

# A fix to our cell-phone waste problem?

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When it comes to cell phones, the world is stunningly wasteful. Customers will buy more than 1.8 billion new ones by the end of this year only to abandon almost half of them to drawers, and they'll recycle a mere 3 percent of them. But creative and enterprising efforts are underway to reverse the seemingly unstoppable tide, says an article in *Chemical & Engineering News* (C&EN), the weekly news magazine of the American Chemical Society.

Alex Scott, a senior editor at C&EN, notes that there is much to be recovered and re-used from a [cell phone](#). An average mobile contains about 300 milligrams (mg) of silver and 30 mg of gold. When added up across all phones to be sold this year, the two metals alone are worth more than \$2.5 billion. Cell phones are made with a few dozen additional elements, but the most high-tech recycling technology today can only recover about 17 of them at a maximum yield of 95 percent. The numbers don't bode well for the fight against [electronic waste](#), but governments and private businesses are trying to address the problem.

One idea dominating efforts to stem e-waste involves improving upon the modular phone idea, which allows users to replace parts but keep the main body of a [phone](#) intact. That way, some people could avoid buying whole new phones when they want to upgrade. Another major piece of a more sustainable mobile culture is the recycling process itself. Scientists are working to make the process greener and more effective at recovering a greater number of elements. But the final piece remains in the hands—or drawers—of consumers, who have to participate to make any current or future recycling efforts a success.

**More information:** "Dialing Back on Cell Phone Waste" -  
[cen.acs.org/articles/92/i35/Di ... ell-Phone-Waste.html](http://cen.acs.org/articles/92/i35/Dialing-Back-on-Cell-Phone-Waste.html)

Provided by American Chemical Society

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