



Vape deposit scheme could recover £6.3m worth of lithium and copper annually

Description

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Discarded disposable vapes

Despite 2025's disposable vape ban, 6.3m vapes and pods still get chucked away every week in the UK. This has prompted fresh calls for a deposit return scheme for vaping products.

Disposable vapes are an example of a product that [creates a lucrative market](#) with no apparent thought for the [environmental](#) cost. Each unit includes plastic for the casing, copper wiring in the circuitry and lithium in the battery.

While the ban on disposable vapes has helped to reduce the number purchased per week, with a 31% reduction, [6.3m vapes and pods](#) are still being binned each week.

Alongside this, reports of fires in bin trucks and at recycling centres persist. Some companies claim they're experiencing one a day.

Rubbish boffins at [Bins.co.uk](#) have calculated that a deposit return scheme could reduce the weekly total by 5.5m. This would save 285m vapes from landfill annually. Alongside this, they've calculated how many fires could be prevented and the precious metals that could be recovered.

What is a deposit return scheme, and why might it help?

Deposit return schemes work by making customers pay a small deposit when buying a product. They can then get that money back if they return the empty item for recycling.

The UK is due to launch a scheme for drinks containers across England, Scotland and Northern Ireland in 2027.

Many similar schemes are in place across countries in Europe and [have an average return rate of 87%](#) showing how successful they can be.

Deposit return schemes usually work well as they change the perceived value of items usually seen as waste, into loss aversion, with consumers wanting to get their deposit back.

It's hard to know exactly how successful a deposit return scheme for vapes would be in the UK. But, applying the European average of 87%, this could recover 285m vapes annually.

This is based on current disposal rates of 6.3m vapes and pods per week, diverting approximately 5.5m vapes from the waste stream every week.

Not only this, but a deposit return scheme could help to prevent fires across the waste industry. Currently, [one provider explained they see one fire a day](#). Not even taking into account other waste operators, an 87% diversion rate would see this drop to just 47 a year.

Valuable metal recovery from vapes

Vapes are technically classed as Waste Electrical and Electronic Equipment (WEEE) as they are small electronic devices. As a result, they do contain small amounts of precious metals. While the amount is minimal on an individual product level, when collated on a large scale this can add up to valuable amounts of resources.

With [each vape containing an estimated 0.15g of lithium and 1.9g of copper cable](#) a vape deposit return scheme achieving an 87% return rate could recover approximately 584 tonnes of lithium and copper annually, with a commodity value of over £6.3m.

Alongside this, a vape deposit return scheme could recover approximately 285m lithium-ion batteries per year. These would otherwise risk entering household bins, street litter, or residual waste streams.

Mark Hall, waste management expert at [Bins.co.uk](#) commented:

A lot of talk so far has focused on how a vape deposit return scheme could reduce litter and fires, but we wanted to put an actual estimation on this to show just how big the impact could be.

We'll only know how successful a vape deposit return scheme can be once it's implemented, but using European averages, it's clear to see that there would be a huge reduction in vapes being binned, which ultimately leads to dangerous fires.

We also wanted to show the value in waste, something that often isn't considered at a consumer level. While an individual vape may not have a large quantity of valuable metals, once this is multiplied by the enormous number that are purchased, it shows just how important it is that we effectively collect and recycle vapes.

Featured image via Getty Images

By [The Canary](#)

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2. annually
3. copper
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5. deposit
6. lithium
7. news
8. recover
9. scheme
10. vape
11. worth

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