

Webinar 2 – Where adaptation and net zero meet: how can we achieve both resilience and net zero emissions outcomes

Adaptation in Action: Building Resilience in NSW Thursday 19 November 2020 | 2pm – 3:30pm



# **AdaptNSW Webinar Series**

# Welcome

**Claire Berecry** Senior Team Leader, Net Zero Emissions Implementation NSW Department of Planning, Industry and Environment



# Acknowledgement of Country

**Claire Berecry** 

NSW Department of Planning, Industry and Environment





## **Meeting rules and interaction**



Turn off your camera



Mute yourself



Use the chat box



Dedicated Q&A time



Closed captions is available

Presentation will be available

PDF



Today's webinar will be recorded





### **Minister's Address**

AdaptNSW Webinar Series

The Hon. Matt Kean NSW Minister for Energy and Environment



### Video







## **Overview of NSW Government Action**

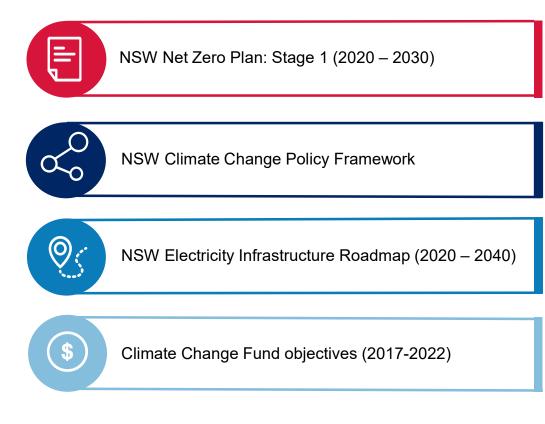
#### AdaptNSW Webinar Series

**Dr Stephen Bygrave** Director, Climate Resilience and Net Zero Emissions Branch, NSW Department of Planning, Industry and Environment



# **Climate Resilience and Net Zero Emissions**

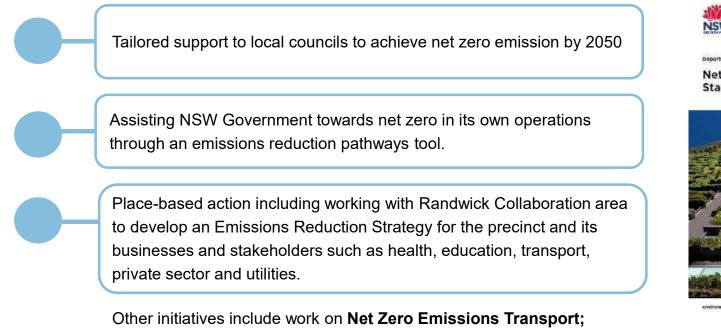
NSW Government is leading initiatives to make NSW more resilient to climate change and to support the state to achieve net zero emissions by 2050.





## **Net Zero Emissions Implementation**

#### Supporting a variety of stakeholders to achieve net zero emissions by 2050

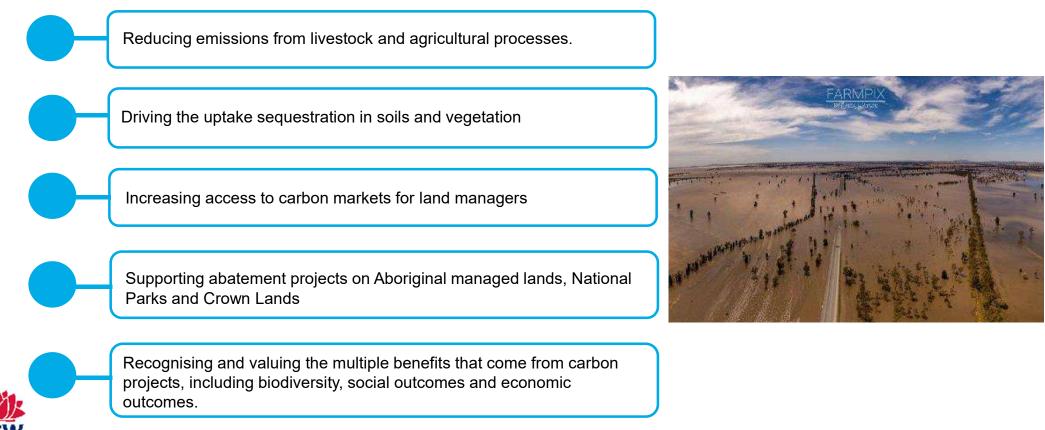


- Electric Vehicle Infrastructure and Model Availability
- Making Buildings EV Ready
- Transport Consumer Information



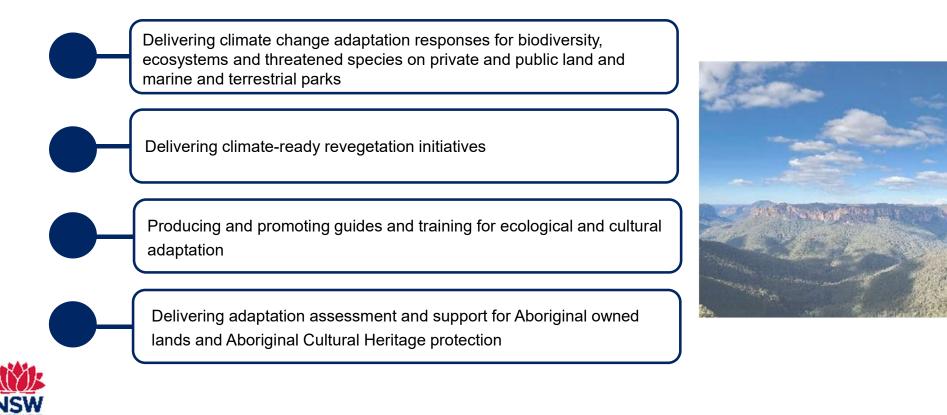
## **Net Zero Land**

#### Delivering abatement in the primary industries and land sectors under the Net Zero Plan



## **Cultural and Ecosystem Adaptation**

NSW land, water and sea management practices are responding to climate change impacts on cultural and natural values; and



## **Climate Preparedness**

Assisting NSW businesses, government and the community to prepare and adapt to the impacts of climate change



The XDI NSW (Cross Dependency Initiative) Project - we work with NSW asset owners and operators to assess impacts of climate change on critical infrastructure and identify shared risks.



Climate Risk Ready NSW: building the capability of the public sector to manage climate-related risks through training, guidance, policy alignment and executive engagement.

Engaging with regional leaders to support locally-driven adaptation action and establishing regional governance models.

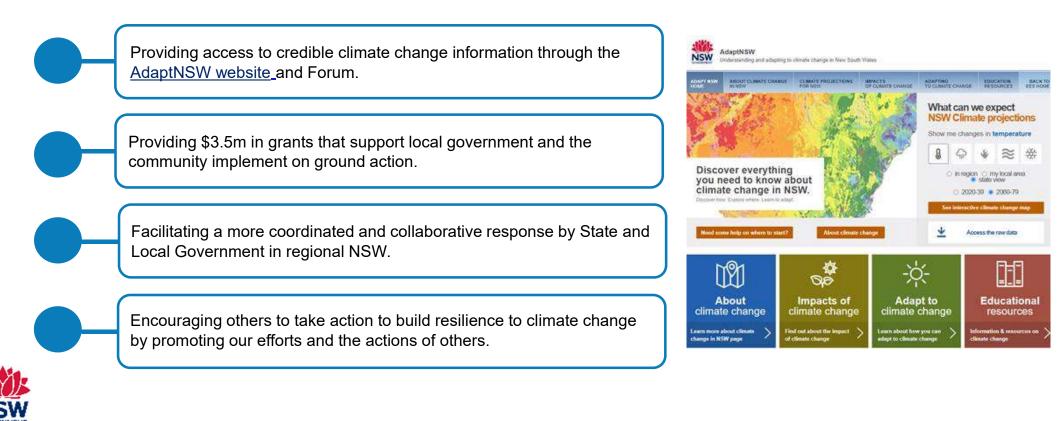
Enabling Regional Adaptation assessments for all regions of NSW that identify priority sectors and pathways for adaptation and transition.





# **Climate Information Delivery**

Helping NSW households, businesses, community groups and government to understand how climate change may affect them and what they can do to respond and adapt to the impacts.



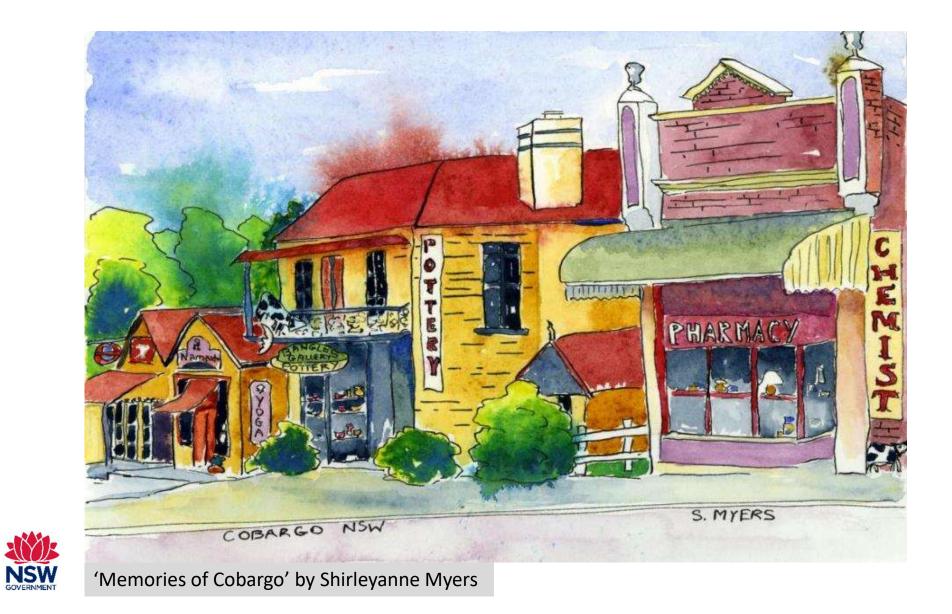


# Cobargo: Dairy farmers, epic metal bands and a clean energy future

**Presentation 1** 

**Zena Armstrong** President, Cobargo Community Bushfire Recovery Fund Inc









Same view, NYE: Photo John Walters, Cobargo RFS



NYE: fire flowing downhill towards the Far South Coast Photo: Ben Marden

**NSW** GOVERNMENT





Cobargo Main Street NYE: Princes Highway





Cobargo Main Street, Princes Highway, 1 January 2020 Photo: Zena Armstrong





Cobargo-Bermagui Road 2 Sept 2019

# Join the Conversation



Be a part of what's new and what's planned for Cobargo ... and you could win a \$100 Cobargo Co-op Voucher and other goodies



Share the Vision for Cobargo and be in the running to win a \$100 voucher from Cobargo Co-op and other goodies

Come along to the Community "Marketplace" sessions on Thursday 12 November at Cobargo Showground Pavilion. Sessions at 11.00am — 1.00pm and 4.00pm — 6.00pm

#### OR

Join in the Community Fun Day and Massive Plant Giveaway on Saturday 14 November from 10.00am at Cobargo Showground and talk to the various Project Leaders about individual projects and programs



Community Consultations Nov 2020





Cobargo community consultations, 12 November 2020



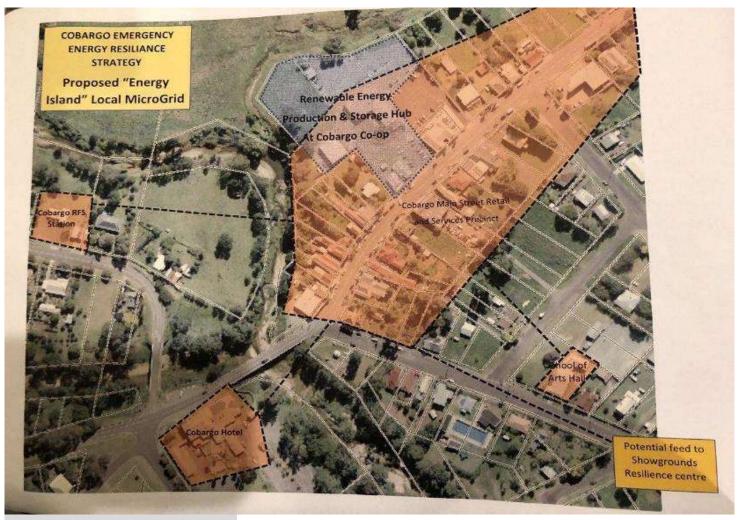


Cobargo main street, Princes Highway, 22 May 2020, ABC



NSW GOVERNMENT

Community consults: Main street redevelopment planning





Community grid concept





Cobargo Showground Community Hall and Disaster Refuge: TAKT Studio for Design

#### NATIONAL LIBRARY OF AUSTRALIA

#### 12 November 2020

borrf@resilience.nsw.gov.au

To Whom It May Concern:

RE: Letter of Support for 'Badja Forest Road Fire Oral History Project'

I am writing to confirm The National Library of Australia (NLA) would be delighted to partner with the Cobargo Bushfire Resilience Centre on a *Bedja* Forest Road Fire Oral History Project, should their application for funding under the Bushfire community recovery and resilience fund succeed.

The NLA is the largest reference library in Australia, responsible under the terms of the National Library Act for maintaining and developing a national collection of library material, relating to Australia and the Australian people. The Library's collection is the nation's single most important resource of materials recording Australian cultural heritage, including Australia's largest oral history collection. The Library is also home to TROVE, an online library database aggregator, which is a centralised national service built with the collaboration of major libraries of Australia.

This project will make a significant contribution to our nation's historical record by capturing 60 individual oral histories from those impacted by the Badja Forest Road bushfires. They will document and preserve important accounts of trauma and resilience, support social recovery and inform future disasters, as well as contribute to general community well-being.

As an expression of our commitment, the NLA will administer the project and commit a total of \$114,860 in direct payments and \$97,282.40 in-kind services over the project's life.

Cash and In-kind contributions to the Project

Total In-kind Contribution \$	Total Cash Contribution in Direct Payments \$	Source of Cash Contribution
\$97,282.40	\$114,860	Cash contribution will be sourced from funds set aside for collection development

The NLA is pleased to partner in this timely and valuable project and I commend it to you.

Yours sincerely

Kevin Bradley PSM Assistant Director-General, Collection National Library of Australia P. 02 6262 1301 E: <u>bradley@nla.uov.au</u> Partnership agreement with National Library of Australia Oral History Project



# THUNDERGOOSE WHAT KIND OF BAND NAME IS THIS? WHAT WHAT AND NAME IS THIS? WHAT WHAT AND NAME IS THIS? WHAT WHAT AND NAME IS THIS AND NAME IS THIS? WHAT WHAT AND NAME IS THIS AND NAME IS THIS? WHAT WHAT AND NAME IS THIS AND NAME IS THIS? WHAT WHAT AND NAME IS THIS AND NAME IS THIS? WHAT AND NAME IS THIS AND NAME IS THIS AND NAME IS THIS? WHAT AND NAME IS THIS AND NAM

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#### MORUYA WATERFRONT HOTEL

WWW.FACEBOOK.COM/MORWATERFRONT WWW.FACEBOOK.COM/THUNDERGOOSEBAND

IUSIC STARTS 8.30PM FREE ENTRY EPIC COVER BAND





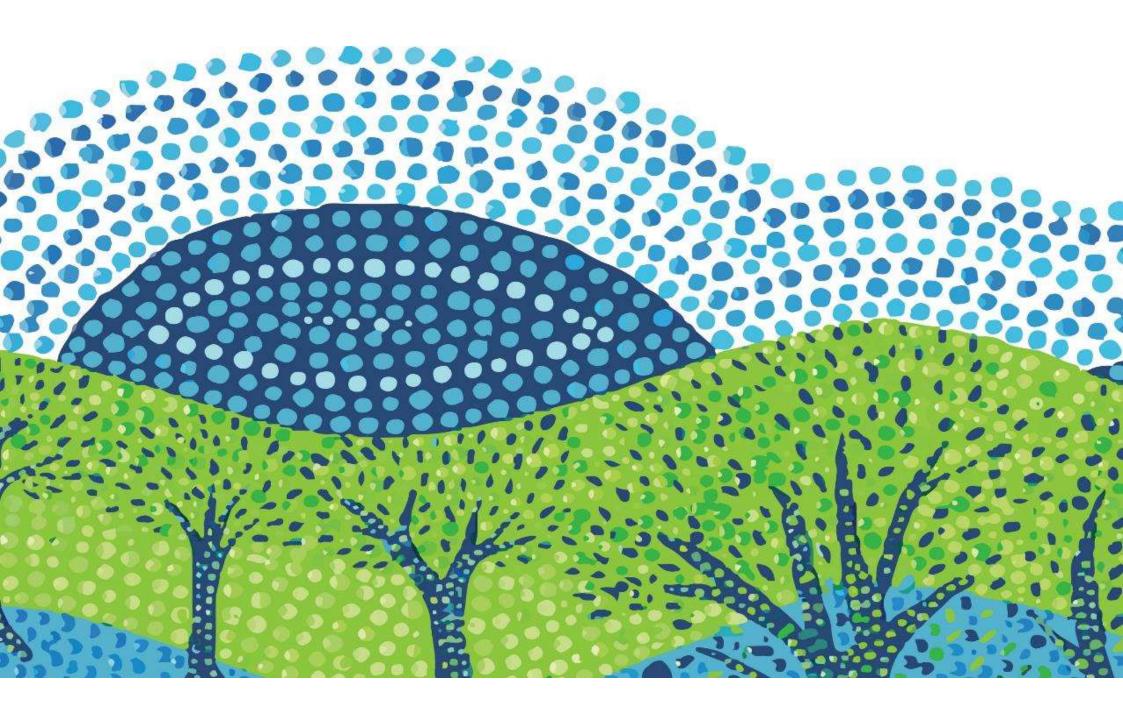


# Green Star – A collaboration to address emissions and resilience in building and construction

**Presentation 2** 

**Sandra Qian** Senior Manager - Policy and Government Relations, Green Building Council of Australia





### Who is the GBCA? Our vision

Healthy, resilient, and positive places for people and the natural environment



# We set the standard for Australia

From libraries to hotels and from offices to the biggest regeneration projects in the country, Green Star continues to drive sustainable outcomes.

































# **Green Star quick facts**



#### **42,000** people living in Green Star rated homes and apartments

725,000

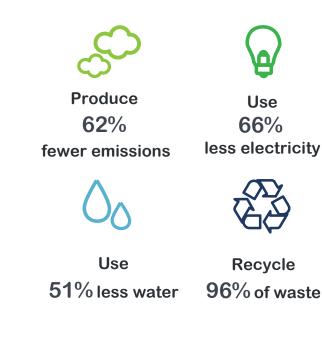
people working in Green Star rated offices

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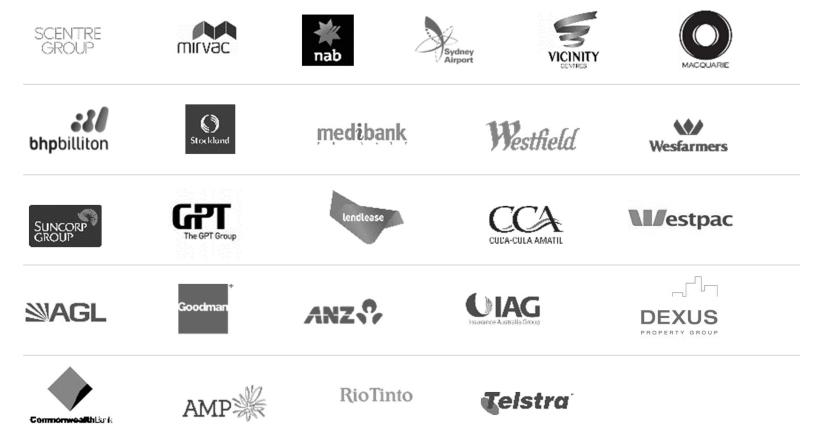


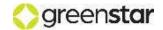
#### 425,000

more people living in Green Star rated communities When compared to buildings constructed to meet minimum standard, Green Star rated buildings:



### **50% of ASX50 companies use Green** Star





# A global focus on carbon & climate change





Emission targets & COP21

Investor demand

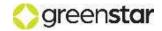


Sustainable **Development Goals** 

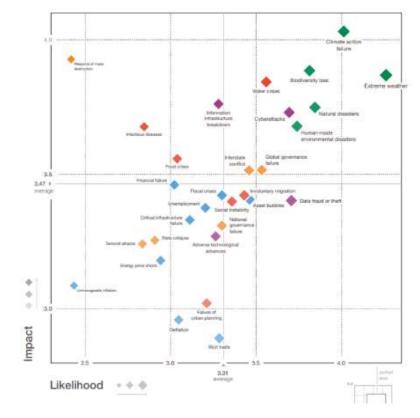


**Board** reporting requirements





# World Economic Forum Global Risks Report (2020)



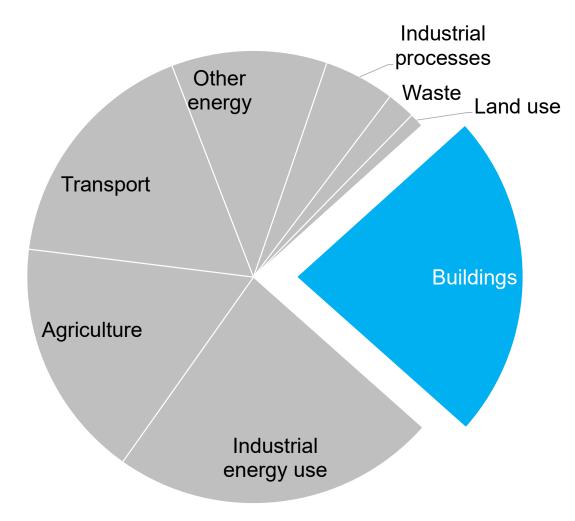
🔿 green**star** 

Top ten risks in terms of likelihood:

- 1. Extreme weather
- 2. Climate action failure
- 3. Natural disasters
- 4. Biodiversity loss
- 5. Human-made environmental disasters

Top ten risks in terms of impact:

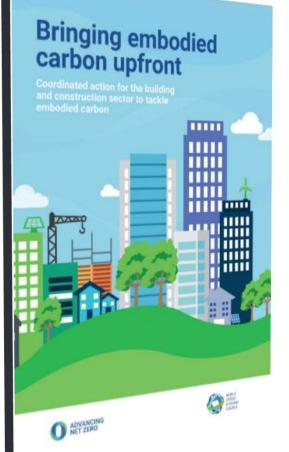
- 1. Climate action failure
- 3. Biodiversity loss
- 7. Natural disasters
- 9. Human-made environmental disasters

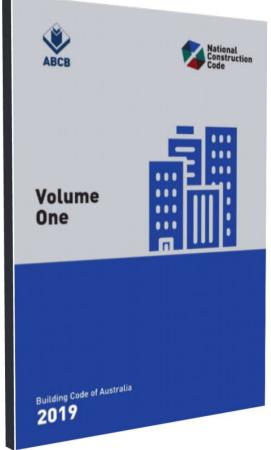


# Buildings represent 23% of all emissions in Australia

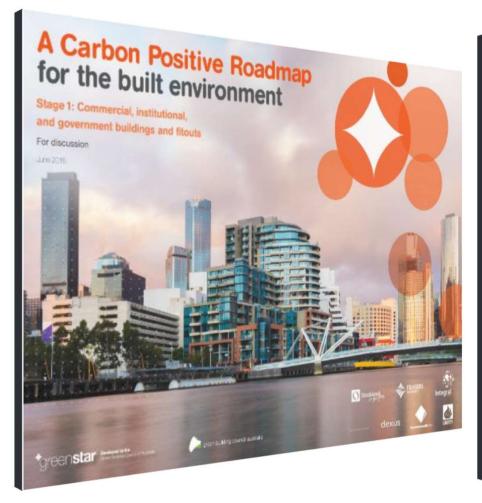
greenstar

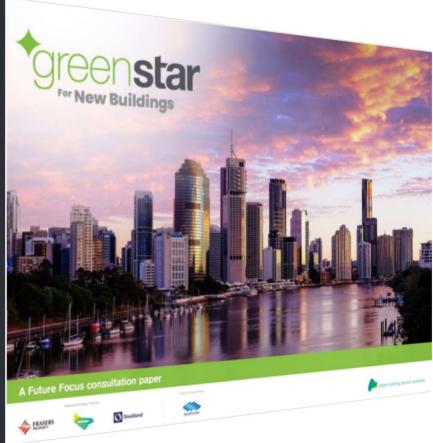






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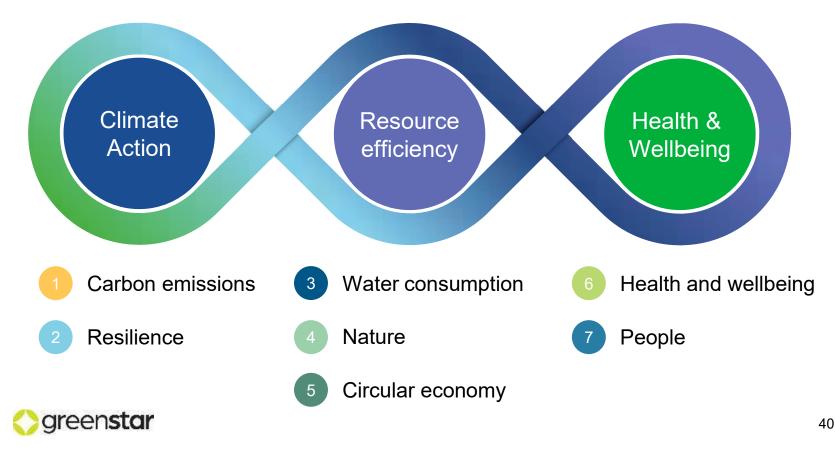






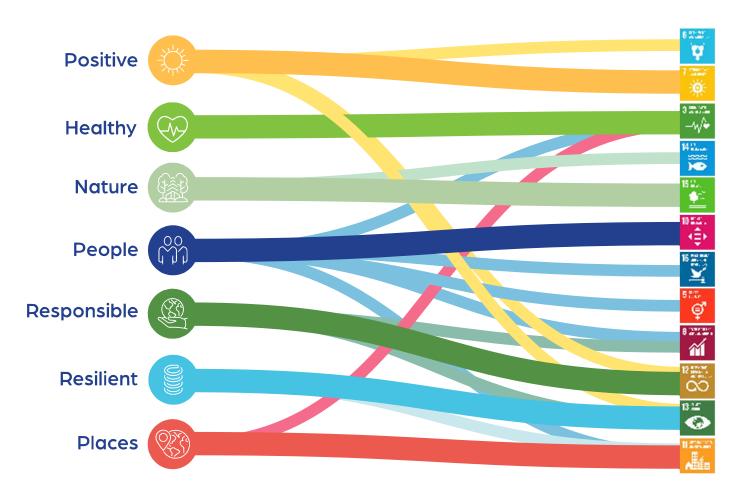
# Why are we changing Green Star?

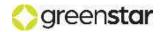
Global megatrends are shaping the built environment like never before



#### Addresses the Sustainable Development Goals

**Green Star Buildings** directly or indirectly addresses 12 out of the 17 UN Sustainable Development Goals. A first for a Green Star rating.





# **A new definition**

**Green Star Buildings** features eight new categories representing the issues that will define the next decade of the built environment.



# **Resilience for buildings**

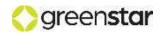
#### **Green Star Resilience Principles:**

1. Enable people-centered decision making through inclusive engagement and consultation.

Assess impacts and opportunities within and beyond a project's boundary and current situation.
Consider, identify, address impacts of acute shocks and chronic stresses locally and on the asset.

4. Enhance capacity of community, businesses and assets to continue, respond and thrive.

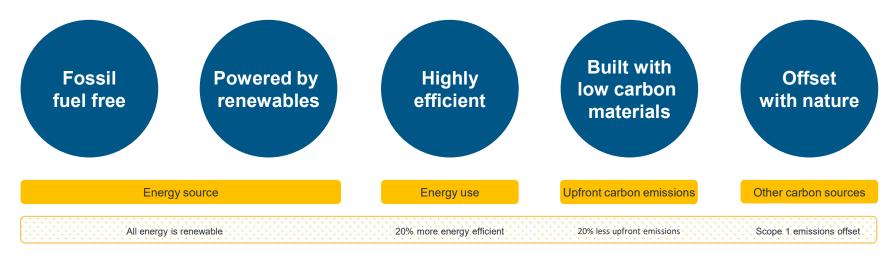
5. Enable ongoing disclosure, communication and evaluation of resilience over time (transparency).



### **Net zero for buildings**

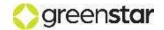
Our new **POSITIVE** category aims to drive every building towards net zero carbon in operations with a focus on transformational change.

This is our formula that every building should follow. And every 6 Star rated building does this as a minimum.



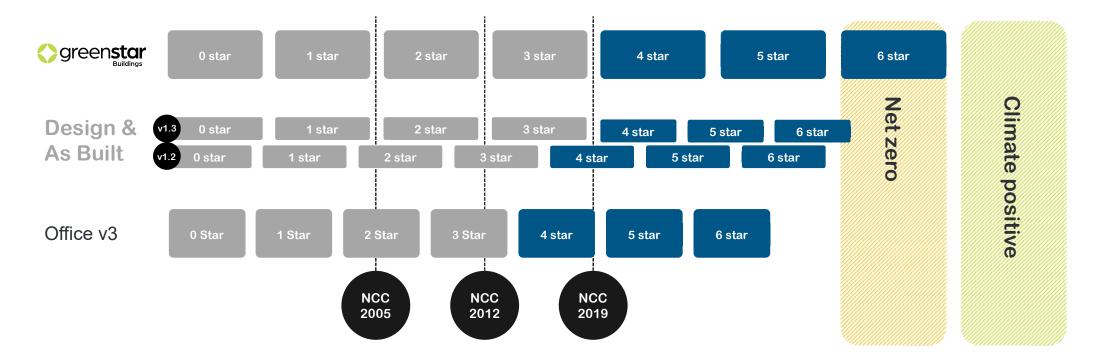


Net zero carbon in operations path, required for 6 star rated buildings



### **Meets the Paris Agreement targets**

**Green Star Buildings** requires 6 Star Green Star rated buildings reduce their energy demand and be powered by renewables.



# **Powerhouse Parramatta**



- 30,000 sqm in size, including 18,000 sqm of exhibition and public space
- 100 kw solar array
- Fully electric with small allowance for traditional flame cooking
- Onsite renewable energy complemented by GreenPower
- Predicted 30% reduction in operational energy use against BAU
- Mechanical systems and plant room space able to accommodate worst-case temperature increases



# M\_Park Building A

- Nestled in a 55,000 sqm low-carbon precinct boasting commercial, coworking, convenience retail, childcare and casual dining
- 130 kilowatt solar array
- Fully electric building with electric heating and hot water
- Onsite renewable energy complimented by GreenPower





# **Green Star Communities (Proposed)**

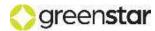
#### **Resilience credits**

- Climate change
- Infrastructure dependency
- Resilience to other impacts
- Community resilience

#### **Positive credits**

- Low energy demand
- Operational Carbon (mandatory)
- Other carbon sources
- Integrated water cycle Carbon in materials
- Impacts from resources





### **Future Homes**



- The Green Star Homes standard will be used to assess Australian homes against three key criteria which we think are important for homes of our future:
- Positive: net zero in energy, fully electric, draught sealed, efficient and powered by renewables
- Healthy: ventilated, comfortable, with products that are better for you
- Resilient: water efficient and climate change ready.



### **Key Observations**

7.



### Perspectives from the Randwick Collaboration Area

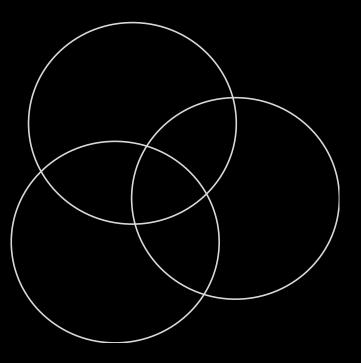
Presentation 3

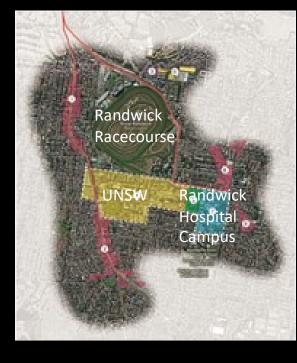
**Duncan Read** Director, Connell Griffin & Program Director, Randwick Collaboration Area Group

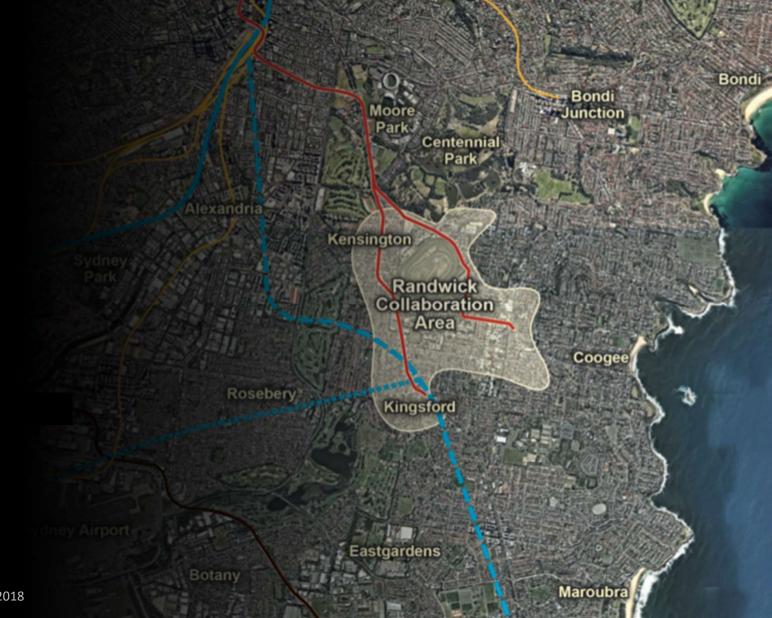




Working together for low emissions and resilient places







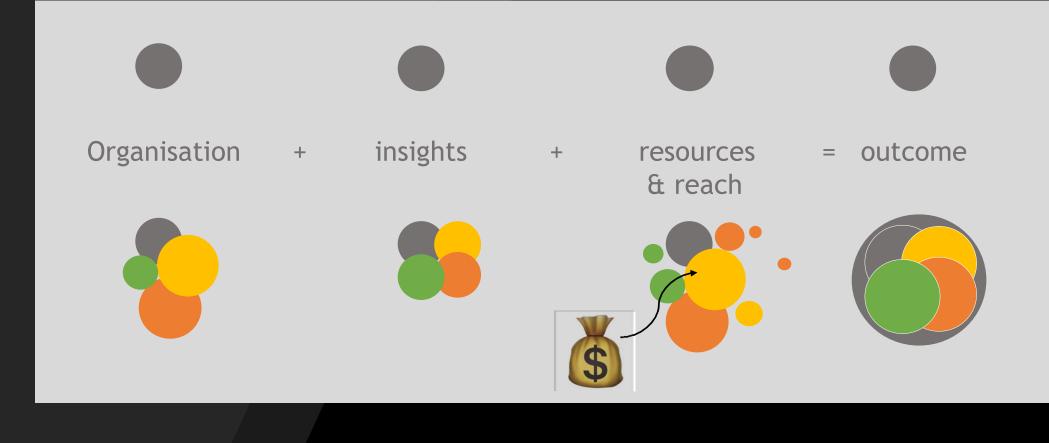
#### Randwick LGA has...

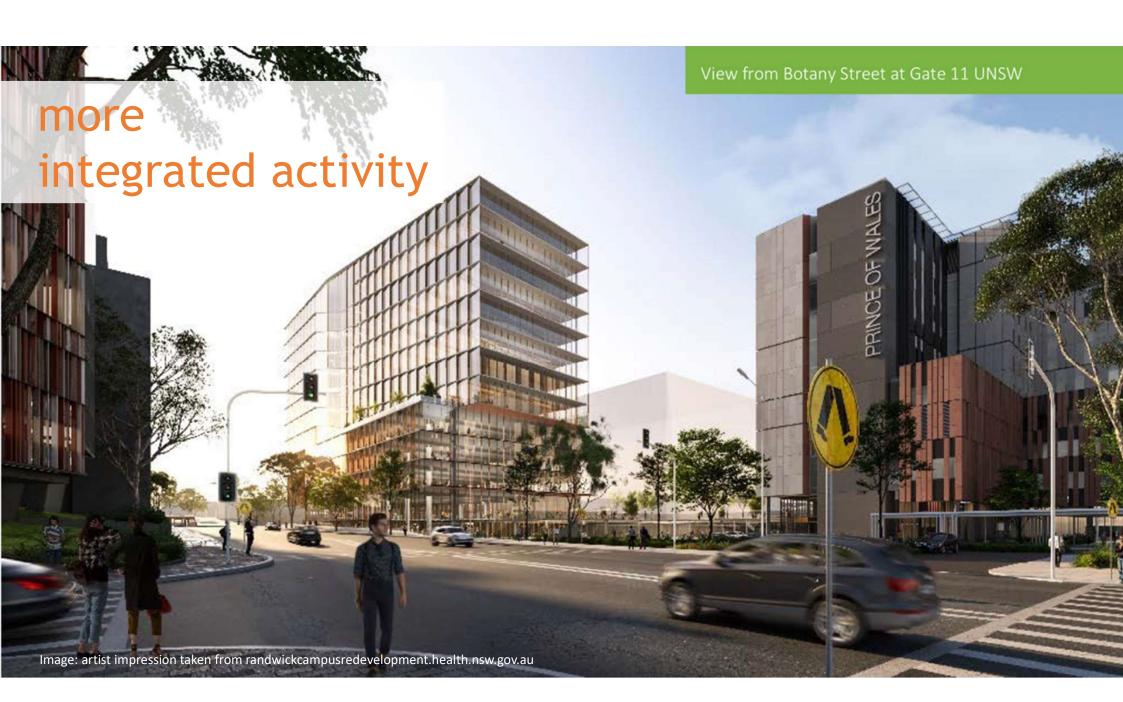
- 29km of coast, 10 beaches , 8 ocean pools
- 154,000 residents
- 13,464 businesses
- 57,355 local jobs
- 85,138 residents in work

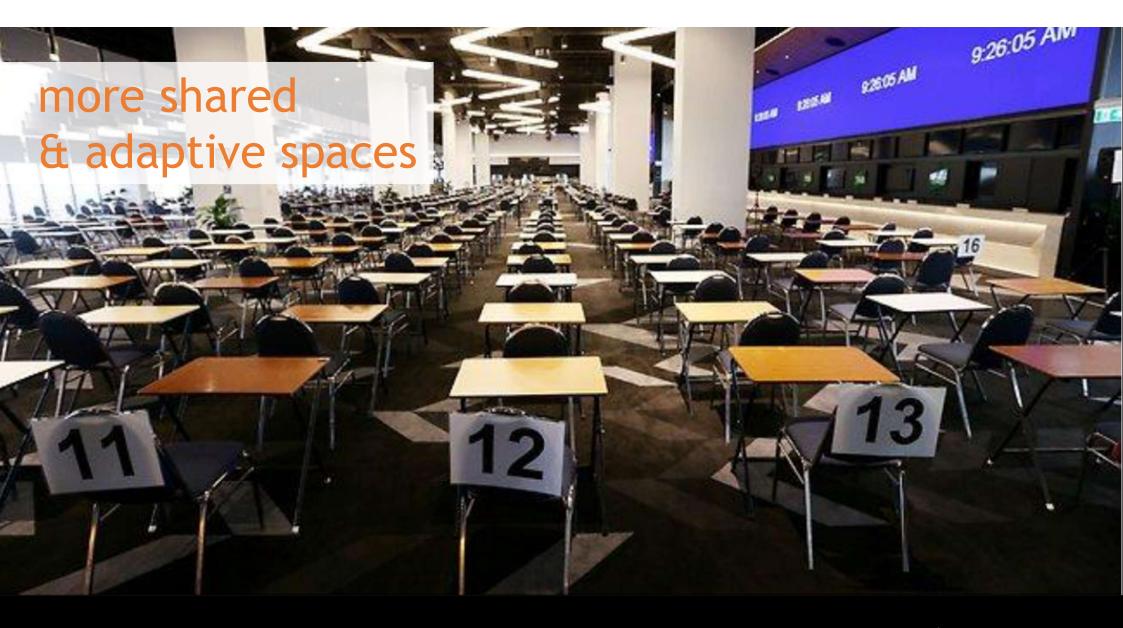
Collaboration Area alone has...

- 4 Hospitals, 13 Medical Research institutes
- 1.8 million patient interactions
- 68,000 student enrolments at UNSW
- NIDA, theatres, music venues, libraries
- TAFE courses and skills training
- Royal Randwick Racecourse & events
- Public and private schools
- Open space, fitness and aquatic centre

## More by working together







# more innovation applied to local problems

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Yellowbox smart lockers at Coogee Beach.

UNSW startup goes local: tech solutions for Randwick City Council beaches



15 JUL 2020 | JULIA JONES

Young entrepreneurs partner with Randwick City Council to deliver smart lockers at Coogee and Maroubra Beach.



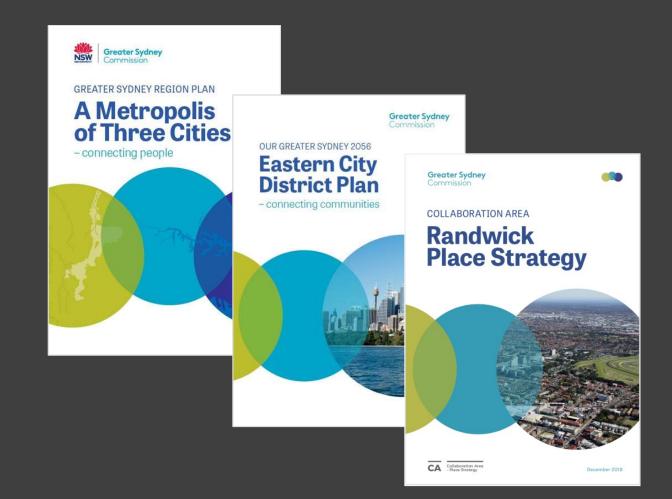
Yellowbox founders Ben Delaney, Vanessa Zhao, Ho Jun Tang and Adrian Brossard.

Images: from UNSW Newsroom, July 2020

# more responsive action

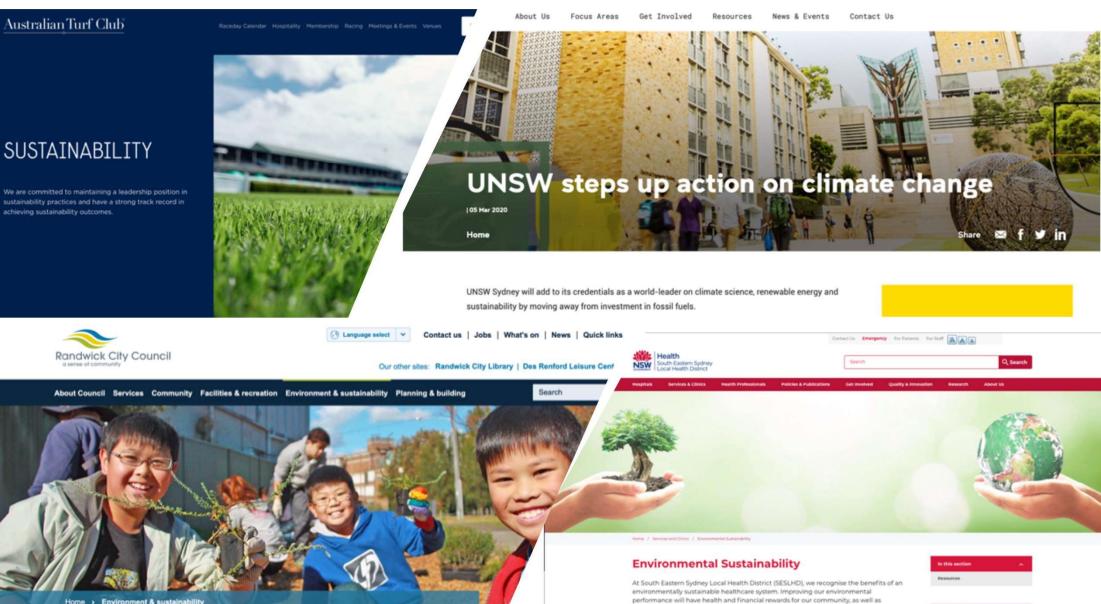


Working together around place





	Connectivity			Liveability			Productivity		Sustainability		Governance		
<b>Priorities:</b>	Priority 1: Create an integrated and connected innovation district	Priority 2: Improve public transport to and from the Randwick Collaboration Area	Priority 3: Improve walking and cycling connections	Priority 4: Improve digital connectivity	Priority 5: Provide diverse housing	Priority 6: Strengthen Randwick's local economy	Priority 7: Provide social and civic infrastructure for current and future generations	Priority 8: Invest in Randwick health and education precinct	Priority 9: Protect environmental assets and open space to a high standard	Priority 10: Create an efficient place	Priority 11: Create a resilient place	Priority 12: Develop an enduring precinct-level governance structure to support the vision	Priority 13: Develop a coherent funding mechanism for th Collaboration Area
Actions:	Action 2	Action 2: Improve public transport capacity and frequency to support more services arriving and departing from Randwick and to improve connections to key destinations such as the CBD, Sydney Airport, Bondi Junction, Green Square-Mascot, Eastgardens- Maroubra Junction and La Perouse Action 3: Develop a strategy for transport invisitigations and initiatives in the south-eastern suburbs of Sydney, including potential for mass transit to the Collaboration Area Action 4: Improve pedestrian legibility and network usability to enhance wayfinding and access to public transport hubs			Action 10: Investigate strategies for short to medium- term visitor accommodation including hotel and serviced apartments Action 11: Provide diverse housing including affordable housing for kay workers and students Action 12: Explore partnership opportunities with LAHC, community housing providers and short-term accommodation providers to provide student accommodation and key worker affordable housing close to and within the Collaboration Area while ensuring a net increase in social and affordable housing near public transport	Action 13: Develop and implement an integrated Collaboration Area retail strategy that considers the context of the wider local economy and opportunities for an expanded night-time economy, while supporting arts and cultural activities	Action 14: Investigate opportunities to share space at Randwick Racecourse, as well as primary, secondary, TAFE and tertiary education establishments Action 15: Develop a public domain plan for the area that creates great places for people, and coordinates projects to match growth	Action 16: Utilise best practice principles to facilitate affordable and adaptable floor space for start- ups, corporate partners and creative industries Action 17: Ensure appropriate floor space provision for commercial interests and partnerships in new developments Action 18: Strengthen the TAFE NSW Randwick presence by increasing vocational training related to health and innovation through co-location opportunities or multi-function buildings Action 19: Create an international brand and story emphasising the success of the innovation district and strategies to attract further investment	Action 20: Increase street tree canopy across the Collaboration Area with redevelopment and public domain improvements Action 21: Implement opportugies for Greed Grid connections, includint east-west connections to the Mill Stream and Boos Wetlands Open Space Corridor	Action 22: Prioritise low-carbon initiatives in future developments such as adaptive building designs and use of penersonal service and the service of the Randwick as a potential pilot project for a low-carbon high- efficiency precinct	Action 24: To improve energy, waste and water efficiencies through future development, proponents must utilise design excellence principles ind design connections to: • introduce best-inactice environmental was sustainable design to buildings and public domains • incorporate smart technology and water sensitive urban design features	Action 25: Establish a Collaboration Area Governance Group to: • strengthen and promote Randwicks evolution- towards an innovation district • create opportunities for private sector investment, start-ups and commercialisation of rese arch • develop economic development strategies, planning frameworks and infrastructure plans Action 26: Identify funding to operate the Collaboration Area Governance Group	Action 27: Identify a range of funding sources (such as sponsorships, grants, contributions, planning agreements or agency budgets) to deliver this Place Strategy



Home > Environment & sustainability

**Our initiatives** 

environmental advantages for the planet.

Contact us Phone: 02 9382 7865 Fax: 02 9382 7651



# 'It's a good idea, but...'

'we have other priorities right now'

'We don't have time we are busy on this'

'There's no funding this year'

'We've already done something like that'

'I'm not sure who's working on that for us'

'What if we don't agree on scope or precinct boundaries?'

# 'Making it Real'

Main purpose To identify gaps & joint initiatives

#### Other objectives

- share work in progress
- precinct insights
- strengthen networks
- explore priorities
- build momentum •









UNSW Sydney will add to its credentials as a world-leader on climate science, renewable energy an sustainability by moving away from investment in fossil fuels.

- ·foodwaste challens of scale · proper brown/orcen worste brown/orcen worste · worste collection mode confusing if different in different places demise of local "treatment" of recyclables . no feedback on how people are doing // contribution to targets Cu Hures education - reduce contamination accountability · buying recycled materials // supply chain
- re-use opportunities

#### PROJECT IDEAS

scale up existing/studies on waste y audit by SOSLHD · precinct wishe communication about food waste specify . recycled products in purchasing/procurement pooling existing data on waste -> target seting guarate a logilist of re-use available in preatch

Tetouter packaging - learn from UNS auf expensiones: soodwaste conversion to charge plane - requires intical mass

's Durchasing aqueement Toint PPA across 4 consortium members (\* (11221 Toint education initiative. pleveraging unique austomers + eq hospital customers. channels. Data project : Energy audit Solar PVinstallation where appropriate - Waste (food) to enorgy-biodigeter SO) \_ Malabar STP natural gas & Aquailability

Randwick Collaboration Area Emissions Reduction Strategy

a 12 month project to ...

#### Inform

#### Align

understand the area's emissions profile

identify and prioritise joint projects

#### Attract

showcase Randwick to scale opportunities

#### Influence

highlight what might be possible

### Where We Are



Feb 20	Apr 20	Jun 20	Aug 20	Oct 20	Dec 20	Feb 21	Apr 21	Jun 21
Phase 0: Idea Workshop	Concept deve	pping (three months) elopment e-on-one engagement Project plan & brief	Confirm fu	trategy developmen nding & governance & engage consultant Collect data, consult Develop strat			Phase 3: Report & advoca Complete strategy Share, advocate & lob Raise support & f	by

### Joint opportunity

#### Early outcomes / future expectations

Stronger local networks and insights	
Group support and contributions	
Direction for joint action	
Emission baseline for Collaboration Area	$\checkmark$
Case for change / future investment	
Lessons for new projects / elsewhere	

More informed

More adaptive

More innovative

More responsive

More impact together

# Working together to support place outcomes

aerial c

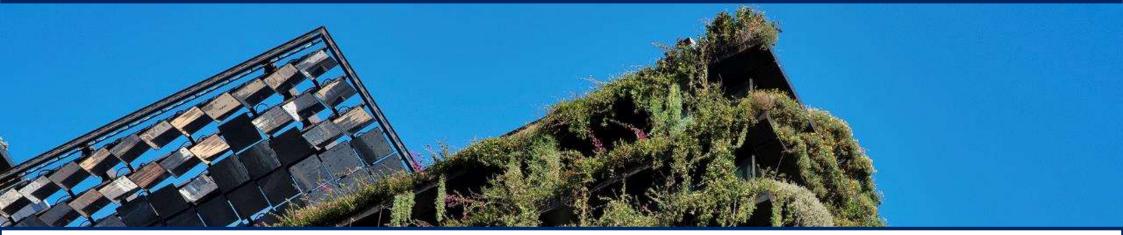




Q & A

### Slido.com Event code: #adaptnsw2





## **Webinar Evaluation**

### Slido.com Event code: #adaptnsw2



Thank you

### Contact us: adapt.nsw@environment.nsw.gov.au