

A tailored lifecycle assessment

ANZRP is committed to working with its collection partners to safely collect and recycle e-waste, producing environmentally sustainable and socially beneficial outcomes.

Every year, ANZRP engages a consultancy – Lifecycles – to undertake an independent lifecycle assessment on the impact our service has made on the environment over the financial year.

Lifecycles' most recent lifecycle assessment was undertaken in October 2023 based on the volume of in-scope NTCRS e-waste recycled by TechCollect in 2022/23. This has highlighted a number of environmental benefits.



Last financial year, TechCollect recycled

2,757 kilograms of NTCRS "in-scope" e-waste collected at

George Town Council - Transfer Station

From a sustainability perspective, this translates to:



Preventing 5,326 kilograms of CO2e from entering the atmosphere. This is equivalent to planting 88 trees.¹



Saved 69,986 MJ of energy. This is equivalent to the 208 days of average household energy use.²



Saved 529 cubic metres of water. This is equivalent to 15 days of average household water use.³



Prevented 8,276 grams of particulate matter from entering the atmosphere. This is equivalent to driving a truck 8,351km on Australian roads.⁴



References

- 1. Based on modelling assumptions developed by the U.S. EPA in their Greenhouse Gases Equivalencies Calculator: https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references
- 2. Based on 35 cubic metres equivalent per day and per Australian household in FY21, using Australian Bureau of Statistic Data (<u>Water Account</u>) and the Australian average water scarcity factor as per the AWARE method.
- 3. Based on 123 GJ of annual energy per Australian household in FY21, using Australian Bureau of Statistic data (<u>Energy Account</u>).
- 4. Factor applied based on an EURO3 diesel truck emissions as modelled in eco-invent 3.5.

^{*}Note, e-waste collected and recycled through individual producer responsibility programs were not included in the life cycle assessment and in the impact figures provided above.