

# War on waste: Why we should recycle our old mobile phones

By Brett Williamson, 24 May 2017

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<https://www.abc.net.au/news/2017-05-24/war-on-waste-recycling-old-mobile-phones/8553796>

Got a drawer at home that is storing a few of your old mobile phones?

You're not alone.

There are more than 23 million unused phones in Australia according to industry-funded recycler Mobile Muster, and they represent a large amount of natural resources that could be recycled.



In fact, each unused phone presents 23 million opportunities to reuse valuable metals, University of Adelaide professor Derek Abbott said.

"As we get more and more advanced devices, there are more unusual elements being used," he said.

"The most advanced Intel microchips use an element in them called hafnium, which is a rare element."

MobileMuster estimates 62 per cent of Australians keep their mobile phones for two years.

One in six reuse or re-gift their phone; of the remainder, only 12 per cent decide to recycle it.

"It's been estimated that if I were to randomly grab one million mobile phones and extract all the gold out of them, there would be over 30 kilograms of gold in there," Professor Abbott said.

In the same amount of phones, Professor Abbott said, there would be more than 300 kilograms of silver.

Professor Abbott said although the amounts of recoverable per device was small, the overall material available to be recycled from unused phones was massive.

"There are many rare elements in there, and these resources do get stretched.

"It's probably getting to a point where it is cheaper to recycle than it is to dig up more ore and search for this stuff.

"If you had a tonne of old iPhones, the density of gold in there, although it is tiny, is actually 300 times more than in the same tonnage of gold ore.

"Mining old phones, in theory, should be cheaper than going out and mining the ore to start with."

MobileMuster is a free mobile phone recycling service, with donation points throughout Australia and prepaid envelopes available from most post offices.