

# Cycling's dirty secret: 300,000 bikes a year dumped in landfill

By [Caitlin Fitzsimmons](#) - May 12, 2024

Cycling is a clean mode of transport, but it has a dirty problem. Across Australia, an estimated 300,000 bicycles wind up in landfill every year.

The frenzy of bicycle purchases during the early COVID-19 pandemic is about to make the problem even worse, as the cheaper machines bought three or four years ago wear out.



Volunteer Anthony Kimpton, working with Revolve Recycling in Alexandria, which has saved almost 11,000 bicycles from landfill. *CREDIT: JAMES BRICKWOOD*

Social enterprise Revolve Recycling in Alexandria is tackling the problem, and has saved 10,873 bicycles from landfill since late 2021.

That includes 2530 bikes that it has refurbished and rehomed, selling the adult bikes and giving away the kids' bikes to disadvantaged children. It has donated 500 kids' bikes so far, including to a remote Aboriginal community in the Northern Territory and Ukrainian refugees in Sydney.

Revolve employs five people from disadvantaged backgrounds, under general manager Guido Verbist who previously ran The Bower in Marrickville.

"About 30 per cent of the bicycles [we receive] are in good condition, and can be given a second life without too much work, by which I mean an hour and a half to two hours of time to be spent on it by a qualified mechanic to get them back on the roads in a safe and good condition," Verbist said.



Volunteer Jonathan Wicker, at Revolve Recycling, helps fix bikes that are to be given away to disadvantaged children.*CREDIT:JAMES BRICKWOOD*

“The problem is that 60 per cent of the bikes sold now are what we call the big box bikes from stores like Kmart, and they are not meant to last. They are very cheap, poor quality and very difficult to repair.”

Revolve Recycling teamed up with consumer organisation Choice to test the longevity of bicycles. It bought two from Kmart for about \$200 each and two more expensive bicycles in the \$600-\$700 range. They were used by four cyclists in similar ways, including for commuting, and brought back for servicing every month. After six months, the more expensive bikes were still going strong, while the cheaper bikes could no longer be repaired after 72 hours of use.

The organisation has a \$500,000 grant from the NSW Environment Protection Authority to assist 250 NSW bike shops with waste management including audit of their bins, providing rubber, metal, and battery collection, and introducing a “Green Wheels” sustainability certification program next month.

Revolve also works with local councils to divert bicycles from landfill and has helped clean up share bikes when operators leave Australia. [Mobike abandoned its bicycle fleet](#), which Revolve has repaired and redeployed. Bird helped collect its fleet of e-bikes and e-scooters, but was apparently unwilling to pay to unlock them from its network, meaning they could only be recycled. The company was contacted for comment.



Volunteers Jose Quaglia, Anthony Klimpton and Tim Starr, at Revolve Recycling, who help fix bikes that are to be given away to disadvantaged children.*CREDIT:JAMES BRICKWOOD*

City of Sydney Lord Mayor Clover Moore said the council supported share bikes, but called for improved policies from the state government to “give confidence to councils that in the event a company fails, there is a framework to manage the consequences”.

Verbist said the disused share bikes were a small problem compared with the poor-quality bikes bought by Australian consumers.

Bicycle Industries Australia figures suggest 1.2 million bicycles are sold in Australia in a typical year, and one in three are children’s bikes. The pandemic lockdowns sparked a bike boom, with sales reaching 1.7 million in 2020 and 1.55 million in 2021.

The industry figures show about two out of three bicycles are sold in big box stores such as Kmart, Big W, Toyworld and Toys R Us where the typical price point is under \$200.



Share bikes in use in Bondi in July 2023. *CREDIT: FLAVIO BRANCALEONE*

A Resolve Strategic poll in September 2021 with 7714 participants suggested 18 per cent – nearly one in five households – needed to dispose of a bicycle either right away or within the next year or so. Another 21 per cent said they would need to do this within one to four years.

Based on annual sales and the survey, Revolve Recycling estimates 300,000 bicycles wind up in landfill every year. Bicycle Industries Australia general manager Peter Bourke said this was a credible estimate, and it could be higher.

Bourke said a common recycling challenge was that bicycles were bulky, but did not contain much scrap metal to extract. The average bicycle was 15 kilograms including the wheels, tyres, saddle, handlebar grips and other components and the cheaper models used cheaper alloys that were low value.

Bourke said there were many groups around the country that rehomed bicycles, but Revolve's retail partnerships and recycling of all bicycle components, including rubber, metal and lubricants, was unique.

He said cycling remained "clean, green transport" and a recent Ernst & Young report showed in 2022 bike commuters saved greenhouse emissions equivalent to 514,096 tonnes of CO<sub>2</sub> a year, by replacing 3.9 billion kilometres of motor vehicle travel.

A Kmart spokesperson said "low price doesn't mean low quality or disposable" and the store's bicycles were subject to robust quality processes and among the top-rated products based on customer reviews.

A Toys R Us spokesperson said the company worked with reputable Australian bike manufacturers, and fewer than 1 per cent of bikes sold in the past six months had been returned.

A Big W spokesperson said it could not comment because it was the retailer not the manufacturer. Toyworld only had a general inquiry contact and did not respond before deadline.