

Development of the Draft Zero Emissions Fleet Strategy and Implementation Plan



1. What's the Issue?

Council's fuel use (petrol, diesel) contributes 12% of Council's total greenhouse gas emissions.

The *Dubbo Regional Council Zero Emission Fleet (ZEF) Strategy and Implementation Plan* is designed to support and guide Council in reducing greenhouse gas emissions associated with its fleet operations.

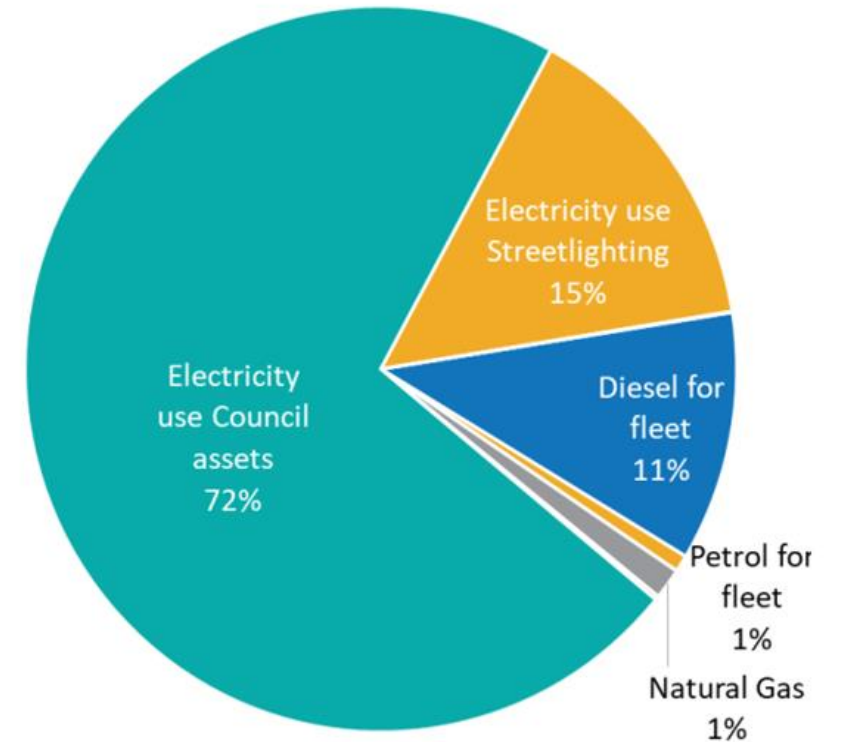


FIGURE 18: PERCENTAGE CONTRIBUTION OF EMISSION SOURCES TO THE CARBON FOOTPRINT

2. What is a Zero Emissions Fleet?

Zero emissions vehicles include:

Battery electric (BEV); and

Hydrogen fuel cell electric vehicles (FCEVs).

These vehicles emit no greenhouse gas emissions, **BUT** only if they are recharged using renewable electricity sources.

The transition to a zero emissions fleet may include:

Hybrid electric (HEV); and

Plug-in hybrid electric (PHEV) vehicles.

These vehicles use fuel and electricity, therefore are not zero emissions.

Zero emissions vehicle (ZEV) charging will increase Council's electricity demand and electricity costs.

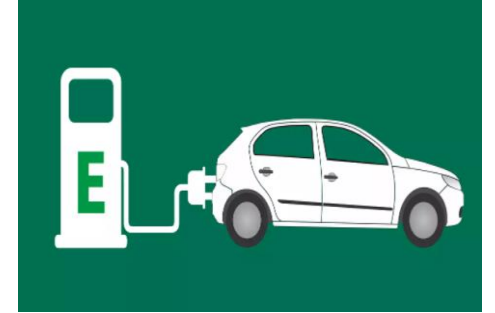
Emissions from vehicle charging will fall as Council increases the proportion of its electricity from renewable sources (to this end there is a current 50% RE target).



3. Why transition to a zero emissions fleet?

Evenergi, engaged in December 2020 to aid Council in better understanding the business case and roadmap for transitioning, concluded transitioning will assist Council to:

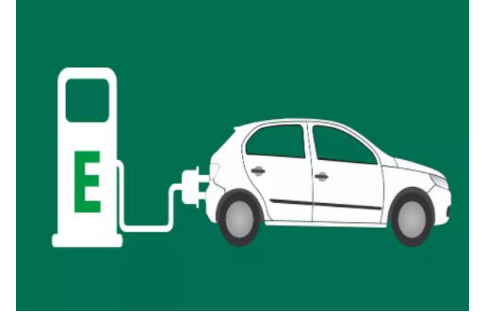
- **Reduce fleet operating costs over a 10 year period (2021-2030)**
 - Their fleet analysis estimated up to 5.5% cost reduction as compared to “business as usual” over the 10 year period to 2030.
- **Reduce greenhouse gas emissions associated with Council’s fleet operations**
 - Their fleet analysis estimated a reduction of up to 9% of the combined light and heavy vehicle fleet emissions over the 10 year period to 2030.
- **Rank highly amongst other leading local governments striving to achieve net zero emissions**
 - NSW government is aiming to fast track the transport sector to net zero emissions by 2050.
 - Local government has been at the forefront in minimising carbon emissions and Dubbo has an opportunity to be at the leading edge.



3. Why transition to a zero emissions fleet?

Everergi's Roadmap concluded:

- **Council's transition pathway will continue to evolve**
 - The **speed of transition will increase** as:
 - Federal/State Government policy evolves;
 - Electric vehicle technology advances;
 - Vehicle availability improves, and
 - Costs reduce.
- **Change is inevitable**
 - The **changing nature of global vehicle supply is likely to introduce risks to 'business as usual'**, with increasing vehicle prices and less choice for traditionally powered fleet options.
- **Incentives exist for early adopters**
 - There are a number of 'early adopter' incentives being launched by the State Government for those councils willing to transition to a zero emissions fleet.



4. Strategic Framework

A draft Zero Emissions Fleet Strategy and Implementation Plan has been developed, with a revision proposed to be completed by December 2024 to account for changes in technology and the growing speed of transition expected.

The draft Strategy contains four sections:

1. **Light Vehicles** (vehicle selection, procurement, use)
2. **Heavy Vehicles** (vehicle selection, procurement, use)
3. **Servicing and Maintenance** (vehicle servicing and maintenance)
4. **Charging Infrastructure** (charger selection, procurement, installation, use, servicing and maintenance)

Each strategy area has a **goal**, aspirational **target** and **strategic outcomes**.

This is followed by an **Implementation Plan** with short term (1-2 year) and medium term (3-4 year) actions.

5. Strategy Goals and Targets

#	Goal	Target	Rationale
1	LIGHT VEHICLE FLEET Switch at time of renewal , where Total cost of Ownership (TCO) is equal to or less than the TCO of the existing traditionally powered vehicle and the vehicle is fit for purpose .	Aim to transition at least 15% of its light vehicle fleet to low or zero emission vehicles by December 2025.	Transition will be staggered as the TCO parity varies greatly between each vehicle segment. Unfortunately 2/3 of Council’s light vehicle fleet is made up of Light Commercial Vehicles (e.g. utilities and vans) which are not expected to transition until after 2025. Of the Passenger Vehicle and SUVs that could transition before 2025 a large % are leaseback.
2	HEAVY VEHICLE FLEET Switch at time of renewal , where TCO is equal to or less than the TCO of the existing traditionally powered vehicle and the vehicle is fit for purpose .	Council trials at least three low to zero emission vehicle within its heavy vehicle fleet by December 2025.	The business case for low to zero emissions heavy vehicles however is presently poor , which will result in a period of relative inaction for heavy vehicle fleet transition particularly before 2025. A pilot and learn approach is therefore suggested.
3	SERVICING & MAINTENANCE Plans for and provides vehicle servicing and maintenance aligned to Council’s Zero Emission Fleet Strategy goals and targets	Council develops a Vehicle Servicing and Maintenance Policy aligned to Strategy goals and targets by December 2023.	Electric vehicles will require both in house and external servicing and maintenance. Whilst Council may be able to attend to most maintenance requirements, any sensor failures and associated error codes will require the vehicle to be sent to a car dealership with access to special IP owned by the vehicle manufacturer.
4	CHARGING INFRASTRUCTURE Plans for, installs and maintains appropriate charging infrastructure aligned to Council’s Zero Emission Fleet Strategy goals and targets.	Council installs and maintains at least 10 ‘smart’ Level 2 AC fast chargers (7-22 kW) for its fleet by December 2025.	The number of chargers required to be installed in the early years of transition is recommended to be “one charger per one electric vehicle” procured until it has been operationally demonstrated that this number of chargers is not required.