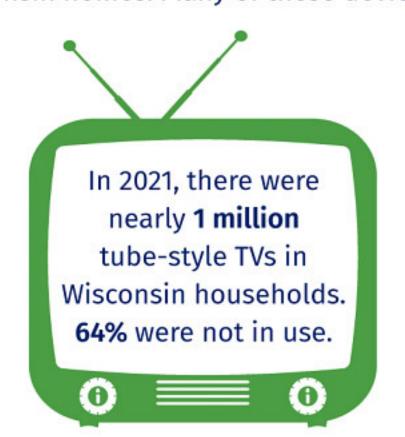
# E-cycling in Wisconsin, by the numbers

Wisconsin has an electronics recycling law to increase the amount of electronics recycled and to make recycling easier for consumers. The law makes it illegal to put many electronics in the trash and requires electronics manufacturers to help cover the cost of responsible recycling. E-Cycle Wisconsin, the manufacturer-funded electronics recycling program set up by the law, has had many successes since it began in 2010, but there is still work to do.

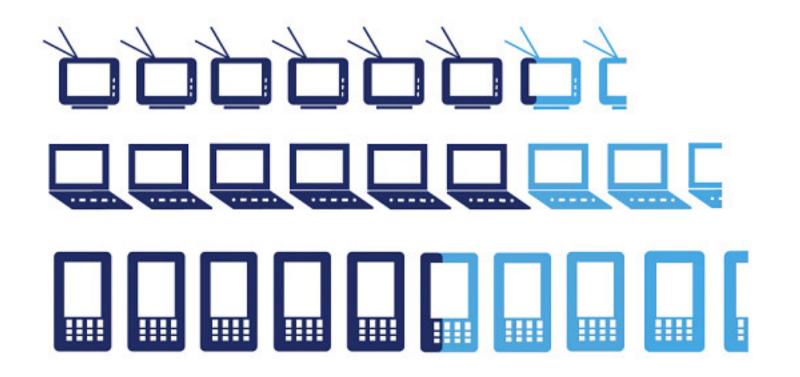
### E-waste

Wisconsin households are using and storing millions of electronics

There are approximately 7.6 million TVs, 8.3 million computers and 9.3 million cellphones in Wisconsin homes. Many of these devices are unused and ready for disposal.



If you lined up all the unused computers stored in Wisconsin households they would stretch from Eau Claire to St. Louis.



Of the 25.2 million homes, 7.6 million are unused.

devices in Wisconsin

### **E-cycling**

Recycling electronics saves energy, water and tons of materials

Recycling 1 million laptops saves the energy required to power 3,657 U.S. homes for a year.



**由由由由由由由由由由由由由 由由由由由由由由由由由由由** 金金鱼鱼鱼鱼鱼鱼鱼鱼鱼鱼鱼鱼鱼 金金鱼鱼鱼鱼鱼鱼鱼鱼鱼鱼鱼鱼鱼 角角角角角



The steel, aluminum and plastic in electronics can easily be reused to make new materials. Each electronic device also contains small amounts of precious metals.

For every 1 million cellphones we recycle, 35,000 pounds of copper, 772 pounds of silver, 75 pounds of gold and 33 pounds of palladium can be recovered.



Many electronics also contain hazardous materials such as lead, mercury and batteries that must be handled safely to protect human health and the environment.

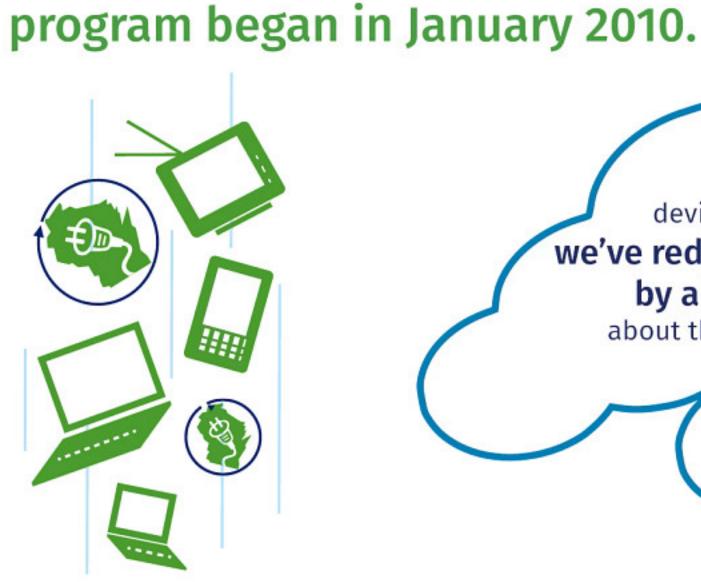


### Successes

Each icon = 1 million devices = = unused

E-Cycle Wisconsin has made recycling more convenient and supports local recycling businesses

More than 370 million pounds of electronics have been recycled through E-Cycle Wisconsin since the



By recycling these devices instead of landfilling them, we've reduced carbon dioxide emissions by about 150,000 metric tonsabout the same amount as using 17 million fewer gallons of gasoline.

Since 2010,

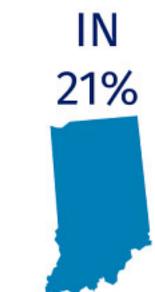
E-Cycle Wisconsin has recovered about 52 million pounds of steel from electronics. That's enough to make 22,000 cars.



#### Where electronics go for recycling

More than 99 percent, by weight, of electronics collected under E-Cycle Wisconsin are processed in Wisconsin or other Midwestern states—which has contributed to job growth in the regional recycling industry.









#### E-Cycle Wisconsin collection sites

1st year of program

309

E-Cycle Wisconsin helps support a network of private businesses, non-profits and governments that provide collection sites to the public.

4th year of program, highest number of collection sites

683

13th year of program

577

2020-21

banned

electronics

banned

electronics

## Challenges

Wisconsinites still have much to learn about e-cycling

#### Responsible recycling has a cost

25% of Wisconsinites do not want to pay anything to recycle electronics.

92% of E-Cycle Wisconsin collectors charge a fee to accept some types of electronics.

This disconnect can lead to illegal dumping.



### Millions of Pounds 5 TVs / monitors TVs / monitors Other non-Other

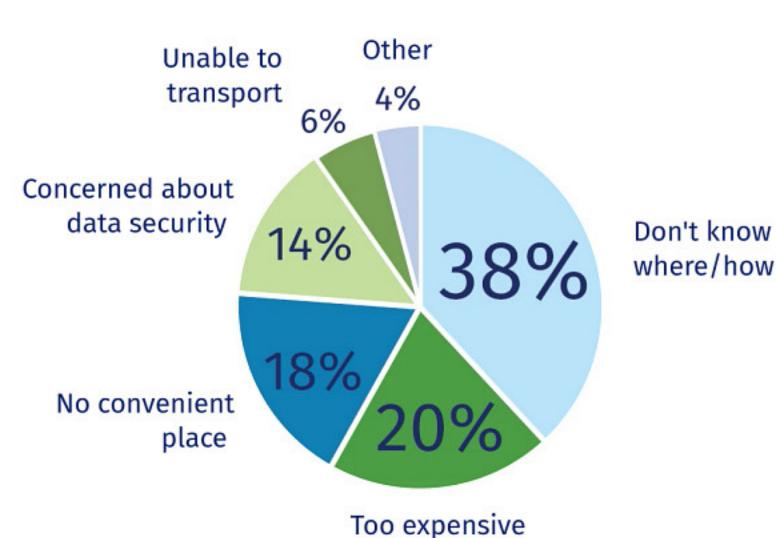
(Non-CRT)

What DNR waste studies tell us

Sorters of waste headed to Wisconsin landfills in 2009 and 2020-2021 found a significant decrease in TVs and monitors, but an increase in smaller electronics. Recycling is free for many of these smaller devices, and many contain lithium batteries that can cause fires if damaged, so keeping them out of the trash is a top priority.

### Why some people don't e-cycle

In a 2021 DNR survey, Wisconsin residents cited several barriers to recycling electronics. Not knowing where or how to do so and cost were the most frequent responses.



### Help take e-cycling further...

- Take old electronics to a registered collector or use a mail-back program for recycling.
- Visit dnr.wi.gov and search "ecycle" to find a collection site or mail-back program.
- If necessary, pay a small fee to ensure proper recycling.

#### Sources:

Results from the Wisconsin DNR's 2021 household recycling survey; DNR's 2020-21 statewide waste characterization study; E-Cycle Wisconsin 2022 report; Quantitative Characterization of Domestic and Transboundary Flows of Used Electronics: Analysis of Generation, Collection and Export in the United States, December 2013, Massachusetts Institute of Technology and National Center for Electronics Recycling; U.S. EPA Waste Reduction Model, accessed Nov. 2021.

(CRT)

35



P.O. Box 7921, Madison, WI 53707 DNRWIe-cycling@wisconsin.gov

PUB-WA-1716 2022

Wisconsin Department of Natural Resources Waste and Materials Management Program

