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The UK ban on disposable vapes: could this be the beginning of the end of Fast Tech?

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The debate around throwaway electronics is at crisis point. Disposable vape sales have surged, quadrupling in one a year, with the UK throwing away 5 million each week in 2023⁶. These pocket-sized devices contain lithium-ion batteries, electronic sensors, rubber seals, oil-soaked sponges, wiring and heating elements assembled into metal and plastic casings¹⁵. The flavouring of these nicotine filled disposable vapes such as bubblegum¹², blue razz¹³ and unicorn¹⁴ flavours, some then even designed as fidget spinners⁴, appear to be directly marketed at children, becoming a worryingly popular craze. Sold as “disposable” and widely available at low cost, single-use vapes are increasingly littered causing environmental outrage alongside public health concerns. In response the UK government announced their intention to ban disposable vapes¹¹ following in the footsteps of Australia⁵ who banned the devices January 1st 2024¹. It is likely other countries will follow as they grapple with these issues. For example 4.5 disposable vapes are thrown away each second in the United States⁸.

The \$28 billion vapour industry² fuels ‘fast tech’; cheaply manufactured, designed often to be used just once, encouraging thoughtless consumption which, alongside a growing litter problem, add nearly half a billion gadgets per year to UK waste streams; 90% landfilled and 880 million lying unused in homes⁷. Globally, in 2019, e-waste amassed 53.6 million metric tonnes¹⁰.

Disposable electronics contain valuable, often hazardous, resources like lithium, copper, cobalt³, chromium, arsenic, mercury, palladium, cadmium, resins and other rare earth elements⁹. Many of these resources, such as lithium, are crucial for green industries like electric vehicle batteries¹⁶, which resource extraction practices have diminished to “critical” levels².

The need for reform in the tech industry is urgent. For example, disposable vapes, while marketed as recyclable¹⁵ are sold without clear recycling instructions, accessible recycling infrastructure, or a deposit-return scheme, leaving minimal incentive to return the valuable materials at end of use. Recycling, while important, is the least favourable environmental solution; bypassing waste hierarchy principles, perpetuating linear consumption hindering circular economy transition.

Progress tackling e-waste has been obstructed by poor corporate responsibility, recycling infrastructure, and market failure to incentivise reuse, repair and recycling. To avoid continued resource depletion and destruction of the natural environment, there must be a global effort to address the growing fast tech industry. However, the underlying question remains, should any disposable electronics actually exist?

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