

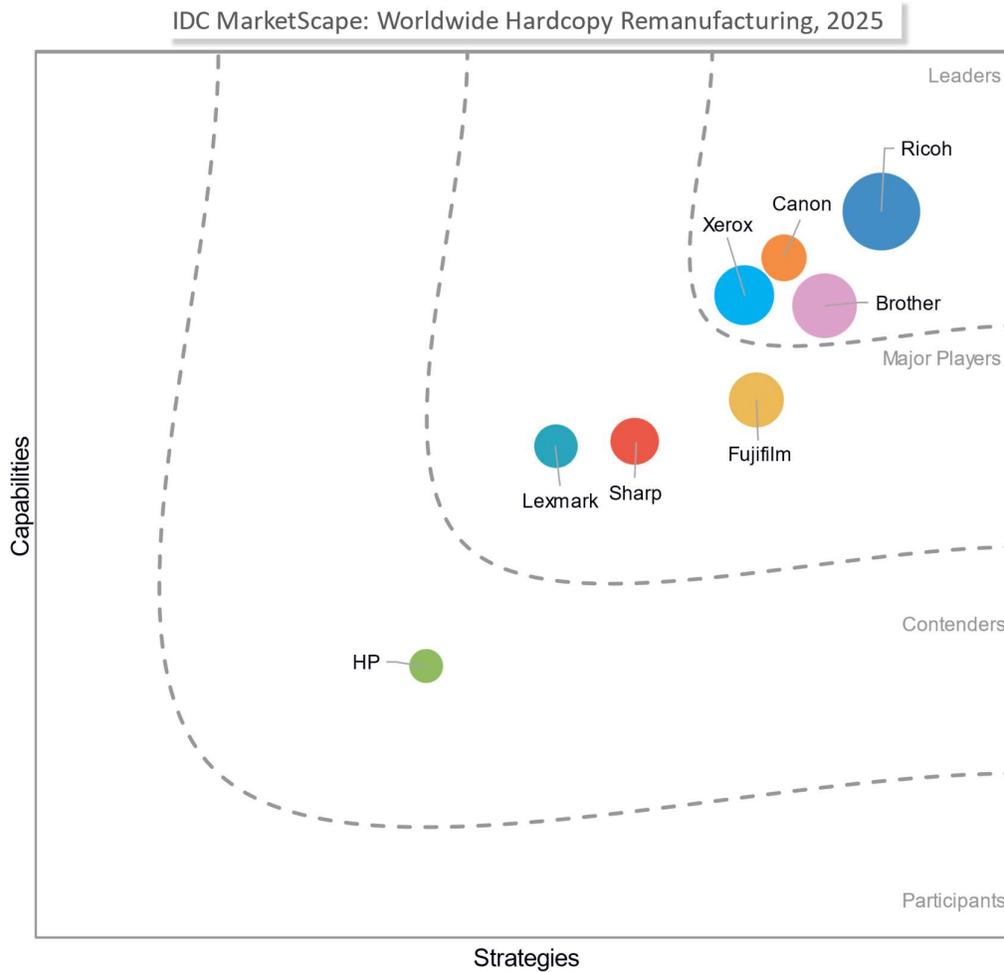
IDC MarketScape: Worldwide Hardcopy Remanufacturing 2025 Vendor Assessment

Keith Kmetz Phil Sargeant

THIS MARKETSCAPE FEATURES RICOH

IDC MARKETSCAPE FIGURE 1

IDC MarketScape Worldwide Hardcopy Remanufacturing Vendor Assessment



Source: IDC, 2025

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: IDC MarketScape: Worldwide Hardcopy Remanufacturing 2025 Vendor Assessment (Doc # EUR153222025). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

This IDC MarketScape assesses the major hardcopy vendors that provide remanufactured devices and/or consumables to the worldwide marketplace. This document discusses the dynamics that surround remanufacturing as part of the increased demand for circularity and sustainability in the hardcopy market. This IDC MarketScape covers a wide variety of hardcopy vendors and takes an in-depth review of their activities on a global, regional, and local level.

The hardcopy industry has been at the forefront of creating sustainability in the IT marketplace, and OEMs have developed research and products to position remanufacturing at the center of the corporate innovation strategies. Sustainability has been a discussion point for decades within the hardcopy industry, and pressure on vendors to accelerate their circularity offerings is gaining momentum to the point that clear competitive advantages can be gained.

Organizations of all sizes seeking to acquire remanufactured devices and/or consumables need to consider several factors before making any decisions. These factors can be quite numerous and as each company is different. While companies will have their own set policies and targets on sustainability, they can use a common set of elements to evaluate different suppliers for their print needs:

- **Devices.** The remanufactured market is like the new build market, as companies can acquire any type of remanufactured device such as A4 or A3 format models, inkjet or laser technology, or hardware for other purposes (such as production or graphic devices).
- **Supply and demand.** One of the current restrictions in the marketplace is that demand is currently greater than supply, especially for hardware as there are fewer vendors offering remanufactured devices than those offering remanufactured consumables.
- **Consumables.** The number of remanufactured toner cartridges and bottles being supplied to customers around the world runs into the tens of millions, and in many cases, they are sold exactly as new ones (with respect to the SKU

and packaging). As such, some customers use remanufactured toners without knowing it.

- **Price and costs.** Organizations should expect to acquire remanufactured devices at a lower cost than new devices. Even though there is a cost involved in remanufacturing, there are no new build expenses for organizations to take into consideration. Irrespective of how organizations choose to acquire the devices (e.g., either transactionally or via contract), price is becoming a competitive factor.
- **Service and warranty.** Remanufactured devices and consumables that are installed have the same level of service and warranty that a customer should expect with new ones.
- **Policy.** In a substantial number of tenders, a certain percentage of goods supplied need to be remanufactured. This is either due to a company's own corporate policy for a specific installation or legislation that may exist on a national level. This type of requirement will only increase in the future as new legislations come into force.

IDC MARKETSCOPE VENDOR INCLUSION CRITERIA

Vendors for this MarketScape were selected as they provide remanufactured devices, consumables, or both to a variety of organizations that are built to the same standards as new equipment. The remanufactured devices and consumables are produced by the vendors or their partners according to set standards. The remanufacturing typically takes place in locations across the Asia Pacific, Europe, Middle East, and Africa (EMEA) and North America. Those vendors that only focus on refurbishment rather than remanufacturing have not been included in this document.

ADVICE FOR TECHNOLOGY BUYERS

Demand for the reuse of devices and consumables is increasing as sustainability continues to be a top business priority that is now part of the overall strategy and decision-making process. The focus of sustainability has shifted from supporting general environmental issues to fulfilling the specific requirements of the circular economy. For example, one of the goals of the circular economy is to reduce or eliminate the presence of single-use plastics and metals. Accordingly, vendors must rethink their sourcing and manufacturing operations to meet this goal. Instead of using virgin material, suppliers are reverting to remanufacturing the products that they already own. When devices are out of contract, they are remanufactured to the highest possible standard and the placed back into the market, often under a new sub-brand name with the same specification and functionality as new builds.

Devices can be manufactured to print millions of pages. However, these devices are often underutilized as page volumes contract and hybrid working practices become

widespread. Consequently, they are typically scrapped before reaching end of life. Companies now aim to ensure these devices are used for their entire lifespans, as this would allow the ROI of each machine to be fully realized by both customers and vendors.

Remanufacturing has taken a step from being a "nice-to-have" operation to being an essential part of a vendor's business strategy. Now, remanufacturing facilities are treated as separate business entities and are a central part of operations.

For organizations looking to bolster their own sustainability credentials, the use of remanufactured devices and supplies is certainly a step in the right direction. Vendors in the hardcopy markets have a long history of educating and helping their customer boost their own sustainability by reducing their carbon footprint and energy use, and the next step is to reuse devices and consumables.

Accordingly, technology buyers should note the following:

- **Evaluate and assess your current sustainability policies.** Organizations with sustainability guidelines written into their corporate objectives should take an in-depth assessment of remanufactured devices and consumables. Such assessments may help the organization reach specific targets and goals surrounding sustainability.
- **Remanufactured devices can help control print spending.** The costs of remanufacturing a hardcopy device are less than the costs of a new build (as the device has effectively already been made in the first place). Although reverse logistics and factory costs need to be considered, organizations can acquire such devices at lower initial price points.
- **Consider hardware, supplies, or both.** Buyers can be quite selective in the type and number of remanufactured devices and consumables that they install. In many cases, customers acquire both new and reused models alongside each other as there may be limited availability of remanufactured devices.
- **Organizations may already be using remanufactured cartridges.** There are many organizations using remanufactured toner cartridges without their knowledge, as it can be more cost effective for manufacturers to reuse cartridges rather than produce new ones. Since remanufactured and new cartridges arrive in identical packaging, technology buyers should confirm the type of cartridge they are using, as it would allow them to boost their sustainability credentials with little effort.
- **Choose what is best for your organization, not the supplier.** As demand for remanufactured devices may outstrip supply, buyers should adhere to their original requirements and choose the hardware devices with the best fit for their operations, rather than accept products that do not meet their original prerequisites.

- **Assess current and future suppliers.** Vendors should practice what they preach, and organizations should take their time to evaluate how well a prospective supplier's sustainability initiatives fit with their own directives and plans. For example, organizations can evaluate a supplier's history, future road maps, and previous contributions to society.
- **Be prepared to switch suppliers.** Organizations choosing to use remanufactured devices and/or suppliers must be prepared to seek alternative brands, as not all current vendors have such items in their portfolios.
- **Ask how remanufactured equipment can contribute to your sustainability targets.** One of the benefits of using remanufactured devices and consumables is the increased contribution to sustainability. Customers should press their suppliers to assess their contributions to improving and achieving sustainability goals and targets.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and opportunities.

Ricoh

Ricoh is positioned in the Leaders category of this 2025 IDC MarketScape for Worldwide Hardcopy Remanufacturing Vendor Assessment.

Below is a summary of its regional operations.

- Device remanufacturing regions: Asia Pacific, China, EMEA, Japan, and North America
- Devices remanufactured: A4 color and monochrome toner MFP, A3 color and monochrome toner MFP, and color and monochrome production
- Consumable remanufactured regions: Asia Pacific, China, EMEA, Japan, and North America
- Consumables remanufactured: A4 toner cartridges, A3 toner bottles, and production toner

Ricoh has a long history of investing in remanufacturing capabilities. The vendor first started to remanufacture its A3 monochrome MFP devices in 1997 before commencing toner remanufacturing in 2000. The remanufacturing developed from Ricoh's Comet Circle, a program first designed in 1994 to address the circular economy, and the circular economy and the zero-carbon society have been at the heart of Ricoh's operations ever since.

Ricoh introduced the GreenLine brand in 2012. These devices are remanufactured in Ricoh's own facilities to the exact standards set for new builds and shipped with less packaging. In addition to its core A3 devices, Ricoh has now started to remanufacture office A4 devices (due to increased demand) as well as production and graphic devices.

The remanufacture of toner has been in development for decades, and Ricoh can take advantage of legislation such as the European Green Public Procurement (GPP). The GPP was first introduced in 2020 for the good of the circular economy across the public sector, which includes government, education, and healthcare. Not only does Ricoh remanufacture as many toner bottles as possible but 100% of the plastic used in new-build toner is recycled.

Ricoh's Smart Return policies, take-back schemes, and other return programs have enabled it to collect and remanufacture devices and consumables from almost every country it operates in, and because of its management information system of direct and indirect customers, it can see which devices are returned to make sure offerings match the demands from customers.

Strengths

- **Historical activities.** Ricoh has been involved in specific remanufacturing for almost 30 years and has invested heavily in its research and development activities to the extent that devices and consumables are designed to be remanufactured from the outset.
- **Future road map.** Ricoh's manufacturing operations had a sustainability road map before a single device was remanufactured. This is constantly updated to reflect societal demands and incorporate legislations found in many countries and regions across the globe.
- **Robust office portfolio.** Ricoh has one of the more in-depth portfolios of remanufactured devices, together with a wide range of remanufactured cartridges and toner bottles for customers. While the devices are sold under the GreenLine brand, the consumables do not have a separate SKU but are simply used alongside new build toner bottles.
- **Production device offerings.** Ricoh has started to remanufacture its production devices to meet current and future demand and follow the success of other brands in introducing remanufactured production devices and consumables to the commercial sector.
- **Global reach.** Ricoh is one of the global players in the remanufacturing hardcopy market as it covers a wide range of countries. The process and standards for remanufacturing remain the same across all regions.
- **Direct customer contracts.** With a high proportion of direct contracts in place, Ricoh is well positioned to receive its products from customers via reverse logistics (meaning Ricoh has a readily available stock of devices and consumables ready for customers requiring remanufactured devices).

Challenges

- **Intensifying competition.** Ricoh was one of the first vendors to offer fully remanufactured devices. As a result, it has helped generate demand for such devices. However, it has become a competitive target, and its rivals are duplicating its market approaches to lessen its previous competitive advantage in remanufacturing.

Consider Ricoh When

Ricoh should be considered when a full range of toner devices is required, coupled together with industry software and solutions which perform the same regardless of whether the devices are remanufactured or new builds (as Ricoh can offer both sets for offices and other areas such as production).

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis or strategies axis indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represent the market share of each individual vendor within the specific market segment being assessed.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores,

and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior and capability.

Market Definition

IDC's definition of a remanufactured product is as follows:

The devices have gone through a specific process of remanufacturing overseen by the OEM vendor. These are called "remanufactured to new". Remanufactured-to-new devices are counted as new units when they meet ALL of the following criteria:

- All defective and worn components are replaced.
- Hard disc drive/memory is completely deleted and nonrecoverable (hardware device only)
- The counter has been set to zero. (This criterion may be excluded if IDC determines that the information provided by the original manufacturer fulfills all other conditions.)
- They passed the same quality assurance process as new devices.
- The remanufacturing process is managed and overseen by the original manufacturer.
- The warranty is similar to or better than that of new devices guaranteed by the original brand.
- They passed the certifications as remanufactured devices, in the case that the local government has certain laws and/or standards for remanufactured devices.

LEARN MORE

Related Research

- *European Hardcopy Device Acquisition: Survey Analysis* (IDC #EUR152621824, October 2024)
- *The A4 Market: Inkjet or Laser?* (IDC #EUR151526224, October 2024)
- *The A3 Market: Dynamics and the threat of A4* (IDC #EUR152466624, September 2024)
- *How Popular Are Refurbished or Remanufactured Hardcopy Devices Amongst Industries* (IDC #EUR152591524, September 2024)
- *Are Businesses Open To Using Refurbished or Remanufactured Devices* (IDC #EUR152376324, July 2024)
- *How Big and Imminent is the Opportunity of Refurbished and Remanufactured Printing Devices in Europe* (IDC #EUR252394724, July 2024)

- *The Inkjet Market: Diversification and Change* (IDC #EUR151525824, May 2024)

Synopsis

This IDC MarketScape assesses the major hardcopy vendors that provide remanufactured devices and/or consumables to the worldwide marketplace. This document discusses the dynamics that surround remanufacturing as part of the ongoing increased demand for circularity and sustainability in the hardcopy market. This MarketScape covers a wide variety of hardcopy vendors and takes an in-depth review of their activities on a global, regional, and local level.

"Reuse and remanufacturing in the hardcopy industry are not new concepts and have become integral parts of OEMs' sustainability programs. Decades of investment in hardware and consumable remanufacturing is now paying off for many brands, and others are following suit." Phil Sargeant, Senior Program Director, IDC's Imaging, Printing and Document Solutions

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International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology, IT benchmarking and sourcing, and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a wholly owned subsidiary of International Data Group (IDG, Inc.).

IDC U.K.

IDC UK
5th Floor, Ealing Cross,
85 Uxbridge Road
London
W5 5TH, United Kingdom
44.208.987.7100
Twitter: @IDC
blogs.idc.com
www.idc.com

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