

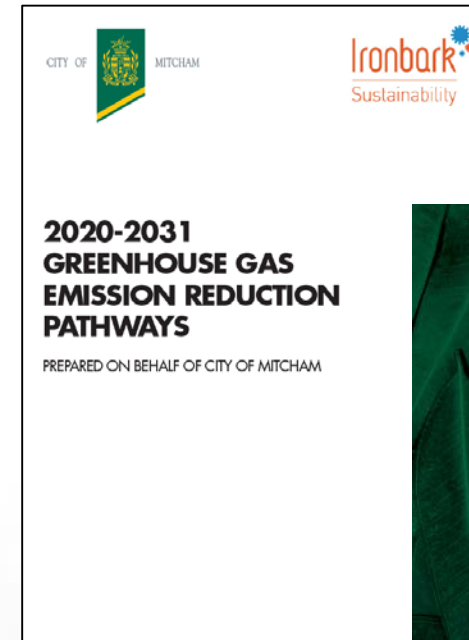
Cities Power Partnership Pledges Update

Purpose

To explain what we've done since Council made its City Power Partnership climate pledges in October 2020

Timeline

- October 2019 Council declared a climate emergency
- Commissioned two reports: Greenhouse Gas Emission Reduction Pathways and Climate Adaptation Pathways
- October 2020 Council confirmed its City Power Partnership pledges and community commitments



Why is this important?



What does net zero mean?

Reduce greenhouse gas emissions

+

Undertake activities that take carbon out of the atmosphere





Reducing carbon emissions from Council operations

3,842 tCO₂e



What we do BAU

Greening & Planning

1. Hot Spots
2. Accelerated Tree Planting
3. Tree Canopy Analysis
4. Soil Temperature Probes
5. Tree Trails
6. Resilient South

Water and flooding

1. Rain Gardens
2. Permeable Paving/Carparks
3. Water Inlets
4. Leaky Wells
5. Flood Mitigation

Bushfire prevention

1. Brush Cutting
2. Fuel Clearance
3. Weed Control
4. Verge Maintenance



What we do BAU

70% of Councils footpath renewals for 2019/20 consisted of **permeable footpaths**, this represents in excess of **17,000m²** of the total 25,000m² program for 2019/20.

75 tree inlets incorporated into capital renewal projects

Award winning sustainable car park trial - St Mary's Permeable Carp Park incorporating Geothermal pavement trial

City of Mitcham awarded **'Tree City of the World'** status

Sustainable infrastructure delivered:

- 1503 Tonnes of recycled asphalt in road renewals
- 4789 Tyres used in Asphalt
- 3193 Tonnes of Crumb Rubber Asphalt laid
- 1 Gap Graded Crumb Rubber Asphalt Trial
- Carlisle Road, Westbourne Park, Earth Day initiative 22 April 2020 - Recycled concrete kerbs, Treenet inlets and stormwater rain gardens



Other initiatives

4,980 Street Lights changed to 14W LED in August 2018.

45KW Solar Power

installed prior at Mitcham Civic Centre, works depot and heritage research centre

A linkage to **60% Renewable Energy** from Lake Bonney wind farm

82KW of Solar PV Panels

installed on Mitcham Library, Melrose Park Depot, Mitcham Community Centre and Cumberland Park Community Centre in 19/20

Building LED Upgrade

at Council's Civic Centre and Melrose Park Depot

Diverted 58% of the Cities Domestic Waste from Landfill in 19/20 (16,154 tonnes of recycling and green waste collected from kerbside)

34% reduction in our corporate emissions since 2014/15



How do we go further?

1. Purchase **100% of Council's energy** from **renewable** sources by 2030

2. Change all **streetlights** to **energy efficient** technology by 2030

3. Fund an ambitious and accelerated transition towards **Council's fleet** being **fully renewables powered** by 2030

4. Set targets and fund programs to **reduce waste to landfill by 75%** both for **Council's commercial and domestic waste streams** by 2030

5. Adopt **sustainable procurement and policies** by **October 2022**
to prioritise low emission products and services and incorporate zero emission design into all new Council buildings

In progress

1. Purchase **100% of Council's energy** from **renewable** sources by 2030

- ✓ Advocating for 100% renewable energy through SA LGA electricity contract expected to commence January 2023.

Cost	Emission Reduction (Per Annum)	% of total
Staff Time	1,143 tCO2e (Scope 2)	27%

In progress

2. Change all **streetlights to energy efficient technology** by 2030

- ✓ A grant application to state government submitted to match funding dollar for dollar for the LED streetlight changeover.

Cost	Emission Reduction (Per Annum)	% of total
\$1.88 million	136 tCO ₂ e	3.2%

In progress

3. Fund an ambitious and accelerated transition towards **Council's fleet** being **fully renewables powered** by 2030

- ✓ 2 Councils electric civic centre pool use vehicles (procured)
- ✓ 2 charging stations (procurement underway)
- ✓ EOI for additional public EV charging station as a part of the Statewide Charging Network

Cost	Emission Reduction (Per Annum)	% of total
To date: \$100,000 for 2 vehicles and charging station	TBC	TBC

In progress

4. Set targets and fund programs to **reduce waste to landfill by 75%** both for Council's commercial and domestic waste streams by 2030

- ✓ Redefining the service model and approach to waste management in line with circular economy principles and undertaking a tender process for the City of Mitcham waste contract accordingly.

Cost	Emission Reduction (Per Annum)	% of total
Staff time	TBC	TBC

In progress

5. Adopt sustainable procurement and policies by October 2022

to prioritise low emission products and services and incorporate zero emission design into all new Council buildings

- ✓ Updated Procurement policy and Guideline to adopt Sustainable procurement.

Cost	Emission Reduction (Per Annum)	% of total
TBC	TBC	TBC

Opportunities for future funding

Project	Cost	Emission Reduction (Per Annum)	% of total
LED light upgrade across Council buildings as part of building renewals 21/22	\$250,000 21/22 to 24/25 Large Sites	163 tCO ₂ e (Scope 2)	4%
Energy efficient retro fits of appliances, heating and ventilation, and hot water systems across renewal program	Up to \$20,000 per site	Up to 3,500kgCO ₂ e per site	0.1% per site
Further Solar PV upgrades in future at small sites (TBC)	\$416, 640	398 tCO ₂ e (Scope 2)	9.4%
Develop a Renewables powered Fleet Transition Plan with an aim to replace all passenger vehicles to EV. Gradually replace 11 utility vehicles to more efficient models as per Green Vehicle Guide.	\$840,700 spread over next 10 years	96.8 tCO ₂ e (Scope 1)	23%
Develop a environment and sustainable development policy and guideline for property and engineering departments for design and maintenance.	TBD	53 tCO ₂ e (Scope2)	1.3%
Switch open space lighting to Smart LED's	\$101, 000 (operational 21/22 – Open Space Lighting – Future Capital \$ TBC	TBC	TBC

Community Emissions



Reducing carbon emissions across the City of Mitcham

633,400

tCO₂e



Community emissions

Waste 5%

Transport
36%

Gas 16%

Electricity
42%



What are we doing?

1. Promote and accelerate
a **community renewable
energy transition**

2. Continue building
community capacity
towards net zero emissions
and climate resilience

3. Transition toward
**renewables
powered transportation**

4. Assist residents in
**behaviour change
education**

5. Assist residents
in **designing new
low energy buildings**



In progress

1. Promote and accelerate
a **community renewable
energy transition**

✓ Progressing “Behind the Metre”
Solar PPA tender process

Cost	Impact
Staff Time / \$75,000 Budget	Potentially high Potential to impact electricity emissions



In progress



2. Continue building **community capacity** towards net zero emissions and climate resilience

- ✓ Delivering community workshops and training with Resilient South and Green Adelaide

Cost	Impact
\$5,000 per annum	Resilience impacts



In progress



3. Transition toward
renewables
powered transportation

✓ Public charging stations being progressed

Cost	Impact
TBC	Potentially high impact on transport emissions

In progress

4. Assist residents in
behaviour change
education

- ✓ Ongoing progression via existing waste education programs in partnership with East Waste, Green Adelaide.

Cost	Impact
\$5,000 per annum	Reduction in waste to landfill

In progress

5. Assist residents
in **designing new
low energy buildings**

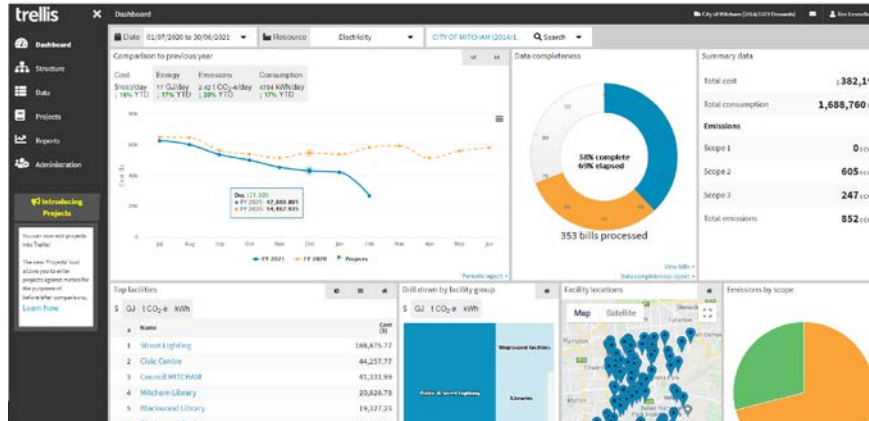
- ✓ Investigating community education opportunities to assist residents in designing new low energy buildings
- ✓ Project for education and advocacy to reduce energy consumption in commercial buildings

Cost	Impact
Staff time	Potential reduction in electricity emissions

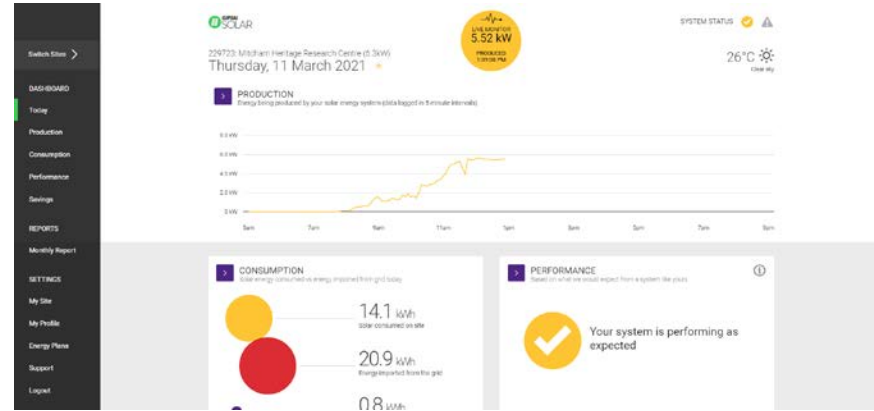
Opportunities for future funding

Project	Cost	Emission Reduction (Per Annum)	% of total
Support Zero Emission and Green Building design in the community	\$44,000 per annum over 2 years	73,000 tCO ₂ e (Stationary Energy)	10.5%
Community Solar - Behind the metre PPA	TBC	TBC	TBC
Maximise extraction/ diversion of domestic recyclables to landfill	TBC	TBC	TBC
Continue to advocate for low emission material used to construct buildings and engineering assets (particularly roads).	TBD	53 tCO ₂ e (Scope2)	1.3%
Low Carbon Concrete Trials to better understand technology	>15% BAU costs	>50% compared to regular concrete	
Sustainable and recycled material use in outdoor furniture	Varies by product	Up to 2,192kgCO ₂ e/t of plastic	0.1% per tonne
Improved climate impacts on playground areas (heat resistive sails, materials, WSUD)	\$10,000-15,000 per site	Varies (depending on project and initiative)	

Tracking emissions reductions and climate impact



trellis



solar analytics

What's next?

- Council Report April/May
- Updates and decisions:
 - LED upgrade
 - Behind the Metre Solar PPA
 - Waste tender
 - Bin Replacement and Collection Options (RAWTEC)
 - Note Once - off operating projects already in Budget Deliberations
 - Outline Series of smaller projects and approach to progress them