Resilient Assets Project

Initiation Workshop, 22 March 2021





Resilient Assets Project Striding purposefully towards resilience rather than running from risk



Who's in the room

- Resilient South Committee
 - Stefan Caddy-Retalic, Regional Coordinator
 - Nina Keath, Onkaparinga
 - \circ Ann Gibbons, Marion
 - Alex Gaut, Holdfast Bay
 - Ben Leonello, Mitcham
- Assets Working Group
 - Brendon Lyons, Marion
 - Piers Duggan, Mitcham
 - Andrew Webster, Onkaparinga
 - Caitlin Evans, Holdfast Bay
- Technical Advisory Group
 - Dr Russ Wise, CSIRO
 - Tom Davies, ICA
 - Dominique La Fontaine, SECCA
 - Dr Theuns Henning, IPWEA NZ
 - o John Marinopolous, Value Advisory Partners
 - Donovan Burton, Climate Planning
 - State Government reps

- Funding Partner reps
 - Brenton Keen, SAFECOM National Disaster Risk Reduction Framework Grant
 - Michael Arman, LGASA Local Government Research and Development Scheme Fund
- State Government reps
 - Di Favier, DEW
 - Graham Green, DEW
 - Matthew Waltho, DIT
 - Catherine Jamieson, Infrastructure SA
- Resilient South Council reps
 - Jenni McGlennon, Onkaparinga
 - Ynys Onsman, Onkaparinga
 - Amanda Hirschausen, Onkaparinga
 - Carl Lunborg, Marion
 - Fiona Harvey, Marion
- Regional Climate Partnerships reps
 - Maggie Hine, Port Adelaide, AdaptWest
 - Matt Green, Central Coordination, LGASA

- Lucy Dodd, Central Coordination, LGASA
- Others
 - Jacqueline Balston, IPWEA Aust
 - Josie McLean, Change Catalyst

Purpose of workshop

- Get together
- Set the scene
- Clarify goals, objectives & outcomes



Agenda

About the project

- Nina Keath, Onkaparinga
- Insurance Council perspective
 - Tom Davies, ICA
- Victorian case study
 - Dominique LaFontaine, SECCCA
- 10min BREAK (2.15pm)

• State Government perspective

- $_{\circ}~$ Di Favier, DEW
- Matt Waltho, DIT
- Brenton Keen, SAFECOM
- Graham Green, DEW
- LGASA perspective
 - Michael Arman, LGASA

• IPWEA perspective

Jacqueline Balston, IPWEA Australia

Facilitated session

- Dr Theuns Henning, IPWEA NZ
- END (4pm)



Nina Keath, City of Onkaparinga

ABOUT THE PROJECT



Incorporating Climate Risk & Adaptation into Asset Management Project Initiation Meeting





Regional Climate Partnerships





Climate Ready Eastern Adelaide

Eyre Peninsula

Limestone Coast

SA Murray-Darling Basin

Yorke and Mid North

Barossa

Far North





Climate Ready Southern Adelaide



Adapting Northern Adelaide

Adaptation Planning

- Regional Integrated Vulnerability Assessment
- Physical and Social Science investigations
- Stakeholder engagement (100+ project champions)



Regional Adaptation Plan



Stakeholder Receptivity

Awareness	Association	Acquisition	Application	
Information	Values	Capacity	External Incentives	
Knowledge of the climate impact / risk	Belief that the impact and associated risk is worth managing	Ability to acquire the skills, systems, technologies and	Financial, regulatory, policy and management support and incentives to	
Knowledge of the		behaviours required to	practically apply and	
adaptation action	Recognition that adapting will help meet existing needs	adapt	implement the adaptation response	
	0		Macro level physical	

systems, infrastructure and social norms are supportive



Local Government Implementation Plan

Key Priorities:

- Aware
- Equip
- Cool Places
- Source to Sea













TCFD

Financial Stability Board's **T**ask Force on **C**limate-related **F**inancial **D**isclosures



Legal and Financial Risks



Climate Risk Governance Assessments



Assets a key gap



Pain points

"There is a heightened awareness of the impacts of Climate Change as we increase the number of WSUD treatments, the number of trees planted and we have a stronger emphasis on protecting and enhancing the environment (particularly for tree management, coastal management and stormwater management)."

Pain points

Buy-in is generally strong but how do we embed, operationalise and prioritise?

"Generally Council and senior leadership are very receptive to climate change initiatives. The contentious issue is how to fund the initiatives and how to resource the implementation of complex projects, that involve multiple parties."

"There's a disconnect between high level strategy/direction and on-the-ground realities. Both are headed in the same direction, however project level roll-outs are typically pushed by individual staff instead of being driven by consistent strategy & policy."

Staff and local government capacity

"The impact and demands (and systemic nature) of climate and disaster risks / impacts on local government way exceed their mandate and capacity. To deal with these problems requires all levels of government, communities and business working together to deal with this."

"Many operational staff are overburdened and it can be tricky to prioritise doing things differently because this requires learning new skills and potentially going slower during that period of learning."

"Most staff are caught up in the reactive and have minimal capacity to plan for future climate change response."

"There are opportunities for support from other levels of Government, however it is not clear if this support is provided to all Councils (particularly smaller Councils)."

Funding & Value Proposition

"The existing priorities of the organisation are entirely driven by financial concerns. Adaptation involves additional costs and the benefits are uncertain and therefore adaptation is deprioritised."

"Funding is perhaps the critical impediment to climate change adaptation implementation. Most major projects are beyond our ability to fund independently and require third parties to co-fund and support."

"Climate change is not costed into renewals or reactive maintenance to retrofit in solutions as we are unsure what we need to do and what the value proposition is."

Asset Managers Want...

- Spatial hazard mapping
 - Identify hazard hot spots
 - Prioritise key assets at risk

"I'm worried we'll get all this data but then won't know what to do with it."

- Implications
 - Quantify the impacts on useful life of assets
 - Maintenance implications
 - Where should we build back 'better' or 'differently'
 - Quantify the cost of no action
 - Socio-economic impacts
- Planning
 - When do decisions need to be made?
 - How much extra funding is required for more detailed risk investigations?
 - Impacts on rates?
 - Community expectations
 - How do we deal with uncertainty?
 - Model inter-dependencies within asset register

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Awareness	Association	Acquisition	Application	
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- Understanding climate 'risk' is important but it's not enough...
- What would a 'resilient' and 'adaptive' Southern Adelaide look like?
- How can our infrastructure and asset investments contribute to this vision?

"Stride purposefully towards resilience rather than run from risk."

Goals

- Understand the risks to our assets and infrastructure (including cross-dependencies)
- Identify the features of a resilient and adaptive southern Adelaide
- Increase council staff confidence and capability to respond
- Build resilience and adaptive capacity within councils (and our communities)
- Identify the economic and social opportunities from investments in climate resilient assets and infrastructure
- Achieve efficiencies and cost savings via collaborative effort and reduce duplication of effort
- Embed a response within our governance processes (e.g. asset management, financial planning, risk and emergency frameworks etc)
- Provide a consistent, shared approach across councils and other levels of government

Outputs

- Vision for a resilient and adaptive southern Adelaide
- Assessments of:
 - \circ Asset risk and vulnerability
 - Financial Impacts
 - Resilience and Adaptation Options
 - $_{\circ}~$ Funding and Value Creation Options
- Guidelines and decision-making tools for council asset managers
- Evaluation

Funding Partners

\$250K - National Disaster Risk Reduction Framework

\$99K - Local Govt Research & Development Scheme

\$59K – Per Council (pending budget bids) + in-kind

Phases

Phase 1 – Review options and develop a best practice approach April - August 2021 (5 months)

Phase 2 – Plan the pilot

Sept – Nov 2021 (3 months)

Phase 3 – Pilot the proposed approach Dec 2021 – Oct 2023 (23 months)

Phase 4 – Share the results

Nov 2023 – April 2024 (5 months)

Phase 5 – Evaluation

one year after completion

Our approach

Project Manager

• Shared with the state government?

Specialist consultants

• Provide technical expertise in vulnerability assessments, hazard data, costbenefit analysis, resilience and adaptation building etc

Governance

- Project Management Committee Resilient South
- Technical Advisory Committee Key experts, related projects e.g. SECCCA
- Steering Committee?

Stakeholder Engagement

• Regional Climate Partnerships, LGA SA, IPWEA

Technical Advisory Committee

Dr Russ Wise Principal Sustainability Economist, CSIRO

Tom Davies Climate Change Special Advisor, Insurance Council of Australia

Dominique La Fontaine Executive Officer SECCCA

Dr Theuns Henning IPWEA NZ

John Marinopoulos Value Advisory Partners

Donovan Burton Climate Planning

State & Fed Government Representatives

Next Steps

- Project Manager (Now)
- Governance arrangements (Now)
- Phase 1 & 2 Tender (April/May)
- Best Practice Approach and Pilot Plan (Nov 2021)
- **Pilot** (Dec 2021 Oct 2023)







Tom Davies, Insurance Council of Australia

INSURANCE COUNCIL PERSPECTIVE













"A two degree world might be insurable, but a four degree world would certainly not be"

(Henri de Castries, AXA 2015)



Climate change will continue in the decades ahead, superimposed on natural variability regardless of political commitments or actual global reductions in greenhouse gases.

	Carbon dioxide emissions	Global warming relative to 1850– 1900	Chance of meeting < 2°C
Low case	Net zero by around 2070 (RCP2.6)	1.3–2.2 °C by 2050 0.9–2.4 °C by 2090	66%
High case	High and accelerating (RCP8.5)	1.8–3.0°C by 2050 3.2–5.4°C by 2090	-



"The good news is that the window for action is still open, if not for much longer" (Borge Brende WEF, 2020)



A hotter world means more "loss" events. Australia represents 2% of the global market for re-insurance but 8% of the losses (Munich Re 2018). The cost of re-insurance is part of the cause for increasing premium prices...stressing affordability







Our Climate Action

- ICA Climate Action has evolved through practice over a decade:
 - Signnatory to United Nations Environment Programme Finance Initiative, Principles for Sustainable Insurance
 - Previous ICA Climate Policy dated 2008
 - ICA Resilience Program since 2010, including BRRT
 - Property Resilience and Exposure Program (PREP)
 - Member Climate Change Action Plans
- 2018/19 ToR Principles for Action evolved from Principles for Sustainable Insurance
- July 2019 Strategy implementation
- July 2020 A year of Action
- 2020 onwards... "An insurable Australia"

The 4 sustainable insurance principles







The Climate Change Action Committee Strategy

- The specific expertise of insurance informs and educates our stakeholders
- Strategy allows value add of insurance expertise
- ICA has a strong voice in educating on the implications and impacts of climate change, particularly with respect to urban planning and disaster preparedness
- Protection of our industry from excessive regulatory intervention
- Agreement on "Our Voice" of leadership
- Integrated approach and connection to other initiatives within ICA and its members, and broader initiatives across the finance system, and the Australian economy
- All members have a cohesive understanding and commitment to implementation plan (Small and large)
- All members understand the broader global and local context
- There is a clear set of practical and logical arguments to assist decision making
- Practical clear strategy linked with risk issues, particularly building codes and planning
- Empowering consumers education
- Affordability and accessibility "Vulnerable" customers identifying those customers today and understanding those of the future
- Role Clarity ICA Climate Committee
- Shovel ready

Mission- "An Insurable Australia"

To take action that will assist and support Australia's transition to a resilient and low carbon economy, and continue to offer affordable and accessible insurance products in a climate changed future - An Insurable Australia

4				
Data and Knowledge				

influence and inform our

is required by which

climate scenarios.

stakeholder to inform key

decision making in different

Communication

Data is at the heart of how we Engage, educate and inform key stakeholders on designing stakeholders; what information for, planning and mitigation of to whom and when is key. We climate change impacts. We will determine what information will help our customers make informed decisions in a climate changed future

Coordination, Collaboration and Integration of Action Ensuring that the industry's actions are informed, or, are informing other initiatives working to mitigate the risks of climate change. We will ensure our actions are integrated with best efforts to act on climate change, with a particular focus on the built environment and banking sectors.


Climate Change Action Committee <u>www.Climaterisk.insure</u>

Mission:

To take action that will assist and support Australia's transition to a resilient and low carbon economy, and continue to offer affordable and accessible insurance products in a climate changed future – An Insurable Australia.



The 4 sustainable insurance principles



The vision of the PSI Initiative is of a risk aware world, where the insurance industry is trusted and plays its full role in enabling a healthy, safe, resilient and sustainable societ 37



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ACTION

The 4 sustainable insurance principles



The vision of the PSI Initiative is of a risk aware world, where the insurance industry is trusted and plays its full role in enabling a healthy, safe, resilient and sustainable society $\frac{38}{38}$



Work Program derived from strategy with 5 Themes

ICA Board Delivered Terms of Reference - A Mandate for Action, based on PSI

ICA Convened a Climate Action Committee to Develop a Strategy – 21 members represented

Strategy Implementation Plan converted to a Program of work with 5 Themes

Action 33 projects; 2 complete, 20 underway



arbon economy, and continue to offer alfordable and accessible insurance product in a climate changed future - An Insurable Australia ordination Collaboration recepter, educate end inform and Integration of Action Ensuing that the industry's y stated olders on dearching planning and mitigation of tions are informed, or, are riste change impacts. We niorming other initiatives. all help our customers make king to migate the risks of limate phange. We will ensure unactions are integrated with informed pipelsions in a climate estellaris to act on climate change, with a particular focus on the isult environment and

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- Customer Knowledge 1.
- 2. Affordability
- **Industry Capability** 3.
- Industry Collaboration 4.
- **Climate Resilient Built** 5. Environment







3 key partnerships formally agreed and working on aligned act



Beyond Compliance Building Guidelines created and being implemented in SA



32 local government collaborations; all can be replicated and scaled



20 projects currently underway, 33 in total, 2 complete



12 Active working relationships with State and Federal Gov Agencies



Risk Intelligence: Industry collaborating on aggregating claims data and providing empirical evidence



Established Industry literacy program



We are working with global members and partners



21 Member companies with 45+ representatives working in CCAC



3rd party certification for resilient buildings in partnership with building and development industry



100+ invited speaking engagements; Industry recognized as a leader on Climate Action



Breaking new ground and advancing Physical Risk Mitigation Infrastructure to protect assets

40

INSURANCE CLIMATE **Project: Minderoo Foundation** CHANGE COUNCIL ACTION **The Fire and Flood Resilience Blueprint** OF AUSTRALIA COMMITTEE

Minderoo Foundation: The Fire and Flood Resilience Blueprint ICA partnering with Minderoo on developing more Resilient Communities

Following the devastating fires experienced in Australia in 2019-20, the Minderoo Foundation established the Fire and Flood Resilience Blueprint. A Blueprint with three streams of activity: response, recovery and resilience. The ICA is leading the Resilient Communities Stream/Mission.

Observations/ Objectives

Minderoo launched the Resilient Communities Mission in April 2020 and developed a partner network as part of the overarching Fire and Flood Resilience Blueprint. The goal is to lift Australia's 50 most vulnerable communities to be on par with Australia's 50 most resilient communities by helping communities to access the support and resources to mitigate their disaster risk and bounce back stronger by 2025.

As the climate changes, many communities will face more frequent fires and floods, and the effects of these will be even more widespread. Across Australia, the resilience of communities to disaster is highly varied. Around one-third of Australia's population lives in highly resilient regions while nearly one-half of Australia's population live in regions that have a low-tomoderate level of disaster resilience.

Minderoo is an enabler, the foundation works with the key partners within industry, government, philanthropy, and research to lift national resilience. We expect the ICA's project work will be leveraged and amplified where it align with Minderoo's missions. The Fire and Flood Resilience Blueprint, and the first Mission (Fire Shield) launched on the 15th of September 2020

GLOBAL LEADER IN FIRE & RESILIENCE BY 2025 FIRE & FLOOD RESILIENCE

BLUEPRINT

Project category



Industry Collaboration



Relationship/partnership

Minderoo Foundation https://www.minderoo.org/fire-and-floodresilience/



Time frame

December 2021. Resilient Communities mission underway



Completion rate



Commitment/contribution Active partner in the delivery of the full blueprint



Success metric

More Resilient Communities - detailed and specific mission-based metrics will follow

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Where we Build, What we Build: Climate Ready homes Southern and Hills Local Government Association: Where we Build, What we Build project

A project designed to increase the resilience of housing in a changing climate. The project has been in existence since 2018.

Observations/Objectives

Southern and Hills Local Government Association's Where we Build, What we Build project is a project designed to increase the resilience of housing in a changing climate. The project has been in existence since 2018. The project has now completed its technical phase and has provided some excellent evidence to underpin an adaptation effort for homes in the target region, and across Australia.

The project has proven that the economic benefits of climateready homes outweigh the costs for both new builds and retrofits. Some key messages include: Building houses to a beyond compliance specification (the project Climate Ready specification), makes economic sense. Over a 50-year period, the net present value of immediately retrofitting the region's housing stock to a climate-ready standard is estimated at over \$72 million. Over \$46 million of this value is in the District Council of Mount Barker area.

Click here to read the full project report





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Resource: Climate Ready homes

Project category



Southern and Hills Local Government Association https://www.lda.sa.gov.au/southemand-hills-loa



Relationship/partnership

National Flood Information Database (NFID)



Time frame Technical phase complete

Project to continue until July 2022



Completion rate

Commitment/contribution

Climate hazard and resilience maps, which can



continue to be used in the future to assess the resilience of homes to natural hazards. Understanding costs and benefits of delivering new or retrofitted climate resilient homes.





Actions of the Sea

Developing the insurance industry's understanding of actions of the sea in the context of sea level rise in Australia.

The understanding of the key issues will inform risk management decisions including future mitigating actions that may drive better outcomes for communities exposed to ongoing sea level rise.

Observations/ Objectives

The ICA's Climate change Action Committee (CCAC) agrees that damage from Actions of the Sea is likely to increase in a climate changed future, therefore the CCAC intends to better understand the insurance industry's current position and future options regarding this complex hazard via a tender project to gain a stronger understanding.

The understanding of the key issues will inform risk management decisions including future mitigating actions that may drive better outcomes for communities exposed to ongoing sea level rise.

ICA members require answers to the following two key questions:

- What are the key issues and recommendations concerning risk awareness and risk taking due to coastal erosion, inundation, and sea level rise for the insurance industry?
- A Data Study: What future data requirements does the ICA have regarding Actions of the Sea and sea level rise to provide a consistent basis for risk management and decision making?



Project: Actions of the Sea



Project category

Climate resilient built environment



Relationship/partnership

The ICA has engaged <u>Baird Australia</u> to complete the study. Baird has elected to partner with <u>Rhelm</u> on the delivery



Time frame

Consultant to deliver final report and analysis including presentation of key Recommendation by end April 2021



Completion rate



Commitment/contribution



The ICA Data and Knowledge subcommittee will work with the selected consultant to produce a report with recommendations for members and a public facing report.



To develop an Insurance Industry Position Statement regarding the current status of the issues associated with Actions of the Sea and what that means with ongoing sea level rise.

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INSURANCE CLIMATE CHANGE COUNCIL ACTION OF AUSTRALIA COMMITTEE

Project: Physical Risk Mitigation Infrastructure SECCCA – Asset Vulnerability

Victorian SECCCA Financing Physical Risk Mitigation Infrastructure Victorian South East Councils Climate Change Alliance - Asset Vulnerability Assessment

Establishing a path for private finance investment into Physical Risk Mitigation Infrastructure - Protecting Australian Assets in a Climate Changed Future. Part 2 of a 7- part project

Observations/ Objectives

Many Australian communities have been developed in hazard prone areas, and the majority will become more exposed in a climate changed future. This project focuses on proving a path for private investment/finance to deliver physical risk mitigation infrastructure such as levees and dams to protect Australian assets.

There has been discussion about Resilience bonds, but there are no actual examples. From the Roma, Launceston, and other project examples the ICA knows that physical risk mitigation infrastructure reduces the risk to exposed communities and reduces premium, therefore improving affordability.

This project is proving a path for private finance investment into Physical Risk Mitigation Infrastructure. By collaborating with Local Governments through a Climate Change Alliance we are forging process and projects to ultimately deliver infrastructure assets that will protect private property and commensurately address insurance affordability in the project areas. We intend that this project to be an exemplar and paves a way for similar projects across Australia.





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Project category

Customer knowledge



Relationship/partnership

Victorian South East Councils Climate Change Alliance (SECCCA). https://www.seccca.org.au/

Time frame

The project commenced in July 2019. (Asset Vulnerability is part 2 of a series of projects to achieve the ultimate goal)





Commitment/contribution



Climate Change Special Risks Role; Strategic input, contribution to project working group. hazard data and financial contribution from ICA.



Private property included in Council's Asset Vulnerability Assessments. Information available to conduct cost benefit analysis for physical risk mitigation infrastructure.



Transforming the Australian housing sector

Partnering with the GBCA to help transform the Australian housing sector Green Star for Homes, Resilience rating tool

The Green Homes Standard is an opportunity to ensure Australian homes are built for the future, ready to adapt to challenges while being part of the global response to the threat of climate change.

Observations/ Objectives

The Insurance industry is in the midst of dealing with a series of catastrophes; but we recognise the importance of keeping our heads up, and taking action to address future risks, particularly those likely to be exacerbated by Climate Change.

One of the main streams of the ICA's Climate Change Action Plan is Climate Resilient Homes and we are delighted to be partnering with the Green Building Council of Australia (GBCA) to create a third-party certification, Green Star for Homes, that will include a Resilience rating.

The ICA recently signed on as a supporting partner of the Green Building Council's "Future Homes" initiative, following the launch of the Green Star for Homes strategy in May. This proposes a standard for new single-family homes, underpinned by three pillars: health, resilience and net zero energy. The draft standard was released for public consultation in August 2020.











Relationship/partnership Green Building Council of Australia https://new.dbca.org.au

Project:



Time frame In development



Completion rate



Commitment/contribution Green Building Council of Australia partnership contribution to the Future Homes initiative



Green Star Homes Standard improved regulatory settings, minimum criteria for sustainable homes of the future.

Success metric

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Conclusion

- Prudential leadership insurers have a role to play
- **Risk Intelligence** empirical evidence, exposure, vulnerability, data.
- Collaboration and coordination is key to achieve effective change
- Focus on Local Governments it's where the impacts are being felt and where there is greatest opportunity to drive change
- **Urgent** We want are delivering a timely program of work, aligned with the market movements now is the time
- Action the power of action in an unsure environment



Dominique La Fontaine, South East Councils Climate Change Alliance

CASE STUDY: SECCCA





The SECCCA Asset Vulnerability Assessment Project –

Presentation to the Resilient South Assets and Climate Risk Project Initiation meeting

March 22, 2021





The SECCCA Region







Asset Vulnerability Assessment

- How will SECCCA member councils' buildings, roads and drainage be impacted by climate change?
- How will related councils' income and expenditure will be impacted?
- How do councils appropriately plan for identified changes and influence decision making to create prioritised, costed works plans to make the asset more resilient to climate change?
- Help councils to have a deeper understanding of how climate change may impact the delivery of community services and a better understanding of potential associated risk to community.
- The project aligns with climate risk methodologies and standard CMI (Climate Measures Standards Initiative).



Project Outputs





Events or scenarios of concern (being finalised)

Climate Change Projection data

- Periods: baseline (1981 to 2010), 2030, 2050, 2070
- Carbon emission scenarios: rcp 2.6 (low), rcp4.5 (moderate), rcp8.5 (high)
- 3 Global Climate Models (GCMs): CSIRO preferred, wetter, hotter/drier futures
- 10 parameters (min. max monthly temp, rainfall, heatwaves, day thresholds, drought index (SPI), wind

Weather observation data

- Last 5 decades: 1970s, 1980s, 1990s, 2000s, 2010s
- Same parameters as above

Climate Change and extreme weather event related data

- Sea level rise and storm surge
- Riverine / overland flood events
- Susceptibility data
- Event extents
- Fire



SECCCA Future Climate Explorer

Projections - Monthly Annual Rainfall - current, 2030, 2050 (graph)





Project Outputs



Asset Vulnerability

Extreme Temperature Change

ACCESS 1.0 RCP 8.5







Project Outputs



INUNDATION PROFILES - FLOODING

Flooding Inundation Profile

Asset Name	Total Area (m2)	Inundated Area (m2)	Percentage Inundated (%)
Inverloch Foreshore Bowling Club Rooms	273m2	80m2	29%







Project management



1. Project Working Group - membership reps from each council's assets teams.

2. Technical Reference Group - membership reps from DELWP (climate data and climate programs), Insurance Council of Australia, Councils Assets and Environment teams.

- 3. Project Control Group SECCCA project subcommittee and SECCCA staff,
- 4. Project Management SECCCA Project Coordinator and EO.
- 5. Technical consultant Spatial Vision and Marsden Jacobs
- 6. Project Evaluator Science into Action and Scientel
- 7. Budget \$200K, to be completed by June 2021



Project Evaluation

- Use a formative evaluation approach to create a resource that can be used by other councils to inform them of how asset vulnerability assessment can be undertaken to increase asset resilience to the impacts of climate change.
- The resource will articulate a proven methodology and framework.
- The evaluation will inform the DEWLP Greater Melbourne Regional Adaptation Strategy currently under development, including the scale of financial resources potentially required to improve asset resilience in the short and longer-term at a state level.
- Budget \$65K funded by DELWP,
- To be completed by June 2021



Residential Asset Class



- Considering an additional assessment of climate impacts on privately-owned residential dwellings.
- This could provide information about likely impacts to the community, vulnerability hotspots, likely damage and loss scenarios and identify adaptation actions.
- As a result, each council would understand the likely impacts on the most exposed and vulnerable residential dwellings in the community and potential protection options.
- Proposing use of approximately 5 house archetypes (including a new build), to conduct the assessment is suggested.
- Seeking legal advice to understand council legal responsibilities regarding climate risk assessment on residential properties before proceeding. Insurance Council of Australia supporting this work





Thank you

Dominique La Fontaine Executive Officer

To join project mailing list please email dpleiter@seccca.org.au



Di Favier, Department for Environment and Water

STATE GOVERNMENT PERSPECTIVE











South Australian Government Climate Change Action Plan 2021 - 2025

Diane Favier, Manager, Climate Change Policy and Strategy Department for Environment and Water

March 2021









Action Plan

- Released December 2020
- Government-led objectives and actions to:
 - help to build a strong, climate smart economy
 - further reduce greenhouse gas emissions
 - support South Australia to adapt to a changing climate.
- 68 actions across seven focus areas





Drivers

- Directions for a Climate Smart South Australia
 - Includes adaptation and resilience policy directions
- Reduce emissions by more than 50% by 2030
- Achieve net zero emissions by 2050
- 100% net renewable energy generation by 2030
- Advice from Professor Garnaut and other experts e.g. EY



South Australia's Climate Change Challenge and Opportunity



Focus Areas and Objectives

	FOCUS AREAS	KEY OBJECTIVES
1	Clean energy transformation	 Accelerate the renewable energy economy Develop a world-class renewable hydrogen industry
2	Climate smart economy	 Attract and grow businesses and industries powered by renewables Support climate smart business innovation, risk management and growth Develop a more circular economy Develop a climate smart resources sector
3	Climate smart agriculture, landscapes and habitats	 Support the agriculture sector to adapt, innovate, and reduce net emissions Support expansion of carbon farming and blue carbon Ensure secure, climate resilient regional and urban water supplies Build the climate resilience of landscapes, habitats and natural resources



Focus Areas and Objectives

4 Low emissions transport	 Support the uptake of low and zero emissions vehicles and fuels Align transport and urban planning with low emissions transport outcomes Increase the use of public transport and active travel
Climate smart built and urban environments	 Provide for development and design that is low emissions and climate resilient Accelerate strategic urban greening Understand and reduce climate change risks to infrastructure
6 Resilient communities	 Support communities and businesses to build resilience and adapt Enhance climate change adaptation in emergency management and health services Provide high-quality and accessible climate change science and information
Government leading by example	 Embed climate change risk and opportunity into government policy and practice Accelerate work towards net zero emissions in government



Actions relevant to climate risk assessment for assets

- Develop a climate smart long term **coastal strategy** (Action 3.11, DEW & CPB)
- Embed strategic climate impact assessment into **Regional Plans** (Action 5.2, AGD)
- Assess climate change risks on **development applications** referred to the EPA (Action 5.7, EPA)
- Develop a South Australian critical infrastructure strategy (Action, 5.11, DPC)
- Assess and address climate change risk in government infrastructure decisions, risk assessment and audit processes (Action 5.12, All agencies)
- Ensure climate risk and opportunity are addressed across government policy and practice (Action 7.1; All agencies)
- Build capacity and capability of **emergency services** to mitigate and adapt to climate related risks (Action 6.5, SAFECOM)



Climate Change Science and Knowledge Plan for South Australia

Ensuring an evidence base to support a climate smart South Australia I 2020





Thank you











Dr Theuns Henning, IPWEA New Zealand

FACILITATED SESSION





Workshop Questions

- What would successful climate adaptation and climate risk management in asset management look like for you?
- Project Scope Goals, Objectives & Outcomes:
 - $_{\odot}~$ What would you change?
 - $_{\circ}~$ What would you keep?
- Is there anything else we should consider?

Next Steps

- Dr T to report on outcomes from today
- Recruit Project Manager
- Set up governance
- Tender for Phase 1&2 (Apr/May 2021)
- Best Practice Approach and Pilot Plan (Nov 2021)
- Pilot (Dec 2021 Oct 2023)



THANK YOU!









