



SALT Torquay



One Planet Action Plan

2019 Review

"Enabler of Regional Prosperity"



THE SURFACE OF
TORQUAY LIVING

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1. Message from Managing Director

I am delighted to present Barwon Water's first annual review of the One Planet Action Plan for SALT Torquay.

SALT Torquay — Barwon Water's 7.5-star or equivalent housing development being built at the site of a former water basin — is the first estate in regional Australia to be recognised as a One Planet Community.

It's an inspiring example of sustainability in our region, aligning to Barwon Water's Strategy 2030 commitment to be an enabler of regional prosperity – economically, environmentally, socially and culturally. Not

only are we designing and creating a liveable, sustainable residential estate, the proceeds from SALT Torquay benefit all Barwon Water customers by helping to keep prices on their bills low.

Barwon Water has established a framework for residents of SALT Torquay to design, build and live in homes that have a small environmental footprint and can be run at a low cost. We have partnered with the local council and appointed a community facilitator to ensure future residents of SALT Torquay are supported to embrace One Planet Living once they move in from 2020.

Our design for SALT Torquay challenges the standard for sustainable and liveable communities in regional Australia. We are particularly proud of the integrated water components that will see household water consumption reduced by 30% and raingardens incorporated into vibrant community spaces. Barwon Water will use SALT Torquay as a pilot study to monitor the impact of digital water meters on water consumption and intends to share its findings with the wider community and industry.

SALT Torquay will enable comfortable living environments for people of all abilities, as well unique connections to nature, creating a healthy, vibrant and desirable place to live.

A new 250kW solar array has been built on land opposite SALT Torquay and is now operational. In time, the array in combination with household solar and batteries will in combination deliver the equivalent of more than 90 per cent of the estate's total energy needs. The residential subdivision construction is 75 per cent complete with 60 per cent of the first land release sold.

We look forward to implementing the actions of the One Planet framework over the coming 12 months at SALT Torquay to embed its credentials as a flagship sustainable community.



Tracey Slatter
Managing Director Barwon Water





2. Introduction

This new, boutique residential estate will replace the former Torquay water supply basin. The estate provides a range of housing styles and living options, including conventional residential lots, townhouse and unit sites' providing more than 80 dwellings.

SALT Torquay Estate is situated over 5.4 hectares of land near the heart of Torquay in the Surf Coast Shire. The surplus government landholding, within easy walking distance of Torquay College and St Therese primary schools, will be transformed into an integrated, tree-filled, liveable community where walking and cycling are prioritised. The estate incorporates integrated open space and water cycle management strategies that aim to foster a sense of community for local residents and visitors.

Innovative technologies and forward-thinking approaches have been employed to optimise the use of natural resources and support the creation of closed-loop systems. The development creates a place that is unique to its local recreation, education, arts, culture and environmental surrounds. The Salt Torquay project aims to create a sustainable space that the community can enjoy together, enhancing the quality of life for Torquay residents. .

Integrated water cycle management principles have been incorporated with storm water swales and rain gardens that double as a cultural and educational wayfinding experience. Integrated landscaping and a nature-inspired playground are designed to respect the indigenous cultural origins of the area and create a space for the community to gather. A 250-kilowatt solar array built on adjacent land is set to compliment household solar energy generation, which in combination will provide over 90% of the estates energy needs.

This best-practice residential development enables us to set the bar high for future communities. We are living our goals of zero emissions, zero waste and delivering outstanding community value.



Our One Planet Living Community includes:

- Design principles to promote health and wellbeing
- Redevelopment of former water storage basin
- A diverse range of housing options (villas, units, townhouses) with garden space for food generation
- 7.5 star energy rated homes
- Two raingardens
- Public and private open space
- Community space to foster friendships and connections
- Minimum 2.5kW battery ready solar photovoltaic system on every house
- 250kW solar array on adjacent land
- Rainwater collection tanks on all lots with first flush diverter plumbed to laundry and toilets
- 100% of homes with universal access to promote a 'home for life' philosophy and allowing deeper community connections to grow.
- Construction of new path connections to schools, recreational and local amenities
- Smart electricity and water meters in every home
- Each dwelling to allow for electric vehicle charging.
- Public space artworks
- Education and cultural wayfinding to foster a strong linkage to the wider community and cultural history of the land

The Salt Torquay One Planet Living Action Plan achieved national endorsement in 2018. The 2019 annual report is the first review of our progress under our national certification. The report outlines our progress against our community targets outlined in our One Planet Living Action Plan, key project and actions taken to date. Key priorities for 2020 and beyond are outlined in the final section.

3. Key Activity in 2019

Barwon Water has made great progress on the design and construction of SALT providing a seamless connection with the Torquay community and education precinct. Under utilised land at Barwon Water's Torquay water tank opposite SALT has been transformed with a fully operationally 250V solar array.

SALT civil construction undertaken by a local contractor substantially progressed during 2019 with the majority of the estate subdivision works completed by June 2019, including the construction of the estates roads and footpaths, two raingardens and the installation of key services (water, sewer, drainage, electrical, high speed internet).

Following the completion of the SALT landscape design in consultation with Surf Coast Council and the Wadawurrung RAP, landscape works commenced in September 2018. The landscape design at SALT is a celebration of Torquay's unique coastal character, and its natural and aboriginal cultural heritage.

A comprehensive series of walking and cycling paths link intimate plaza spaces, play space and parkland. Each community space incorporates predominantly locally native plant and tree species, recycled and natural materials such as reclaimed water basin embankment rock, and artworks which have strong reference to the culture of the traditional owners of the site, the Wadawurrung people. The wheelchair accessible children's play space will form part of the wider universal access design of the site and is set above the dramatic backdrop of Torquay Point. Visible throughout the site and overlooking the parkland below, the space is designed to encourage a deeper level of connection for the entire community. The individually locally designed and fabricated play elements will tell the story of the locally endemic and endangered Hooded Plover with luminous, speckled eggs embedded in the pathways, an arbour shaped like the nest of the Plover and a cubby-like pod and lookout portal to Torquay Point.





An overview of other key activities for 2019 is provided below:

Housing Precinct

- Civil and Landscape detailed design approved by Council
- Construction commenced
- 7 future home owners accessing architectural advice
- Salt cultural wayfinding strategy approved in partnership with Wadawurrung traditional owner representatives
- Planning approval for 7 medium density superlot sites providing for 36 dwellings, including affordable housing
- Salt Torquay project announced <https://www.salt-torquay.com.au/>

Sales

- Substantial community interest generated with over 1200 current registrations for SALT Torquay with regular updates provided to these potential home owners
- The first vacant land release was successful with 70% of the land sold to date
- Residential developers have responded positively to the Building Design guidelines and advised that they are able to collaborate with clients to reach the desired energy rating requirements
- Educational site tours held with two local schools

Site Initiatives

- 250kV solar array constructed on adjacent land now operational
- Salt Community Coordinator appointed
- Procurement of SMART water meters
- Engagement of energy assessment consultant
- Investigation of Salt being incorporate into Cultural 'Walk and Talks' on Country with the Wadawurrung Registered Aboriginal Party (RAP)
- Construction commenced on the community play space that will provide a cultural and education component for the whole community

4. One Planet Action Plan

Barwon Water has more than 110 years of experience in providing excellence in water, sewer, and recycled water services to its customers and the community. This is what we do; we do it well and we need to keep doing it well.

Building on our core business success, we are now entering a new phase in the organisation's history. Recognising the challenges of climate change, population growth, rapid technological advancement and economic transition, we are shifting our mind-set from water utility to being a leader in regional prosperity. Our vision for regional prosperity not only encompasses economic, social and environmental elements, but also recreational and cultural imperatives, including enhancing Aboriginal values.

As the land developer, Barwon Water will not ultimately be constructing the buildings, but has made every effort to make it possible for homeowners and building developers to create a community where it will be possible to live a One Planet Lifestyle. The key mechanisms that Barwon Water have utilised include:

4.1 Design Mechanisms

- Subdivision planning permit approval (SPPA)
- Medium density and development planning permit approval (MPPA) including architectural drawings and planning statement
- Design and layout (DL)
- Design standards, overseen by a Design Review Committee for conventional residential lots and medium density lots including:
 - Mandatory inclusions (DG-M)
 - Suggested considerations for buildings and gardens (DG-S)

4.2 Resident Incentives and Guidance

- Salt vegetation certificate for 250 indigenous plants from Barwon Water's community nursery.
- \$5,000 credit certificate for an accredited battery storage and control system connected to the household solar system

4.3 Community Engagement

- Appointment of Community Facilitator
- Partnership with Surf Coast Council to maximise community engagement on sustainability issues
- Resident Welcome Pack

One Planet Action Plan

The SALT Torquay One Planet Action Plan embodies the goals and aspirations of Barwon Water, key stakeholders and the Bioregional Australia imperatives. It has been developed for the purpose of creating transformational change across each of the project phases of Design, Construction and Residential lifestyles.

It includes some measures that can be directly implemented by Barwon Water as part of the redevelopment of the former Torquay Basin, as well as targets and goals that are beyond the control of Barwon Water, which can only be achieved through the participation of statutory authorities, utilities, other stakeholders and future homeowners.

This report assists Barwon Water in monitoring progress against the Action Plan.



5. Review of Progress against Action Plan

5.1 Health and Happiness

Encouraging active, social, meaningful lives to promote good health and wellbeing.

Goal	Outcome	Indicator	Performance
HH1	Create a livable neighbourhood where walking and cycling is prioritised	80% physically active residents	<p>Creation of shared footpaths and roads are 90% complete. This infrastructure will facilitate an increase in physical activity alongside encouragement and education through the community facilitator.</p> <p>Footpaths and active transport links constructed throughout the site to facilitate active transport to key facilities within 20 minutes</p>

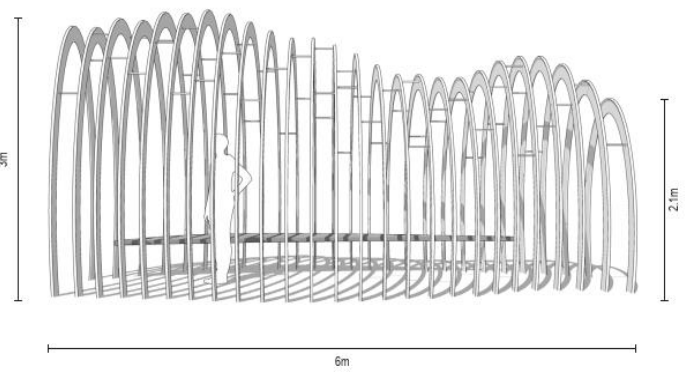
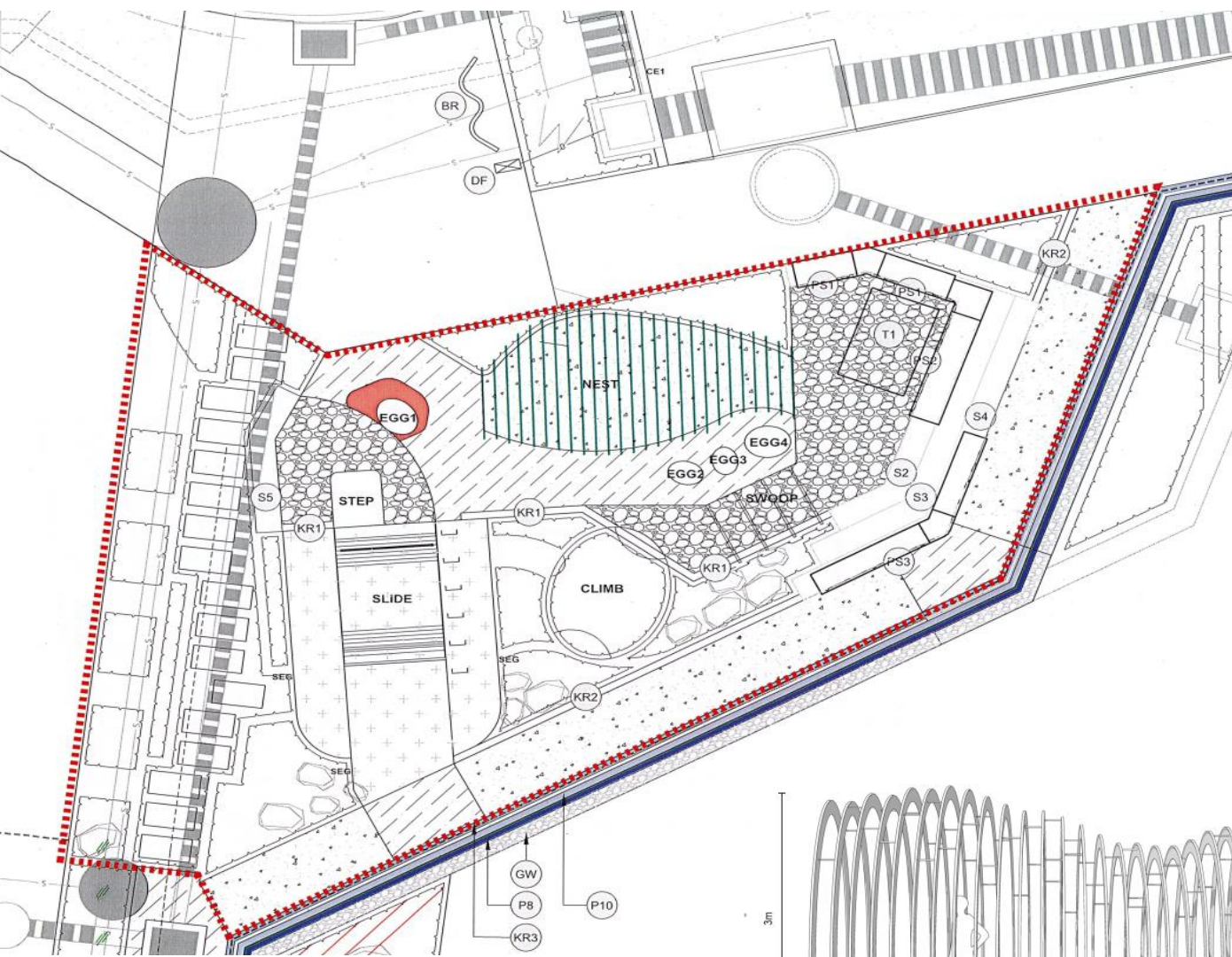
5.1.1 Key Activities and Successes

Salt Torquay is currently in the construction phase. Health and happiness ultimate goals will be achieved once residents move in from 2020. During 2019, the following progress has been achieved:

- Construction of pedestrian only zones (playground, plaza and rain garden) and pathways that will connect future residents to the local schools and amenities. This will make active transport safer and more attractive.
- Passive surveillance has been designed into playground, raingarden and plaza spaces, creating a safer place to enjoy the outdoors.
- Wayfinding design finalised and construction commenced of wayfinding elements. Wayfinding to provide education and direction about the estate and wider communities facilities. Wayfinding Strategy development in partnership with the Wadawurrung .This incorporates cultural heritage and biodiversity information relevant to Salt and the surrounding context.
- Additional 500m of shared path is being construction along Grossmans road (outside of the estate) to encourage pedestrian and cyclist usage and provide connection built to local primary schools
- Local Sales team educated on the One Planet Living framework and facilitating discussion with potential purchasers on the community's vision



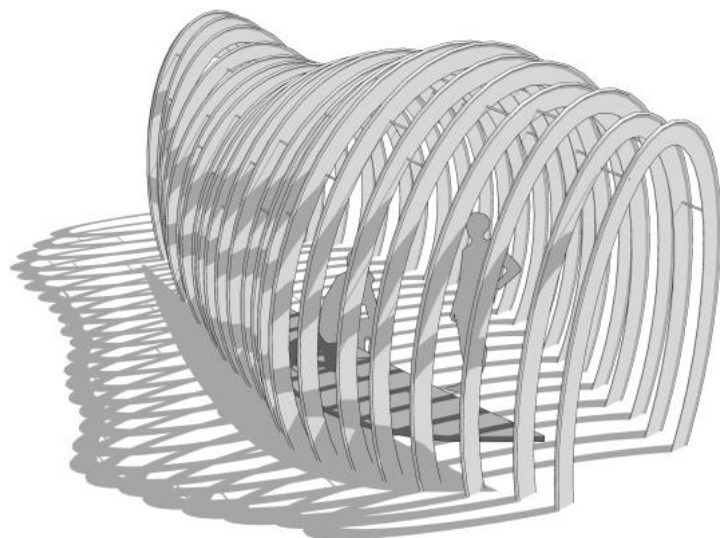
Case Study 1 – A Nature Inspired Play Space

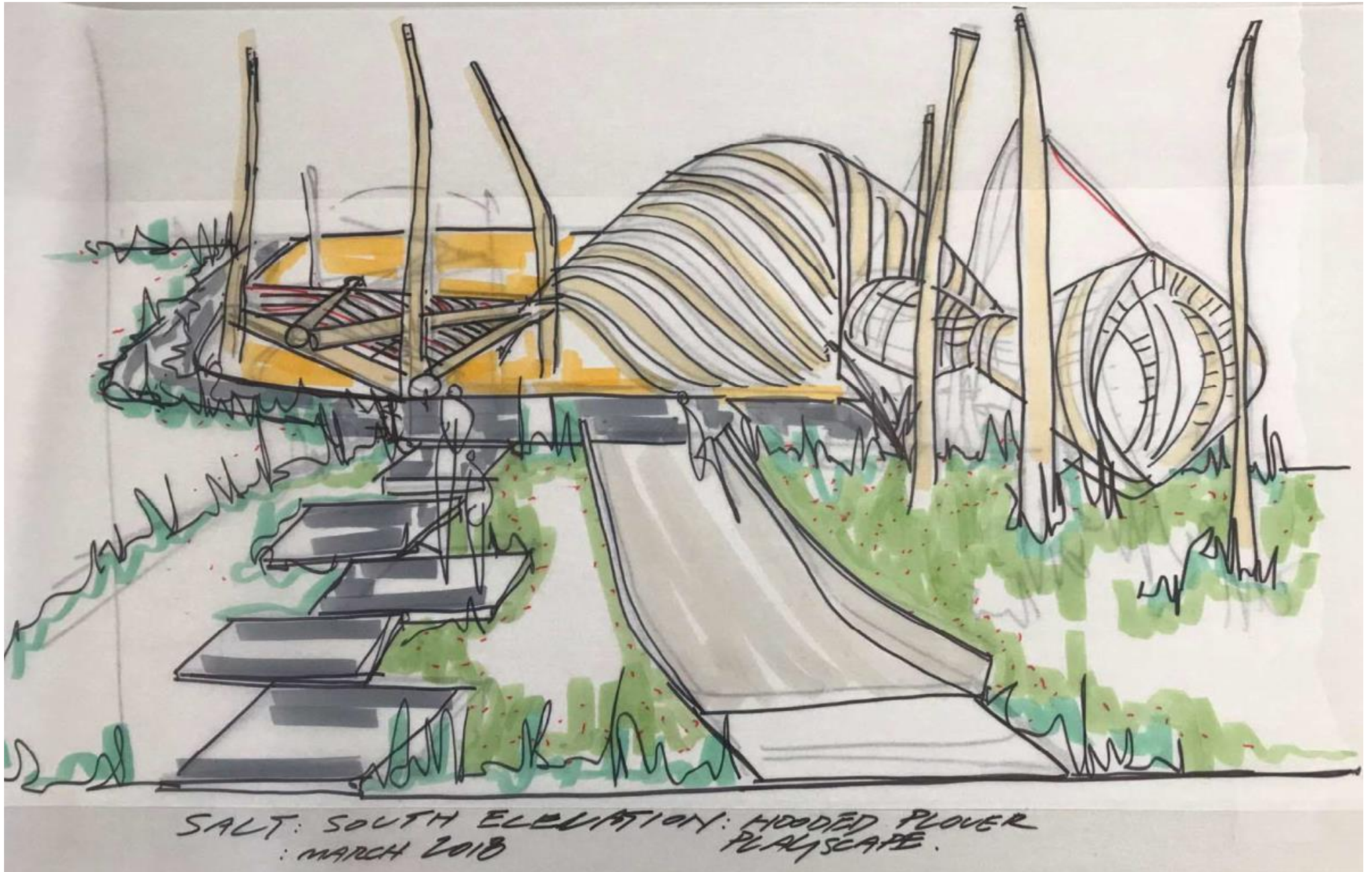


An exciting playspace is under development for the future residents of Salt Torquay.

Inspired by nature, the playground mimics the characteristics of the life of a hooded plover. The playspace will feature a walkthrough nest and speckled hooded plovers eggs to compliment the surrounding play equipment.

Built above the raingarden with glorious ocean views the playspace was designed with passive surveillance in mind. Making it a fun, happy and safe space for all. Construction of the equipment has commenced and is due to be completed by the end of 2019.





5.2 Equity and Local Economy

Creating safe, equitable places to live and work which support local prosperity and international fair trade.

Goal	Outcome	Target / Indicator	Performance
EE1	Employment of all consultants from within the local region (within 30 km).	80% of consultants used throughout the project to be from the local region	100% of engineering, town planning, surveying, landscape architecture, geotechnical consultants employed on Salt with G21 region (i.e. within 30kms)
EE2	Contractors encouraged to employ at least one apprentice, trainee or graduate where possible from the local region (30km). .	1 per contractor	100% compliance

5.2.1 Key Activities and Successes

- The civil construction of underground services complete. This allows all residential lots access to high-speed internet (NBN) connection points.
- Building Design Guidelines finalised and published that include reference to locally sourced materials in housing construction.
- Over 95% of public realm materials within Salt Torquay have been sourced from local quarries. The concrete and asphalt that has been used is sourced from within 30km of the site and the remainder is regionally sourced from nearby Geelong (bitumen mix refined in Geelong, 40km away.)
- All landscape contractors locally based (Head offices or residing within 20km of site).
- 100% of consultants employed within GROW G21 region (30km radius)
- All key contractors have engaged apprentices from the local region intermittently throughout the project. Lake & Land employed a graduate engineer used as site manager.



5.3 Culture and Community

Nurturing local identity and heritage, empowering communities and promoting a culture of sustainable living.

Goal	Outcome	Target / Indicator	Performance
CC1	Proactive leadership and consultation with the Wadawurrung Registered Aboriginal Party (RAP) to provide cultural education through wayfinding signage	Employment of local indigenous group	Wayfinding design and educational signage content developed by the Wadawurrung Registered Aboriginal Party. Increased awareness of traditional use of land and cultural significance of the area
CC2	Locally designed and fabricated public art sculptures and wayfinding elements	100% locally designed within a 30km radius	100% Compliance
CC3	Provide a Community Facilitator to facilitate a range of activity both during the construction and operational phases (minimum 2 year period).	Appoint Community Facilitator	100% compliance

5.3.1 Key Activities and Successes

- Salt Torquay is not within a heritage-listed site; however Barwon Water is demonstrating leadership by proactively working with the Wadawurrung traditional owners to respect the thousands of years of sustainable traditional custodianship of the land on which the estate is being built.
- Interpretative signage relating to traditional aboriginal use of the land, landscaping and planting strategy developed in partnership with the Wadawurrung RAP,.
- Two education sessions held with local schools promoting the sustainability aspects of SALT.
- Community facilitator appointed to facilitate a sense of community, sustainability initiatives.
- Play space elements based on the story of the Hooded Plover (endangered) with accompanying cultural and educational elements



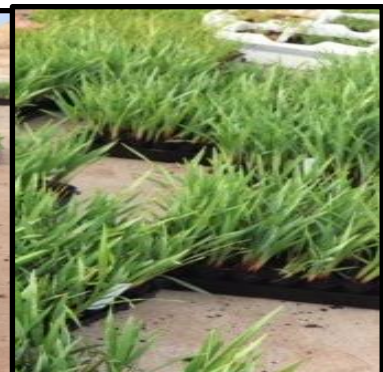
5.4 Land and Nature

Protecting and restoring land and marine systems for the benefit of people and wildlife.

Goal	Outcome	Target / Indicator	Performance
LN1	Improve ecological value of the site by providing habitat for fauna and flora through landscape construction	Increase biodiversity habitat by 15% in diversity of plant species across the site	Landscaping design complete and planting commenced of a further 15 tree species (231 trees) and 30 different shrub/grass/ground cover species within garden beds 17,037 plants) Increased biodiversity habitat by 25.2% when landscape construction complete (14, 256 m2).
LN2	Indigenous planting strategy that optimised local biodiversity in fence free front gardens and public realm land	100% native vegetation in public realm and front gardens	60% complete noting that the landscapes is still be constructed 100% DG requires front gardens to be planted with native species
N3	Public realm planting strategy that minimises water consumption, reflects regional flora, builds soil carbon and provides tree canopy	Number of trees plant	Design 100% compliant and planting commenced Tree planting has commenced on site with a further 231 low water consumption trees to be planted by completion

5.4.1 Key Activities and Successes

- Threatened ‘Bellarine’ Yellow Gum protected onsite and 15 additional Yellow Gums incorporated into the streetscape tree planting which will provide shady tree canopy for future residents.
- Public realm landscape plans, including planting plans approved by Council.
- Public realm vegetation plans use only indigenous and native plant species.
- A proposed incentive for purchasers of Salt Torquay was a Gift Voucher valid for 250 indigenous plants for landscaping purposes.
- Barwon Water is pleased to announce that this incentive is confirmed with propagation of the plants commenced within our local nursery. Landscaping designed to require no irrigation following establishment.



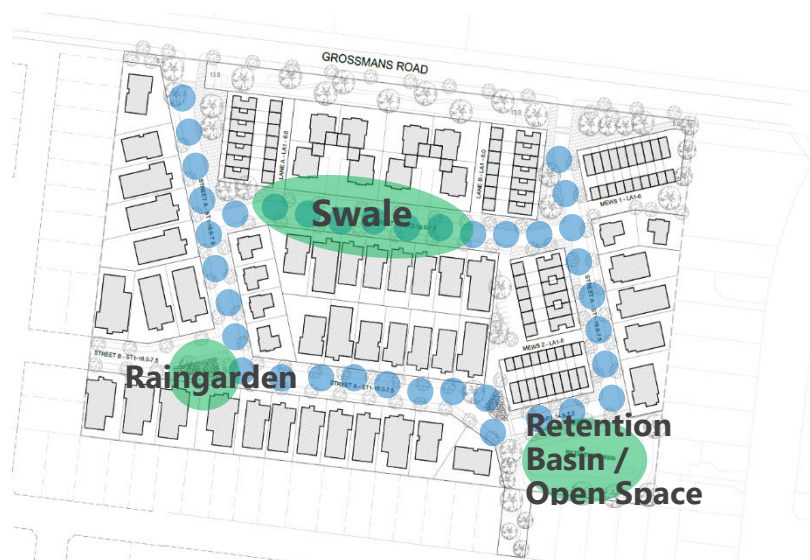
5.5 Sustainable Water

Using water efficiently, protecting local water resources and reducing flooding and drought.

Goal	Outcome	Target / Indicator	Performance
SW1	Estate achieves leading practice for water use, management, reducing storm impact, maintaining water on the land and water harvesting for drought periods.	Exceed traditional industry 'best practice' guidelines (Best Practice Environmental Guidelines CSIRO, 1999)	Estate exceeds BPEM guidelines and demonstrates leading practice for water use and management.
SW2	All residents with a lot size over 400m ² will be connected to a rainwater collection tank (minimum capacity 10,000 litres per dwelling). Tanks must be plumbed to re-use rainwater through the house toilet, laundry and outdoor areas.	100% residents with rainwater tank	Water tank inclusion mandated within the Residential Design Guidelines
SW3	High permeability in individual allotments and increased rainwater retention on site	100% compliance	Permeable driveways mandated within the Residential Design Guidelines
SW4	Design of flood retention basin incorporated into the basin to manage extreme weather and reduce stormwater runoff	Basin designed to BPEM standards	Flood retention basin designed to exceed BPEM standards and construction commenced

5.5.1 Key Activities and Successes

- Rainwater capture and filtering included in approved storm water management plan.
- Estate building guidelines mandate permeable driveways and 10,000 litre (minimum) rainwater tanks.
- Drainage strategy approved by Council.
- Barwon Water approved SALT as location of IoT smart water meter pilot study.
- Integrated water cycle management – individual lot through to site wide approach.



“Unlike a conventional residential development, Salt Torquay is designed with a fully integrated water cycle management system. The residential lots themselves harvest and re-use rainwater and incorporate permeable driveways to assist with filtration. The wider estate utilises multiple retention basins which creates vegetated open space opportunities that the wider community can enjoy”



5.6 Local and Sustainable Food

Promoting sustainable humane farming and healthy diets high in local, seasonal organic food and vegetable protein.

Goal	Outcome	Target / Indicator	Performance
LSF1	Residents have access to locally produced food via their own garden and provided with support to grow and share their own food	60% of residents to have a home vegetable garden	25% of residential lots area to be maintained as garden space mandated in the Design Guidelines. Community Facilitator to inform users of opportunities.

5.6.1 Key Activities and Successes

- Lots sold with obligation to provide minimum 25% garden area where growing food will be possible. Community facilitator to provide information about local community garden opportunities e.g. Danawa community garden, for involvement and educational purposes.
- The SALT Resident Welcome Pack includes information on locally grown food and the farmers market within the Surf Coast Shire as well as links to resources on growing your own food.
- Information for residents regarding local markets, Danawa food garden and local produce opportunities within social media platform currently in design phase.




5.7 Travel and Transport

Reducing the need to travel, encouraging walking, cycling and low-carbon transport.

Goal	Outcome	Target / Indicator	Performance
TT1	Lower travel emissions by making it easier and attractive to use active and public transport modes	60% of residents engaging in active transports for at least 2 hours per week	Information surrounding active transport prepared for distributed via online community (currently in design phase) >500m of path connections constructed to assist in seamless integration and active transport to the wider community.
TT2	Provide less space for vehicle parking and more space for vegetation, pedestrian and cycling	Provide 100% private parking and 30% on street public parking	Construction of sharded paths and road network completed.
TT3	Dwellings to provide a 32A power connection to garage to allow for future installation of electrical car charging	100% compliance	Mandated via Design Guideline mechanism

5.7.1 Key Activities and Successes

- 32A power connection to garage mandated and published in the SALT Torquay building design guidelines.
- Quarry products, concrete, pipe and pits all procured from local suppliers.
- NBN connection to all residential lots, which facilitates working from home and reduction in need to travel to satellite work places.
- Salt Resident Welcome Pack encourages sustainable transport modes.



Construction is complete on the pedestrian and cycling linkages throughout the estate. This will allow future residents to make the most of active transport to key amenities and further public transport options

5.8 Materials and Products

Using materials from sustainable sources and promoting products which help people reduce consumption.

Goal	Outcome	Target / Indicator	Performance
MP1	Strive to source all public realm materials (produced and quarried) locally (30km radius)	>95% compliance	100% Compliant
MP2	Encourage use of sustainable or recycled construction materials in homes	Number of residents using recycled materials in dwelling construction	Design Review Committee appointed to review housing designs and materials. Builder's Forum scheduled for to educate builders and architects on best practice building

5.8.1 Key Activities and Successes

- 100% of embankment beaching rock from the former water basin has been re-used in either the gabion baskets or the hard stand for the estates solar array.
- Organically rich topsoil recovered from earthworks reused as part of surfacing and hydro seeding of vacant lots.
- Design Guidelines published encouraging the use of construction materials and products from a 50km radius (production and sourcing)
- >95% of public realm materials sourced from the local region (quarried or produced from the local region)



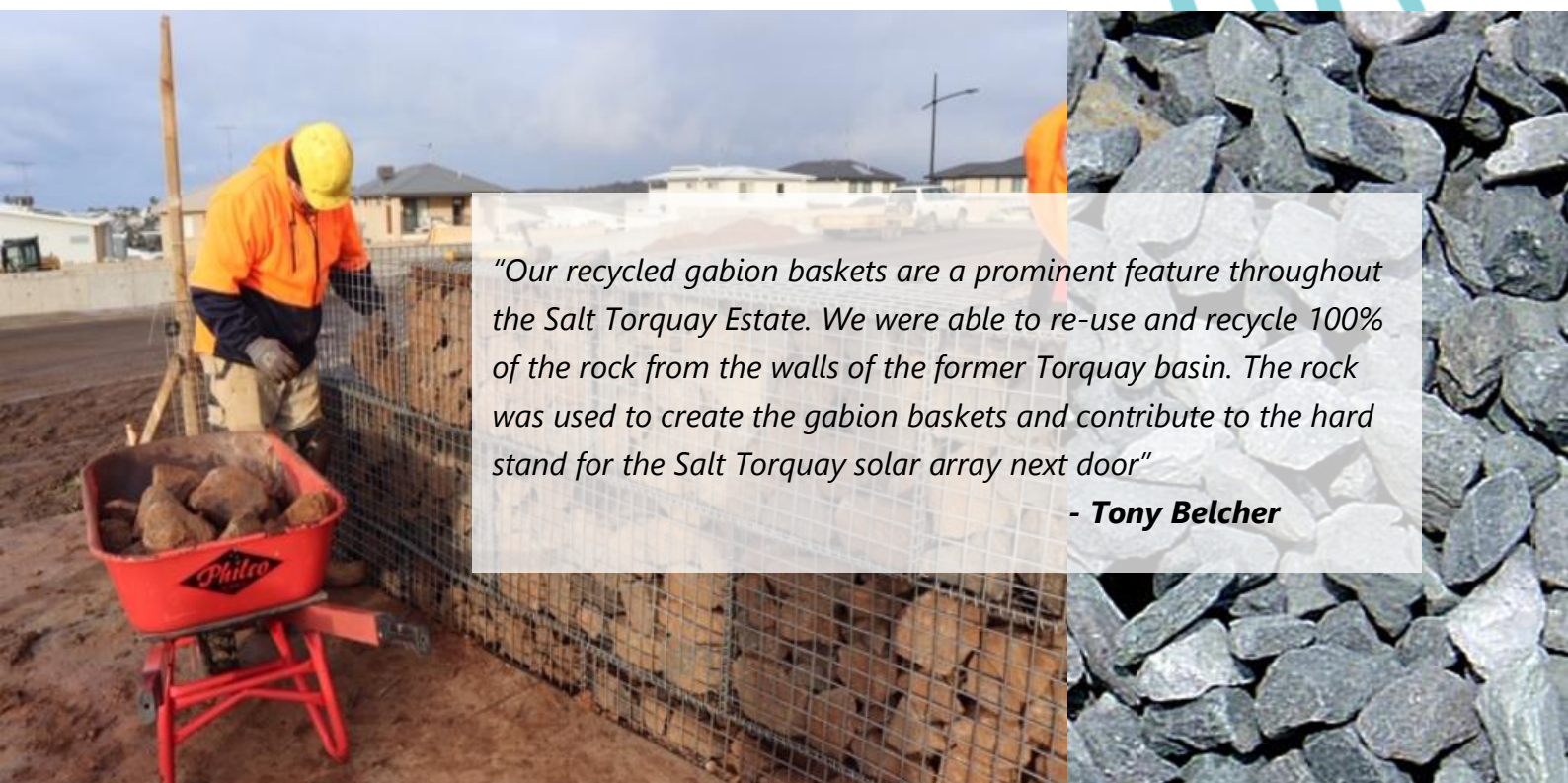
5.9 Zero Waste

Reducing consumption, reusing and recycling to achieve zero waste and zero pollution.

Goal	Outcome	Target / Indicator	Performance
ZW1	Guidelines to foster reduced building material waste principles during design phase	Number of residents to address this in dwelling plans	Guidelines yet to be prepared
ZW2	Develop a strategy that optimises material reuse among contractors and builders (local circular economy)	Number of dwellings able to re-use material	Strategy developed

5.9.1 Key Activities and Successes

- Recycling and waste reduction guidelines published in the SALT building design guidelines.
- 100% of site surplus soil material was re-used. Top soil was stockpiled (for future use) throughout the estate and all surplus clay material was transported and utilised at a nearby Barwon Water site to fill another redundant water basin. .



“Our recycled gabion baskets are a prominent feature throughout the Salt Torquay Estate. We were able to re-use and recycle 100% of the rock from the walls of the former Torquay basin. The rock was used to create the gabion baskets and contribute to the hard stand for the Salt Torquay solar array next door”

- Tony Belcher

5.10 Zero Carbon Energy

Making buildings energy efficient and supplying all energy with renewables.

Goal	Outcome	Target / Indicator	Performance
ZC1	Smart metering	N/A	N/A
ZC2	250KW solar farm opposite the site to be fed into the grid initially	Solar Farm and individual solar panels to offset 92% of estate energy production	Solar Farm complete and operational.
ZC3	Incentive available for residents to subsidise the cost of a solar battery	Number of residents that purchase a solar battery 100%	Budget for solar storage incentive established and potential purchases educated on mechanism.

5.10.1 Key Activities and Successes

- 2.5KW solar system on northern facing roof mandated and published in SALT building design guidelines.
- 250kW solar array built on land opposite SALT and now operational.
- Smart metering pilot approved by Barwon Water.

An exciting highlight for 2019 was the completion of the solar array adjacent to Salt Torquay. The array, in combination with household solar initiatives, will generate enough energy to meet over 90% of the estate’s total energy needs. At this stage, the energy produced by the solar array is feeding back into grid.

Salt Torquay’s residential building design guidelines are now completed and published. This includes a range of exciting eco features for our future residents. These include mandatory electric car charging points and household rainwater harvesting and reuse for toilet, laundry and food production. These measures are estimated to reduce mains water consumption by 30%.



Case Study 2 – Barriers to Sales

Salt Torquay is officially on the market, with the residential subdivision 75 per cent complete and 70 per cent of the first land release sold. Creating industry-leading water management throughout the residential estate has not come without its challenges, with the best-practice retarding basin providing many head-scratching complexities for both Barwon Water and our Contractors.

Residential Market Conditions

Market conditions have deteriorated over the past 12 months, with June 2019 reports showing the housing market at its slowest in 12 years with 30% less properties for sale than the markets most recent peaks. Another factor making buyers hesitant is the flow on affect of the Australian Banking Royal Commission, with changes to loan applications creating uncertainty. However, CoreLogic's head of research, Tim Lawless, recently reported that the broader property market appeared to have stopped falling and showing early signs of improvement, publishing that national dwelling values have finally stopped falling after a 20-month decline. With market conditions set to improve and further land releases scheduled – Salt Torquay is well positioned to demonstrate the benefits of the Salt Torquay lifestyle.

Construction

Inclement weather has caused delays as the program relies on dry weather to be able to install the clay liner for the base of the innovative, multi-use stormwater retarding and filtration basin. This asset will ultimately be handed back to the local council, so design changes were required to accommodate local maintenance and asset management access. The program delay has affected our ability to allow potential buyers access to inspect residential lots and has slowed down the sale process.

Government Processes

A barrier to the traditional sales practice is ensuring compliance with government processes. The **Victorian Government Landholding Policy and Guidelines** outlines the circumstances in which government agencies purchase, retain and sell land. Sales at Salt Torquay are subject to Victorian Government Land Monitor approval. This involves having a property valuation approved and signed off by the Victorian Valuer General to determine the appropriate price; this process takes 4 weeks and is only valid 3 months (total). Publicly transparent and equitable sales processes have been engaged to meet Government land sale requirements. Such processes somewhat diminish our ability to engage with individual potential purchasers prior to sale.

Vacant land titles

We have designed landscaping works well in excess of what would normally be provided in a similar scale estate. Where landscaping works are not completed prior to Council's Statement of Compliance for all, or a particular stage of a subdivision, the outstanding landscaping works can often be deferred upon the payment of a bond to Council. These bonds are held by Council to help ensure the timely completion of the landscape works and that the works comply with the previously approved landscape plan.

As a landscape bond is not typically used by Surf Coast Council, it has taken longer than anticipated to gain approval to defer some of the landscaping works within the Salt estate, and in particular the rain-delayed

stormwater basin landscaping. Completion of approved landscape works is critical to facilitate land titles and the settlement of the residential lots especially where lots have been presold.

Case Study 3 – 3rd Party Assets

Barwon Water’s vision for Salt Torquay is to demonstrate industry leadership in sustainable residential development. At the outset of the project, we had planned to use recycled material in our roads and footpaths, lowering the estate’s carbon footprint and minimising use of virgin quarry products. Council ultimate take ownership of the road assets therefore the specification requires to meet their engineering standard. Recycled or permeable road materials are not in accordance with Councils standards and were not allowed.

As we move towards the operational phases of the project, we will be able to work with government stakeholders to assess the benefits of these measures. Through planned future opportunities such as a builder’s forum and Salt builder’s induction, we aim to create a perspective shift. This will assist making sustainable strategies more accepted and mainstream within the industry, creating positive outcomes for developments to come.

Planning and engineering approval processes are heavily regulated. We adapted and aimed to achieve sustainable outcomes with aspects that we are able to exercise more control over. In lieu of using permeable pavements within roads, we were able mandate permeable household driveways across the entire estate. Through our civil construction methodology, we were able to re-use 55% of the bulk earth material onsite and 100% of the basin walls, this was highlighted as a key success for civil construction.

Medium Density – Coming Soon

Barwon Water has entered into a development and sales agreement for the medium density superlots at Salt Torquay with a Torquay-based master builder. Design plans are currently being reviewed with the aspiration of creating even greater housing diversity across the estate and delivering a more affordable housing product for the home buyer while maintaining low-cost living energy and water efficient features.

This will be an exciting outcome and provide greater opportunity for people of diverse age, income and physical ability to join our community at Salt Torquay.



6. Plans for 2020

Throughout the 2020 review period the project is scheduled to move from the construction phase to the implementation phase of the One Planet Living Action Plan. This will be an exciting phase of the project as the focus will be on commencing community and residential engagement and fostering community connection and relationships. The construction of residential housing will commence the first of the sustainability initiatives will be implemented. Some highlights will include:

- Civil and landscape construction completed.
- First Salt Builders forum – this will be a public event where builders, architects and the local community can attend to learn about our vision for Salt and how to achieve a zero energy house.
- Commencement of construction of energy efficient, affordable medium density dwellings
- Marketing and sale of remaining Salt vacant land
- Salt launch event – A public event to officially open the completed site to the community and begin to foster a sense of community
- Collaboration with Surf Coast Shire in “Powered for Positive Initiative”
- Develop social media platform and commence resident engagement initiatives
- Approval of dwelling design by Salt Design Review Committee, with Private residential construction to commence
- Smart water meters to be installed
- Energy assessment consultation post construction
- Investigation for Salt to be incorporated into cultural ‘Walk and Talks’ on Country with the Wadawurrung RAP



6. Summary

One Planet Principle	Headline Goal & Targets	2019 Status & Progress
Health and Happiness	Increase physical activity by residents	On Track
Equity and local economy	Employment of all consultants from within the GROW G21 region	On Track
	Contractor encourages to employ at least one apprentice, trainee or graduate where possible from the GROW G21 region	Completed
Culture and community	Consultation with the Wadawurrung Registered Aboriginal Party (RAP) to provide cultural education through wayfinding signage	On Track
	Locally designed and built sculptural and way finding elements	On Track
	Provided a Community Facilitator to facilitate a range of activity during the construction and operational phases (2 year period).	On Track
Land and nature	Improve ecological value of the site to allow space for animals and nature	On Track
	Indigenous planting strategy that optimised local biodiversity in fence free front gardens and public realm land	On Track
	Public realm planting strategy that minimises water consumption, reflects regional flora, builds soil carbon and provides tree canopy	On Track
Sustainable water	Estate achieves leading practice for water use, management, reducing storm impact, maintaining water on the land and water harvesting for drought periods	Completed
	All residents with a lot over 400m2 to be connected to a rainwater collection tank plumbed to re-use rainwater through the house toilet, laundry and outdoor areas.	On Track
	High permeability in individual allotments and increased rainwater retention on site	On Track
	Design of flood retention basin incorporated into the basin to manage extreme weather and reduce stormwater runoff	On Track
Local and sustainable food	Residents have access to locally produced food via their own garden and provided with support to grown and share their own food	On Track
Travel and transport	Lower travel emissions by making it easier and attractive to use active transport modes	On Track
	Provide less space for vehicle parking and more space for vegetation, pedestrian and cycling	On Track
	Dwellings to provide a 32A power connection to garage to allow for future installation of electrical car charging	On Track
Materials and products	Strive to source all public realm materials (produced and quarried) locally (within 30km radius)	On Track
	Encourage use of sustainable or recycled construction materials in homes	
Zero waste	Guidelines to foster reduced building material waste principles during design phase	On Track
	Develop a strategy that optimises material reuse among contractor and builders (local circular economy)	On Track
Zero carbon energy	Smart metering pilot study	On Track
	250KW solar farm opposite the site to be fed into the grid initially (offset).	Completed
	Incentive available for residents to subsidise the cost of a solar battery	On Track