Western Alliance for Greenhouse Action

Strategic Plan 2015-2020

June 2015

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Executive Summary

This document sets out the Western Alliance for Greenhouse Action's (WAGA) strategic plan for the five years from 1 July 2015 to 30 June 2020.

WAGA's vision is: *WAGA will lead and support collaborative action to reduce greenhouse gas emissions and increase the adaptive capacity of its communities through partnerships between local communities, businesses, government and research bodies.*

WAGA's mission is: *WAGA will lead and support collaborative action to reduce greenhouse gas emissions and increase the adaptive capacity of its communities through partnerships between local communities, businesses, government and research bodies.*

The strategic plan includes a set of values (Section 2.3) and a set of guiding principles (Section 2.4) that alliance members agree will guide WAGA's work and their relationship. The scope (Section 2.5) stipulates that WAGA will focus primarily on activities that foster carbon mitigation and climate change adaptation at the regional level, complementing member councils' municipal-level and corporate work in these areas.

There are five strategic directions outlined in the plan, together with priority actions, outcomes and key performance indicators listed against each direction. They are:

* Low Carbon West - implementation of WAGA's main strategy for the transition to a low carbon economy in the region
* Adaptation Strategy and Action Plan - implementation of WAGA's framework strategy for climate change adaptation in the region
* Knowledge Excellence - increasing and sharing regional knowledge and action-based research related to WAGA's projects
* Advocacy - building support for and alignment with the aims of Low Carbon West and the Adaptation Strategy with state and federal governments, industry and the community
* Organisational Sustainability - ensuring strong, transparent and stable governance.

The plan also sets out WAGA's governance structure, including financial arrangements and the roles of and relationship between the WAGA committees.

Finally, Section 4 describes WAGA's strategic context to explain the alliance's goals and directions at this point in its history.

1. Purpose

The purpose of this strategic plan is to establish strategy and governance for the Western Alliance for Greenhouse Action (WAGA) from 1 July 2015 to 30 June 2020.

This document contains the following sections:

* WAGA's strategy for 2015-2020 (Section 2)
* WAGA's governance arrangements for 2015-2020 (Section 3)
* Context for WAGA and its strategic plan (Section 4).

The strategic plan reflects a consensus of views by all WAGA members about preferred directions for the alliance from 2015 to 2020. The document was drafted by the WAGA Coordinator with guidance and feedback from the WAGA Executive and Operational Committees and was ratified by unanimous decision of the WAGA Executive Committee on 12 June 2015.

2. Strategy

**2.1 Vision**

The western region is a national leader in developing a low carbon economy, and its communities and businesses are resilient and thriving in a changing climate.

**2.2 Mission**

WAGA will lead and support collaborative action to reduce greenhouse gas emissions and increase the adaptive capacity of its communities through partnerships between local communities, businesses, government and research bodies.

**2.3 Values**

WAGA members agree to uphold the following values in working together:

* Regional collaboration
* Inspirational, aspirational and innovative action
* Leadership by local government
* Mutual trust and respect
* A unified approach and shared ownership of success
* Open communication
* Integrity
* Flexibility

**2.4 Guiding Principles**

WAGA's activities will be implemented according to the following guiding principles:

|  |  |
| --- | --- |
| **Sustainability** | WAGA's activities use a holistic approach to achieve positive social, economic and environmental outcomes that are able to be maintained. |
| **Precautionary principle** | WAGA undertakes all feasible efforts to avoid harm to people and the environment as a result of its actions, even when scientific consensus on harmful effects is pending or not certain. |
| **Inclusion** | WAGA fosters an inclusive, participatory approach that relies on active community engagement and a balanced representation of diverse community interests. |
| **Generational equity** | WAGA takes the needs of both current and future generations into account in its activities and decision-making. |
| **Knowledge-sharing** | WAGA provides opportunities for sharing knowledge, information and learning between its members and with its stakeholders. |
| **Capacity-building** | WAGA's activities develop the human and organisational capabilities and leadership of its members and other stakeholders in the region. |
| **Responsibility** | WAGA encourages all sectors and industries in the region to take full responsibility for responding to climate change through mitigation and adaptation. |
| **Proactivity** | WAGA initiates and implements activities to address climate change, rather than simply reacting to or waiting for impacts to occur or worsen. |
| **Leadership by example** | WAGA members lead by example in taking action on climate change, advocating for values (Section 2.3) and principles (Section 2.4) that they demonstrably uphold. |

**2.5 Scope**

The scope of WAGA's work comprises:

* Partnerships, projects, strategies and advocacy that directly and primarily lead to mitigation or adaptation to climate change impacts
* A focus on community-based emissions and climate change issues at the regional level that complements work on councils' corporate emissions and issues at the municipal level
* Information-sharing and capacity-building for WAGA members to assist them in their climate change-related work.

WAGA recognises that actions that may not produce emissions reductions or adaptation in the short term may still be strategic and appropriate and lead to greater results in the long term. Those results may also be directly claimed by other stakeholders, such as businesses, rather than WAGA or its members.

**2.6 Strategic Directions**

| **Strategic Direction** | **Objective** | **Outcomes** | **Key Priorities** | **Key Performance Indicators** |
| --- | --- | --- | --- | --- |
| **Low Carbon West** | To implement Low Carbon West in partnership with LeadWest and collaborating with other stakeholders in order to achieve the strategy's vision: support for the growth of the region while limiting the increase in greenhouse gas emissions associated with that growth | * Reduction in total greenhouse gas emissions by 2.5% on 2012 levels by 2020, effectively decoupling emissions from population and economic growth * Enhanced capacity and resources in the region to deliver projects and activities that fulfil Low Carbon West's objectives * Increased leadership, initiation and participation by businesses and others in the region on action to reduce emissions * Recognition of Low Carbon West as a leading and effective strategy for developing a low carbon economy, by communities in the region and nationally * Post-2020, plans for WAGA to continue to lead and respond, and to aim for zero net emissions in the region by 2030 | * Implementation of priority actions recommended by Low Carbon West to assist in the transition to a low carbon economy, through well-planned and well-managed projects * Development and implementation of a strong engagement plan for the WAGA councils and the region's stakeholders, clearly and widely communicating objectives, opportunities, steps and outcomes * Development of productive ongoing working relationships with key Low Carbon West stakeholders | * Reduction in total emissions in the region by 2.5% on 2012 levels by 2020, against Low Carbon West's baseline emissions profile * Measurable enhancement of co-benefits: economic development, jobs creation and protection of environmental values * Establishment of Low Carbon West as a well-known, accepted and effective strategy across the region * Number of projects identified, funded, supported and/or implemented for each priority action recommended by Low Carbon West * Identification of barriers and challenges associated with implementation, ways to address them and a plan for further progress on emissions reduction post-2020 |
| **Adaptation Strategy and Action Plan** | To improve the WAGA region's capacity to adapt to climate change by assisting the WAGA councils to proactively plan for long term transformational adaptation and management of climate change risks in their operations and communities | In accordance with recommendations in the Adaptation Strategy and Action Plan:   * Enhanced understanding across council departments about what adaptation is, the future-proofing opportunities it presents and how it relates to councils' responsibilities * Robust adaptation decision-making embedded in council management, services and operations * Enhanced capacity and resources in the region to deliver adaptation projects and activities * Strong regional partnerships to coordinate risk identification, adaptation action, review and reporting | * Successful completion of WAGA's VASP-funded project 'How Well Are We Adapting?' * Provision of information-sharing and capacity-building opportunities for WAGA councils' sustainability officers and other relevant staff on adaptation issues * Provision of opportunities for WAGA councils to benchmark their adaptation performance against other councils in the region and identify their gaps * Development of productive ongoing working relationships with key adaptation stakeholders * Review of the region's progress towards adaptation in conjunction with a review of WAGA's Adaptation Strategy | * Milestones and project reports for 'How Well Are We Adapting?' * Council staff and member satisfaction with relevance, quality and range of information-sharing and capacity-building events undertaken by WAGA * Increase in resources for adaptation in the region that have been facilitated by WAGA |
| **Knowledge Excellence** | To facilitate knowledge exchange and generation among WAGA members and other stakeholders in order to build capacity and responsiveness in addressing climate change in the region | * Access to up-to-date knowledge from authoritative sources * Information-sharing between WAGA members that is engaging, relevant, adding value, streamlined and focused on members' needs * Increased interaction with policy makers, innovators and other stakeholders who seek advice and collaboration from WAGA * Provision of accessible and useful information to stakeholders * Recognition of WAGA as a leader in regional climate change issues and skills capacity building | * Building, sharing and facilitating regional knowledge * Promotion, generation and development of innovative ideas and next/best practice * Action-based research on next/best practice and information, developed to fulfil objectives of Low Carbon West and the Adaptation Strategy * Brokering knowledge from diverse sources * Identification of knowledge gaps for WAGA projects and WAGA councils' municipal-level work * Development of an online resource base for WAGA members * Regular and up-to-date dissemination of information and reporting on WAGA's projects | * Council staff and member satisfaction with information and support provided by WAGA * Level of state-wide networks and knowledge agencies engaged |
| **Advocacy** | To advocate on behalf of WAGA members to government, industry and non-government organisations where appropriate, in relation to strategic goals and key outcomes identified in Low Carbon West and the Adaptation Strategy | * Increased support for WAGA's aims and activities from:   + State and federal governments   + Industry and business   + General community and community leaders | * Identification of policy, regulatory and systemic barriers to outcomes and action recommended by Low Carbon West and the Adaptation Strategy * Development of long term strategic advocacy campaigns with key stakeholders to overcome the barriers * Short term advocacy actions when opportunities arise that relate directly and are useful to fulfil objectives of Low Carbon West and/or the Adaptation Strategy | * Number and success of advocacy actions and campaigns implemented under Low Carbon West and the Adaptation Strategy * Council staff and member satisfaction with WAGA's contribution to local government advocacy about climate change |
| **Organisational Sustainability** | To ensure the ongoing sustainability of WAGA by:   * Strengthening WAGA's governance, organisational structure and financial security * Ensuring transparency through clear communication, monitoring and evaluation * Building stable long term working relationships based on WAGA's values | * Operational effectiveness and efficiency that are continuously improving * Strong organisational accountability, accessibility and transparency to member councils * Engaged Executive and Operational Committees working to achieve consensus * Enhanced reputation * Secure financial base, including external funding support | * Development of a new 4.5 year MOU between members to cover the period 1 January 2016 to 30 June 2020 * Development of annual implementation plans to maintain progress on fulfilling WAGA's mission and core projects as identified by the strategic plan * Regular review by WAGA members of governance structure, processes and effectiveness, including host council arrangements * Review and improvement of planning, monitoring and evaluation processes and project management | * Establishment of 4.5 year MOU to 2020 * Up-to-date governance documents and structure * Satisfaction of WAGA members, WAGA staff and host council staff with host council arrangements * Sound financial management and an increase in external funding for WAGA led or supported activities * Ongoing feedback from Executive and Operational Committees and through annual reviews of implementation plans * Reference to WAGA-related activities in all WAGA Councils' City or relevant corporate work planning |

**2.7 Monitoring and Evaluation**

The strategic plan should be monitored and evaluated to ensure strong and progressive leadership in climate change management through the fulfilment of WAGA's strategic directions. This will be undertaken through:

* Monitoring of WAGA's governance, finances, communications, advocacy and projects by the Executive Committee through its bi-monthly meetings
* Annual review of each current implementation plan by both the WAGA Executive and Operational Committees in preparation for a new annual implementation plan to be signed off by the Executive Committee. The annual review will specifically assess how WAGA is fulfilling its vision, mission, values and the strategic plan's key performance indicators.
* A review of all key performance indicators in the strategic plan by both the WAGA Executive and Operational Committees in 2019-2020 and earlier when and if any substantive changes are made to WAGA's organisational structure or membership before 2020.

WAGA will provide three levels of reporting:

* Bi-monthly reports from the Coordinator for the Executive Committee, covering activities undertaken, communications, advocacy, financial and contract management, and WAGA projects
* Reports to internal and external stakeholders in accordance with communications and monitoring plans for Low Carbon West and the Adaptation Strategy
* Annual report for all stakeholders about WAGA's activities and outcomes.

3. Governance

**3.1 Membership**

The financial members of WAGA are the seven western councils: the Cities of Brimbank, Greater Geelong, Hobsons Bay, Maribyrnong, Melton, Moonee Valley and Wyndham. All financial members have equal voting rights through the Executive Committee. The Shire of Moorabool is a non-financial member without voting rights.

**3.2 Finances**

The financial members are required to contribute annual funding to support the WAGA staff and operational expenses. Members pay equal annual contributions on the basis that the value of WAGA membership directly arises from the overall and equal value of regional action to each council.

By unanimous agreement, the Executive Committee has set annual contributions by each financial member as $22,000 (plus GST) for each financial year.

It is not expected that member councils will be required to contribute additional funding for WAGA activities, as WAGA's annual budget will be set within the financial limits set by annual contributions and any external project funding received by WAGA. When additional project funding is considered necessary, a first priority will be to seek it from external sources such as state or federal grant programs or external partners. Occasionally, however, the Executive Committee may agree that additional council funding is appropriate for a particular WAGA activity, in which case each member council will decide the amount of its individual contribution to that activity.

WAGA will endeavour, with Executive Committee approval, to maintain a suitable financial reserve for payment of contingencies to ensure the alliance's financial sustainability.

**3.3 Organisational Structure**

WAGA is an unincorporated partnership between its members pursuant to a Memorandum of Understanding (MOU). The 2012-2015 MOU governs the partnership from 1 January 2012 to 31 December 2015. The proposed 2016-2020 MOU will govern the partnership from 1 January 2016 to 30 June 2020. WAGA's other formal governance documents are its Terms of Reference and its Operational Protocol, which will be updated for the period of the MOU 2016-2020.

WAGA operates according to the following organisational structure:

**The Executive Committee**

The role of the Executive Committee is to lead WAGA's strategic direction, facilitate political support for WAGA's work with their Councillors and others, oversee WAGA's governance and facilitate external funding support, embed WAGA's strategies in relevant council policies and work plans, and approve all major documents including but not necessarily limited to:

* Annual implementation plans
* WAGA's annual budgets
* Project plans and project budgets
* Annual reports and project milestone reports
* Advocacy documents: submissions to government and non-government enquiries, written communications from WAGA to government ministers and senior staff, media releases
* Major communications and presentations to stakeholders.

Each member council nominates one senior officer (at least Manager-level) with sustainability responsibilities, who will represent them on the committee, plus a suitable proxy who will attend meetings when the nominated officer cannot attend. Executive Committee members report separately to their respective councils. A Chairperson is appointed by the Executive Committee from its members for a 12 month period. Each financial member council has one vote on the committee.

**The Operational Committee**

The role of the Operational Committee is to provide:

* Input into the drafting of WAGA's major documents, including the annual implementation plans, in line with WAGA's strategic directions
* In-kind resources, including staff time and other support, for the implementation of WAGA's projects
* Information-sharing and capacity-building for WAGA councils' operational staff through WAGA Operational Committee meetings and information forums
* Advice to the Executive Committee and WAGA staff to facilitate WAGA's activities.

Each Executive Committee representative nominates one sustainability officer from their council to sit on the Operational Committee, plus a suitable proxy to attend operational meetings when the nominated officer cannot attend. Non-nominated representatives and guests from all councils can attend meetings but will not have voting rights. Operational Committee members report directly to their respective Executive Committee representatives.

**Low Carbon West Project Steering Group**

The role of the Low Carbon West Project Steering Group (PSG) is to oversee, facilitate and review implementation of Low Carbon West. The PSG reports directly to WAGA's Executive Committee, which will approve Low Carbon West's project plans, budgets and funding, major events and major documents. The WAGA Coordinator will report regularly to the Operational Committee on Low Carbon West's progress, to keep the committee informed and invite committee members' ongoing feedback and advice.

Low Carbon West's PSG consists of three representatives nominated by the WAGA Executive Committee from its members, a Project Sponsor also nominated by the Executive Committee, the Chief Executive Officer of LeadWest, and the Executive Officer of Western Melbourne Regional Development Australia.

**'How Well Are We Adapting?' Project Control Group**

The role of the Project Control Group (PCG) for 'How Well Are We Adapting?' is to oversee, facilitate and review implementation of 'How Well Are We Adapting?' The PCG reports directly to WAGA's Executive Committee, which will approve the project's major outputs and documents, according to the Project Plan for 'How Well Are We Adapting?' The WAGA Coordinator will report regularly to the Operational Committee on progress with 'How Well Are We Adapting?' to keep the committee informed and invite committee members' ongoing feedback and advice.

The PCG consists of a WAGA Executive Committee representative and two Operational Committee members, nominated by the Executive Committee, a representative from the Victorian Government (Department of Environment, Land, Water and Planning, the project funder) and a representative each from the project's two consultants (Net Balance Foundation and RMIT Centre for Urban Research). Other council and consultants' staff may be requested by the PCG to attend meetings in an advisory capacity.

**Urban Sustainability Atlas Project Control Group**

The role of the Project Control Group (PCG) for the Urban Sustainability Atlas is to oversee, facilitate and review implementation of the project. The PCG reports directly to WAGA's Executive Committee, which will approve the project's plans, outputs and documents. The WAGA Coordinator will report regularly to the Operational Committee on progress with the Urban Sustainability Atlas to keep the committee informed and invite committee members' ongoing feedback and advice.

The PCG currently consists of Operational Committee representatives from some WAGA councils that have contributed additional funding to the project (Greater Geelong, Hobsons Bay and Moonee Valley) and an officer from the City of Port Phillip (project partner). Membership of the PCG will be reviewed by the Operational and Executive Committees for 2015-2016. A representative of CSIRO, the host for the Urban Sustainability Atlas, and the Project Managers, are requested by the PCG to attend meetings in an advisory capacity.

**Adaptation Working Group**

The role of the Adaptation Working Group is to share knowledge and experience among its members about issues relevant to the WAGA councils' adaptation work and assist the Operational Committee to develop adaptation-related actions and make recommendations when requested. The group's members consist of representatives nominated by each WAGA council and invited staff from other relevant council departments, such as risk management. As this is primarily a WAGA information-sharing forum, the group reports directly to the Operational Committee.

**Occasional Working Groups**

Working Groups may be established by either the Executive or Operational Committees from their members to undertake particular activities in line with WAGA's strategic directions. Executive working groups will report directly to the Executive Committee, and Operational working groups will report directly to the Operational Committee, to advise and make recommendations on particular matters for WAGA. In addition, working groups may be established to develop and implement actions and projects under Low Carbon West; these groups may draw representatives from the Executive and/or Operational Committees and will report directly to the Low Carbon West Project Steering Group.

Other council staff and external stakeholders may be invited to join working groups where appropriate. Working groups will have a strictly advisory role and no decision-making powers. The Coordinator will keep both committees informed about their work.

**WAGA Executive Officer**

The role of the Executive Officer is to:

* Coordinate and assist the work of the Executive and Operational Committees, the Low Carbon West Project Steering Group, 'How Well Are We Adapting?' Project Control Group, and all WAGA's other project and working groups. This includes managing the transparent and smooth interchange of information and ideas between the various committees and project/working groups.
* Monitor WAGA's contractual, financial, governance and project commitments and keep the Executive Committee informed about any risks
* Manage WAGA's day-to-day administration, projects, budgets, monitoring, communications (including the WAGA website) and reporting
* Liaise with internal and external stakeholders according to WAGA's agreed strategic directions and plans
* Draft WAGA's documents and advocacy with input from the Executive and Operational Committees
* Facilitate knowledge-sharing, knowledge-generation and capacity-building for WAGA members - between members and with external stakeholders
* Provide supervision and support for the WAGA Climate Change Adaptation Project Officer.

The Executive Officer is accountable to the Executive Committee.

**WAGA Climate Change Adaptation Project Officer**

The role of the Project Officer is to:

* Manage and undertake tasks to support the PCG for 'How Well Are We Adapting?' and assist WAGA and its members to implement 'How Well Are We Adapting?', according to the Project Plan
* Facilitate and assist the Adaptation Working Group in its knowledge-sharing role
* Facilitate and assist WAGA to implement its Adaptation Strategy and Action Plan, including drafting and reviewing the adaptation annual implementation plans.

The Project Officer is supervised on a day-to-day basis by the Executive Officer and is accountable to the Executive Committee.

**WAGA Host Council**

The role of WAGA's host council is to:

* Provide direct employment, accommodation, secure facilities for financial and records management, and related support for WAGA staff on behalf of WAGA, in line with the conditions set out in WAGA's Terms of Reference
* Enter and oversee contracts on behalf of WAGA and in accordance with decisions made by the Executive Committee about WAGA's activities, with financial commitments to be met from WAGA's funds.

The host council is nominated by the Executive Committee. The Executive Officer and the Project Officer, as direct employees of the host council, are subject to the host council's employment contracts, including all rights and conditions, and will comply with the host council's employee policies.

**WAGA's Committee and Working Group Structure**

4. Context

This section is provided to explain the operating conditions for WAGA's strategic plan, its position in WAGA's history, and the reasons for WAGA's strategic directions over 2016-2020. It is recognised that much of the strategic landscape that applies to WAGA in 2015 will change rapidly, particularly federal and state government policy (see Section 4.3.1 Federal Policy Context and 4.3.2 State Policy Context, below). Nevertheless current policy conditions relevant to WAGA are included in this section to explain the strategic directions set in 2015 and provide context for an assessment of WAGA's progress and achievements in a review of the strategic plan in due course.

**4.1 History of WAGA and its Strategic Plan**

4.1.1 WAGA's Beginnings: 2006-2011

The Western Alliance for Greenhouse Action was established in 2006 by interested councils and other stakeholders to work together at the regional level to respond to climate change challenges in the west of Melbourne. Founding members of the alliance were seven councils: Brimbank, Hobsons Bay, Maribyrnong, Melton, Moonee Valley, Moorabool and Wyndham, with Victoria University and the Western Region Environment Centre as associate members. A committee of operational staff from the councils had oversight of the alliance's work. An Executive Officer was initially employed in 2007 to work on projects with operational staff. At that time, the alliance was funded through a Victorian Government grant and then, from July 2009 according to a transition plan to make Victorian greenhouse alliances self-sustaining, through member contributions.

WAGA's first priority was to reduce greenhouse gas emissions. Early collaborative projects to 2011 focused on advocacy to reduce councils' corporate emissions (Sustainable Public Lighting - 'Give Our Streets the Green Light'), assessing renewable energy potential in the business sector ('Big Roofs' project to map non-residential roof space for solar systems), encouraging energy efficiency by households (Sustainable Suburbs bulk-buy program for low carbon products), and related research and identification of opportunities to reduce emissions.

In 2011, WAGA confirmed that its current membership was limited to local government, and Greater Geelong joined the alliance. A five-year strategic plan was prepared, and a new governance model was established: the Operational Committee developed and ran projects as it had done, and an Executive Committee was formed to approve projects and oversee strategic direction.

4.1.2 Strategic Plan 2011-2015

The strategic plan developed by WAGA members in 2011 established a vision, a mission, guiding principles, strategic directions and a monitoring and evaluation framework for the alliance's work. These were set within the context of prevailing scientific evidence about the likely serious impacts of climate change, relevant socio-economic trends and challenges in the region, and current and expected federal and state policy, particularly a national emissions reduction target of 60% below 2000 levels by 2050. It was decided that all aspects of climate change policy, including climate adaptation, should be included in WAGA's focus, and that a broad stakeholder base was necessary to engage industry and businesses, community stakeholders, research institutions and others in the region.

The strategic plan also confirmed WAGA's governance structure: a partnership between the existing council members, the role of the Executive and Operational Committees and the Executive Officer, and working groups reporting to the Operational Committee.

To implement the strategic plan, WAGA undertook the following actions:

* Development of a Memorandum of Understanding between the seven financial member councils to operate from 1 January 2012 until 31 December 2015, Terms of Reference and an Operational Protocol. (Moorabool, the only non-financial member, continued to be involved through participation in both the Executive and Operational Committees.)
* Development of annual implementation plans (AIPs) for the financial years 2011-2012, 2012-2013, 2013-2014 and 2014-2015
* Projects, advocacy, policy development, studies, collaboration with stakeholders, and information-sharing and capacity-raising activities for WAGA members, in accordance with the AIPs
* Annual review of the AIPs against WAGA's strategic directions
* Periodic review of the effectiveness of governance arrangements in delivering WAGA's needs
* Development and implementation of a Communications Strategy 2013-2015 and an Advocacy Policy 2013-2015.

4.1.3 Review of the Strategic Plan

Over 12 months, commencing with a joint meeting of the Executive and Operational Committees in June 2014, WAGA undertook a review of its strategic plan, with a view to developing a new plan that would guide the alliance for a further five year period. (Issues for review and the views of WAGA members are captured in the document: *Discussion Paper: Review of WAGA's Strategic Plan*, updated to June 2015.)

The review confirmed members' ambition that WAGA should be a leader in facilitating emissions reductions and adaptation at a regional level. To achieve this, WAGA's existing strategy and governance structure were broadly upheld, with the addition of a set of agreed values, articulation of WAGA's scope, and some amendments to the organisational structure to reflect a strong guiding role for the Executive Committee. It was also agreed that WAGA's two long-range strategies: Low Carbon West, a plan for transition to a low carbon economy in the region, and the regional Adaptation Strategy and Action Plan, should guide all WAGA's project work in future.

The review also revealed the importance of a further review and, if necessary, adjustment to strategy and governance within the next five years. The next review may also consider whether WAGA's membership should be expanded beyond the current members and local government and whether it is appropriate for WAGA to be auspiced by an external organisation, either temporarily or permanently. WAGA members recognise that the strategic and socio-economic landscape related to WAGA's role may rapidly change over time and that its leadership may in fact be a positive factor in the change.

**4.2 Regional Context**

4.2.1 Key Socio-Economic Trends

The eight WAGA member municipalities encompass an area of over 4,700 square kilometres, with a regional population of about 840,000. Extensive transformation is underway in the region, with rapid population growth occurring – in the inner developed areas but particularly the peri-urban fringe. Overall, about 15% growth is expected, which will be experienced unevenly. The change involves new demographics, housing, and transport choices and challenges, and the creation of 'greenfield' suburbs in Wyndham, Melton and Greater Geelong.

The region is the most culturally and linguistically diverse region in Victoria, with 130 nationalities represented. The area has a low socio-economic demographic with higher than average ill health and unemployment, but there is increasing gentrification of areas of the west, as well as increasing awareness and concern among residents about the effects of climate change.

Industry is also transitioning with an observed decrease in the local manufacturing sector. The region remains an industrial hub, however, for Victoria and indeed Australia; manufacturing is still the west’s largest employer. There are variations in the concentration of commercial and industrial sectors across the region. Brimbank has a high proportion of transport, postal and warehousing businesses. Hobsons Bay's strength is in ship-building, logistics, motor vehicle, chemical and petroleum industries, railway maintenance and transport. Maribyrnong is the western region's transport and retail hub. Moonee Valley has a strong commercial focus, with two large Principal Activity Areas - Airport West and Moonee Ponds. Melton and Wyndham have a relatively high proportion of construction businesses, associated with commercial and industrial 'greenfields' growth. Greater Geelong, Victoria's largest regional centre, has a broad industrial base of knowledge and research, health, defence, advanced manufacturing, tourism, information communications and technology, food and agriculture. Moorabool, to the north of Geelong, continues to be recognised for agriculture, particularly intensive food production.

While there have been significant industrial closures since 2013 and foreshadowed to 2017, there are also a number of existing industrial and commercial developments that will experience future growth, such as Essendon Fields, Airport West, East Werribee Employment Precinct and the Western Industrial Precinct. In Greater Geelong, a number of masterplans continue to be developed, such as Armstrong Creek, the largest continuous growth area in Victoria.

There are important socio-economic challenges common to the WAGA councils, most of which were listed in the 2011-2015 strategic plan and have remained relevant. The themes are:

**Growth Management**

* The need to address transport pressures and logistics management
* Long term sustainable development, particularly in growth areas
* Transition of rural land and natural landscapes to residential areas, with consequent impacts on communities, infrastructure, biodiversity and agriculture

**Planning and Infrastructure**

* The need to incorporate sustainable design principles in new suburbs and buildings
* Cost-effective retrofitting of pre-existing buildings to reduce environmental impacts
* Energy efficiency and the uptake of distributed renewable energy (solar systems)
* Legal, insurance and financial risks of climate change impacts arising as a result of planning

**Economic Development**

* The need for sustainable transformation of industry due to economic factors and changing markets
* Opportunities to increase jobs in the region and upskill workers
* Opportunities for innovation and relevant action-based research

**Community Development**

* The need to support and value diverse cultural communities
* The need to provide particular support for vulnerable and low socio-economic communities
* Increasing interest and calls for action on climate change from the community
* Ensuring future liveability in the region
* The need to engage and collaborate with businesses, particularly small and medium-sized enterprises (SMEs), to develop solutions.

4.2.2 Key Stakeholders and Plans

WAGA undertook a stakeholder analysis in 2013, which identified and characterised the alliance's important internal and external stakeholders; a database, periodically updated, was prepared from the analysis, and this document lists these stakeholders. They have a stake in WAGA's work and most of them share WAGA's interests at least to some extent. Their support may also be useful for WAGA in various ways, providing opportunities for collaboration, advice, funding and simply as case studies of organisations addressing climate change in the region.

The following stakeholder groups have been categorised as 'High Stake, High Resources':

* WAGA councils
* LeadWest and Western Melbourne Regional Development Australia (WMRDA), partners with WAGA in developing and implementing Low Carbon West
* Relevant local government alliances, such as the Municipal Association of Victoria (MAV), other Victorian regional greenhouse alliances, Association of Bayside Municipalities, Council Alliance for a Sustainable Built Environment (CASBE), G21 Geelong Region Alliance, Inner Melbourne Action Plan (IMAP) and the Western Transport Alliance
* Relevant Australian Government departments and agencies, particularly the Department of Environment
* Relevant Victorian Government departments and agencies, particularly the Department of Environment, Land, Water and Planning (DELWP), the Department of Economic Development, Jobs, Transport and Resources (DEJTR), the Department of Health and Human Services (DHS) and Sustainability Victoria
* Business and industry groups active in the region
* Water authorities: Melbourne Water, City West Water, Barwon Water and Western Water
* Waste management facilities as well as the Metropolitan, and Barwon South West, Waste and Resource Recovery Groups
* Health facilities in the region
* Energy distributors and energy generators in the region
* Suppliers of green products and services relevant to the WAGA councils.

The eight WAGA councils are addressing climate change at the municipal level through their own targets, plans and policies (see Section 4.3.3 for a summary). There are also other important overarching regional plans that should be seen as complementary to the WAGA councils' climate change work. Some of these are described in the 'Best Practice Review Note' provided for Low Carbon West. They are:

* *Western Agenda - A Strategic Plan for Melbourne's West 2012-2016*, by LeadWest. This strategy sets out a broad set of strategic directions for the region, covering the economy, education and skills, community wellbeing and infrastructure, and includes a specific target to reduce greenhouse gas emissions in the LeadWest region by 70% on 2008 levels by 2050.
* *Regional Plan 2013-2016*, by WMRDA. This is another comprehensive strategic plan; it specifically includes support for Low Carbon West to 'provide businesses with information on moving to a low carbon economy'.
* *A Jobs and Industry Strategy for Melbourne's West*, 2013, by LeadWest and WMRDA. This strategy takes into account high growth rates in the region, highlighting key industries and infrastructure projects.
* *Western Transport Strategy*, by LeadWest and the Western Transport Alliance. This strategy does not specifically address the need to reduce emissions but does set forth an integrated transport plan designed to reduce the impacts of road transport.
* *Low Carbon Growth Plan for Greater Geelong.* As Greater Geelong is not a member of LeadWest, the Geelong region is not covered in the plans mentioned above. This plan provides an important context for climate change action in and around Victoria's largest regional city.

4.2.3 Regional Greenhouse Gas Emissions Profile

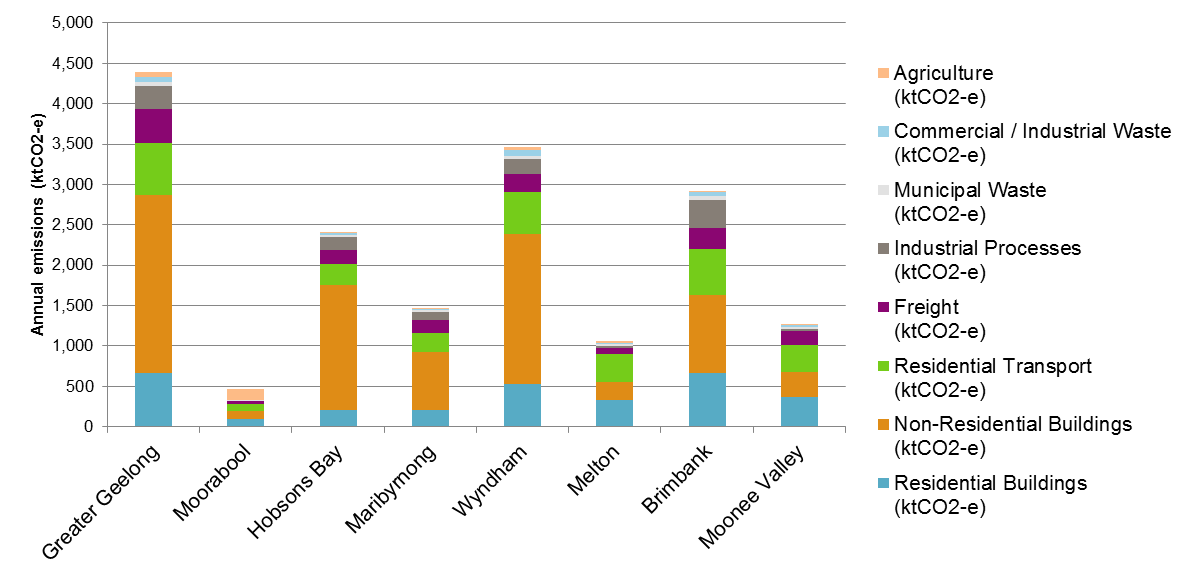
The region's baseline emissions for 2012 and projected emissions for 2020 were identified as part of the process to develop Low Carbon West. A full description of the emissions profile is given in AECOM and Arup's 2014 memorandum, *Baseline Emissions for 2012 and 2020*.

The WAGA region generated 17.4 million tonnes of CO2-e greenhouse gas emissions in 2012. Under business-as-usual conditions, emissions are projected to increase to 20.1 million tonnes by 2020, representing a growth of 15%.

The table below shows where emissions are concentrated across the WAGA municipalities; the major contributors are Greater Geelong (25%), Wyndham (20%), Brimbank (17%) and Hobsons Bay (14%). Wyndham is predicted to experience the highest growth, with an emissions increase of 35% by 2020, associated with jobs growth (31% increase) and population growth (45% increase).



The table below shows which sectors were mainly responsible for emissions in 2012. Businesses generated 64% of the total, with 46% of the total generated by energy use in non-residential buildings (factories, facilities and to less extent commercial buildings). Residential buildings generated 18% of the total, followed by residential transport with 17%. Waste and agriculture account for the remainder. This table also shows that, while business, residential and transport emissions are prevalent for each municipality, the spread is not even. For example, the residential sector is proportionately more significant as a generator of emissions for Moonee Valley, Melton and Moorabool than it is for the other WAGA councils.



4.2.4 Challenges for Carbon Mitigation

The Intergovernmental Panel on Climate Change (IPCC) released its Fifth Assessment in 2013 and 2014. The assessment included findings that warming of the world’s climate system is unequivocal and that human influence is ‘extremely likely’ to be the dominant cause of that warming. The IPCC also adopted a world [carbon budget](https://theconversation.com/another-budget-in-massive-deficit-14407) in order to assess the level of mitigation required. To meet a target of not exceeding 2°C temperature rise relative to 1850-1900, the IPCC stated that the total post-industrial carbon emissions from all sources should be limited to 1,000 billion tonnes. By 2011, about half of the budget was already consumed.

In February 2014, the Climate Change Authority (CCA) released its own report and recommendations on emissions reduction targets for Australia, following the CCA's Targets and Progress Review, as required by the *Clean Energy Act 2011*. Based on an assessment of the science presented by the IPCC and others, as well as an assessment of Australia's role and position in relation to international efforts to reduce emissions, the CCA recommended that Australia's existing target of 5% below 2000 levels by 2020 be tightened to 15% by 2020. It also recommended that, following 2020, the target be increased to 40-60% by 2030. The recommendations are consistent with the CCA's calculation that Australia should adopt a national carbon budget of 10.1 billion tonnes of emissions for 2013-2050, its 'fair share' of the global budget.

A rising trajectory of targets, as recommended by the CCA, is designed to facilitate long term policy and investment in carbon mitigation. It recognises that smaller reductions in the years to 2020 and beyond will push a greater burden of adjustment on to later periods, that steeper reductions in later years without strong early intervention may not even be possible, and that in any case steeper reductions will lead to greater social and economic shocks than relatively gradual reductions. Also, strong, early and innovative action on carbon mitigation will help Australia remain competitive in a global low carbon economy.

WAGA recognises that its primary challenge is to assist in Australia's transition to a low carbon society, based on meeting emissions reduction targets In line with the recommended carbon budget. The main tasks for the region are to reduce direct emissions (Scope 1) and emissions from energy consumption (Scope 2), through energy efficiency and a switch to low carbon energy sources. Low Carbon West is WAGA's strategy for meeting the challenge, complementing member councils' municipal-level plans and policies.

The most obvious and significant constraint is that the region is an industrial centre with energy supplies overwhelmingly sourced from lignite (brown coal). Furthermore, as Victoria has some of the largest lignite seams (430 billion tonnes in total, some yet to be developed) in the world, this energy source is embedded as a foundation for investment in the state's economy at the expense of competitive investment in utility-scale renewable energy generation and government facilitation of distributed renewable energy. This corresponds to a limited choice to purchase cheap 'green' power, which hampers a switch to low carbon energy in residential and business sectors. The relative abundance of Australia's fossil fuel supplies is, of course, the basis of serious structural impediments to alternative stationary energy at both national and state levels, and this is reinforced by federal and state policies that favour conservation of the existing energy market structure.

Despite the challenges, the WAGA region is experiencing a relatively rapid uptake of residential solar. Driven largely by Victoria's mandatory 6 Star Energy Rating for new houses, this uptake is most significant in the growth areas. Over ten years (2001-2011), more than 3,000 solar PV units and 11,000 solar hot water heaters were installed on rooftops across Wyndham. At the same time, some businesses are championing renewable energy; for example, in 2014 Toyota Australia installed a 500kW solar array, the largest in Victoria, at its Altona North plant.

There are also indications that carbon mitigation may be facilitated to a greater extent in Victoria in future. These signs include the stated intention of the current Victorian Government to encourage investment in renewables and energy efficiency, a City of Melbourne-led council consortium to drive new investment in renewable energy plants, and the advent of an option for Victorians to purchase electricity from an energy retailer dedicated to renewable energy (Powershop). The pressure of rising energy costs, notably gas prices, can also be expected to encourage efficiency and the switch to renewables - not only the installation of solar systems but the use of hot water heat pumps and other energy efficient products subsidised through the Victorian Energy Efficiency Target.

Challenges to carbon mitigation in the transport sector are much more closely related to special conditions in the WAGA region. These challenges are set out in Low Carbon West's sector report: 'Transporting People and Freight'. To summarise, direct carbon emissions from transport are exacerbated by the region's population growth and economic development, which are leading to major increases in traffic volumes from cars and trucks. There are insufficient jobs for the population in the region, so that residents often have to make long trips elsewhere for work. Adding to the traffic problem, large peri-urban suburbs and precincts such as Werribee/Hoppers Crossing/Tarneit, Point Cook/Laverton and Melton often rely on only one major arterial road and rail route for access, with poor public transport provision.

The Western Transport Strategy, developed by the Western Transport Alliance and LeadWest, provides a plan for an integrated transport system that would provide better public transport options and less road traffic across the region. That strategy is complemented by measures to reduce direct emissions in the transport sector recommended in Low Carbon West. It should be noted that both strategies recommend the establishment of the Western Interstate Freight Terminal, a development to consolidate freight that would increase emissions in the region but reduce them overall across Victoria.

While other direct sources of emissions - industrial processes, waste and agriculture - are not significant in the region's total emissions profile (see Section 4.2.3 above), they also represent particular challenges that WAGA is committed to addressing through Low Carbon West.

4.2.5 Challenges for Climate Change Adaptation

The IPCC in its Fifth Assessment found that global surface temperature change by the end of the 21st century is likely to exceed 2°C relative to 1850-1900, even under a moderate mitigation scenario. Accordingly, the WAGA region is expected to experience a range of climate change impacts, even with a successful mitigation strategy, and therefore adaptation is a necessity. Broad impacts, some of which are already being experienced in the region, include:

* Sea level rise of 0.5 metres, which can lead to an increase in the frequency of coastal flooding by an order of magnitude of 100 to 1,000. A 100-fold increase means that a one-in-100-year storm surge would occur about once a year.
* Increase in heat waves (days above 35°C per year) and associated human health impacts, including deaths
* Southward spread of tropical insect-borne diseases such as Dengue Fever
* Very extreme bushfire days, which are expected to occur four to five times as often in south eastern Australia by 2050. In Melbourne, catastrophic bushfires may occur once every 2.4 years on average, rather than once every 33 years as at present.
* Decline in stream flow in Melbourne. The average is likely to decline by up to 35% by 2050.
* Increase in the frequency and severity of storms and heavy rain and wind events, leading to crop damage, soil erosion and higher likelihood of damage to housing and infrastructure such as water, power, transport and telecommunications.



Storm surge on Bayview Street, looking toward Millers Road, Altona, Winter 2014. The occurrence and severity of such events are predicted to increase due to climate change.

The WAGA councils recognise that local government has an important role to play in adaptation and have therefore begun to address the long term impacts of climate change. The first step at the regional level was to identify risks in managing climate change impacts of particular concern to councils in the region (*WAGA Climate Change Risk Assessment*, 2011). Most of these risks are either common to councils across the region (e.g. lack of staff skills) or trans-boundary, affecting multiple municipalities (e.g. sea level rise). The remaining risks, such as bushfires and coastal inundation, are specific to a few councils. A shortlist of 17 priority regional risks was drawn from the original identified list. In summary, they are:

**Risks to business continuity and service delivery**

* Inadequate council resourcing
* Staff skill shortage
* Inadequate long-term planning
* Inadequate finance for asset renewal
* Conflicts between OH&S and community needs

**Risks to governance and regulation of planning and building**

* Inadequate planning

**Risks to infrastructure and assets**

* Increased asset maintenance costs
* Damaged underground infrastructure

**Risks to water management**

* Drain blockages
* Decreased water harvesting
* Stormwater overflow
* Disruptions to wastewater treatment

**Risks to emergency management**

* Inadequate emergency facilities

**Risks to regional mobility**

* Transport service disruption

**Risks to the regional economy**

* Slowing of the local economy

These risks represent the adaptation challenges that are being addressed where possible at the municipal level by the individual WAGA councils and at the regional level by WAGA. In addition, some WAGA councils are addressing climate-related risks of particular importance to them, such as risks to biodiversity with endangered grasslands and flora and fauna.

**4.3 Strategic Landscape**

4.3.1 Federal Policy Context

The Australian Government sets national policy, relevant to carbon mitigation and climate change adaptation, which applies directly or indirectly to all WAGA's stakeholders. These measures comprise industry, energy and climate change policy, national targets for emissions reductions and renewable energy, supportive regulation and funding, and advocacy for and participation in international climate change action.

The following federal measures are important:

* ***National emissions reduction targets and a carbon budget***. These policies set the national ambition for carbon mitigation. While Australia currently has an official emissions reduction target of 5% below 2000 levels by 2020, the CCA recommends steeper reductions to decarbonise the economy by 2050 (see Section 4.2.4 above). Without strong interim targets and based on current emissions levels, it is likely that Australia will exceed its carbon budget by 2030-2035.
* ***The Emissions Reduction Fund*** (ERF), as the centrepiece of the Government's Direct Action plan to assist Australia to meet the 5% emissions reduction target. The Government's replacement of the Carbon Pricing Mechanism (CPM) with the ERF has major implications for reductions in direct emissions by the WAGA region's businesses and, more generally, in emissions from energy consumption. The CPM, as a deep structural economic tool, changed pricing signals across the Australian economy and was demonstrably the most effective mitigation measure applied in Australia to date. In only two years of limited operation, the CPM was responsible for a decrease in the emissions intensity of the National Electricity Market by about 4.6%[[1]](#footnote-1). This decrease has been cancelled out over 2014-2015 as emissions have steadily increased since the mechanism was repealed[[2]](#footnote-2). Whether the ERF will lead to discernible emissions reductions, let alone help meet even the 5% target, remains to be seen. To be effective in the WAGA region, the fund will need to enable significant emissions reductions projects that would not otherwise go ahead, in the energy sector and by regional businesses. It will also require an adequate safeguard mechanism that does not allow those reductions to be offset by increases in other parts of the economy. The draft safeguard mechanism released in March 2015 does not provide the necessary protection; it would specifically allow emissions to rise to a five-year historical highpoint, is only expected to cover about 50% of the economy and may not encourage direct emissions reductions by electricity generators. Furthermore, it is not linked to the national emissions reduction target so does not take into account any possible rise in the target in future.
* ***Renewable energy target*** (RET). The future level and even existence of the RET continues to be in doubt in 2015. In its 2014 review of the RET, the CCA found that the target is the only current government instrument capable of producing sizable emissions reductions in the electricity sector but that uncertainty about the target's future has led to a lack of investor confidence and a consequent severe downturn in renewables investment. Current and future arrangements for the RET are therefore an important factor in whether and to what extent WAGA can encourage uptake of and investment in renewables in the region.
* ***Building and product regulations and standards***. A suite of supportive federal regulations, standards and industry assistance packages promote emissions reductions through resource and energy efficiency in buildings and products. These include the Building Energy Efficiency Disclosure, energy efficiency requirements in the Building Code of Australia, National Greenhouse and Energy Reporting (NGER), National Australian Built Environment Rating Scheme (NABERS), Nationwide Housing Energy Rating Scheme (NatHERS), energy labelling, and minimum energy performance standards (MEPS) for electrical products.
* ***AusIndustry***. The federal department offers programs such as the Entrepreneurs Infrastructure Programme, R&D Tax Incentive and the Tradex Scheme for importers and exporters that can be used to support low carbon activities.
* ***Support for climate change adaptation***. The Government has a Climate Change Adaptation Program, worth $126 million, with the aim of better understanding and managing climate change risks. Under this program, the National Climate Change Adaptation Research Facility (NCCARF) has received ongoing funding for its applied research, which to date has included studies of direct relevance to local government, freely available through NCCARF's Local Government Portal. The Government has also undertaken major national vulnerability assessments, so far of particular relevance to coastal settlements and biodiversity issues.
* ***Australia's role in the United Nations Framework Convention on Climate Change*** (UNFCCC). The Australian Government also represents Australia's interests at the international level. Australia's emissions reduction goals are expected to be influential in negotiations at the Paris Conference on the UNFCCC in December 2015. As Australia is a developed country with a comparatively high per capita carbon footprint, and facing significant challenges to decarbonisation, its ambitions will set a strong example for other countries.

4.3.2 State Policy Context

In accordance with its role in Australia's federal system, the Victorian Government also sets overarching policies and targets related to climate change. As well, it is responsible for land use planning and providing supportive regulation, funding and other assistance for communities, businesses and councils in addressing and reducing impacts.

The new Victorian Government has signalled that it intends to lead Australian governments in developing effective carbon mitigation, renewable energy and energy efficiency policies. However, more than good policies will be required to manage a transition from coal in Victoria. With an economy that produces and relies on fossil fuels, some Victorian regions are also dominated by fossil fuel industries and related heavy power users. These communities will be affected and may indeed experience significant economic hardship if restructuring is not managed carefully. In handling energy politics and communicating about the need for change, the Victorian Government will need to effectively link low carbon measures with economic development and jobs creation. This will be important in the WAGA region, which has a manufacturing base that is vulnerable to downturn, as well as other regions such as the La Trobe Valley.

Policy areas and specific measures that are important to Victoria's role in addressing climate change include the following:

* ***Victorian Climate Change Act 2010.*** The Act requires development of a state adaptation plan and that climate change be taken into account in specified decisions. The Victorian Department of Health has developed a guide for how municipal public health and wellbeing planning should have regard to climate change in accordance with the Act. The new Government has indicated that it will review the Act in 2015 and reinstate the emissions reduction target removed by the former Coalition Government. A state-based target in line with climate change science will be an important overarching policy to justify state programs, including funding for local and regional programs, designed to achieve the target.
* ***Victorian renewable energy target.*** A state-based RET may also be important to stimulate investment in renewable energy if uncertainty about the national RET is not resolved, and it may therefore be appropriate for WAGA to advocate for this measure.
* ***Land use planning***. This is one of the most significant policy areas affecting climate change action, as it influences the development of suburbs, buildings and transport plans, codes and related infrastructure. Many of Low Carbon West's recommended actions address land use planning as well as building development, but entrenched existing and current land use is probably responsible for the greatest proportion of the region's emissions that will not be reduced by Low Carbon West.
* ***Victorian Energy Efficiency Target*** (VEET), a program to subsidise key energy-saving products***.*** The Government has signalled that it will expand the VEET to cover additional measures such as insulation. The VEET can be expected to continue to reduce emissions by lowering the cost of energy efficiency and is therefore a useful policy for both residents and businesses. It also addresses the need to make energy-saving measures accessible to low income people.
* ***Victorian Climate Change Adaptation Plan and the Victorian Adaptation and Sustainability Partnership*** (VASP). The VASP is a cornerstone of the Plan, with the stated aim of strengthening the relationship between state and local governments with respect to adaptation, clarifying their respective roles and responsibilities in this area, and providing funding for local government adaptation projects. So far, the future of the VASP, including further funding rounds, is uncertain, and the Government has indicated that it will review the Plan. The Government should be encouraged to reinstate the Victorian Local Sustainability Accord, a program which funded carbon mitigation as well as adaptation projects. Both programs have funded projects by WAGA councils, and the VASP currently funds 'How Well Are We Adapting?', WAGA's major adaptation project.
* ***Sustainability Victoria*** (SV)***.*** This is the implementation arm of the Department of Environment, Land, Water and Planning, which in the past has provided direct assistance for communities in taking action for sustainability. SV’s 'Smarter Resources Smarter Business' program provided mentoring and funding for many Victorian medium-sized businesses in energy and resource efficiency until the program's funding was exhausted in 2014. SV is currently drafting a new strategic plan and, in line with stated Government intentions, should expand its scope to include direct assistance for carbon mitigation and adaptation projects.



In relation to land use planning, housing development such as this in Melton illustrates the challenges of reducing emissions with the expansion of low density suburbs, associated transport needs and pressures on values such as open space and biodiversity.

4.3.3 Local Government's Role and the WAGA Councils' Climate Change Work

Local government has specific responsibilities to help the community address climate change. This is enshrined in the *Climate Change Act 2010* through an obligation on key decision-makers to 'have regard to climate change' when making specified decision. This includes local government when preparing a municipal public health and wellbeing plan (MPHWP). Councils also respond directly to their communities' requests for local climate action. Council roles are not a duplication of state and federal roles, which remain necessary; however, in 2015 local government action is more important than ever with limited action at other levels of government. Within their municipalities, many councils develop plans and policies for their own operations, some also for the community, undertake direct community projects and provide information and education through contact and collaboration with their ratepayers. They also often provide on-the-ground promotion for state and federal programs and build local capacity and expertise.

Important ways in which local government undertakes climate change action include:

* ***Direct interaction*.** Many ofthe WAGA councils undertake community programs that inform, advise and engage with specific groups in the community on climate change. This includes businesses; councils' economic development staff often say that direct one-on-one contact with local businesses is one of the most important way to engage them.
* ***Coordinating action*.** Councils have a role in bringing together and providing a focal point for local stakeholders. In the WAGA region, examples of useful programs are Future Proofing Geelong and Living Brooklyn, which are collaborations between councils, local businesses and community leaders. Such programs should be championed by WAGA.
* ***Piloting*.** In undertaking municipal programs, councils effectively pilot them for others. They also have opportunities to trial new technologies. Melton's Community Education Program, developed as part of its Lead, Educate, Advocate and Demonstrate Sustainability (LEADS) program, is one such project that other WAGA councils are following with interest to see how the learnings can be applied elsewhere in the region.
* ***Providing an example.*** The WAGA councils' efforts to reduce their own corporate emissions set a good example for the community. Annual savings of nearly 25,000 tonnes of emissions are achieved across the region through the change-over of public lighting to energy efficient luminaires and environmental upgrades and solar installations on council-owned buildings. This is equivalent to the amount of energy used by about 3,000 households.
* **Using the rates mechanism.** Councils can provide incentives to property owners to undertake environmental upgrades of their buildings by offering them loans to do so, repaid via rates. The rates mechanism has been used in this way to promote upgrades for other purposes and is currently being used in Victoria to promote energy efficiency and renewable energy - by the City of Melbourne to encourage environmental upgrades of business premises, and by the Cities of Darebin and Moreland to encourage solar installations by low income residents. Low Carbon West recommends that WAGA explore this mechanism, particularly as buildings generate most of the emissions in the region.



Direct interaction: Hobsons Bay's 'Green Kinders' program directly informs and engages with local families.



Providing an example: the environmental upgrade of Moonee Valley's Civic Centre has enabled the council to show the community what's possible.

WAGA councils' municipal-level climate change work is summarised below. Some councils do not have specific targets, although they do work to reduce emissions for their own operations and the community. This includes Moorabool, currently developing an Environment Strategy that will include climate change action. A minority of councils have strategies labelled as 'adaptation' policies, although others have included climate change risks in their risk registers or are undertaking climate change risk assessments.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Council** | **Emissions reduction target: council operations** | **Emissions reduction target: community** | **Climate change / greenhouse strategies** | **Programs to changeover public lighting and upgrade council buildings - partly federally funded** |
| **Brimbank** | 50% below 2011 levels by 2022 | No target | Greenhouse Reduction Strategy 2013-2023 (Council and community)  Currently developing an audit of 'adaptation' related plans/policies | 'Powering Down- Realising Greenhouse Reductions in Street Lighting, Municipal Offices and Leisure Centres at Brimbank City Council' |
| **Greater Geelong** | 30% below 2006 levels by 2011 (currently under review) | 20% below 2006 levels by 2011 (currently under review). (Low Carbon Growth Plan: opportunities identified to reduce by 6% below 2000 levels.) | Greenhouse Strategy (2008-2011) - currently under review; new strategy will cover council and community emissions.  Climate Change Adaptation Strategy (Council and community) | Heating and cooling upgrades at large facilities  Geelong Library Heritage construction to 5 star Greenstar |
| **Hobsons Bay** | Zero net emissions by 2020 | Zero net emissions by 2030 | Corporate Greenhouse Strategy (2013-2020)  Community Greenhouse Strategy (2013-2030)  Climate Change Adaptation Plan (2013-2018) | 'Lighting the West' changeover to sustainable street lighting (with Wyndham, Moonee Valley and Maribyrnong) |
| **Maribyrnong** | Carbon neutral by 2015 | Carbon neutral by 2020 | Becoming Carbon Neutral: Corporate Action Plan  Zero Net Emissions by 2020 | 'Lighting the West' changeover to sustainable street lighting (with Hobsons Bay, Wyndham and Moonee Valley) |
| **Melton** | 10% reduction by 2015, zero net emissions by 2025 | No target | Greenhouse Action Plan (2011-2015) under review and 2016-2020 plan currently being developed  Melton Environment Plan currently in preparation. It will guide Melton's Environment Program to 2020. | 'Lead Educate Advocate Demonstrate Sustainability' (LEADS) - bulk changeover of street lighting, upgrades to 9 council facilities, community education that aims to assist disadvantaged groups |
| **Moonee Valley** | Zero Net Emissions by 2020 | Zero Net Emissions by 2020 | Greenhouse Strategy 2010 (Council and community) - currently under review  Community and Council Greenhouse Action Plans, developed to implement the Greenhouse Strategy | 'Lighting the West' changeover to sustainable street lighting (with Hobsons Bay, Maribyrnong and Wyndham) |
| **Moorabool** | No target | No target | Environment Strategy currently being developed |  |
| **Wyndham** | 40% below 2001 levels by 2015 (currently under review) | No target | Environment & Sustainability Strategy (2011-2015) - includes and addresses climate change, currently under review  Currently undertaking a climate change risk assessment | 'Lighting the West' changeover to sustainable street lighting (with Hobsons Bay, Maribyrnong and Moonee Valley) |

4.3.4 Benefits of a Regional Greenhouse Alliance

The alliance can:

* **Complement and scale up local action to address climate change at a broader level** (WAGA example: WAGA's regional-level frameworks and action address the particular conditions and needs of the western region. Low Carbon West priority actions are based on the region's specific emissions profile, and the Adaptation Strategy is based on the priority risks identified for the region.)
* **Attract partners and enable collaboration to augment outcomes** (WAGA example: Lighting the West, in which four WAGA councils are collaborating, sharing elements such as communications and marketing to reduce costs and widely promote successes)
* **Represent member councils' interests in regional advocacy actions** (WAGA example: promotion of WAGA councils' interests and Low Carbon West in consultation with the Victorian Government to develop an Energy Efficiency and Productivity Statement)
* **Represent member councils' interests with large and/or regional stakeholders** (WAGA example: consultation and collaboration with state government departments and agencies such as City West Water and the Department of Environment, Land, Water and Planning)
* **Initiate and foster projects that are only feasible on a regional scale and take advantage of economies of scale** (WAGA example: Urban Sustainability Atlas, as it involves the development and testing of software that would be out of reach for individual councils)
* **Leverage individual stakeholders’ experience, expertise and relationships to maximise reach and effectiveness in planning and communications** (WAGA example: Low Carbon West will certainly rely on the experience and relationships of member councils, particularly economic development staff, in working with their business communities.)
* **Make the most efficient use of individual members' resources, share information and build capacity** (WAGA example: WAGA's Operational Committee)
* **Attract large sources of funding** (WAGA example: 'How Well Are We Adapting?')

1. O’Gorman, M. and F. Jozo, 2014, ‘Impact of the carbon price on Australia’s electricity demand, supply and emissions’, *CCEP Working Paper*, Centre for Climate Economics and Policy, Crawford School of Public Policy, The Australian National University [↑](#footnote-ref-1)
2. Pitt & Sherry, April 2015, *Carbon Emissions Index (CEDEX)* [↑](#footnote-ref-2)