

# Working with our councils to reduce carbon & adapt to climate impacts

Presentation to STC Board Regional Climate Change Initiative Feb 2023



#### **Overview:**

- Southern Councils Climate Collaboration: Katrina Graham, Senior Climate Change Officer, City of Hobart
- Council Carbon Footprints: Scott Morgan, Sugden & Gee
- Community Carbon Footprints: Alison Johnson, Climate Resilience Officer, Brighton Council
- Council Climate Risk Assessments: Graham Green, Special Projects, Southern Midlands Council





• Questions

#### STCA Climate Program 2021 - 2023

- Regional Strategy: adapting to a changing coastline in Tasmania
- Climate Impacts Information for Decision Making (update)
- State-wide proposal for local government climate action
- Southern Councils Climate Collaboration:
  - Corporate and Community Carbon & Energy Profiles
  - Corporate Climate Risk Assessment and Adaptation Planning





#### **Barriers to Council Climate Action**

Lack of knowledge and skills Structural challenges including inadequate legislation, planning scheme and building code requirements

Lack of consistency across the region in e.g. emergency management, public risk registers, asset management

Resourcing, especially for smaller Councils Lack of authorising environment within councils to act





#### What does council climate action involve?

MITIGATION			ADAPTATION Corporate				
Community		Corporate		Community		Corporate governance	
Community emissions including	5	Council energy us emissions	se and	Community deve	elopment	<ul> <li>Public risk register</li> <li>Strategic plan</li> </ul>	
business and industry, residents, government ser	, rvice	Carbon sequestrat	tion and	Natural reso	urce	<ul><li>Insurance</li><li>Legal liability</li></ul>	
		opportuniti				<ul> <li>Development approval and</li> <li>Building approvals</li> <li>Development approva</li> <li>Local and regional land</li> </ul>	d control Is d use plans
						Asset management <ul> <li>Stormwater</li> <li>Roads</li> <li>Built assets</li> <li>Green space including</li> </ul>	parks and reserves
CORPORATE FOUNDATIONAL INFORMA			TION		Financial management	Emergency management	
	Corporate Inventory Methods (capture in financial accounting) (climate		Corporate Sta exposed t (climate inc	Statutory Functions d to climate risk indices: UTAS CFT)		Environmental health	

## Southern Councils Climate Collaboration - delivery

Project Governance					Consistent and	
<ul> <li>Communication Strategy</li> <li>Reporting</li> <li>Budget</li> <li>Steering Committee</li> </ul>	Inication Ing Base Corporate Council Carbon and Energy Footprint Community Carbon Footprint Councils Carbon Action Plans Reporting KPI's	Community Mit Corporate Ada Review climate risk tools & legal advice Council climate risk assessments & Adaptation Plans Reporting KPIs	igation (Direct aptation (Direct Community & Engagement: Understanding and values Roles and responsibilities Support for responding	Support) t Support) Councillor Climate Forum	upport) Support) Councillor Climate Forum	action by councils Increased capacity to respond
				Regional Strategy Implementation Plan Review and update Increased		Thriving and Resilient
				awareness	DECRATION Souther	Communities

#### **SCCC: Council Carbon Footprints**









#### Scott Morgan, Sugden & Gee

#### Methods: Council Carbon Footprints

- Prepare carbon footprints & energy use summaries for each council
- Uses national legislation & consistent approach across councils
- Three years of inventories prepared for 11 councils, with one year (2021/22) for the one council
- Calculations completed, and preparation of written summaries with potential opportunities to reduce emissions & energy is underway
- Sessions to be held with relevant council for the calculations and summaries

#### Sources of Emissions – Fuels

- Fuels used in vehicles and plant, mostly petrol & diesel
  - Cars & utes
  - Trucks
  - Graders, tractors, mowers
- Stationary fuel use, e.g. bottled gas & natural gas for heating of buildings, hot water, cooktops or gas barbeques











### **Source of Emissions - Electricity**

- Emissions from generating electricity included in carbon footprints
- Tasmania's electricity mostly hydro/wind
- Some imported via Basslink & from Tamar Valley gas fired power station
- Each year emissions per unit of electricity calculated by Clean Energy Regulator
- Onsite solar power with credit for feed in to grid has been incorporated











#### Sources of Emissions - Waste

- Emissions from waste collection and facilities are in footprints as councils have "control" over how it is to be disposed of
- Landfilled waste emits gases over 50+ years, with footprint based on lifetime emissions & impact of any landfill gas extraction
- Compositing emits about 10% of emissions from landfill with gas extraction
- Waste is the largest component of the footprints (about 70-85%)













#### Council Carbon Footprint – example



Greenhouse Gas Emissions % for one year years



#### Energy Use over 3



#### **SCCC: Community Carbon Footprints**

- Community info gap
- Electricity trends
- Diverse range of local actions
- Electricity trends
- EV's and rooftop solar growing





#### Community carbon information gap

**3.35 Mega tonnes** of dioxide equivalent in 2020

3,350,000 tonnes of CO2 released every year across Tasmania from energy use







#### Diverse range of local solutions

- Healthy transport
- Warm healthy homes
- Energy efficient businesses (ag, forestry to IGAs)
- Optimal industry (manufacturing, breweries etc)
- Capturing waste/water emissions



Regional greenhouse gas footprint

#### LGA and postcode electricity trends

Municipality:	Commercial electricity kWh/ per capita / per day in 2021-22	Residential electricity kWh/ per capita / per day
Brighton Council	5.4	11.8
Central Highlands Council	16.9	<mark>19.1</mark>
City of Hobart	<mark>22.3</mark>	12.3
Clarence City Council	8.1	15.4
Derwent Valley Council	15.9	11.7
Glamorgan Spring Bay Council	12.1	14.5
Glenorchy City Council	9.0	11.2
Huon Valley Council	11.5	10.1
Kingborough Council	3.5	<mark>9.4</mark>
Sorell Council	<mark>3.4</mark>	10.7
Southern Midlands Council	7.9	12.0
Tasman Council	6.1	10.9

#### Regional electricity decreased by 11%



REGIONAL

INITATIVE

### EV's and rooftop solar growing

- 20,000 systems, doubled over 8 yrs
- 63+ million units/yr
- Clarence residents and businesses lead in gen
- 300 EV's regionally
- Doubled in the last 3 yrs





## SCCC: Councils climate risk & adaptation planning





#### Graham Green, Southern Midlands Council

#### **Climate Change Adaptation:**

Climate change adaptation is defined as action taken to prepare for actual or expected changes in the climate:

- in order to minimise harm
- to cope with the consequences







#### Local Government Climate Change Adaptation Responsibilities:

ttps://www.dcceew.gov.au/sites/default/files/documents/coag-roles-respsonsibilities-climate-change-adaptation.pdf

- Manage risks & impacts to council owned & managed assets
- Manage risks and impacts to council's service delivery
- Contribute appropriate resources to prepare, respond and recover from climatic impacts
- Ensure local planning & development regulations incorporate climate change considerations
- Facilitate community resilience, by providing climate risk information
- Collaborate across councils & Tasmanian

### Managing physical impacts

- Inundation and damage to coastal infrastructure
- Asset management e.g. storm water infrastructure and buildings
- More frequent and severe storm damage
- Maintaining continuity of important services during extreme weather events
- Fire hazards.

Source: https://www.mav.asn.au/





#### Managing physical impacts

The frequency and intensity of extreme weather events in Australia is increasing

(Insurance Council of Australia)

Natural catastrophes declared since 2019

Source: https://www.mav.asn.au/

\$13B

Claims paid since 2019



### Managing legal risks

- Keep **up-to-date** on climate change science and information, particularly in relation to potential risks from natural hazards;
- Develop **clear and certain criteria** for decision-making to increase public confidence that decisions use the **best available scientific evidence**;
- **Exercise reasonable care** when making planning decisions, ensure relevant known and understood, relevant law is identified & understood, and reasons for decisions are clear & accurate **& documented**;
- Increase public consultation, to improve transparency around decisionlimit administrative review
- Facilitate the **provision of information** to property owners on potential risks to property.



Source: <u>https://walga.asn.au/getattachment/Policy-Advice-and-Advocacy/Environment/Climate-Change/Climate-Change-</u> Resources/Baker and McKenzie Local Government Risk Legal Liability Climate Change Feb2016.pdf.aspx?lang=en-AU

#### Council climate liability

Climate change is **clearly established** through legislation, national and state policy and international agreements. It is likely that a court will determine that **climate risks and impacts are foreseeable**.

Councils have a **duty of care** in the context of climate change adaptation which may arise in the context of:

- Development approvals where the risk of harm was foreseeable
- Failure to maintain or build infrastructure e.g. storm water systems



#### Council climate risk assessment – delivery

Climate Risk & Adaptation Tools	<ul> <li>Update legal advice – needs basis</li> <li>Review and update of climate risk tools (RCCAP) – complete</li> <li>Update tools located on ReCFIT website include transitional, liability and economic risks</li> </ul>
Council climate snapshots	<ul> <li>Collaborate with UTAS to review and prepare 'easy to use' climate profiles</li> <li>Align to State vulnerability assessments</li> <li>Consider local government assets and climate exposure</li> </ul>
Council Climate Risk & Adaptation Plans	<ul> <li>Leverages from Corporate Council Adaptation Plans and Strategic Risk Registers</li> <li>Includes targets, annual reporting</li> <li>Directly support councils to prepare and embed</li> </ul>
Council Climate Risk reporting KPIs	<ul> <li>Develop a series of Reporting KPI's based around key local government climate risks</li> <li>Leverage from CCAPs and elevate to Regional / State action</li> <li>Seek engagement partnership with key stakeholders</li> </ul>

## Questions





