

Camden: Towards Net Zero 2023



Community Assets

Background

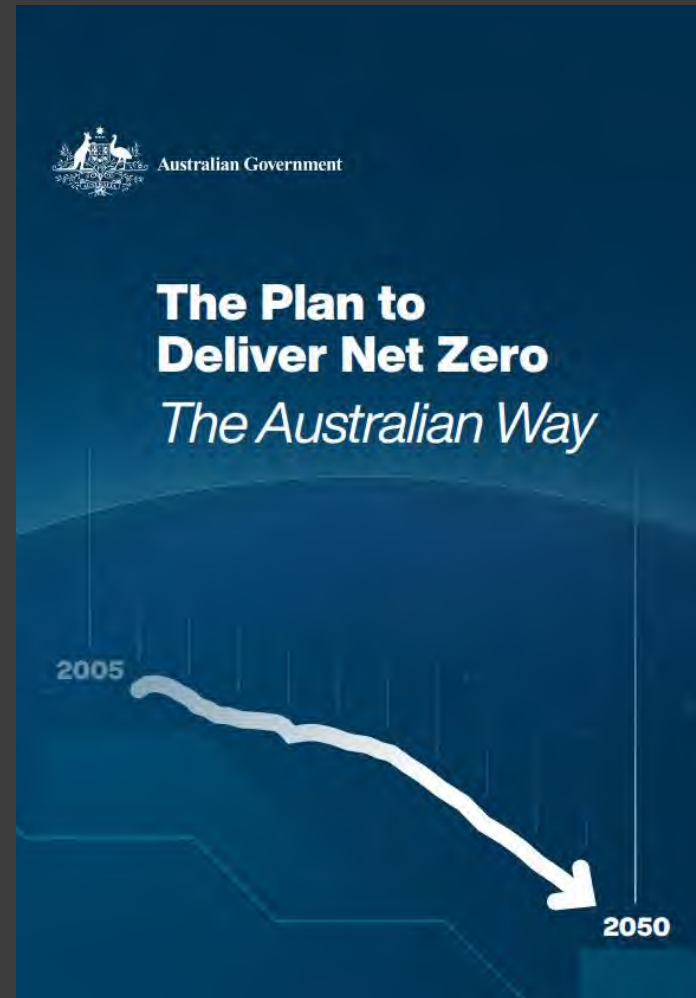
- Impacts of climate change are already being felt
- In Camden, we have experienced increased frequency and intensity of extreme weather events
- These climate changes are attributed to an increase in greenhouse gas emissions driven by human activities and the use of fossil fuels.
- Action on climate change and achieving net zero emissions is being driven from all levels of government

Context



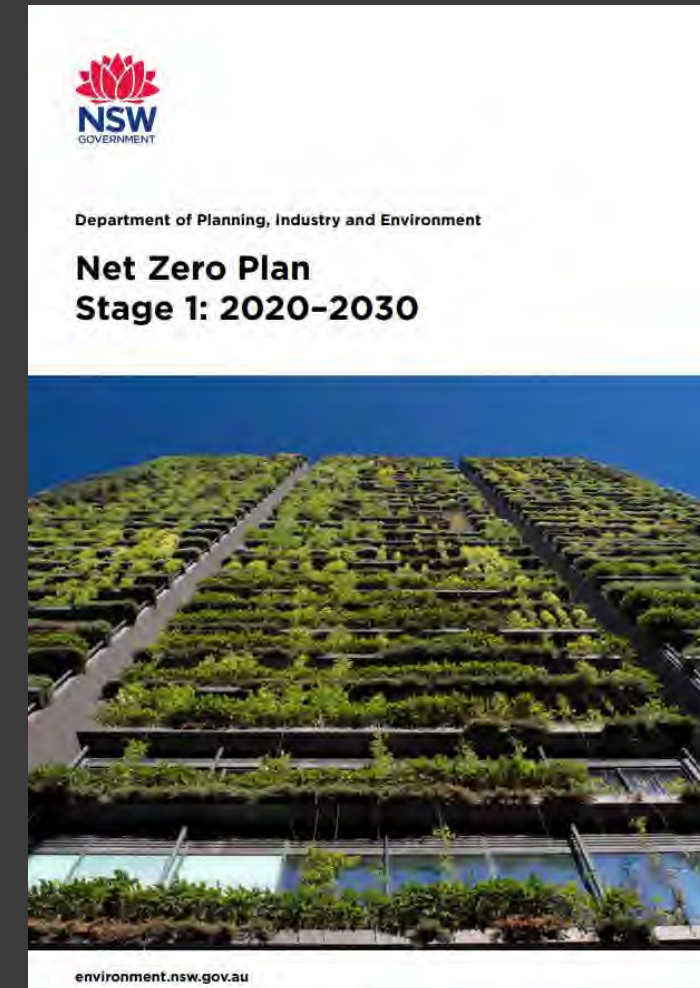
Paris Agreement (December 2015)

196 countries have committed to work towards limiting increases to well below 2°C and to strive for 1.5°C



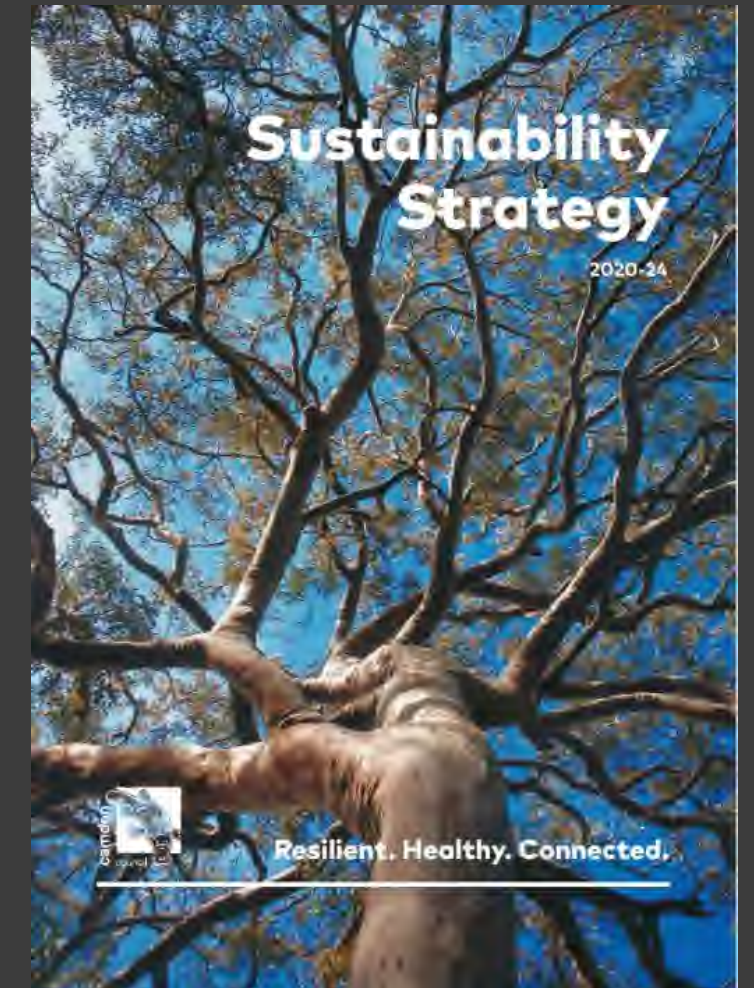
Australian Government

- net zero emissions by 2050
- 43% reduction by 2030 based on 2005 levels



NSW Government

- net zero emissions by 2050
- 70% reduction by 2035 based on 2005 levels



Camden Council

- net zero emissions from Council's operations by 2050
- 50% reduction by 2030 based on 2018/19 levels

Emissions Profile

How emissions are measured:

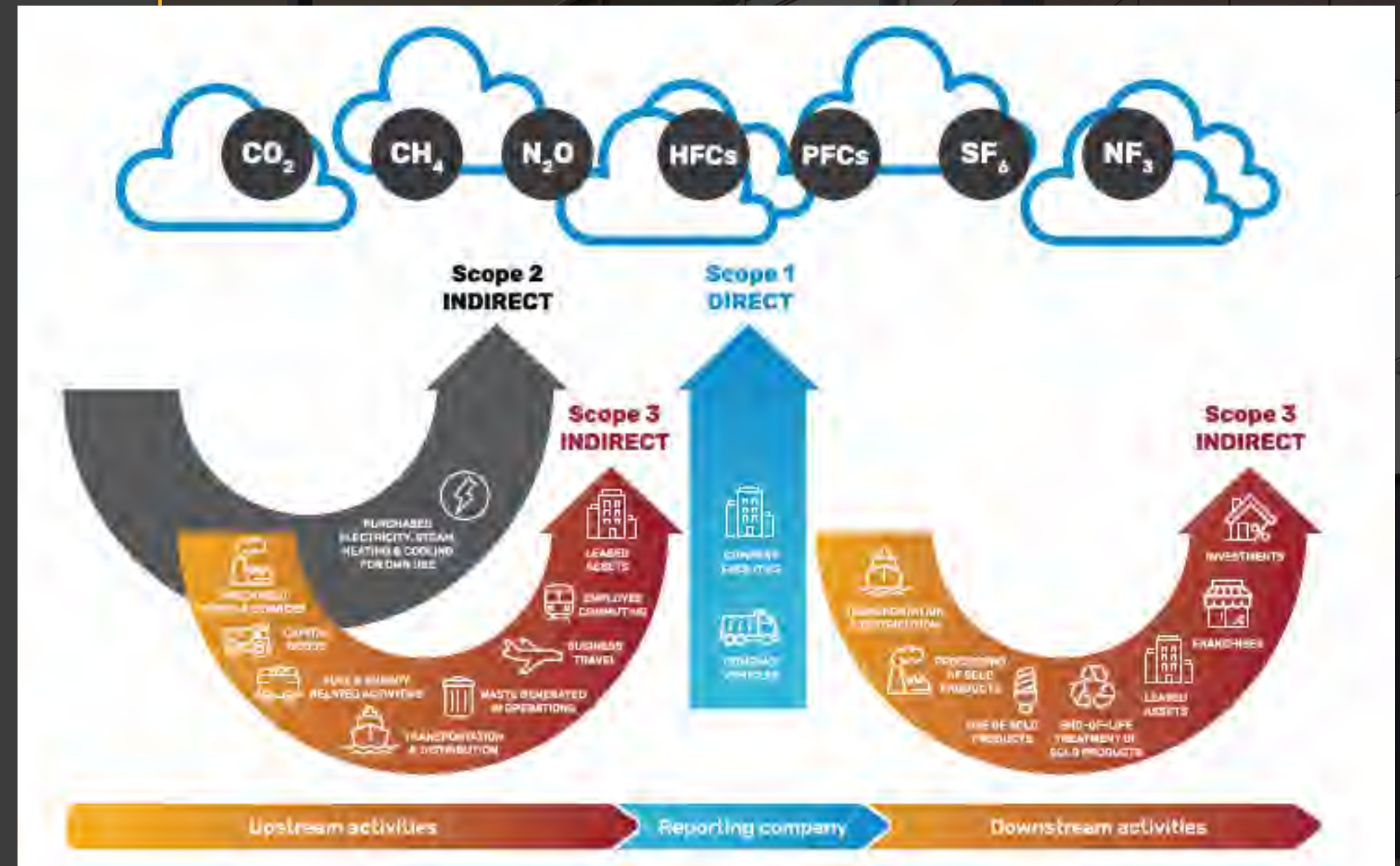
The Greenhouse Gas Protocol (GHG) sets a standardised global framework to measure and manage greenhouse gas emissions.

These are differentiated into:

- **Direct emissions** – a result of emission from sources owned or controlled by the reporting entity; and
- **Indirect emissions** – a result of emissions from the reporting entity but occur at sources controlled by another entity

The GHG Protocol further differentiates direct and indirect emissions sources into three broad scopes:

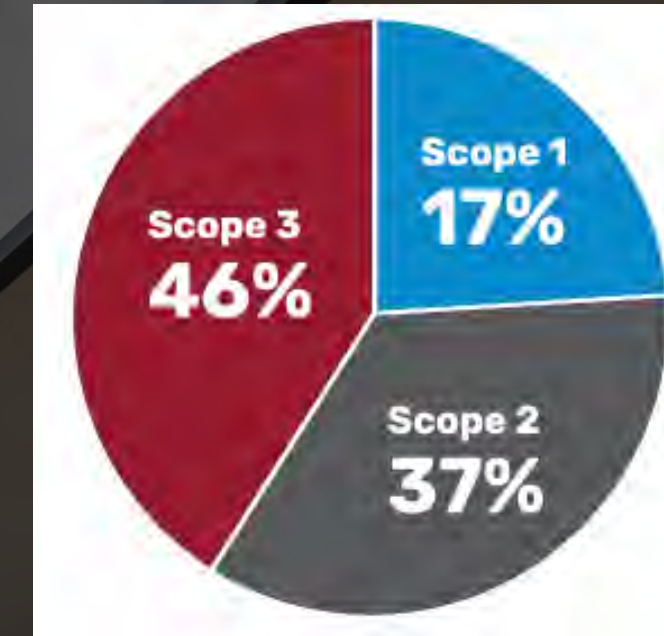
- **Scope 1** – directly generated at Council facilities, or due to the direct provision of services
- **Scope 2** – caused by indirectly consuming electricity
- **Scope 3** – are indirect emissions resulting from activities that are outside of Council



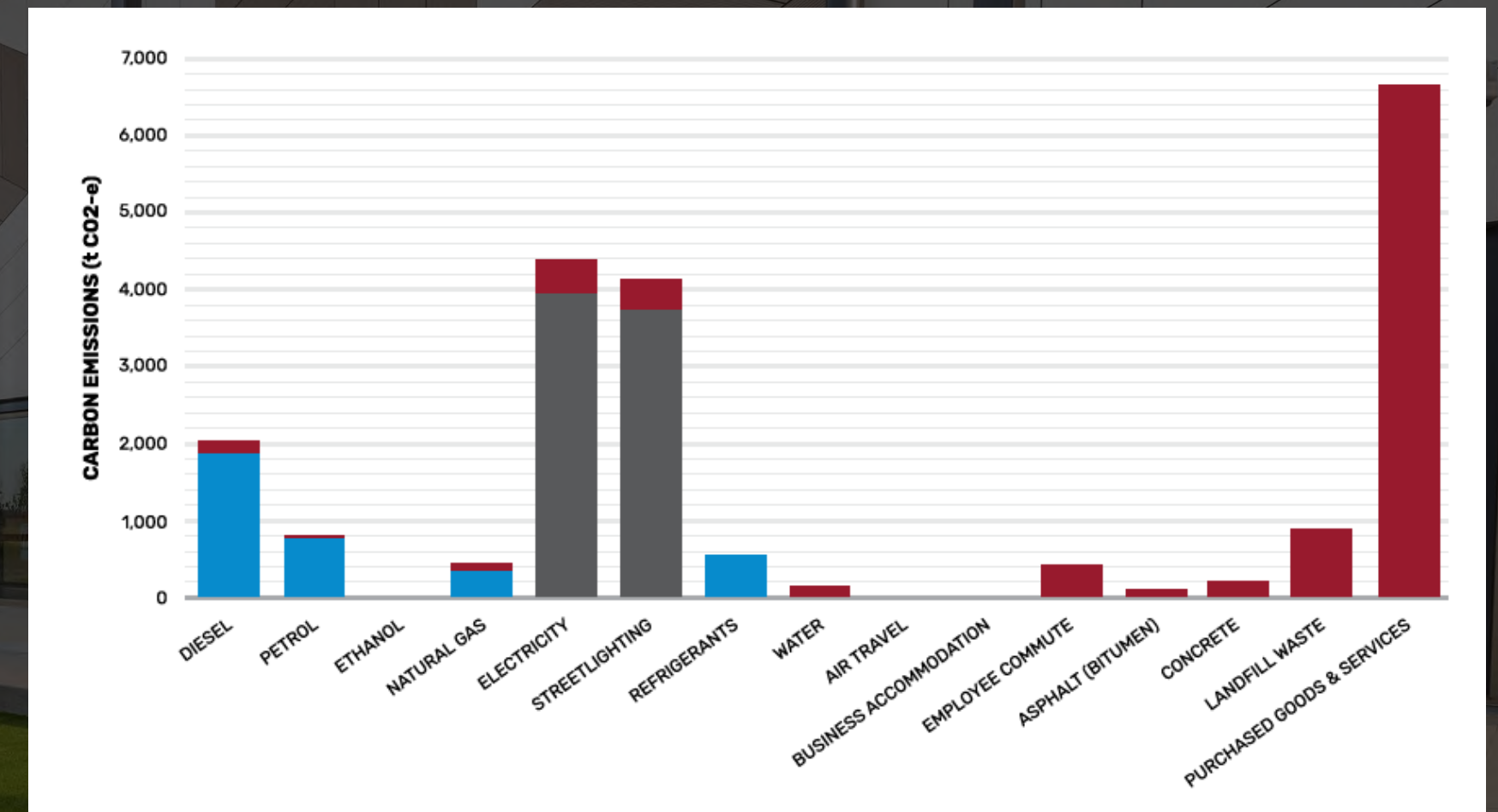
Scope 1, 2 and 3 emissions, GHG Protocol

Emissions Profile

- 2018/19 has been identified as the most representative financial year for Council operations – our baseline
- In 2018/19 our emissions footprint was 20,745 tonnes of carbon dioxide equivalent (CO₂-e)
- The majority of emissions came from electricity use of Council facilities (20%) and street lighting (21%)
- Purchased goods and services are the second largest emissions source (32%)



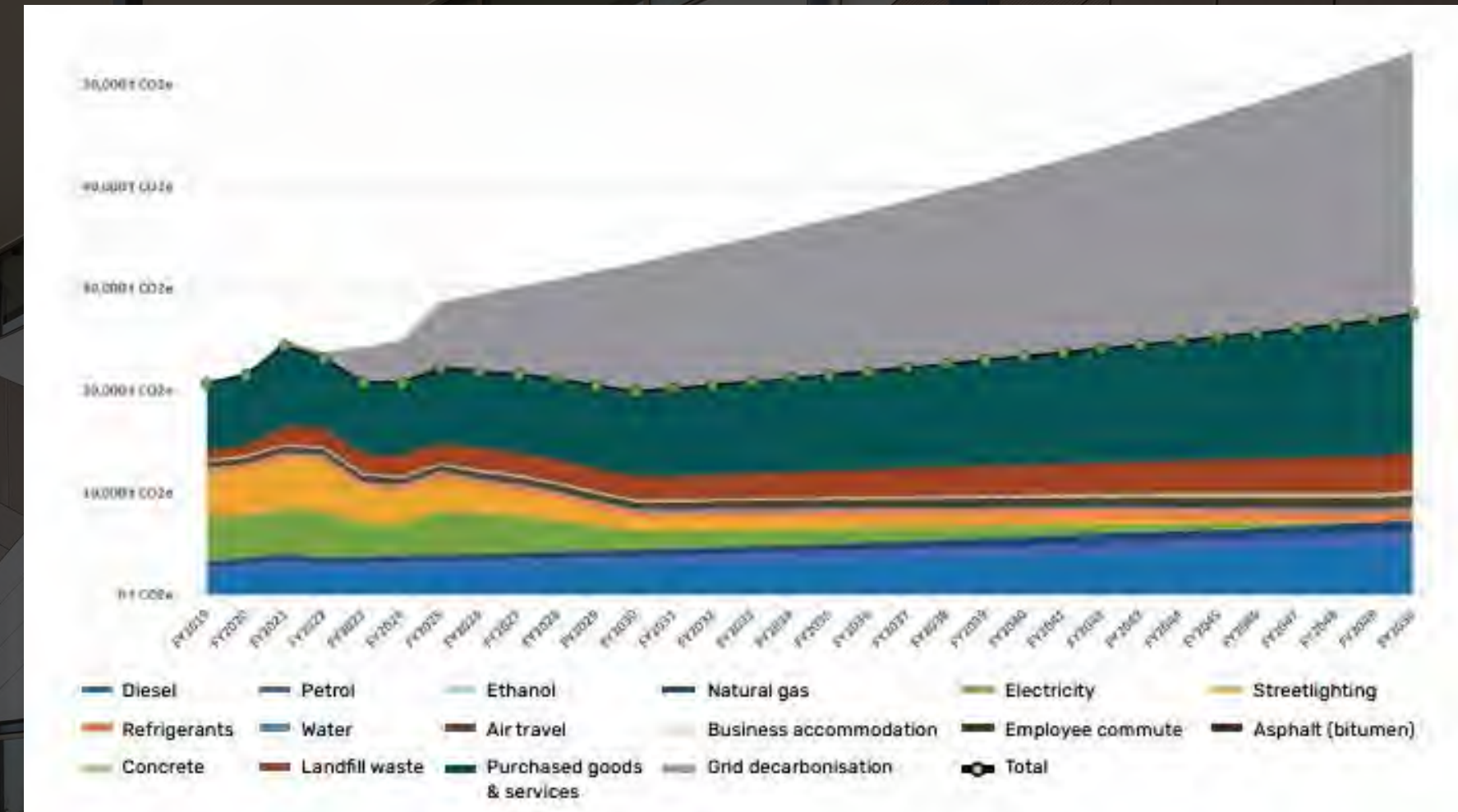
Camden's emissions footprint by scope (2018-19)



Camden's emission from sources and scopes (2018-19)

Future Emissions Trend

- Long-term emission projections have been prepared up until 2050
- Monitoring shows that our emissions are continuing to increase with an increase of 17.5% in 2020-21 compared to the baseline year
- It is projected that Council's emissions will be 25,618 t CO₂-e by 2049-50 if no carbon abatement action is taken by Council
- NOTE: All scope 1 and 2 emissions were included in the inventory however only select scope 3 emissions due to availability of data



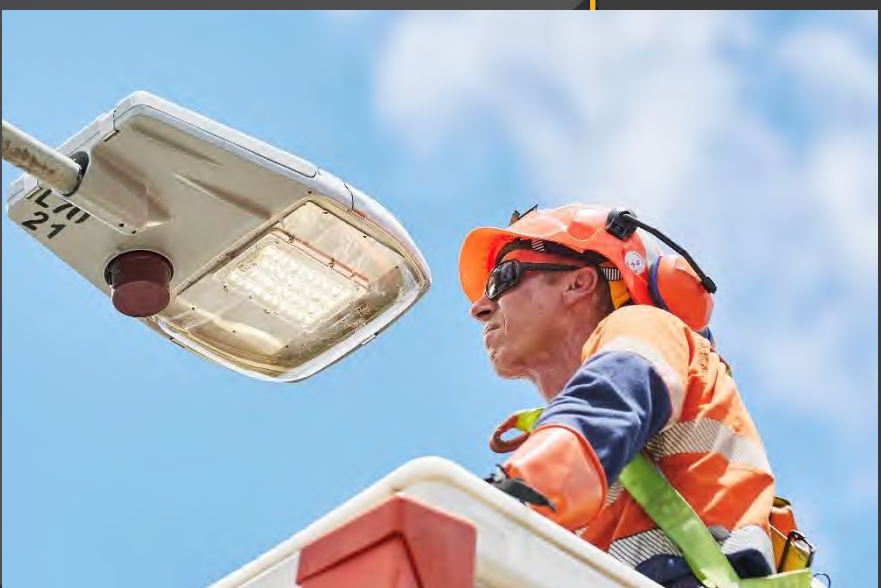
Predicted future emissions for Camden

Current Initiatives



Power Purchase Agreement

- Commenced 1 January 2023 for a 10 year term
- Secures 100% renewable energy for streetlighting and 46 sites
- Supplier is Snowy Hydro through Red Energy, utilizing Metz Solar Farm near Armidale



LED Streetlighting Upgrade

- More than 7,100 non-LED streetlights were upgraded with LED lights
- The upgrade will reduce Council's emissions by 2,100 t CO2-e annually
- Expected financial savings of \$8 million over 20 years



Solar Photovoltaic Systems

- Solar Photovoltaic Systems – 446kW
- Oran Park Administration Building, Camden Library, Narellan Library, Mount Annan Leisure Centre, Millwood Depot, Harrington Park Community Centre, Julia Reserve Community Centre, Catherine Park Community Centre and Gregory Hills Community Centre

Current Initiatives



LED Lighting Upgrades

- Ongoing upgrading of Council buildings since 2016 including Narellan and Camden Libraries, Camden Civic Centre, Harrington Park Community Centre
- Sportsfield lighting upgrades at Birriwa, Jack Nash Liquidamber, Nugget Beames, Pat Kontista and Ron Dine Reserves and at Onslow Oval with savings of \$51,000 annually



Street sweeping contract

- Diverts 90% of waste from landfill with plastics sent to a plastic recycler and organic waste reused in the landscape industry
- Saves approximately \$56,300 annually

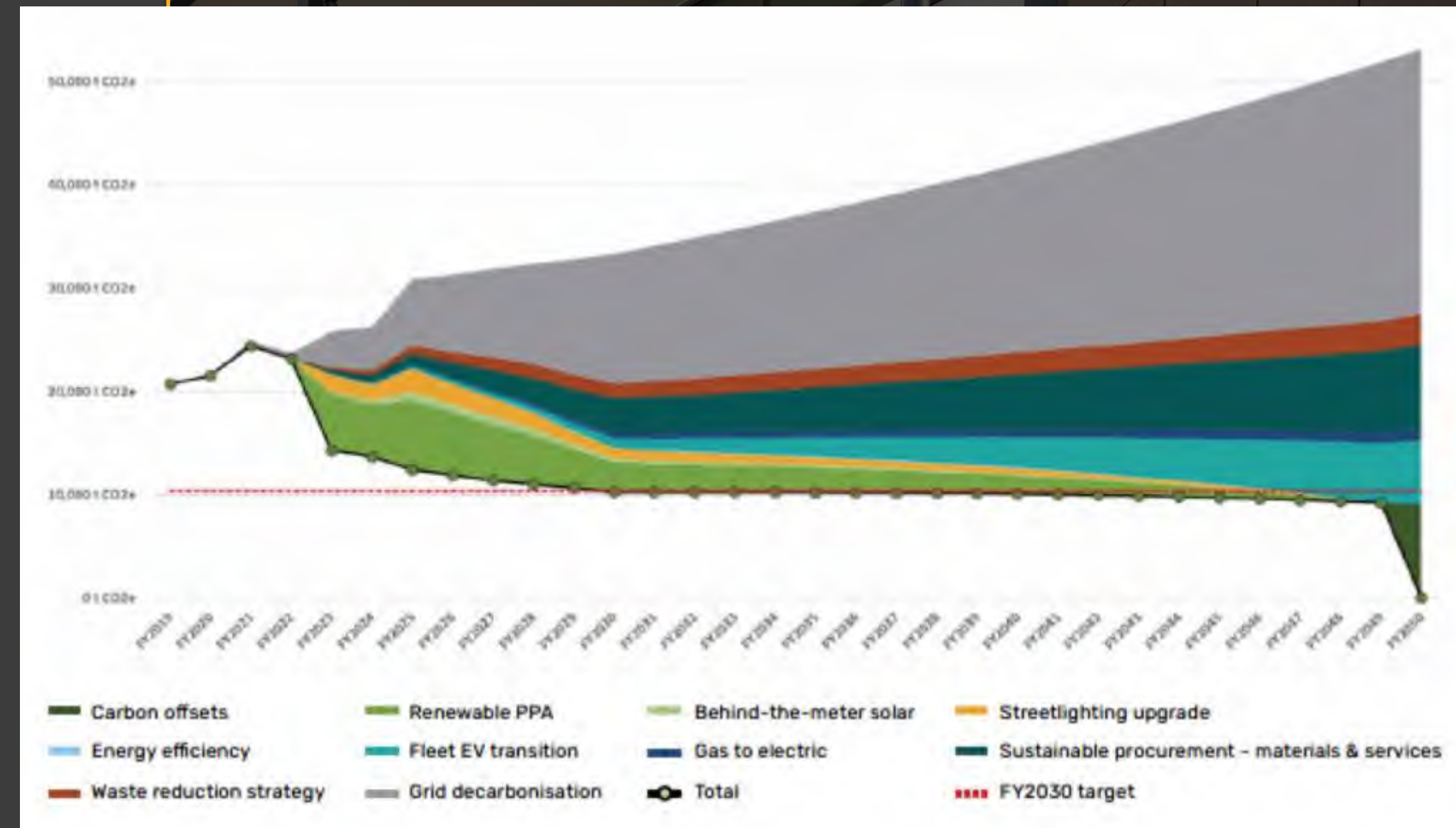


Electric plant/vehicles

- One of the first Council's in NSW to purchase an electric mower
- Installed two 22 KW DC electric vehicle charging stations for staff fleet vehicles

Opportunities for Net Zero

- To meet our goal of emitting no more than 10,373 t CO₂-e by 2029-30, accelerated and early action is required
- Depending on which abatement measures are pursued and their success, the gap to net zero emissions could be as much as 9,086 t CO₂-e by in 2050
- The figure shows the modelled emissions reduction pathway with abatement measures implemented, including the purchase of carbon offsets in 2049-50



Indicative emissions reduction pathway with carbon offsets

Opportunities for Net Zero



Energy

Our buildings, facilities and assets are energy efficient and powered by renewable energy



Waste

Our waste diversion rates will be increased through continual improvement



Goods and Services

Commitment to progressively lower emissions through our purchased products and services

Opportunities for Net Zero



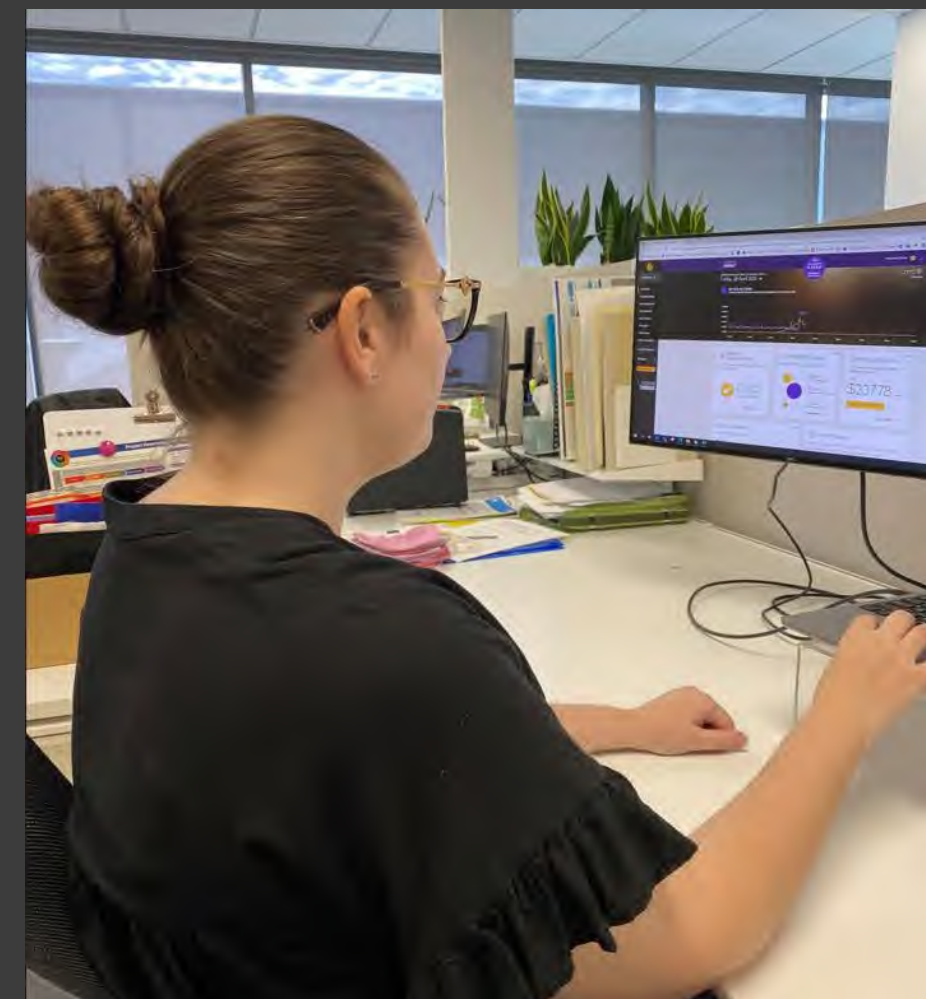
Built Environment

Our buildings and facilities will have low or zero emissions



Transport & Plant

Our staff fleet vehicles, operational vehicles and plant fleet include low greenhouse emission options



Emissions Management

We have the skills, knowledge and systems to allow us to understand and track our emissions