targets.
- Reduced water consumption.
- Waste reduction and disposal savings.

Social

- Improved staff health and wellbeing.
- Respond to growing government and community expectations.
- Attract and retain high level of staff to contribute to organisational productivity.
- Reduce absenteeism.
- Support the implementation of government urban and regional planning.

IMPLEMENTING THE NATIONAL FRAMEWORK FOR SUSTAINABLE GOVERNMENT OFFICE BUILDINGS

Role of the Government Property Group

The Government Property Group (GPG) is a national body comprising members who have responsibility for government property in each of the State and Territory governments. The GPG reports to the Australasian Procurement and Construction Council (APCC).

Implementation of the Framework will be undertaken by jurisdictional members of the GPG. Overall responsibility for implementing and reporting on the Framework and its objectives will be by the GPG. The key implementation activities are:

- Providing leadership by government in the achievement of a sustainable government portfolio;
- Coordinating and monitoring the implementation of initiatives identified in the Framework;
- Providing access to resources and knowledge across the GPG network;
- Promoting the Framework to industry and the wider community; and
- Reporting on progress and outcomes.

Implementation by GPG member jurisdictions will be coordinated around the six guiding principles of the Framework to support and encourage collaboration between the jurisdictions and the development and sharing of knowledge, experiences and tools.

PRINCIPLES THAT GUIDE THE IMPLEMENTATION OF A SUSTAINABLE OFFICE BUILDING PORTFOLIO

These principles will be used to guide jurisdictions to develop sustainable building strategies, policies, guidance material, training and tools. The six principles of the Framework are:

- 1. Reduce the impact of office buildings on the natural environment;**
- 2. Respond to the adaptation challenges associated with climate change;**
- 3. Improve the cost effectiveness and efficiency in the use of office buildings;**
- 4. Enhance the health, wellbeing and productivity for occupants;**
- 5. Demonstrate leadership in the procurement and management of government office accommodation; and**
- 6. Identify opportunities for strategic asset management to contribute to community sustainability.**

These guiding principles will be supported by the implementation of key initiatives. These initiatives will incorporate targets and action plans and will form the basis of ongoing monitoring and reporting by jurisdictions through the GPG and APCC.

PRINCIPLE ONE

Reduce the impact of office buildings on the natural environment

Key initiatives are:

- Adopt nationally consistent environmental rating tools for office fitouts (new and refurbished), and office buildings (new and refurbished).
- Develop strategies to reduce energy consumption and carbon footprint in government-occupied owned and leased space.
- Develop and implement a nationally consistent green leasing policy.
- Minimise waste to landfill and maximise recycling opportunities in government office accommodation.
- Develop strategies that promote the Framework to industry and the wider community.

PRINCIPLE TWO

Respond to the adaptation challenges associated with climate change

Key initiatives are:

- Adopt strategies that reduce the risk to building operation due to the effects of climate change.
- Develop strategies to reduce water consumption in government-occupied owned and leased space.
- Share leading-edge green building design and innovative solutions.

PRINCIPLE THREE

Improve the cost effectiveness and efficiency in the use of office buildings

Key initiatives are:

- Promote the use of Energy Performance Contracts (EPC) to upgrade government office buildings.
- Employ flexible workplace principles to improve space efficiency and effectiveness.
- Improve government agencies' strategic office accommodation planning.
- Adopt a “Triple Bottom Line” approach to the performance measurement of building assets.

PRINCIPLE FOUR

Enhance the health, wellbeing and productivity for occupants

Key initiatives are:

- Provide workplaces that are consistent with the social aspects of triple bottom line reporting (appropriateness, accessibility and building condition) to enhance wellbeing and productivity.
- Promote facility management practices to improve indoor environment quality (IEQ) of buildings.



PRINCIPLE FIVE

Demonstrate leadership in the procurement and management of government office accommodation

Key initiatives are:

- Adopt sustainable procurement guidelines for furniture, equipment, materials and cleaning products.
- Influence occupant behaviour to improve building sustainability.
- Work with the Commonwealth to develop a leadership model in relation to mandatory disclosure.
- Continue to implement Strategic Asset Management principles which include environmental sustainability.

PRINCIPLE SIX

Identify opportunities for strategic asset management to contribute to community sustainability

Key initiatives are:

- Support initiatives that align with urban planning and reduce the burden on public infrastructure e.g. Transit Oriented Developments, roads, public transport systems.
- Explore opportunities to optimise the use of government buildings for community purposes (particularly in regional areas).

ACRONYMS & GLOSSARY

APCC - Australasian Procurement and Construction Council Inc.

Best practice – The most efficient, well-defined methods to evolve and utilise revenue and business opportunities in the delivery of services that can be leveraged from one organisation to another.

Carbon footprint - The measure of the impact of an entity or product's total amount of greenhouse gas emissions created directly or indirectly and released into the atmosphere over a given time frame. For simplicity of reporting, it is often expressed in terms of the amount of carbon dioxide (CO₂).

Environmental Rating Tools – Evaluate and score the energy performance of a building against a selection of criteria. National Australian Built Environment Rating System (NABERS) and 'Green Star' are examples of voluntary national schemes that 'score' efficiency in terms of performance and design respectively.

Facility management - The process of planning, managing, maintaining, rationalising and accounting for facilities and associated services in a cost effective manner aimed at long-term preservation of the asset value.

Flexible workplace - Workplace arrangements such as hours of work, work location and the way work is carried out are mutually changed to match individual and business needs in terms of improving efficiencies and productivity.

Framework - National Framework for Sustainable Government Office Buildings.

GBCA - Green Building Council of Australia.

GHG - Greenhouse Gas.

GPG - Government Property Group; national body comprising members who have responsibility for government property in each of the Australian, State and Territory governments.

IEQ - Indoor Environmental Quality; the overall comfort of a building's interior and the comfort and health of its occupants. Many factors may contribute to indoor environmental quality, including use of daylighting, passive design and natural ventilation, indoor air quality (IAQ) and the presence volatile organic compounds (VOCs) or other contaminants and pollutants released by certain building materials.

ACRONYMS & GLOSSARY continued

OECD - Organisation of Economic Co-operation and Development; main forum for monitoring and evaluating economic trends and developments in its 30 member countries.

SAM - Strategic Asset Management; a framework that promotes better practices owing to the planned alignment of physical assets with service demand through systematic management throughout the life of a physical asset (planning, provision, management, maintenance, and eventual disposal of assets).

Sustainable buildings - Buildings which are designed and perform to minimise their impact on, or positively contribute to, the social, economic and environmental elemental surrounds.

Sustainable development - Development that meets the needs of the current generation without compromising the potential for future generations to meet their own needs. This also implies the capacity of a development project to endure organisational and financial changes over time.

TBL - Triple Bottom Line; taking into account the interrelated social, economic and environmental elements when evaluating the impact, performance and effects of activities as a 'holistic' approach to sustainable development.

TODs - Transit Oriented Developments; mixed use developments, located along major public transport corridors and generally centred on public transport infrastructure (bus and train stations, interchanges, etc). TODs are designed to encourage more sustainable transport behaviour through encouraging reduced reliance on motorised private transport, encouraging pedestrian mobility and synergies between complementary mixed land uses.

REFERENCES

Australian Sustainable Built Environment Council (ASBEC), 2008. *The second plank – building a low carbon economy with energy efficient building*.

Brundtland commission, 1987. *Our Common Future*, Brussels: World Commission on Environment and Development.



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