



EVERY BUILDING COUNTS

THE JOURNEY TOWARDS SUSTAINABILITY IN THE PERTH SOUTH WEST METROPOLITAN REGION

September 2021

PURPOSE OF THIS REPORT

In 2019 the Property Council of Australia produced a report titled “[Every Building Counts - a practical plan for emissions reduction in the built environment](#)”. The report is aimed at the three tiers of Government and provides recommendations (‘pathway’) for how the sector can help transition to, among other things, net zero. The report includes a [specific section for Australian Local Governments](#).

The South West Group is an alliance of six Local Governments in the South-West Metropolitan Region of Perth. Part of the Group’s role is advocating for the region’s needs and opportunities, including greater investment in enabling infrastructure and improvements to the policy, legal, regulatory and planning environment affecting the Region.

The Group has the following strategic goals in relation to its advocacy program:

- Position the Group as a credible and respected voice for a united region and a key stakeholder in the decision-making processes that affect the Region.
- Build the profile of the SWG, its policy positions and strategic objectives with Federal and State Governments, media and key influencers and decision-makers.
- Develop strong working relationships with stakeholders that influence or make major decisions that affect the region.
- Form partnerships that assist regional advocacy efforts

To support these strategic goals, the Group has collated information from its member councils that relate to the recommendations in the PCA’s report. This response is intended to build awareness of the activities of South West Group Local Governments in this arena, and to strengthen the Group’s relationship with important stakeholders like the Property Council of Australia.

Following the ‘context’ section, this report is structured using the five key themes within the PCA report: 1. Net zero buildings plan; 2. Government leadership; 3. Incentivise high performance; 4. Robust rating tools for different building types; and 5. Transform markets for materials and products.

CONTEXT

The South West Group (SWG) and its six member councils (Cities of Cockburn, Fremantle, Kwinana, Melville and Rockingham and the Town of East Fremantle) have been on a journey towards sustainability for at least the last twenty years.

A major milestone was the investment in waste recycling through the creation of the \$100 million South Metropolitan Regional Council Regional Resource Recovery Centre (SMRC) in the early 2000's. The SMRC received the WA Government 2021 Waste Award for its contribution to recycling and waste minimisation (see Figure 1). The SMRC initiative was followed by water conservation programs, river and coastal pollution management initiatives, green space development and rehabilitation, promotion of active transport, a region NRM Plan and tree canopy enhancement.



Figure 1: Presentation of the WA Government 2021 Waste Award to the SMRC

Another part of the journey to sustainability was the development of Wellard Village near Kwinana as a partnership between Peet Co. and the Department of Housing. The selected use of zero setback and Transit Orientated Design produced an award winning development that took advantage of the construction of the Perth Mandurah Heavy Rail line in 2007 (see Figure 2).

The SWG has a sustained interest in the preservation of built heritage as well as the region having cutting edge infrastructure. The SWG, through the South West Corridor Development Foundation, obtained significant funding for refurbishment of heritage buildings in Fremantle in the mid 1980's ahead of the defence of the America's Cup. At this time there were also deep retrofits of commercial buildings supported by the City of Fremantle such as the expansion of the Esplanade Hotel.

Five members of the SWG have supported the WA Local Government Association Climate Change Declaration that demonstrates their acknowledgment of the impacts of climate change and their commitment to developing locally appropriate mitigation and adaptation strategies to manage climate change.



Figure 2. Invita Apartments Wellard Village

A current redevelopment in the Town of East Fremantle is the Royal George Hotel is aiming to be designed to a Five Star Green Star standard.



Figure 3. Royal George Hotel East Fremantle aiming for Five Star Green Star

Local governments in Western Australia have a statutory obligation to “use their best endeavours to meet the needs of current and future generations through an integration of environmental protection, social advancement and economic prosperity.”

The City of Cockburn is an excellent example of the journey to sustainability being undertaken by region local governments. Figure 4 is taken from the City of Cockburn Climate Change Strategy 2020 – 2030.

The Region will be a significant contributor to Perth’s growth. Between 2016 and 2036, it is estimated that \$24.6 billion will be invested in the Region in dwelling construction, with the Region expected to grow at a faster rate than other parts of Metropolitan Perth, from a population of 454,000 today to almost 625,000 by 2036 (source: Informed Decisions).

The SWG welcomes the initiative by the Property Council of Australia and the Green Building Council of Australia to set up a vision for net zero buildings and to propose constructive actions towards this vision.

Although local governments across Australia differ in size and capability, they typically have a unique relationship with their own communities and have many mechanisms for informing, motivating and demonstrating pathways for environmental protection, social advancement and economic prosperity. They also are best placed to build resilience and adaptive capacity within their own communities.

The SWG agrees that local governments are an increasingly important driver of emissions abatement in the built environment. The SWG also accepts that through functions such as regulating the development process and influencing local attitudes and behaviours, councils have an opportunity to drive better outcomes in relation to our buildings and cities, whilst delivering long-term social, environmental and economic benefits.

In 2013, the SWG developed and began implementing its *Regional NRM Strategy: A regional approach to Natural Resources Management (NRM) in the South West Metropolitan Region* to protect and enhance the environment for its community. A Regional NRM Facilitator was appointed in 2014 to work with member Councils to implement the Regional NRM Strategy. The program is still operational today.

The SWG and its member councils welcome the opportunity to work in partnership with State and Federal Governments, the community and industry to ensure that carbon emissions within the geographical area of the South West Metropolitan Region of Perth (SWMR) reach net zero by 2050.

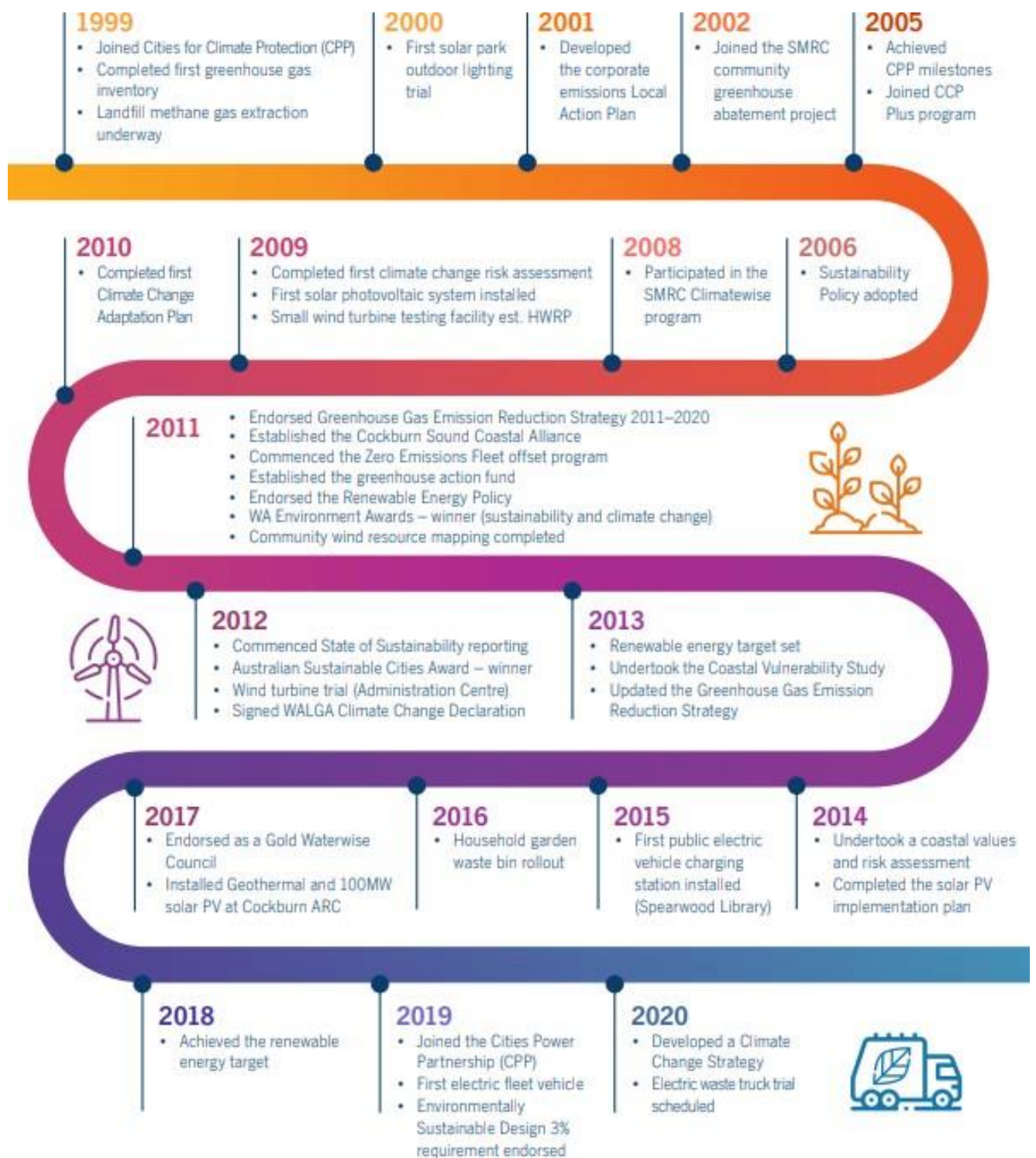


Figure 4. City of Cockburn Climate Change Journey

THEME 1: A NET ZERO MUNICIPAL BUILDINGS PLAN

The South West Group member councils are at different stages of setting a long-term vision for net zero buildings or net zero for their own operations. In 2009, the City of Fremantle was the first carbon-neutral local government in Western Australia. The City of Melville has recently committed to reduction of carbon emissions caused by its operations to net zero by 2030 and to work with State and Federal Governments, the community and industry to ensure that carbon emissions within its geographical area reach net zero by 2050. The City of Rockingham aims to be carbon negative by 2030 by sequestering carbon from the environment, using renewable energy and offsetting more carbon than is emitted in its operations.

Table 1. Position on a Net Zero Municipal Net Buildings Plan or Net Zero by 2030

| LGA | Position | Comment | Climate Action Plan |
|----------------|---|---|--|
| Cockburn | Formal Support | Target of Net Zero by 2030 | Climate Change Strategy 2020 -2030 |
| East Fremantle | Formal Support | Target of Net Zero by 2030 | Climate Emergency Strategy |
| Fremantle | Formal Support | Maintain Net Zero to 2030 | One Planet Action Plan 2020 - 2025 |
| Kwinana | Proactive in ameliorating impacts of climate change | Climate Change plan embedded into every project and process | Climate Change Plan 2021- 2026 |
| Melville | Formal Support | Resolution June 15, 2021 to Net Zero by 2030 | Draft Climate Action Plan within two years |
| Rockingham | Formal Support | Target of Carbon Negative by 2030 | Sustainability Strategy 2020 |

All of the SWMR local governments have local planning strategies and local planning schemes to support urban consolidation, encourage intensity in and around activity centres, promote transit oriented development, create housing choice, improve local employment and encourage sustainable transport options.

The SWMR local governments are all influencing local attitudes and behaviours for better long term social, environmental and economic outcomes. All local governments employ sustainability officers. They are taking a leadership position in managing waste and a move to Food Organics, Garden Organics (FOGO) to improve waste diversion from landfill. And all local governments have installed water and power metrics within their own facilities, as well as e-waste recycling drop-off points throughout their municipalities that are well used by their communities.

THEME 1: SOUTH WEST GROUP POSITION:

- Support a local government target of Net Zero by 2030 for council own operations and to work with State and Federal Governments, the community and industry to ensure that carbon emissions within its region reach net zero by 2050
- Support regional local governments in regional sustainability projects and planning as well as promote partnerships and pilot projects to support positive long term social, environmental and economic outcomes.

THEME 2: GOVERNMENT LEADERSHIP

Local governments in the SWMR do have consistent planning pathways that support innovation.

However, the maintenance of a fit for purpose Local Planning Scheme is a complex and resource intensive process. For example, the City of Fremantle Local Planning Scheme No. 4 was gazetted on 8 March 2007. This has been supplemented and updated since its gazettal by the following (as at October 2019):

- 79 amendments to the Scheme
- 10 local structure plans
- 2 local development plans
- 99 local planning policies
- a Local Heritage Survey and Heritage List (incorporating 2,443 places and 23 heritage areas)
- a Significant Tree Register (established in 2018 and initially incorporating 5 trees)

There is a State Government resistance to incorporating bespoke clauses in local planning schemes.

There are development incentives to encourage energy efficient building design (Green Star of equivalent) are already included in some local planning strategies (Canning Bridge City of Melville, Knutsford Street East, City of Fremantle. The City of Cockburn has provision for a floorspace bonus for developers achieving affordable housing thresholds. The City of Rockingham has provision density/height incentives within its city centre.

The City of Fremantle has had a long history of partnerships through consistent planning pathways that encourage innovation to produce award winning sustainability outcomes. Two of Development WA's Innovation through Demonstration projects are in the City of Fremantle – WGV and East Village at Knutsford. Another two Innovation through Demonstration projects are in the City of Cockburn – OneOneFive Hamilton Hill and Salt Lane Coogee.

The City of Melville has a MOU with Murdoch University for supporting and developing innovative products that underpin sustainability for the City and the wider community. The city monitors the real time energy and water performance of fifteen of its buildings under the SMART microgrid project.

Local governments in the SWMR are leaders in the actions to reduce emissions and monitor environmental performance with their land use, infrastructure and buildings. The City of Rockingham has installed 600kw of solar panels that generated more than 1 million kwh in 2019/20 and capture methane gas emissions from landfill and convert it into energy. The City of Cockburn sourced 26% of the energy demands of its buildings from solar power in 2019/20 and had over 500 electricity, gas and water meters uploaded to the Kinesis platform to monitor the City's corporate energy and water use online.

The City of Kwinana reported, that in implementing its Climate Change Mitigation and Adaptation Plan 2015-2020, a number of key achievements in that five year period including:

- A 30.2% reduction in greenhouse gas emissions per capita, far exceeding the Plan's 10% target
- Installation of 7 solar systems, totalling 183kW, on City facilities, bringing the City's total solar photovoltaic capacity across all facilities to 217kW
- Adoption of a Green Building Policy
- Comprehensive energy audits of four City facilities
- Recognition in WALGA's Climate Change Governance Study as one of the best plans in WA Local Government

The City of Rockingham in its Sustainability Snapshot Report 2020 detailed the following achievements:

- The operation of a carbon neutral vehicle fleet
- Having solar panels fitted at all of its top ten energy using facilities totalling 600kW
- 92 City facilities being installed with solar PV totalling 3,046 panels
- 235 street lights being converted to LEDs reducing annual energy consumption by 9,000 kw
- 80,000 tonnes of Carbon Dioxide equivalent were captured from waste in 2019/20 with captured gases being converted into 13,000 MWh of electricity
- 27,000 native seedlings planted

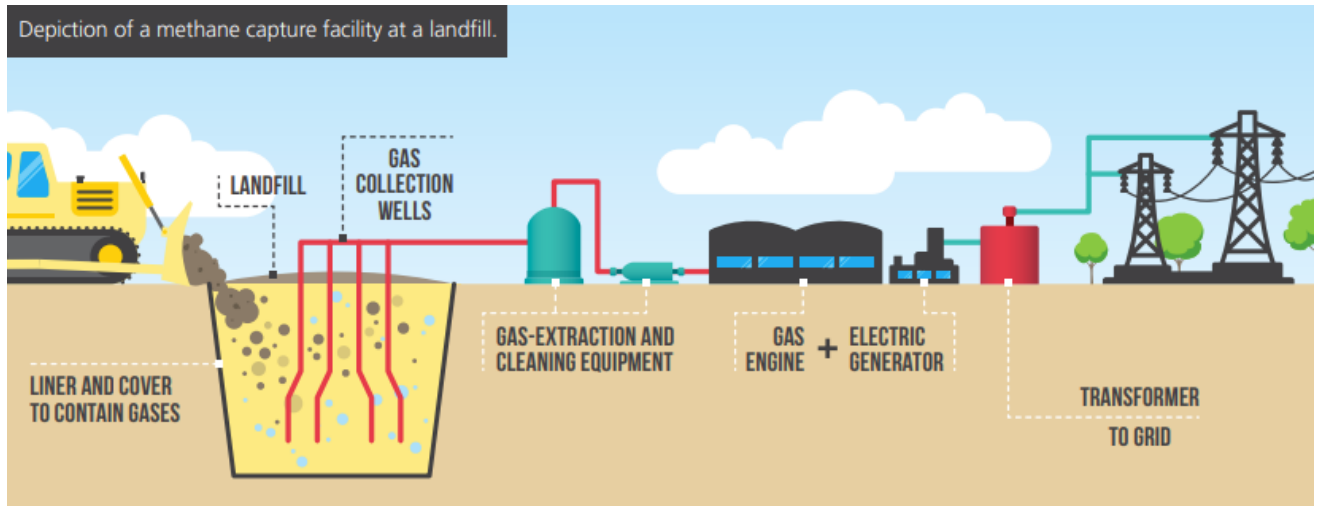


Figure 5. Methane capture from Landfill

Source City of Rockingham

Across the region all decision making on council assets requires assessment against sustainability and climate change risk. Councils are involved in multi-faceted sustainability initiatives to improve the community understanding of the need to reduce emissions. Some council libraries have kits which can be used to monitor building performance. The City of Rockingham is planning issue of a sustainable home guideline in 2022. The City of Fremantle has partnered with demonstration projects such as Josh's House. The City of Melville has established the Piney Lakes Environmental Education Centre as both an example of sustainable building construction and as a focus for environmental education. The City of Rockingham

THEME 2: SOUTH WEST GROUP POSITION:

- Supports consistent planning processes that incentivise or encourage innovation
- Believes that its member local governments are leading by example with their own land use, infrastructure and buildings to reduce emissions and monitor environmental performance
- Supports all decision making on infrastructure, community facilities and council assets should be in alignment with emission reduction targets and addressing climate change risk
- Believes that its member councils are working to ensure that all members of the community understand the need to reduce emissions and have access to tools to support decision making and are also working towards the community having positive attitudes and behaviours to reducing emissions
- The provision of direct support to low income and vulnerable households and consumers is not a role undertaken by members of the SWG

THEME 3: INCENTIVISE HIGH PERFORMANCE

The City of Melville has incentivised high performance buildings by providing incentives for energy efficient building design in the Canning Bridge Activity Centre Plan. The response from developers has included buildings such as Cirque on Kishorn that won the 2020 UDIA National Awards for Excellence - High Density Development Award, the 2019 Australian Institute of Architects WA Chapter Awards: The Harold Krantz Award for Multiple Housing, the 2019 UDIA Awards - Russel Perry Award and High Density Award (see Figure. 6). Similar incentives are included in the Knutsford Street East and City Centre precincts in Fremantle and at Cockburn Central.

Limited action is currently being taken to positively influence energy and resource conservation by buildings occupants other than by community education programs.

Region local governments do not provide specific incentives for energy efficient retrofits or tune up of older office buildings or homes. The SWG may source project funding through the South West Corridor Development Foundation for energy efficient retrofits or tune up of older office buildings or homes if funding schemes are available.

Local governments do have website linkages to the Nationwide House Energy Rating Schemes (NatHERS), the National Construction Code, the Australian Your Government's website, the Building Commission website and the Local Planning Policy LPP-1.5 Energy Efficiency in Building Design to provide guidance for building retrofits.

The City of Rockingham, though its Planning Policy Framework includes density/height incentives in its City Centre to encourage sustainable measures (energy, water, waste, air quality and material selection) at all stages of development and operation.

The City of Fremantle may provide incentives if there is a new build component of a retrofit project.

The Town of East Fremantle strongly encourages the retrofit of existing buildings rather than demolition and will work with owners/developers to preserve existing structures.

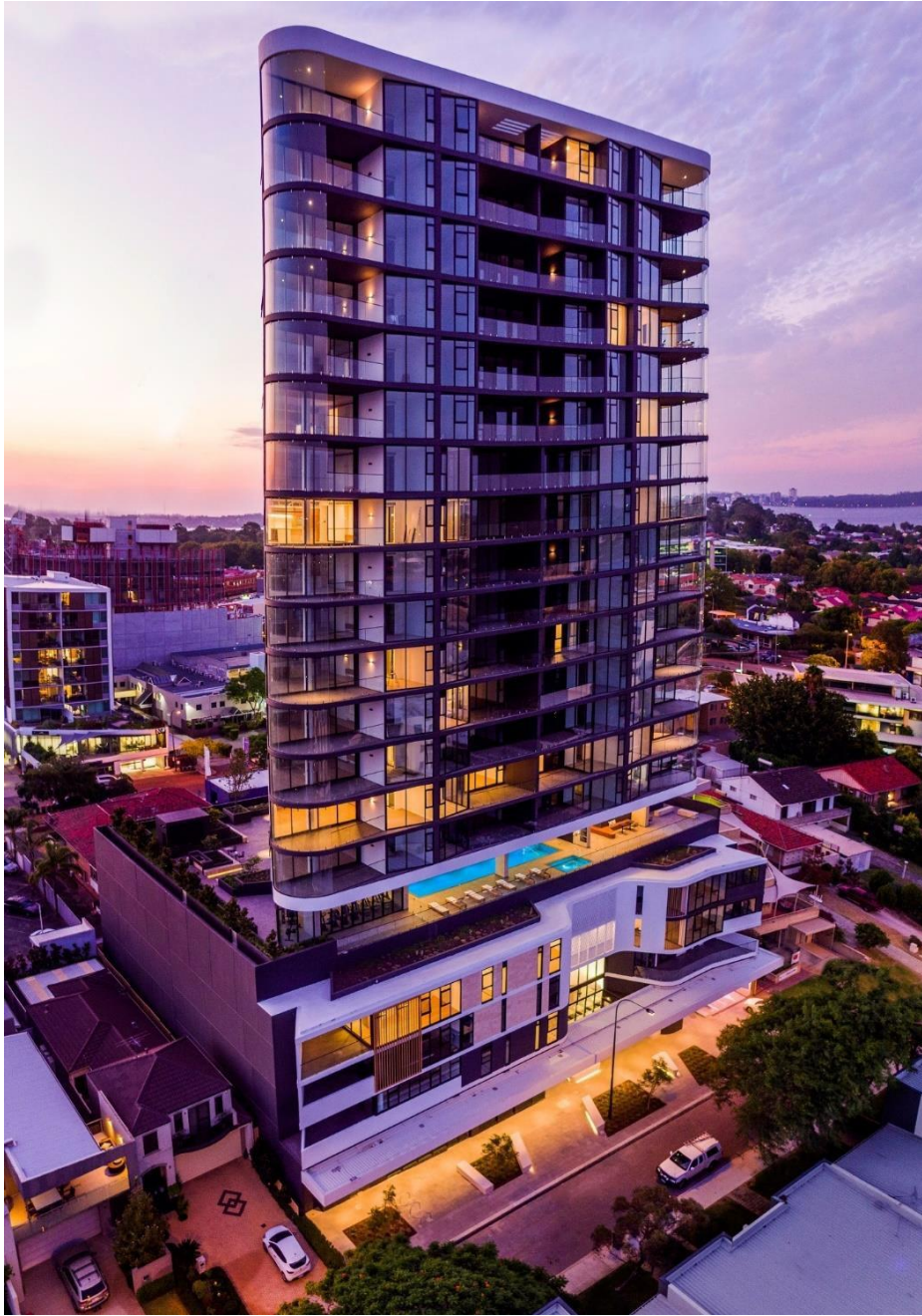


Figure 6. Cirque on Kishorn at Canning Bridge

THEME 3: INCENTIVISE HIGH PERFORMANCE SOUTH WEST GROUP POSITION:

- Support the incentives such as height and density within defined activity areas to incentivise high performance
- Regional local governments are unlikely to have extensive impact on the mid-tier office building market or routinely provide financial incentives for high performance buildings
- Support sectoral leadership by local government for affordable housing and heritage protection
- Support deep retrofits of existing homes particularly in the local governments with defined heritage areas

THEME 4: ROBUST RATING TOOLS FOR DIFFERENT BUILDING TYPES

There are multiple rating tools in use in Western Australia and throughout the SWMR.

Listed below are regional examples of tools and frameworks:

PassivHaus Australian Passive House Association

The My Home Project in North Fremantle involves 18 self-contained single bedroom units designed to Passive House standards. The construction method uses timber pre-fabricated wall, roof and floor cassette systems which are delivered to site with insulation, external cladding, windows and cavities for services.



Figure 7. My Home Project Housing

Source: Design Freo

NatHERS Nationwide House Energy Rating Scheme

Josh's House Hilton 10 star

Nightingale Fremantle 9.5 star

Shoreline Estate North Coogee 9.0 Star

Green Star Green Building Council of Australia

Calleya Six Star Green Star – Communities for 1724 lot subdivision

Tuart Lakes Lifestyle Village Baldivis Six Star Green Star

Walyalup Koort Fremantle Five Star Green Star

Royal George Redevelopment East Fremantle seeking to be designed to Five Star Green Star



Figure 8. Tuart Lakes Lifestyle Village Baldvis Six Star Green Star

Source: Stantec

NABERS National Australian Built Environment Rating System, principally for commercial buildings

Rockingham Centre 4.0 Stars Energy Rating, 4.0 Stars Water Rating

One Planning Living Framework Bioregional

WGV White Gum Valley

Evermore White Gum Valley

It is still too early in the development of rating tools and frameworks to consider supporting a single approach.

There is also currently no standard process for comparing sustainability initiatives or energy efficiency of homes, and there is no State requirement for mandatory disclosure of energy efficiency for homes being bought, sold or leased.



Figure 9. Walyalup Koort Fremantle Five Star Green Star



Figure 10. 150-152 Riseley Street Four Star NABERS



Figure 11. Rockingham Centre NABERS 4.0 Stars Energy Rating, 4.0 Stars Water Rating

Source: Vicinity Centres

THEME 4: ROBUST RATING TOOLS FOR DIFFERENT BUILDING TYPES SOUTH WEST GROUP POSITION:

- Consider advocacy for mandatory energy ratings of homes and commercial buildings at time of sale
- Delay endorsement of a single rating scheme for homes but encourage comparability between rating schemes and frameworks
- Support the use of trusted, robust and credible rating schemes for government projects

THEME 5: TRANSFORM MARKETS FOR MATERIALS AND PRODUCTS

Local governments role is typically ensuring compliance with the provisions of the Building Code of Australia, the National Construction Code and relevant Australia Standards.

SWMR local governments will continue to work towards demonstrating the use of new products, practices and services in their own projects but are unlikely to provide financial incentives.

SWMR local governments will work with developers and owners to incorporate innovative products, practices and services into projects as they have done with many of the projects profiled in this response.

As outlined in the response to Theme 1, SWMR local governments will work with State and Federal Governments, the community and industry to support a nationally coordinated strategy to achieve net zero embodied carbon.

THEME 5: TRANSFORM MARKETS FOR MATERIALS AND PRODUCTS SOUTH WEST GROUP POSITION:

- Support Australian leadership in high performance building products
- Work with State and Federal Governments, the community and industry to support a nationally coordinated strategy to achieve net zero embodied carbon

RESOURCES AND REPORTS

City of Cockburn

- Climate Change Strategy 2020 - 2030 [ECM 9832294 v5 Climate Change Strategy 2020-2030 \(cockburn.wa.gov.au\)](#)
- Sustainability Policy [ECM 4134030 v7 Sustainability - Policy \(cockburn.wa.gov.au\)](#)
- Sustainability Strategy 2017 - 2022 [ECM 6834071 v1 CoC Sustainability Strategy 2017-2022 Web \(cockburn.wa.gov.au\)](#)
- State of Sustainability Report [ECM 9754871 v10 State of Sustainability 2019 2020 \(cockburn.wa.gov.au\)](#)
- OneOneFive Hamilton Hill Project [OneOneFive Hamilton Hill - Overview - DevelopmentWA - Shaping our State's future](#)
- Salt Lane Project [Salt Lane - Overview - DevelopmentWA - Shaping our State's future](#)
- Affordable Housing for Developers [Affordable Housing for Developers - City of Cockburn](#)

Town of East Fremantle

- Climate Emergency Strategy Strategic Objectives Strategic Objective 1 ([eastfremantle.wa.gov.au](#))
- Wood Encouragement Policy [317-wood-encouragement-policy-council \(eastfremantle.wa.gov.au\)](#)

City of Fremantle

- Climate Change Adaption Plan Climate Change Adaption Plan - July 2020 | City of Fremantle
- One Planet Fremantle Framework APPROVED One Planet Fremantle Framework 2020-2030 FINAL.pdf
- Actions Plans Action plans | City of Fremantle
- Sustainable Policies and Procedures Sustainability policies and procedures | City of Fremantle
- Fremantle Solar Farm South Fremantle Solar Farm | My Say Freo
- North Fremantle "My Home" Project North Fremantle 'My Home' project approved | City of Fremantle

City of Kwinana

- Climate Change Policy 2013 Climate Change Policy ([kwinana.wa.gov.au](#))
- Climate Change Plan 2021 -2026
- Strategic Community Plan 2021 - 2031 Strategic Community Plan 2021-2031 ([kwinana.wa.gov.au](#))

City of Melville

- Climate Change Climate Change - City of Melville ([melvillecity.com.au](#))
- Emissions Melville's Emissions - City of Melville ([melvillecity.com.au](#))

City of Rockingham

- Sustainability Strategy 2020 Sustainability Strategy ([rockingham.wa.gov.au](#))
- Sustainability Strategy Snapshot Report 2020 Sustainability-Snapshot-Report-2020 ([rockingham.wa.gov.au](#))
- Greening Plan 2017 <https://rockingham.wa.gov.au/forms-and-publications/your-city/our-vision/greening-plan-2017>
- Coastal Risk Hazard and Adaption Plan [Coastal Hazard Risk Management and Adaption Plan 2019 \(rockingham.wa.gov.au\)](#)

South West Group

- Regional NRM Strategy [South West Group NRM Regional Strategy - 12 August 2013](#)