

Is Recycling Enough? Beyond the Blue Bin



Built from *Beyond the Blue Bin: Deconstructing the Myth of a Truly Circular Economy* by Ethan Yang, Editor-in-Chief

Grades 4–8 · About 45 minutes · ★ everyone · ★★ older readers

Name _____

Date _____

1. Before You Read

★ What do you put in the recycling bin at home or at school? Where do you think it goes after it is picked up?

★ Think of something you own that has lasted a long time. Why do you think it lasted?

2. The Short Version

Read this first. Older readers: read the full article too.

Many people think that sorting plastic, paper, and glass into the blue bin takes care of the trash problem. Ethan says it is not that simple.

Most things we use follow a straight line he calls "take-make-waste." We dig up raw materials, make products that don't last long, and throw them away. Recycling usually doesn't turn a plastic bottle back into a new bottle. Instead, it becomes a lower-quality material, like carpet or cloth, which gets thrown away later. This is called **downcycling**. It slows the trip to the landfill, but doesn't stop it.

In a **circular economy**, materials would be used again and again, in a loop. To get there, Ethan says we have to start when a product is first designed. Things should be built to last, easy to repair, and easy to take apart, with standard screws instead of glue, so their parts can be used again.

Some companies already do this. Patagonia repairs outdoor gear and sells used items through its Worn Wear program. Fairphone makes phones where you can replace the battery, camera, and screen yourself.

But Ethan says companies can't do it alone. He wants laws that make companies responsible for their products from start to finish, better places to sort and rebuild materials, and shoppers who care more about quality than newness. Keep recycling, he says. The real goal is a world where we barely need a blue bin at all.

3. Word Bank

Word	What it means
landfill	a place where trash is buried in the ground
downcycling	recycling something into a material of lower quality than it was before
disassembly	taking something apart into its pieces
longevity	lasting a long time
refurbish	to clean and fix up something used so it can be sold or used again

★ Use **downcycling** in a sentence of your own.

4. Check Your Understanding

★ 1. What is the "take-make-waste" model? Answer in one sentence.

★ 2. According to the article, what usually happens to a recycled plastic bottle?

○ It becomes a brand-new bottle, just as good as before ○ It becomes a lower-quality material, like carpet or cloth ○ It disappears completely

★ 3. Name two ways a product can be designed so it fits a circular economy.

★ 4. Name one company from the article and what it does to keep its products in use.

★★ 5. Ethan says a circular economy "cannot be left to individual companies." Name two other things he says are needed, and explain how one of them would help.

5. Ethan's Ledger

Ethan weighs every big idea with three questions: *What do we win? What does it cost? And what's the catch?* Fill in the ledger for a circular economy.

	Your answer
The win: What good things happen if products are made to last, be repaired, and be reused?	
The cost: Who might have to pay or give something up?	
The catch: What makes this harder than it sounds?	

6. Think Deeper

★ Ethan ends by saying the future is about "designing a world where we barely need one at all." He means a recycling bin. What would a world like that look like? How would it be different from today?

★★ Pick something you own, like a backpack, a pair of sneakers, or a tablet. Using ideas from the article, describe how you would redesign it so it lasts longer and its parts could be used again.

7. Write Your Report

Write a short report answering this question: **Is recycling enough to solve our trash problem?**

- **My answer:**
- **Reason 1 (from the article):**
- **Reason 2 (from the article):**
- **One thing the other side would say:**
- **My conclusion:**

For Teachers and Parents: Answer Key

Word bank sentence: Answers vary; check that the student uses downcycling to mean recycling something into a lower-quality material.

1. It is the way our economy works now: we take raw materials, make them into products that don't last long, and then throw them away.
2. It becomes a lower-quality material, like carpet or cloth.
3. Any two: built to last instead of wearing out quickly; easy to repair, with parts and instructions people can get; easy to take apart, using standard screws instead of glue; made of materials that can safely go back to nature or be reused over and over.
4. Patagonia: its Worn Wear program repairs gear and sells used items. Fairphone: it makes phones where users can easily replace the battery, camera, and screen.
5. Any two: "producer responsibility" laws that make companies pay for what happens to their products for their whole life; investment in better sorting and remanufacturing facilities; a change in how people shop, valuing quality and long-lasting things over new things. Sample explanation: if companies have to pay for their products after they are thrown away, they will want to design them to last and be easy to recycle.

Ledger (sample answers): Win: less trash in landfills, fewer new raw materials taken, things last longer, and companies can earn customer loyalty and new money from repair and refurbishing. Cost: companies may have to pay for their products' whole life; building new sorting and remanufacturing facilities costs money; shoppers give up always getting something new. Catch: no single company can do it alone; it needs new laws, new facilities, and people changing their habits, and recycling itself is limited because materials wear down, get mixed with dirt or other stuff, and cost a lot to process.

Think deeper: Open answers. Strong answers describe products that last, get repaired, and get taken apart and reused, so very little ends up as trash. For the redesign, look for at least two ideas from the article: longer-lasting materials, parts that can be replaced, screws instead of glue, or materials that can be reused.

Report: Look for a clear answer, two reasons taken from the article, a fair statement of the other side, and a conclusion that matches the answer.