Mobile Device Circularity Targets: Background and Definitions
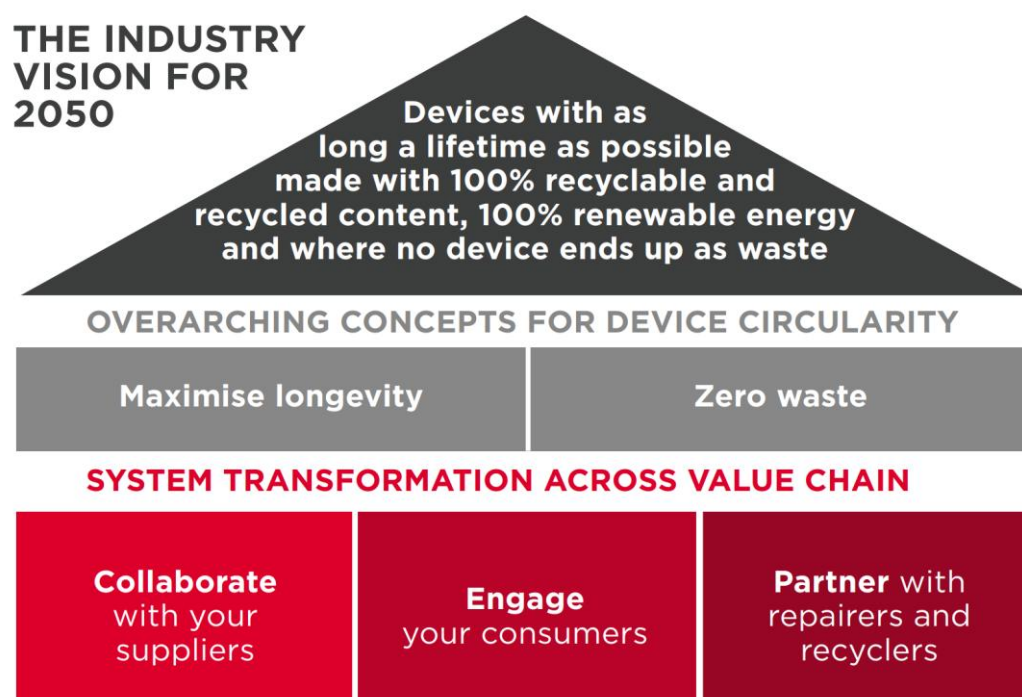
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This document provides additional details on the new operator targets on circularity announced in June 2023 by GSMA and mobile network operators.

Why did the GSMA and operators propose these targets?

The GSMA has been discussing with operators how to make progress towards realising the Industry Vision for 2050 included in the GSMA Strategy Paper on a Circular Economy for Mobile Devices:

Mobile industry vision for circularity

THE INDUSTRY VISION FOR 2050

Devices with as long a lifetime as possible made with 100% recyclable and recycled content, 100% renewable energy and where no device ends up as waste

OVERARCHING CONCEPTS FOR DEVICE CIRCULARITY

Maximise longevity **Zero waste**

SYSTEM TRANSFORMATION ACROSS VALUE CHAIN

Collaborate with your suppliers **Engage** your consumers **Partner** with repairers and recyclers

Source: GSMA (2022). Strategy Paper for Circular Economy: Mobile devices.

What is the origin of these targets?

Following the publication of the GSMA Strategy Paper in November 2022, a Project Group of 29 mobile network operators has focused on developing targets to support the long-term vision of reducing the environmental impact of mobile devices. The group has discussed a range of possible metrics and targets, and decided to prioritise metrics that are important in the near-term and are closest to operators' control.

The two proposed targets primarily support two elements of the 2050 Vision: mobile devices made with 100% recycled content and no device ending up as waste.

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Target 1 progresses on devices made with recycled content by collecting valuable materials already in circulation from used (and in some cases, inactive) mobile devices through takeback schemes.

Target 2 progresses on both elements by ensuring collected materials are not landfilled or incinerated, and are instead repaired, reused, or recycled. Both targets may also support longer device lifetimes if inactive devices are collected and are refurbished for a second life.

These targets are intended align with the GSMA ESG Metrics for Mobile, specifically target ENV-04 (1.4b-i and 1.4b-ii):

> 1.4b. Circularity of mobile devices
>
> i. Used mobile devices collected through operator take-back schemes in the reporting period as a percentage of new mobile devices distributed directly to customers in the reporting period (%).
>
> ii. Percentage of used mobile devices collected through operator take-back schemes in the reporting period that were repaired, reused or recycled i.e. diverted from landfill or incineration (%).

The targets are intended as a starting point in the journey to achieving the 2050 vision. Future targets could more directly support other key elements of the vision through engagement with manufacturers and recyclers on data collection, device durability, recyclability, and renewable energy use.

Are these industry targets and are they mandatory?

These targets are not industry-wide targets. Instead, they are recommendations from the GSMA for operators to commit to, as a way to demonstrate leadership on circularity. In a similar way to aligning to the ESG Metrics for Mobile, these targets are voluntary. There is no penalty if operators choose not to commit.

What are the proposed targets?

1) Increase take-back

- By 2030, the number of used mobile devices collected through operator take-back schemes amount to at least 20% of the number of new mobile devices distributed directly to customers.

- *Alternative wording: By 2030, for every five new mobile devices distributed by operators, one or more used mobile device is collected through operator take-back schemes.*

2) Avoid sending waste to landfill or incineration

- By 2030, 100% of used mobile devices collected through operator take-back schemes are repaired, reused or recycled.

The key terms in the definitions are underlined.

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How are the key terms defined?

Mobile devices

The definition is decided by operators, as long as these devices remain in the scope of what is considered as "mobile devices" in the context of their reporting (eg: smartphones, feature phones, wearables, mobile routers). Please define when reporting. Does not include network equipment nor fixed equipment such as fixed CPEs, set-top boxes, smart home equipment, etc.

Note: as part of this project the focus of the two metrics is set to mobile devices, which usually represent the largest volumes of electronic devices distributed by operators and present the biggest challenge for takeback. Operators willing to do so are encouraged to set up separate targets to increase take-back of other customer premises equipment.

Used devices

Devices that have been used by their previous owner before being disposed of, or devices that suffer from a major fault and cannot be repaired. Does not include devices coming back to operators through legally required returns/change-of-mind policies.

Note: In geographies where it might be difficult for operators to collect whole devices (e.g. in developing markets), the definition of devices could be extended to equipment components/waste in quantity and quality that are equivalent to those of mobile devices (e.g. collecting 150g of qualified equipment components/waste can be equivalent to collecting 1 whole mobile device. Rule to be adapted by operators according to the type of mobile devices they distribute so that the definition of the metrics can remain consistent). In this case, it is recommended that operators clearly mention this in their reporting, along with the conversion rule they are using.

Distributed devices

New devices that are sold, given (e.g. to charity), leased, or provided as part of an "as a service" model on the consumer market or B2B market by the mobile network operator to customers through the operator's own channels, including through physical and online stores and call centres. This <u>includes</u> devices that are sold, leased, or provided "as-a-service" to businesses that then provide the devices to their employees and contractors.

This definition <u>excludes</u> devices that are distributed by MNOs to third parties such as distributors and retailers that then re-sell the device to end users.

Note: refurbished devices are excluded from the scope of the definition of 'Distributed devices' for this phase of the project as our primary goal is to reduce the impact of new materials (i.e. collect materials already in circulation for each new device sold).

At least 20%

This is the proposed range that is expected to be achievable by 2030. Operators may choose to have higher takeback rates, but 20% is proposed as a minimum that demonstrates sufficient ambition.

Landfill or incineration

Refers to devices ended up in landfill or dumping waste in the natural environment, as well as burning devices, even with energy recovery. Exemptions to this are unrecyclable and hazardous materials that must be disposed of securely.

Collected

Devices that are brought back to operator stores, sent to operators either through direct postal route or through third party collection points, or picked-up by operators from collection points managed through operator partnerships (e.g. special operation in commercial mall, townhall, etc.)

Operator take-back scheme

Any initiative led by the operator to collect used devices such as trade-in schemes and donated devices.

Repaired / reused

Devices that are refurbished (either by operator or by specialised refurbishers) and re-distributed by operator or by another party. Refurbishment includes data cleaning, necessary repairs, testing, re-packaging. Aligned to the definition in the ESG Metrics for Mobile.

Recycled

Devices that are transferred by operator to controlled recycling organisations. Aligned to the definition in the ESG Metrics for Mobile.

Note: Operators must make sure that the recycling organisations to which they are transferring devices reduce to the minimum the equipment waste that is incinerated or sent to landfill. When equipment waste is incinerated or sent to landfill as a last resort, this must be done by the recycling organisation according to a controlled/approved process in order to avoid pollution and health hazards.

What are the benefits of committing to these targets?

There are a number of expected benefits of committing to these targets:

- Help customers return unwanted devices in a safe and secure way
- Enable more devices to have another life or be recycled responsibly
- Generate an additional source of revenue from the value of collected devices
- Source greater volumes to help improve viability of repair and refurbishment schemes
- Support internal circular economy and waste reduction strategies
- Demonstrate to external stakeholders that mobile network operators are putting into action the vision in the Strategy Paper
- Highlight environmental leadership through marketing and communication of new targets

Resources

- New Circularity Targets Press Release (27 June 2023)
- Information about the targets

If you have questions, please contact betterfuture@gsma.com.