FUTURE PROOFING GEELONG

IMPACT STATEMENT 2011–2016

IN COLLABORATION WITH CLIMATEWORKS AUSTRALIA
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### REFERENCES
- Reference 1: The Low Carbon Growth Plan for Geelong 2011 Summary
- Reference 2: Updated Low Carbon Growth Plan 2015
- Reference 3: Future Proofing Geelong Memorandum of Understanding
- Reference 4: Projects webpages and outcomes

These references are available at www.futureproofinggeelong.com.au
EXECUTIVE SUMMARY

Future Proofing Geelong brings together a dedicated group of partners to collaborate on sustainability actions across industry, business, education, government and community.

Future Proofing Geelong is responsible for implementing the recommendations of the Low Carbon Growth Plan for Geelong, originally published in 2011. It identifies key opportunities to transition Geelong’s economy towards a low carbon future while achieving positive economic and social benefits. The Low Carbon Growth Plan 2015 update was prepared in response to changes in the local economy and sets the future direction of the program.

The Future Proofing Geelong vision is that by 2030, Geelong is internationally recognised as one of the world’s most sustainable cities. Faced with challenges like climate change, economic adjustment and growth, the region has pursued a collaborative and innovative approach to Geelong becoming more resilient and adaptive.

The program focuses on enabling projects which will assist Geelong to become more sustainable, more liveable and more productive.

Future Proofing Geelong has worked with diverse stakeholders since 2010. Collaboration, building relationships and brokering outcomes have been fundamental. The collaborative efforts of organisations in Geelong have delivered projects and increased awareness, which will lead to Geelong’s transition to a low carbon future and position Geelong as a leader in this field.

Following the expiry of the Sustainability Covenant, which originally united the partners of Future Proofing Geelong from 2011-2014, a Memorandum of Understanding (MOU) has been signed to further cement the partnership which delivers the objectives of Future Proofing Geelong.

The partners (signatories) to the MOU include:
- The City of Greater Geelong
- Geelong Manufacturing Council
- Deakin University
- Geelong Chamber of Commerce
- Barwon Water
- Committee for Geelong
- Barwon Health
- Geelong and Region Trades and Labour Council
- The Gordon

This Impact Statement for Future Proofing Geelong illustrates the positive impacts of the program from 2011-2016:

- Engagement with commercial building owners/tenants has resulted in 11 completed projects which have invested $679,000 and a further $3million in projects under development. Emissions savings are continuing to be identified and delivered with 433tCO2 savings reported from completed projects to date.
- Partnering and supporting community projects has led to 304 activities being hosted, with participation rates estimated at approximately 54,000.
- Thirteen projects have been supported in business and industry, creating or maintaining over 100 jobs, developing the skills of 600 people, expanding 14 businesses and increasing turnover to the value of $1.2 million.

Will Tieppo
Chair – Future Proofing Geelong
Advisory Board 2016–2017
WHAT MAKES FUTURE PROOFING GEELONG UNIQUE?
In the early days of Future Proofing Geelong a collaboration with ClimateWorks Australia produced a Low Carbon Growth Plan for Geelong\(^1\), which was released in 2011. Geelong was the first municipality to generate a Low Carbon Growth Plan, which outlined how greenhouse gas emissions could be reduced for the lowest costs within the municipal boundaries.

An update of the Low Carbon Growth Plan was prepared in 2015, to reflect changes in the local economy, most notably significant changes due to the planned closure of industry. It also highlights some of the achievements of Future Proofing Geelong and sets the direction that needs to be followed to achieve greater emissions reductions.

Following the expiry of the Sustainability Covenant, which united the partners of Future Proofing Geelong from 2011-2014, a Memorandum of Understanding (MOU) has been signed every three years to further cement a partnership to deliver the objectives of Future Proofing Geelong.

The partners to the MOU commit to working together to foster sustainability through the facilitation and promotion of integrated environmental, economic and social activities. This partnership assists the City of Greater Geelong to take a leadership position in Victoria to foster partnerships with other government agencies, the private sector and community. Working in collaboration enables the group to identify and implement sustainability opportunities relevant to the region.

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1. See Reference 1 for a summary of the Low Carbon Growth Plan for Geelong 2011
THE OBJECTIVES OF THE MOU ARE TO:

- Enhance relationships between local government, state government, community and industry to advance the sustainability of the Geelong region through collaborative partnerships
- Engage local industry and community to help implement and align actions identified in specific sustainability areas, such as the Low Carbon Growth Plan for Geelong
- Attract investment and jobs in cleaner technology to the Geelong region
- Support Geelong to become a leader in integrating sustainability considerations into key organisational operations
- Develop Geelong as a leading model of a community transitioning to a low carbon economy
- Promote “Future Proofing Geelong” as the primary aggregation brand for sustainability initiatives in Geelong which align to the Low Carbon Growth Plan.

ALIGNMENT WITH LOCAL COUNCIL PRIORITIES

The Future Proofing Geelong program and the maintenance of the ongoing partner MOU is strongly aligned to the City of Greater Geelong City Plan. The program is directly involved in:

Growing our Economy – supporting existing business and encouraging new and emerging growth sectors. Facilitating a prosperous and innovative Geelong through implementing the Low Carbon Growth Plan, working with businesses to undertake and implement commercial building energy audits and upgrades, investment in and management of the clean technologies market development program (in partnership with key stakeholders); and

Sustainable built and natural environment – by supporting our community to live sustainably, advocating for and promoting sustainable design and development through community advocacy and education, web site materials and case studies.

The resourcing of the Future Proofing Geelong program and MOU is a significant part of the City of Greater Geelong’s commitment to sustainability and the environment. It supports meeting the requirements of Council’s Environmental Management Strategy and Zero Carbon Emissions Strategy, both of which are guided by the One Planet Living principles.

THE PARTNERS

The Future Proofing Geelong partners during 2011 to 2016
WHAT IS FUTURE PROOFING GEELONG?
Faced with challenges like climate change, economic adjustment and growth, the region has pursued a collaborative and innovative approach to Geelong becoming more resilient and adaptive.

**COMMUNITY** Information and resources relating to home and community sustainability.

**BUSINESS & INDUSTRY** Encouraging and supporting ideas and projects from business, to achieve low carbon economic growth.

**COMMERCIAL BUILDINGS** Emissions reduction, upgrades, and energy efficiency in office, government and business related buildings.

The purpose of Future Proofing Geelong is to promote and support new and existing initiatives from business, industry, community, education and government that seek to improve environmental outcomes for Geelong. Initiatives that lead to jobs, skills development and business development, that will further enhance the prosperity of Geelong for future generations, are a priority.
FUTURE PROOFING GEELONG INITIATIVES ADDRESS ONE OR MORE OF THE NINE THEMES ESTABLISHED TO ACHIEVE THE PROGRAM’S VISION:

MORE SUSTAINABLE
• Efficient resource use
• Enhancing natural assets
• Reducing environmental impact

MORE PRODUCTIVE
• Enhancing community capacity and skills
• Cleaner, leaner business and industry
• Innovation for sustainable economic growth

MORE LIVEABLE
• Resilient urban landscapes
• Resilient communities
• Secure natural resources

VISION

COLLABORATION AND INNOVATION
Future Proofing Geelong engages with numerous key stakeholders, establishing mutually positive relationships. The collaborations/partnerships have enabled the delivery of positive project results to support the Geelong community becoming a more resilient.
WHAT IS FUTURE PROOFING GEELONG’S IMPACT?
IT IS CLEAR FROM THESE RESULTS THAT PROGRESS HAS BEEN MADE IN ESTABLISHING GEELONG AS A MORE LIVEABLE, PRODUCTIVE AND SUSTAINABLE CITY.

This Impact Statement covers the period 2011-2016. This Statement combines the data across that period (and includes data from the previously published Impact Statement 2011-2014) to illustrate six years of program delivery.

The impacts of the program over this time have been very positive showing carbon emissions reductions from buildings, increased community engagement and developing markets for clean technologies.

KEY PROGRAM OUTCOMES INCLUDE:

- **13 Projects Supported in Business and Industry**: Creating or maintaining over 100 jobs, developing the skills of 600 people, expand 14 businesses and increasing turnover amongst business to the value of $1.2 million.

- **304 Community Projects and Activities Hosted**: Partnering and supporting community projects with participation rates estimated at approximately 54,000. High participation rates demonstrate a healthy community appetite to learn more about sustainable living.

- **11 Completed Projects with Commercial Buildings**: $679,000 invested in completed projects and a further $3 million in projects under development. Emissions savings are continuing to be identified and delivered with 433tCO2 savings from completed projects.

This work continues to bring benefits to the Geelong community; creating sustainable jobs, building skills and expanding businesses.
METHODOLOGY

The results presented in this Impact Statement have been collected from organisations occupying 21 buildings that have responded to a request for data from Future Proofing Geelong; community engagement data, and declarations of project outcomes made by those supported in business and industry. Over the years of data collection, Future Proofing Geelong and GHD have collected data, and ClimateWorks Australia has collated data.

ClimateWorks undertakes the analysis for the Impact Statement based on information provided by Future Proofing Geelong. Additional information has been sourced from various publicly available sources which are noted.

Where emission reductions have not been identified, ClimateWorks has calculated these based on standard emission factors (see assumptions).

Where cost savings have not been identified, ClimateWorks have calculated these based on standard energy prices (see assumptions).

Where sufficient information was not available to analyse opportunities in a quantitative manner, these opportunities have been considered in a qualitative manner.

ASSUMPTIONS

The following emission factors have been assumed, taken from the National Greenhouse Accounts Factors:

- 1 GJ Natural Gas = 0.05 tCO2e
- 1 tonne of wood waste sent to landfill = 1.2 tCO2e (lifespan emissions)
- Victorian grid electricity emissions intensity = 1.09 tCO2e/MWh

Where dollar savings have not been provided, an energy price of $35.30/GJ has been assumed for industrial users.

FUTURE PROOFING GEELONG HAS MOVED FROM BROAD AWARENESS RAISING TO FOCUS ON DEEPER ENGAGEMENT TO ACTIVATE ACTION ACROSS THREE PILLARS:

**ECONOMIC STIMULATION**

<table>
<thead>
<tr>
<th>OUTCOMES</th>
<th>IMMEDIATE IMPACT</th>
<th>FUTURE PROOFING GEELONG ACTIVITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGHER DEMAND for cleantech goods and services within Greater Geelong</td>
<td>Community: The community is living sustainably</td>
<td>Direct community engagement by hosting awareness raising events</td>
</tr>
<tr>
<td>GREATER SUPPLY of cleantech goods and energy efficiency services from businesses within Greater Geelong</td>
<td>Business &amp; Industry: Increased jobs and skills in Geelong’s cleantech sector and large-scale industry demand for cleantech goods and services</td>
<td>Grants to enable community organisations to engage the community</td>
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<tr>
<td></td>
<td>Commercial Buildings: Buildings are energy and resource efficient (EE) and powered by renewable energy (RE)</td>
<td>Development of the Smarter Homes, Smarter Living Program and the ESD Pilot program</td>
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**FUTURE PROOFING GEELONG GOALS**

<table>
<thead>
<tr>
<th>ECONOMIC STIMULATION</th>
<th>COMMUNITY</th>
<th>BUSINESS &amp; INDUSTRY</th>
<th>COMMERCIAL BUILDINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>OUTCOMES</td>
<td>Community</td>
<td>Business &amp; Industry</td>
<td>Commercial Buildings</td>
</tr>
<tr>
<td>• Renewable energy generated</td>
<td>• New skills and jobs created (number of jobs), sector investment ($ funds, $ turnover,) increase in revenues</td>
<td>• Emissions reduced (tCO2)</td>
<td></td>
</tr>
<tr>
<td>• Homes more efficient (Star rating)</td>
<td></td>
<td>• Renewable energy generated (kwh)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Increased awareness and engagement with sustainability in the community</td>
<td>• Waste diverted from landfill (kgs/CO2)</td>
<td>• Actions by owners and tenants to improve EE and RE</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Improved Energy Efficiency of Commercial Buildings (NABERS rating)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Increased engagement, awareness and knowledge of sustainable business practices</td>
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<td></td>
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<td></td>
<td>• Actively engage and support owners and tenants to reduce emissions by improving energy efficiency or resource recovery and considering renewable energy.</td>
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<tr>
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<td>• Increase capability and connect local energy efficiency service providers to businesses and commercial building owners</td>
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<tr>
<td></td>
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<td></td>
<td>• Provide grants and or support to seek funding to businesses and building owners seeking to reduce carbon emissions.</td>
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</tbody>
</table>
The community engagement program has deepened engagement and built capacity with a broad cross-section of stakeholders through a range of engagement activities.

Working with the community 304 events were held, and approximately 54,000 participants attended events.

Over 38 schools in Geelong have had sustainability content delivered in-house with Costa Georgiadis and Tim Silverwood.

6 grants were issued to community groups for projects which endeavour to deliver the aims of Future Proofing Geelong.

Involvement in the statewide Sustainable Living Festival for 4 years 2013-2016, which in 2015 provided 1/3 of the activities hosted across the state.

The 2013 Better Blocks event was the first in Australia and saw over 1000 attendees in Central Geelong promoting and demonstrating a broader sustainability message.

Key sponsorship and support for Sustainable House Day has seen an increase in attendance and participation.

The Smarter Homes Smarter Living program, an initiative developed to engage with new home builders to encourage energy efficient homes and uptake of rooftop solar, offers free sustainability design advice to anyone building a new home. This program included the Armstrong Creek Sustainable House (Nov 2013 – July 2015).

In July 2016 the City commenced a 12 month Environmentally Sustainable Design (ESD) Assessment Pilot. As part of the pilot a free ESD assessment is provided for medium to large planning development applications. Any take up of the recommendations is voluntary. An ESD Advisor has been engaged through Future Proofing Geelong for the pilot duration, to provide pre-application advice, assess development plans and make recommendations to improve the ESD credentials of developments. The assessment covers the following topics: indoor environment quality, energy efficiency, water efficiency, stormwater management, building materials, transport, waste management, urban ecology, innovation and construction and building management. To date the ESD advisor has attended 31 pre-application meetings on eligible developments, assisted 15 state referrals on projects within the Geelong CBD and to date 28 applications have had assessments completed with recommendations provided to the applicant.

Prior to commencing the trial, ESD training was provided to the Statutory Planning Department on the history of ESD in planning and ESD principles. ESD trial information and sustainable building factsheets have been made available on the City’s website: www.geelongaustralia.com.au/planning/article/item/8d364694019e82e.aspx
ENCOURAGING AND SUPPORTING IDEAS AND PROJECTS FROM BUSINESS: BUSINESS AND INDUSTRY IMPACTS

In 2014, funding was secured to run a three year program of support for business and industry looking to develop markets for cleantech products and services. The program is based on a market analysis and skills and capabilities audit, which identified opportunities across Greater Geelong. The program is co-funded by the City of Greater Geelong, Geelong Manufacturing Council programs and the Manufacturing Productivity Network (state government);

- Cleantech Innovations Geelong is an alliance of business and industry looking to develop Geelong as a centre of excellence for clean technology in Australia
- Thirteen projects have been supported in business and industry, which will create or maintain over 100 jobs, develop the skills of 600 people, expanded 14 businesses and increased turnover for businesses to the value of $1.2 million
- The projects supported include:

1. ASPIRE: materials resource exchange platform
2. Electric vehicle charging stations installed on the central Geelong waterfront
3. Electric Vehicles Conference
4. Environmental Upgrade Agreements
5. ESIC Lighting: Energy efficient industrial lighting product innovation to better manage a wireless operating system to achieve energy and costs savings
6. Green Roof Competition for commercial buildings
7. Household trial of CLOéy food waste processing units
8. People’s Solar: Refinement of a model for crowd-funding small-scale community solar power
9. Polymeric Powders: Market research about the scale of demand for a new raw material made from waste tyres
10. Precinct Scale Food Waste Processing trial at Deakin Waurn Ponds Campus: in partnership with Deakin University and CSIRO
11. Procurement for Innovation project – Barwon Heath: investigating the recyclability of, or use of secondary materials in the manufacture of key health care products
12. Procurement for Innovation project – City of Greater Geelong: Zero maintenance recreational bridges with a 100+ year design life initiated by the Council. Eight suppliers have expressed an interest, currently receiving support to be tender ready for 2017
13. The Black Shed: a demonstration site for renewable energy and energy efficiency goods and services for households

- Support to business and industry has resulted in over $2 million being secured for projects
- Successful bids into each round of the Geelong Region Innovation and Investment Fund, resulted in projects valued at $1.76 million that are estimated to deliver 31 jobs in manufacturing
Office, Government and Business Related Buildings: Commercial Buildings Impacts

- Engagement with building owners, tenants, energy efficiency service providers, real estate agents; and some buildings owned by the City, has contributed to the data reported to date;
- Emphasis on developing mutually positive relationships and knowledge sharing, particularly with:
  - businesses, who are often responsible for and incurring the challenge of increasing energy prices
  - local building owners, many of whom own multiple buildings in Greater Geelong and can therefore facilitate significant volumes of carbon emissions reduction activity
  - energy efficiency service providers, many who are local and eager to engage with fellow local businesses;
- $3 million investment in projects under development and $680,000 investment in completed projects
- A strategic partnership with the national CitySwitch program supports Future Proofing Geelong to engage with and support business and government tenancies to improve their energy and resource efficiency
- 20 grants to meet 50% of the cost of energy assessments have provided energy efficiency recommendations to building owners and businesses. This support was strengthened by guidance to implement identified opportunities through links to local service providers, funding opportunities and assistance to measure savings
- To date, more than 3000 tonnes of emission reductions opportunities have been identified from commercial building upgrades, of which more than 430 tonnes have been reported completed

$3.68m investment in projects under development or completed
3,511tCO2 in total emissions savings in various stages of completion
3,077 emissions savings in progress
433tCO2 emission savings delivered/completed

Reported energy savings in the pipeline have increased to 7% of corresponding energy use in 2015/16

Building retrofits, solar and HVAC improvements are reported to be the largest opportunity for emission reductions in the pipeline
SNAPSHOT OF IMPACTS 2011

MAY 2011
SUSTAINABILITY COVENANT
Signing Of Covenant

JUNE 2011
PROJECT GOVERNANCE
Establishment
Advisory Board and Working Group,
Project Branding, Website development.

JUNE 2011
CLIMATEWORKS LOW CARBON GROWTH PLAN
Program launch

AUGUST 2011
PRIME MINISTER VISIT TO GEELONG
Acknowledgement

OCTOBER 2011
REFERENCE GROUPS
Group Establishment
To ensure FPG took a holistic approach
to sustainability, a bottom up feedback
mechanism was established by the
development of the SME and Community
Reference Groups. Members of the
community were invited to apply to
participate as representatives of small
business, sustainability related community
groups or general community interest.
From the work these groups participated
in, a list of 30 projects was distilled down
into 3 themes and a project for each theme
was developed via a facilitated process
so that attention and funding could be
provided by a targeted response.

NOVEMBER 2011
LOW CARBON AUSTRALIA FORUM
Forum
SNAPSHOT OF IMPACTS 2012

FEBRUARY 2012
SMARTER HOMES, SMARTER LIVING
Launch event

MAY 2012
COMMUNITY AND COUNCIL IN TRANSITION
Conference

JUNE 2012
CLEANTECH CONFERENCE
Partnering With GMC
This event featured presentations from successful businesses operating in the cleantech sector. The intention was to empower local businesses looking to transition to clean technologies.

The event provided a forum for over 100 businesses to understand key issues facing the cleantech market. It provided a catalyst for the creation of Cleantech Innovations Geelong.

JULY 2012
LOW CARBON AUSTRALIA FLEXIGROUP
Forum

APRIL 2012
FPG FUNDING ASSISTANCE
Program Launch

MAY 2012
CEEP FUNDING ANNOUNCED
Funding Announcement
City of Greater Geelong successful in CEEP funding, energy efficiency upgrades to Council buildings
This project supports the Low Carbon Growth Plan as well as contributing to the goals of Council’s Ecocallenge program.

JULY 2012
SMARTER HOMES, SMARTER LIVING
Booklet Release

SEPTEMBER 2012
SUSTAINABLE HOUSE DAY
Event
SNAPSHOT OF IMPACTS 2013

JANUARY 2013
GREENLIGHT PROGRAM
Initiative Commencement
Part funded by Sustainability Victoria and delivered in partnership with Geelong Manufacturing Council, Future Proofing Geelong and the Barwon Regional Waste Management Group. This training course, which attracts Continuous Professional Development points, worked on building the capability of 30 regional companies from a broad cross section of industry.

The course was designed to assist businesses transition towards a sustainable, low-waste, thriving enterprise.

JUNE 2013
GEELONG BETTER BLOCKS
Australian First Event

AUGUST 2013
AUSTRALIAN YOUTH CLIMATE COALITION
Forum
Australian Youth Climate Coalition Youth Forum- partnered with AYCC, CoGG Youth Dept & Barwon Regional Waste Management Group (10 schools involved, 80 students)

Students were led through a series of facilitated sessions to understand climate change and how it will affect their future as well as visioning the future they hope to have and inspiring them to action.

NOVEMBER 2013
CITY SWITCH AWARD
Award Runner Up
Future Proofing Geelong became the City of Greater Geelong’s responsible team for sign up to the CitySwitch Program for the city.
Council and local business engagement in the Program led to Victorian New Signatory of the Year Runner Up award.

FEBRUARY 2013
SUSTAINABLE LIVING FESTIVAL
Event

AUGUST 2013
CLEANTECH INNOVATIONS GEELONG
Alliance Launched

NOVEMBER 2013
ARMSTRONG CREEK SUSTAINABLE HOUSE
Program Launched

DECEMBER 2013
CLEANTECH INNOVATIONS GEELONG
Market Analysis and Skills and Capabilities Audit Results Released
SNAPSHOT OF IMPACTS 2014

MEMORANDUM OF UNDERSTANDING
Memorandum of Understanding signed by 10 organisations committed to working together to make Geelong a more liveable, productive and sustainable place to be.

AWARDS
Future Proofing Geelong is recognised through a number of Awards schemes:
- Australian Regional Development Innovation Awards 2014 – Environment & Sustainability Award.
- Sustainable Living Festival – Silver Honker for the region making the most noise about sustainability 2014.
- City of Greater Geelong Green Achiever Award 2014 for Future Proofing Geelong staff member, Sam Smith.

NATIONAL AWARD
Winners: CitySwitch National Award for Partnership of the Year (City of Greater Geelong – Future Proofing Geelong, Ryrie Centre Property, 235 & 237 Ryrie St Geelong tenants).
CitySwitch State Award for Partnership of the Year in Victoria (City of Greater Geelong – Future Proofing Geelong, Ryrie Centre Property, 235 & 237 Ryrie St Geelong tenants).

SUSTAINABILITY VOLUNTEER SUPPORT
Value of volunteer support dedicated to sustainability activities in Geelong spikes at $144,000.

UPDATE TO LOW CARBON GROWTH PLAN
Updated Low Carbon Growth Plan commenced in 2014, is published in 2015.

SUSTAINABLE LIVING FESTIVAL
The 2014 Sustainable Living Festival breaks all previous records attracting 3,700 participants to 63 events.
SNAPSHOT OF IMPACTS 2015

MAY 2015
FUTURE PROOFING GEELONG
Five Years Old
Working with community, business and industry to make Geelong more sustainable.

DECEMBER 2015
CITY SWITCH PROGRAM
21 Businesses Now Signed Up
Achieving total energy reduction savings of 145 tonnes of carbon emissions. Total Green Power purchases equal 857 tonnes. Total abatement as a result of the CitySwitch program equals 1002 tonnes CO2-e

FEBRUARY 2015
SUSTAINABLE LIVING FESTIVAL GEELONG
Over 90 Activities Held
Including schools tours with Tim Silverwood and Costa Georgiadis (Gardening Australia) that attract 8,500 participants. The Sustainable Living Expo and other events hosted by community and business encourage residents to live a low carbon lifestyle.

OCTOBER 2015
AMBASSADOR
Mr Tom Lonergan, Geelong Cats Player
Helps share the Future Proofing Geelong message.

JANUARY 2015
CLEANTECH INNOVATIONS GEELONG
Kicks Off With A Bang
Including procurement for innovation projects which stimulate demand for waste efficient, energy efficient and water efficient products. Local suppliers are supported to respond to this increased demand.

FEBRUARY 2015
GREEN CARPET AWARDS
Celebrating Achievements
To acknowledge the hard work of our community groups, individual volunteers and businesses working in partnership with Future Proofing Geelong to create a more sustainable future.
SNAPSHOT OF IMPACTS 2016

FEBRUARY 2016
GREEN ROOF COMPETITION
Creating More Green Spaces

The competition invited commercial building owners to explore innovative ways of incorporating rooftop gardens throughout Geelong. Students from Deakin University’s Master of Landscape Architecture program assisted with green roof designs and residents were invited to vote for a ‘People’s Choice Award’. Six leading organisations entered.

FEBRUARY 2016
SUSTAINABLE LIVING FESTIVAL AND SCHOOL TOURS
Tim Silverwood (Take 3 for the Sea) and Costa Georgiadis (ABC’s Gardening Australia)

Tim and Costa take their sustainability message to major Geelong events including the Nightjar Markets and Pako Festa. As well as visiting 19 schools around geelong, delivering their message to over 500 students and teachers.

2016
GREEN CARPET AWARDS
Celebrating Achievements

Acknowledging the efforts and passions of community groups, leading the change in sustainability actions in Geelong.

OCTOBER 2016
CLEANTECH INNOVATIONS GEELONG
Projects confirmed

Thirteen projects are progressing to increase jobs, build skills and expand businesses. These projects stimulate demand for, or increase local supply of, waste efficient, energy efficient and water efficient products.

2016
GEELOONG ENVIRONMENTAL FILM FESTIVAL AND YOUTH LEADERSHIP PROGRAM
Event

Over 11 schools in Geelong sent youth leader delegates to attend the youth leadership program as part of the Geelong Environment Film Festival.

2016
GEELOONG OFFERS ENVIRONMENTAL UPGRADE AGREEMENTS
Project confirmed

An Environmental Upgrade Agreement (EUA) is an agreement between building owners, lenders and local council. This loan facilitates building upgrades to improve the environmental performance and requires no upfront capital or security. The building owner and business can both instigate and contribute to this opportunity.

2016
GEELOONG OFFERS ENVIRONMENTAL UPGRADE AGREEMENTS
Project confirmed
HOW ARE OUR PARTNERS WORKING WITH FUTURE PROOFING GEELONG?
HEATING AND COOLING SYSTEM UPGRADE HELPS SAVE THOUSANDS OF DOLLARS AT KEY COMMUNITY FACILITIES

Leisurelink Aquatic Centre and Corio Library will significantly improve their energy efficiency thanks to upgrades to heating and cooling systems.

With funding assistance from Sustainability Victoria, the City has undertaken a $340,000 project to upgrade the chillers at Corio Library and Anakie Road depot as well as the boiler (pool heater) at Leisurelink Aquatic Centre.

The City thanks Sustainability Victoria for funding $170,000 towards the project. The upgrades undertaken last October and November would result in savings of around $35,000 per year.

"Not only will it save thousands of dollars per year, but importantly, it will offset around 239 tonnes of greenhouse gas emissions, that is the same as flying return from Melbourne to Brisbane 223 times."

The City was determined to ‘walk the talk’ when it came to sustainability efforts in the region and make all of Council’s buildings more sustainable.

DEAKIN UNIVERSITY LEADERS IN SUSTAINABILITY DATA COLLECTION

Deakin is the first university in Australia to use Kinesis software, an integrated data management and reporting system that helps understand how to build on sustainability initiatives. It works by receiving data directly from Deakin’s metering and services to monitor, measure and report on the sustainability performance of campuses.

Kinesis feeds live sustainability data via digital screens to staff and students, providing real-time information about energy usage, water consumption and other resource management, to influence how Deakin University uses these supplies.

This system is now Deakin’s single source of truth for sustainability metrics and allows the Sustainability and Facilities teams to monitor the performance of the built environment.

THE OUTCOME

Since the implementation of the tool, Deakin University has been able to establish an emissions baseline from which they have developed a detailed Carbon Management Strategy. Engagement with sustainability data has increased significantly across Facility Managers and Service Providers, and data is now trusted as CCAP provides a ‘single source of truth’ that can be relied upon.

In 2017 Deakin University plan to use this data and develop engaging digital information screens to communicate performance and impacts at a campus and building level.
BARWON HEALTH CLOSED LOOP PROGRAM - RAISING STANDARDS IN SUSTAINABILITY

Barwon Health’s Food Services CPU (Central Production Unit) produces over 3,000 meals per day and employs 150 staff, including cafeteria, food production, drivers, and food service assistants. The CPU is the hub of food production across Barwon Health where all meals are produced and dispatched.

Barwon Health’s Food Services CPU recognised the need to find an option for recycling and an alternative to landfill for unconsumed food and production waste.

A Closed Loop Organics Unit (CLO300) was installed. The CLO300 has the capacity to compost all of the unconsumed food and production waste from approximately 3,000 meals per day for patients, residents and clients.

The food waste is converted into nutrient-rich soil conditioner within a 24 hour period. The soil conditioner is donated to various community gardens and a local winery.

We have achieved:

- 100% diversion of food waste from landfill
- Reduction in size of our landfill bin
- Less frequent collections of our landfill bin

Barwon Health Food Services CPU, was the winner of the Environment and Sustainability Award at the 2015 Australian Regional Development Conference Innovation Awards for their Closed Loop Organics Composting Project and was also winner of the Premier’s Regional Recognition Award at the Premier’s Sustainability Awards 2015.

BARWON WATER – FORERUNNERS IN ENVIRONMENTALLY FRIENDLY OFFICE SPACE

Barwon Water has recently refurbished and transformed its 50 year old Ryrie Street office into the greenest office in Geelong. Ryrie HQ achieved 5 Star Green Star for design and is an exemplar of what sustainable outcomes can be achieved through building redesign and refurbishment.

THE OUTCOME

Ryrie HQ will be 80% more energy efficient than the previous office spaces. It features a high performance façade that eliminates 95% of direct sun penetration and has an innovative HVAC system. By retaining the original building structure, more than 1 million kilograms of CO2 (equivalent) were saved.

The building has spectacular views over Corio Bay and a roof garden that provides urban greening and an exceptional outdoor space for staff. It also features two green walls and a raingarden providing water treatment and aquatic biodiversity. The building re-uses rainwater for toilet flushing and irrigating the green infrastructure. The building reconnects all ability access between Ryrie Street and the Arts and Library hub.

It also supports the revitalisation of Central Geelong, providing a new architectural and sustainable building icon for Central Geelong.
HAIR (AND BEAUTY) GOES GREEN AT THE GORDON.

In 2016 The Studio, The Gordon’s Hair and Beauty salon, became the first TAFE in Victoria to join the Sustainable Salons Australia initiative.

The Studio now recycles 95 per cent of its waste by using the resource recovery service offered by Sustainable Salons Australia.

Rather than contaminating the waterways, excess shampoo and hair colour waste go to a chemical recycler. Plastics are also recycled into construction material and gardening equipment.

There is social capital built into the project as well, with proceeds from recycling benefiting the community through several programs. Every kilo of recycled aluminium helps Oz Harvest fund four meals for the homeless. Ponytails go to the Variety Charity to provide wigs to children with alopecia, while cut hair is made into booms used to absorb oil spills.

CONSTRUCTING (GREEN) FUTURES – THE GORDON.

Changing teaching practices has led to efficiencies in construction related courses. These include:

- Increasing on-site training and delivery and assessment in painting, carpentry, bricklaying and crane driving. Uses the equipment of the employer, cutting down on the need for equipment and resources usage.
- Greater use of online and BlendEd learning programs. This initiative greatly reduces the need for the physical printing of resources that can be often wasted or not used to their full potential. Learning and assessment materials are now online in many courses giving greater freedom and flexibility to program delivery. A side benefit of this approach is reduced car emissions with students not having to attend physical classes.
- Scrap wood offcuts are stored and recycled.
- Scrap metal from plumbing activities is recycled.

COMMITTEE FOR GEELONG

The Committee for Geelong was delighted to host a Future Proofing Geelong briefing in December 2016 with the Minister for Energy, Environment and Climate Change, The Hon Lily D’Ambrosio along with Christine Couzens, MLA Member for Geelong. The event was a significant opportunity to highlight the program and its successes to the Minister, together with members of the Committee for Geelong.

The Future Proofing Geelong team presented a summary of the business and the broader community sustainability initiatives, in addition to the industry employment and investment achievements of Cleantech Innovations Geelong (CIG). Minister D’Ambrosio spoke about the Government’s current areas of focus in sustainability and the environment and a range of funding programs. The event provided a unique opportunity to promote and demonstrate to the Minister and Committee members the value of further investment in the Future Proofing Geelong program and alignment of projects such as CIG with the Victorian State Government’s initiatives.
WHAT IS NEXT FOR FUTURE PROOFING GEELONG?
FUTURE PROOFING GEELONG HOLDS A TRUSTED, RECOGNISED POSITION AMONGST STAKEHOLDERS WITHIN GREATER GEELONG.

The partners involved in Future Proofing Geelong have committed to work together for nearly ten years, at the time of publication of this Impact Statement.

This is a formidable indication that Future Proofing Geelong remains a productive way in which to bring economic growth outcomes and sustainability together.

Our future projects will build on efforts with commercial buildings, business and industry and the community.

OPPORTUNITIES GOING FORWARD

The Low Carbon Growth Plan for Greater Geelong 2015 update states that countries, cities and regions are now starting to focus on post-2020 carbon emissions targets and the long term goal of decarbonising by the middle of the century. Geelong can remain a leader by starting to develop longer term emission reduction strategies.

The Pathways to Deep Decarbonisation report - a collaboration between ClimateWorks and Australian National University - sets a framework for planning for long term emission reductions. The report is part of the global Deep Decarbonisation Pathways Project, a collaborative initiative of 15 countries representing more than 70 per cent of global emissions, which shows how individual countries can transition to a low-carbon economy and limit global warming to 2 degrees celsius.

The Australian pathway outlined in the report can be used as a framework for Geelong’s long term planning. In addition to accelerating implementation of cost-effective measures now, a priority outlined in the report is to ensure that long-term assets such as buildings and industrial plant being built in coming years take advantage of the latest technologies, so that higher than necessary emissions are not locked in for years to come. The report also identifies the need for research and development of new technologies and approaches, and for skills and supply chains to be developed to deliver these.

While many technologies needed to drive deeper emissions reductions are being developed at a national or global level, cities such as Geelong can support deployment at a local level, including through planning, skills development, supporting infrastructure and building local capacity. An example of this is deployment of infrastructure locally to enable roll-out of electric vehicles.

Geelong is a recognised leader in regional low-carbon planning. The unique collaboration of Future Proofing Geelong has helped drive implementation of the Low Carbon Growth Plan for Geelong, and can serve as the backbone for a longer term transition to a low-carbon economy.