

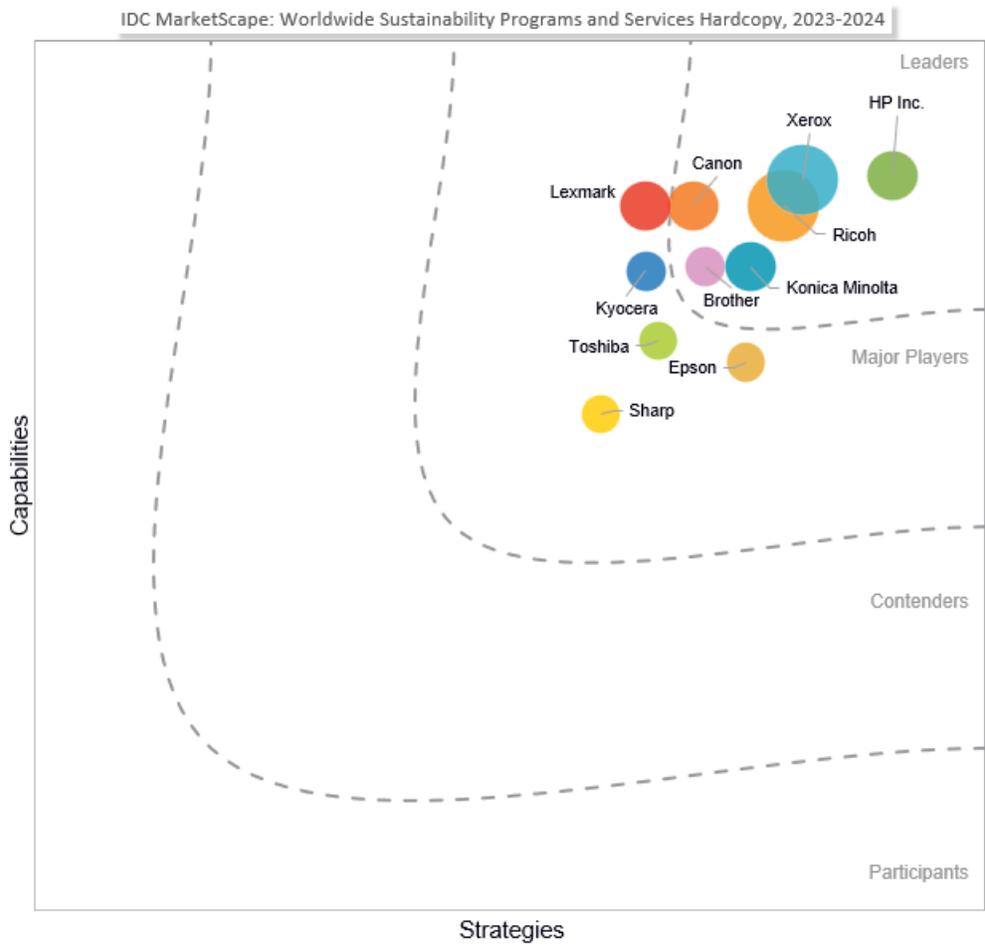
IDC MarketScape: Worldwide Sustainability Programs and Services Hardcopy 2023 Vendor Assessment

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IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape: Worldwide Sustainability Programs and Services Hardcopy 2023 Vendor Assessment



Source: IDC, 2023

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

IDC OPINION

This IDC study assesses sustainability programs and services among select hardcopy vendors through the IDC MarketScape model. This assessment discusses the quantitative and qualitative characteristics that position vendors for success in the office printing market. This IDC MarketScape covers a variety of hardcopy vendors and is based on a comprehensive framework to evaluate key metrics in corporate strategies, business operations, products and business models, and governance/risk/compliance measures offered in the context of sustainability.

In many ways, printing equipment manufacturers are among some of the most progressive companies in any industry when it comes to sustainability strategies and execution. Many of the reasons trace back to the earliest stages of the printing market when equipment manufacturers began to introduce recycling and remanufacturing programs for consumable supplies (toner and ink cartridges). Circularity has been an inherent part of the printing business model for decades. Building on these earlier investments, print equipment manufacturers have continued to advance their sustainability strategies and goals in meaningful ways.

In this assessment, IDC evaluated 11 major hardcopy equipment manufacturers across 22 scored criteria and collected feedback from customers on their experience and perception of the key characteristics, capabilities, and strategies of these vendors. Key findings include:

- The top 3 sustainability initiatives or capabilities that customers looked for from a printing equipment partner included:
 - Product/solutions features that can help the organization drive sustainability throughout its own print and document infrastructure
 - Programs and services for auditing and reporting on the current environmental impact of the printer fleet with ongoing monitoring of comparisons to a future optimized state
 - Key sustainability targets that the vendor identified specifically aimed at reducing climate impact (e.g., planned reduction in emissions and carbon footprint, reducing waste, and green energy programs)
- The top 5 objectives or requirements driving customers to consider the sustainability capabilities and strategies of their printing equipment partners were:
 - Alignment with the organizations' overall corporate sustainability objectives
 - The need to address certain regulatory requirements around sustainability and reducing environmental impact (regulations vary by region but are growing in importance across the globe)
 - Consideration for products, programs, and services that can help the business reduce environmental impact while improving overall operations
 - A desire to work with suppliers that demonstrate values consistent with their own regarding sustainability and climate-related activities

- An increased need for sustainability monitoring, reporting, and disclosure, through the setting of KPIs and other metrics

IDC MARKETSCOPE VENDOR INCLUSION CRITERIA

This research analyzes 11 prominent hardcopy equipment manufacturers with broad hardware, solutions, and services portfolios to address office workgroup/departmental printing environments on a global scale. Excluded from the study were IT outsourcing companies, business process outsourcing (BPO) providers, and software manufacturers that offer print or document-related services or subcontract those services to hardcopy vendors. Indirect channel partners of the hardcopy equipment manufacturers have also been excluded from this study.

ADVICE FOR TECHNOLOGY BUYERS

Sustainability has become a top-of-mind issue for businesses all over the world and is inherently tied to digital transformation. Sustainability can no longer be regarded as a "trade-off with returns" because it is integral to the business risk and opportunity posture. Sustainability factors are a crucial part of business and IT strategy, as they can impact business value, talent attraction, and customer retention. Companies are looking to partner with suppliers that demonstrate consistent values when it comes to sustainability and making the world a better place.

Further, organizations are striving to develop clear road maps and the required metrics and skills to achieve their own sustainability goals. Increasingly, organizations are turning to their print services providers for help. In fact, IDC's most recent MPS benchmark survey shows that 77% of organizations identify "meeting environmental goals" as either important or very important when considering factors for moving to managed print services (MPS).

For organizations looking to address crucial challenges associated with sustainability, print OEMs bring a wealth of experience and technology to the table. It is important to understand how these vendors are looking to drive sustainability features into their products and throughout their own operations and business models. Companies should evaluate vendors based on their ability to meet ongoing needs across multiple vectors within the context of the vision for the office of the future.

Accordingly, technology buyers should do the following:

- **Evaluate vendors based on their own corporate sustainability objectives:** Identify the vendor's near- and short-term sustainability targets and evaluate progress made toward those objectives. Place emphasis on those areas that demonstrate material societal value, such as reducing carbon emissions, conserving biodiversity, and promoting a circular economy.
- **Recognize the importance of product features and capabilities:** Consider all print and nonprint-related hardware portfolios. Look to identify key benefits that might drive financial and societal value from specific sustainability features/capabilities.
- **Understand the services that vendors offer to complement their hardware offerings:** Many vendors offer consulting services specifically designed to help customers reduce climate impact associated with printing. Services could include both professional and managed consulting services combined with a tech-enabled solution for achieving, monitoring, measuring, capturing data of, and reporting on specific sustainability initiatives.

- **Consider the vendors' managed print services offerings:** There are many aspects of MPS that can have a positive impact on the environment. Consolidating print devices alone can result in dramatic reductions in energy consumption, waste, and carbon emissions. For many organizations, simply moving to long-life supplies can significantly reduce materials waste. And of course, reducing paper consumption can have a positive impact on the environment while also serving as one of the most effective means for lowering print costs.
- **Conduct an internal sustainability audit:** Many print vendors offer tools and services that users can leverage to measure key sustainability metrics within the existing print environment. These assessments can help companies drive optimization in the existing print fleet while establishing long-term sustainability targets and measuring progress over time.
- **Seek out vendors that offer reforestation services and carbon offsetting programs:** Print is often viewed as having a negative impact on the environment due to the number of trees that are consumed from printed pages. Nevertheless, trees are one of the most renewable resources on the planet. Many vendors offer programs that allow for the planting of trees to offset the paper consumed for printing. In most cases, companies can integrate these programs into back-end systems to automate the process.
- **Partner with vendors that can take a holistic approach to sustainability needs:** Organizations are waging a constant battle between the need to reduce environmental impact and the need to work more effectively and efficiently. Print service providers should work with customers to establish programs to meet multiple objectives: improved efficiency, greater productivity, reduced environmental impact, and financial benefits.

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 challenges.

Brother

Brother is positioned in the Leaders category in this 2023-2024 IDC MarketScape for the worldwide sustainability programs and services hardcopy market.

Brother International Corp. is a wholly owned subsidiary of Brother Industries Ltd. located in Nagoya Japan. Brother Industries was formed in 1908.

Quick facts about Brother include:

- **Employees:** 41,653
- **Global market coverage:** Operates in more than 100 countries in North America, Europe, Asia/Pacific (APAC), and the Middle East/Africa
- **Top industry focus:** Focuses on education, government, healthcare, and retail verticals but sells to other markets
- **Ideal customer size:** Small businesses to the midmarket, with some enterprise accounts (The company's stated sweet spot for its B2B solutions is organizations of 250+ employees.)
- **Distribution:** Brother partners with various commercial channels (e.g., IT VARs, resellers, office equipment dealers) and retail partners for sales of its printing products.
- **Services/solutions evaluated:** Sustainability programs and services

- **Delivery models evaluated:** Scope and focus include key metrics looking at business services, corporate strategies, business operations, products and business models, and governance/risk/compliance measures offered in the context of sustainability.
- **Key differentiator:** Brother has strong brand recognition among consumers and small business customers, with products and solutions designed specifically to address the SMB segment. Brother does not typically sell printing products directly. Brother works with a broad network of retail and commercial channel partners for the distribution of products and solutions.
- **Key sustainability targets identified:** Brother has set an ambitious target to reduce its carbon emissions by 65% by 2030 with the ultimate goal of becoming carbon neutral by 2050.

Strengths

- **Environmental Vision 2050:** Brother's approach to sustainability is rooted in its Environmental Vision 2050 plan. This vision outlines an aggressive plan to minimize the environmental impact of its business operations on the ecosystem and promote activities to restore and conserve the ecosystem beyond that impact. Brother's approach is built around three main pillars: promotion of resource circularity, reduction of CO2 emissions, and biodiversity conservation activities.
- **Collaborative approach:** Brother takes a collaborative approach to sustainability by working closely with partners and customers to construct what it calls a "sustainability culture." Brother believes that it can only achieve its sustainability targets by helping customers and partners achieve their own sustainability objectives.
- **Sustainability by design:** Brother's vision is to achieve 100% circular economy for its products and services. To achieve that goal, Brother will focus on three key areas: expanding workstyle innovations in its products and services; advancements in circular business operations; and developing a circular model for optimized products. Brother notes that its products are designed and built specifically to be remanufactured. Future efforts will include producing lighter and smaller components for toner cartridges and printers/MFPs designed for remanufacturing.
- **Zero waste to landfill:** Brother achieved zero waste to landfill accreditation for its toner recycling programs 10 years ago, and it has achieved that status every year since. Through its closed-loop recycling process, Brother can remanufacture or recycle 100% of all returned toner cartridges. Plastics used in its printer cartridges do not contain persistent organic pollutants (POPs), which means cartridges can be recycled multiple times. Brother continues to make steady and important advancements to its toner recycling/remanufacturing capabilities. The company notes that its European recycling process is 100% carbon neutral, with recycling plants located in Slovakia and the United Kingdom having achieved carbon neutral status.

Challenges

- **Solutions portfolio:** Brother's portfolio of print/document software solutions is limited, primarily because its products are not intended for certain departmental or workgroup applications where solutions integration is more likely required.
- **Professional and managed services:** With no direct global services delivery platform, Brother has a limited range in terms of providing managed and professional services (e.g., direct MPS, IT services, workflow services). Instead, Brother relies on channel partners to provide these types of services in conjunction with its product offerings. This approach works well in the SMB sector, but many larger enterprise customers look to work directly with manufacturers for global print services programs.

Consider Brother When

Brother is a strong contender for those SMBs looking for printing devices that can deliver on the full range of key sustainability attributes. Brother's products can help customers reduce their environmental impact through a broad range of eco-friendly product features. Moreover, Brother's printing products meet all the elements outlined in IDC's criteria for essential capabilities related to sustainability. Brother should also be on the short list of vendors when looking for a supplier that is investing to drive sustainability throughout its own operations, including a keen focus on biodiversity conservation activities.

Canon

Canon is positioned in the Leaders category in this 2023-2024 IDC MarketScape for the worldwide sustainability programs and services hardcopy market.

Founded in 1937, Canon's headquarters are in Tokyo, Japan.

Quick facts about Canon include:

- **Employees:** 180,775 (as of December 31, 2022)
- **Global market coverage:** Operates in approximately 220 countries in North America, Latin America, Europe, Middle East, Africa, and APAC
- **Top industry focus:** Education, financial healthcare, hospitality, logistics, manufacturing, and retail
- **Ideal customer size:** SMB, shared office, upper midmarket, and enterprise
- **Distribution:** Canon sells direct to large enterprise accounts. For SMB customers, Canon's products are sold through various channel partners (IT VARs, resellers, office equipment dealers) and retail distribution.
- **Services/solutions evaluated:** Sustainability programs and services
- **Delivery models evaluated:** Scope and focus include key metrics looking at business services, corporate strategies, business operations, products and business models, and governance/risk/compliance measures offered in the context of sustainability.
- **Key differentiator:** Canon's overall printing solutions portfolio is designed with carbon reduction and circularity in mind, leveraging technology to ensure its products last longer and can be remanufactured for a second life. Canon also provides digital solutions that optimize device usage, supporting the transition from paper to digital and mitigating the need for in-person machine maintenance. In combination, these capabilities help businesses achieve sustainability goals with products that reduce waste and minimize impact on the planet.
- **Key sustainability targets identified:** Canon has identified a target average annual 3% improvement in the index of life-cycle CO2 emissions, with a cumulative goal to reduce carbon emissions by 50% by 2030. Canon is aiming for net-zero CO2 emissions for entire product life cycles by 2050.

Strengths

- **Enabling a sustainable society:** Canon's approach to sustainability is deeply rooted in its overall corporate philosophy of "Kyosei," which means living and working together for the common good. Canon strives to create new value through the power of technology and innovation, providing cutting-edge technologies, products, and services while also contributing to solutions to address the problems facing our society. By providing greater value while using fewer resources throughout all product life cycles, Canon aims to enable affluent lifestyles while protecting the environment.

- **Targeting critical societal challenges:** Canon identifies three specific topics within its overall sustainability strategy as the most important: climate change, resource efficiency, and chemical substances. While its overall approach to sustainability covers a much broader scope, Canon views these specific topics as critical issues facing our society that will also have a profound impact on Canon's operating sites and product competitiveness due to trends toward stricter regulation worldwide.
- **Resource efficiency:** To maximize the value brought about by resource recycling, Canon pursues product-to-product recycling, or recycling used products into new ones. Canon's closed-loop toner cartridge recycling program is a strong example of this. Canon's Toner Cartridge Collection and Recycling Program, which was launched in 1990, was one of the earliest such programs in the industry. Canon has also been remanufacturing used multifunction devices since 1992. Canon claims that at least 90% of the material used in the latest remanufactured line of imageRUNNER ADVANCE MFP models is reused from the original MFP at the end of their first use. When a remanufactured device is shipped, Canon guarantees it will offer the same level of quality as a new product.
- **Biodiversity:** Canon fully recognizes biodiversity as an important basis for a sustainable society, and it promotes many activities that contribute to biodiversity conservation. Some specific biodiversity actions include supporting education and scientific research programs, forest cleanup and reforestation activities, sand dam construction, river clean-up activities, placing of bird nesting boxes, wastewater recycling systems, and restoration of coral reefs.

Challenges

- **Rate of introduction:** While Canon continues to drive innovation in core areas of its imaging and printing portfolio, its rate of introduction for new products and services has been somewhat slow to go to market.
- **Marketing:** Canon continues to invest in key areas to drive sustainability throughout its business operations and product life cycle. However, Canon's overall messaging regarding climate actions and sustainability efforts is not visible to the market. IDC believes that Canon could benefit from driving increased awareness of its sustainability programs and strategy.

Consider Canon When

Organizations should consider Canon if they are looking for a hardcopy vendor that offers a holistic approach to cover every facet of sustainability, spanning business operations, products and business models, and governance/compliance. Canon should also be considered by those organizations looking for a supplier that can help the company advance its own sustainability objectives through the deployment of innovative solutions and technology.

Epson

Epson is positioned in the Major Players category in this 2023-2024 IDC MarketScape for the worldwide sustainability programs and services hardcopy market.

Founded in 1942, Epson headquarters are in Nagano, Japan.

Quick facts about Epson include:

- **Employees:** 79,906
- **Global market coverage:** Operates in 150+ countries in North America, Latin America, Europe, and APAC

- **Top industry focus:** Education, financial healthcare, hospitality, logistics, manufacturing, and retail
- **Ideal customer size:** SMB, shared office, upper midmarket, and enterprise
- **Distribution:** Epson partners with various commercial channels (e.g., IT VARs, resellers, office equipment dealers) and retail partners for sales of its printing products.
- **Services/solutions evaluated:** Sustainability programs and services
- **Delivery models evaluated:** Scope and focus include key metrics looking at business services, corporate strategies, business operations, products and business models, and governance/risk/compliance measures offered in the context of sustainability.
- **Key differentiator:** Epson relies solely on its office inkjet technology to serve the office printing market. Epson has a broad portfolio of office-class inkjet devices leveraging its PrecisionCore, next-generation printhead technology. With its "heat free" PrecisionCore inkjet technology, Epson strives to produce products and services to drive work process innovation by minimizing environmental impact.
- **Key sustainability targets identified:** Epson aims to become carbon negative and underground resource free by 2050.

Strengths

- **Targeted environmental investments:** Epson's approach to sustainability is outlined in its Environmental 2050 Vision. Epson has identified four material topics that it can address to help solve specific societal issues: achieving sustainability in a circular economy, advancing the frontiers of industry, improving the quality of life, and fulfilling its social responsibility. Epson plans to invest approximately \$700 million to achieve its 2030 environmental goals. Specific investments will be targeted in four key areas: decarbonization, closed resource loop, customer environmental impact mitigation, and environmental technology development.
- **PrecisionCore inkjet technology:** Epson is looking to mitigate its customers' environmental impact by offering inkjet products that meet the needs of an increasingly decentralized workforce and an upsurge in local production in the commercial and industrial printing sectors. Epson's PrecisionCore heat-free technology is a very important part of this value proposition. In contrast with laser-based printing technologies, the inkjet writing system is comprised of only a few major components, which means that Epson's printing devices consume less power, require fewer resource components, and produce less waste. Building on these inherent benefits, Epson hopes to transform the office printing market with products that can help customers achieve their own environmental objectives.
- **PaperLab dry fiber technology:** Epson's PaperLab will pioneer a sustainable papermaking system that turns used or wastepaper into new paper using a dry process called dry fiber technology. Epson notes that customers could achieve sustainability through a circular economy by leveraging a solution that combines its office inkjet printers with an office papermaking system.

Challenges

- **Offering breadth:** As an emerging player in the office workgroup printing market, Epson's overall range of office-class printing products, as well as its portfolio of print/document software solutions, is somewhat limited. IDC expects Epson to continue to expand its overall solutions and services portfolio.

- **Marketing:** Epson's PrecisionCore inkjet technology offers very compelling benefits, and its products are well positioned to help companies address specific needs for reducing environmental impact. Nevertheless, laser technology is well entrenched in the office printing segment, which means Epson will need to drive its marketing efforts to communicate the value proposition of its inkjet technology.

Consider Epson When

Organizations should consider Epson if they are looking for printing devices that offer a strong value proposition when it comes to reducing environmental impact. Those companies looking specifically for products that can deliver long-life consumables and require fewer service interventions should also consider Epson.

HP Inc.

HP Inc. is positioned in the Leaders category in this 2023-2024 IDC MarketScape for the worldwide sustainability programs and services hardcopy market.

Formed in 1939, HP Inc.'s worldwide headquarters are in Palo Alto, California.

Quick facts about HP Inc. include:

- **Employees:** 58,000
- **Global market coverage:** Operates in 180+ countries in North America, Latin America, Europe, Middle East and Africa, and Asia/Pacific
- **Top industry focus:** HP Inc. works with enterprise and SMB accounts across all vertical markets and geographies.
- **Ideal customer size:** All types of customers, ranging from SOHO, SMB, upper midmarket, and enterprise organizations
- **Distribution:** HP Inc. sells products direct and through a network of channel partners (e.g., IT VARs, resellers, office equipment dealers). HP Inc. also sells through retail distribution.
- **Services/solutions evaluated:** Sustainability programs and services
- **Delivery models evaluated:** Scope and focus include key metrics looking at business services, corporate strategies, business operations, products and business models, and governance/risk/compliance measures offered in the context of sustainability.
- **Key differentiator:** HP Inc. views sustainability as critical to its future-ready strategy and as a key enabler for driving both shareholder value and enabling long-term value creation for its customers. HP Inc. has a bold vision to be the "world's most sustainable and just technology company." As a result, HP Inc. has a well-defined sustainability strategy that includes major milestones, key investments, and a commitment to measuring and disclosing achievements.
- **Key sustainability targets identified:** HP Inc. is looking to reduce its value-chain greenhouse gas (GHG) emissions by 50% by 2030 and achieve net-zero emissions by 2040. HP Inc. has also identified a key target to reach 75% circularity for products and packaging by 2030.

Strengths

- **Sustainability in its DNA:** HP Inc.'s own DNA drives its approach to sustainability, as the company is built on a continued focus on innovation. The company has a long and storied history of pushing sustainability initiatives over the evolution of its products and culture. HP Inc. can point to 80+ years of taking specific actions around sustainability and more than 20 years of reporting on the progress of sustainability efforts.

- **Circularity:** Recycling and enabling a circular economy are key to HP Inc.'s overall sustainability strategy. In 1991, HP Inc. established its first toner recycling program, which has evolved into what is now called the Planet Partners Return and Recycling Program, one of the industry's most formidable printer supplies recycling programs. More than 1 billion HP Inc. print cartridges have been returned through the HP Planet Partners recycling program as of December 31, 2022. HP Inc. also focuses on sourcing renewable materials in the interest of protecting ecosystems and resources for future generations. More than 95% of HP Inc. home and office printers, laptops, notebooks, displays, and workstations shipped to customers in 2022 included recycled materials. HP Inc. has a stated goal to reach zero waste in its operations by 2025. In 2022, HP Inc. achieved an 87.7% landfill diversion rate globally.
- **Climate action:** Sustainable impact is at the heart of HP Inc.'s business strategy. In 2021, the company announced what it defines as its most comprehensive and ambitious Sustainable Impact agenda. The variables included within this agenda are too numerous to cover fully, but HP Inc. is taking urgent and decisive action in three key areas: achieving net-zero carbon emissions across its entire value chain, reforestation, and driving innovation in products and services to enable a more circular economy.
- **Packaging:** HP Inc. has a goal to eliminate 75% of single-use plastic packaging by 2025 compared with 2018. The company's packaging strategy has three focus areas: eliminating unnecessary packaging material, space, and hard-to-recycle materials such as plastic foam; innovating packaging designs to use materials with a lower environmental impact, such as sustainable fiber and recycled plastics; and prioritizing highly recycled content and easily recyclable materials that can readily circulate through the economy.

Challenges

- **Channel enablement:** HP Inc. has worked diligently to drive channel enablement for its print solutions and services, with a focus on education, marketing, and business development. Its Amplify Impact partner program is very comprehensive and instrumental in helping channel partners promote and sell sustainability capabilities and services. As the market for print and document services moves deeper into the SMB space, HP Inc. must continue to evolve its channel programs to ensure that partners are equipped with the necessary tools, resources, and expertise for success.

Consider HP Inc. When

Organizations should consider HP Inc. if they are looking for a vendor that can deliver across the full spectrum of sustainability attributes. With its vast array of office printing products, solutions, and services, HP Inc. can help customers address their own sustainability objectives with innovative technologies that can reduce their carbon footprint, minimize their climate impact, and promote a circular economy. HP Inc. should also be on the short list of vendors when looking for a supplier that is investing in driving sustainability throughout its own business and operations.

Konica Minolta

Konica Minolta is positioned in the Leaders category in this 2023-2024 IDC MarketScope for the worldwide sustainability programs and services hardcopy market.

Konica Minolta's headquarters are in Tokyo, Japan.

Quick facts about Konica Minolta include:

- **Employees:** 39,775

- **Global market coverage:** Operates in more than 100 countries in North America, Europe, APAC, and the Middle East/Africa
- **Top industry focus:** Provides solutions for all industries, but its website notes education, financial services, healthcare, legal, government, insurance, manufacturing, and utilities
- **Ideal customer size:** The company's target customer size ranges considerably from micro-small businesses (<100 employees) and midsize businesses (100-500 employees) to large enterprises (1,000+ employees).
- **Distribution:** Konica Minolta sells direct and partners with various commercial channels and office equipment dealers for sales of its printing products.
- **Services/solutions evaluated:** Sustainability programs and services
- **Delivery models evaluated:** Scope and focus include key metrics looking at business services, corporate strategies, business operations, products and business models, and governance/risk/compliance measures offered in the context of sustainability.
- **Key differentiator:** Konica Minolta has a broad portfolio of hardware, solutions, and services that fit within its Intelligent Connected Workplace (ICW) model. Through ICW, Konica Minolta looks to deliver value across a broad spectrum of document imaging and printing applications, including Intelligent Information Management (IIM).
- **Key sustainability targets identified:** Konica Minolta aims to achieve net-zero carbon emissions by 2050. In addition, the company aims to make its products from more than 90% circulated resources (recycled materials and biomaterials) by 2050.

Strengths

- **Management philosophy:** Konica Minolta's long-term commitment to sustainability is rooted in its management philosophy "The Creation of New Value." Through this philosophy, Konica Minolta strives to create economic and social value through technological innovation to enable a sustainable world. Leveraging its expertise in imaging, data processing, and data-based decision making, Konica Minolta looks to help its clients and partners identify and resolve specific problems facing our society.
- **Sustainability assessments:** As part of its Optimized Print Services offering, Konica Minolta customers can opt for an environmental audit of their printer fleet with the bizWORKPLACE total cost of ownership (TCO) assessment tool. Utilizing this tool, companies can determine the energy and consumable consumption of printing devices to identify more energy-efficient machines and reduce waste. The bizWORKPLACE tool also provides periodic environmental reporting to ensure optimized performance over time.
- **Sustainable Solutions Certification System:** In 2020, Konica Minolta launched its Sustainable Solutions Certification System, which helps the company create products and solutions in line with its business transition to an "as a service" model. Through this system, Konica Minolta works to certify a broad range of products and services designed to solve environmental social issues. Essentially, Konica Minolta has established a baseline of standards for specific business and product characteristics and assesses its products against those standards using a three-step ranking system. According to Konica Minolta, Sustainable Solutions sales, including those products and services that were carried over from the company's Sustainable Green Products Certification System implemented through fiscal 2019, accounted for approximately 77% of its total sales.
- **Refurbished equipment program:** Like many vendors, Konica Minolta is pursuing multiple strategies to extend product life cycles and promote a circular economy. The company has identified four key areas to advance circularity within its product ecosystem: offering refillable

toner bottles/cartridges, making consumables last longer, utilizing more recycled materials, and deploying refurbished equipment. With its bizhub refreshed program, Konica Minolta provides customers in Europe with access to affordable, high-quality refurbished bizhub MFPs. Utilizing a consistent process that is standardized across European markets, Konica Minolta can ensure that refurbished devices deliver high levels of performance and quality while offering resource and GHG emission savings compared with the production of new devices.

Challenges

- **Marketing:** IDC believes that Konica Minolta could improve its overall marketing capabilities by strengthening its communications to both end-user customers and channel partners regarding the value of its sustainability capabilities and offerings. Konica Minolta should also continue to focus on channel enablement to ensure that its channel partners are equipped with the necessary tools and resources to help SMB customers address their own sustainability goals.

Consider Konica Minolta When

Organizations should consider Konica Minolta if they are looking for a supplier that is taking decisive actions to reduce climate impact while promoting the effective use of resources both for customers and within its own supply chain. Konica Minolta's Intelligent Connected Workplace strategy provides customers with access to information management solutions that can increase workflow efficiency, storage, security, and compliance by leveraging AI-infused technologies. By digitizing content and automating workflows, customers can realize additional sustainability benefits.

Kyocera

Kyocera is positioned in the Major Players category in this 2023-2024 IDC MarketScape for the worldwide sustainability programs and services hardcopy market.

Kyocera Document Solutions (Kyocera) headquarters are in Osaka, Japan.

Quick facts about Kyocera include:

- **Employees:** 21,794
- **Global market coverage:** Operates in 170+ countries in Africa, the Americas, Asia, Europe, and Oceania
- **Top industry focus:** Kyocera targets all horizontal and vertical markets, with a focus on government, education, and healthcare.
- **Ideal customer size:** The company's target customer size has a large range, from micro-small businesses (<100 employees) and midsize businesses (100-500 employees) to large enterprises (1,000+ employees).
- **Distribution:** Kyocera sells direct and partners with various commercial channels and office equipment dealers for sales of its printing products.
- **Services/solutions evaluated:** Sustainability programs and services
- **Delivery models evaluated:** Scope and focus include key metrics looking at business services, corporate strategies, business operations, products and business models, and governance/risk/compliance measures offered in the context of sustainability.
- **Key differentiator:** Kyocera has a long history in the market with its ECOSYS concept for its printing devices. The ECOSYS platform involves extending the life span of the components used in Kyocera's devices and reducing the disposal of parts and consumables. Products

based on the ECOSYS concept are designed to reduce environmental impact while keeping running costs down. Kyocera is working to evolve the ECOSYS concept and promote product development that prioritizes environmental performance and strengthens its recycling system.

- **Key sustainability targets identified:** Kyocera Group, the parent company of Kyocera Document Solutions, aims to reduce greenhouse gas emissions by 46% by FY31. In addition, the company aims to become carbon neutral by FY51. Kyocera Document Solutions Group has set its own goal to achieve carbon neutrality by FY31.

Strengths

- **ECOSYS platform:** Since its launch in 1992, Kyocera has evolved its ECOSYS concept and expanded the platform into its full portfolio of printers and MFPs. According to Kyocera, in 1997, the ECOSYS printer became the first printer in the world to receive the Blue Angel certification. Kyocera has been selling eco-friendly products long before it became fashionable in the industry, and the company is drawing from that experience to evolve its overall sustainability strategy.
- **Information and document management:** In addition to its printing hardware, Kyocera provides enterprise content management (ECM) solutions as well as various document-related services. Leveraging these solutions and services to digitize content and manage information more effectively, customers can enhance their work efficiency, improve their productivity, and reduce their climate impact for document-related processes.
- **Inkjet textile printing:** Beyond the office environment, Kyocera is also advancing business operations that contribute to reducing environmental impact in the commercial and industrial printing area. With its FOREARTH inkjet textile printer, Kyocera aims to eliminate virtually all water usage from fabric printing to significantly reduce the environmental impact associated with printing in the fashion industry.

Challenges

- **Related services portfolio:** Kyocera has continually strengthened its range of document-related services over the years. However, IDC believes that Kyocera's overall capabilities could be strengthened through global consistency and support for additional professional and managed services in areas such as sustainability assessments and ongoing sustainability monitoring of the fleet.

Consider Kyocera When

Organizations should consider Kyocera if they are looking for a supplier that offers solutions across a wide range of document-related applications. Kyocera offers a broad portfolio of environmentally friendly products in three main areas: office MFPs and printers, ECM/CSP and information management, and inkjet commercial and industrial printing.

Lexmark

Lexmark is positioned in the Major Players category in this 2023-2024 IDC MarketScape for the worldwide sustainability programs and services hardcopy market.

Lexmark's headquarters are in Lexington, Kentucky.

Quick facts about Lexmark include:

- **Employees:** 7,746

- **Global market coverage:** Operates in 170+ countries in North America; Asia/Pacific; Europe, the Middle East, and Africa (EMEA); and Latin America
- **Top industry focus:** It provides solutions for all industries, but its website notes specific vertical targets in banking, education, government, healthcare, insurance, manufacturing, and retail.
- **Ideal customer size:** Enterprise and SMB
- **Distribution:** Lexmark sells direct and through various commercial channel partners and office equipment dealers.
- **Services/solutions evaluated:** Sustainability programs and services
- **Delivery models evaluated:** Scope and focus include key metrics looking at business services, corporate strategies, business operations, products and business models, and governance/risk/compliance measures offered in the context of sustainability.
- **Key differentiator:** Lexmark's sustainability strategy is integrated throughout its business, and the company strives to design and develop products, services, and solutions that are increasingly less impactful on the environment. Lexmark identifies three specific pillars as key to its overall sustainability approach: sustainable design, efficient use, and responsible reuse and recycling.
- **Key sustainability targets identified:** Lexmark is committed to being operationally carbon neutral by 2035. In addition, Lexmark aims to reduce its absolute scope 1 GHG emissions by 27.5% by 2030 (from a 2019 base year), as well as increase its annual sourcing of renewable electricity to 100% by 2030.

Strengths

- **Sustainable design:** Lexmark products are designed to have minimal effects on the environment throughout the entire life cycle, including manufacturing and distribution. Lexmark utilizes a life-cycle analysis to measure improvements and/or identify areas to improve from generation to generation to provide products that are increasingly less impactful on the environment while reducing its carbon footprint. The company selects materials that enable Lexmark's products to be more energy efficient, lightweight, and serviceable while ensuring that products last longer and can be refurbished or remanufactured. A sustainable design and life-cycle analysis are foundational to Lexmark's focus on product development and supporting a circular economy.
- **Efficient use:** With its Smart Refresh life-cycle management program, Lexmark collects performance and usage data to replace only the printers and MFPs in the customer environment that are truly at the end of their useful life, not just at the end of a contract term. Through this program, customers can realize significant cost savings and reduce their carbon footprint while Lexmark reduces the need for new raw materials to manufacture new products.
- **Reuse and recycling:** Recycling and circularity are fundamental to Lexmark's overall sustainability capabilities. The Lexmark Cartridge Collection Program (LCCP), launched in 1991, was first established to reduce waste by ensuring that cartridges did not end up in a landfill. Eventually, Lexmark began to incorporate materials from returned cartridges back into its own products, creating a closed-loop remanufacturing process. In 2022, 69% of the cartridges and supplies returned to Lexmark were reused, and Lexmark's goal is to increase that to 80% by 2025. As mentioned previously, Lexmark places strong emphasis on extending the useful life of its printing equipment. With the Lexmark Evergreen program available in EMEA, customers can place select remanufactured devices back into service after an extensive quality check and refurbishment process.

- **Related solutions and services:** To complement its hardware offerings, Lexmark offers a wide array of solutions and services that can help customers achieve their own sustainability goals, ranging from workflow services to digitizing content and reducing paper consumption to cloud-based print management tools and optimized MPS. As an authorized PrintReleaf dealer, Lexmark offers reforestation services to its MPS customers. Through the PrintReleaf program, Lexmark customers can plant trees in certified forests around the globe to replenish the trees used for paper consumption. An optional carbon offset for paper consumed is also available.

Challenges

- **Go to market:** Lexmark's overall go-to-market strategy could benefit from increased marketing activities to drive brand awareness and thought leadership around sustainability, particularly in areas where its "sustainable design" philosophy adds significant value.

Consider Lexmark When

Organizations should consider Lexmark if they are looking for a vendor with a strong printing heritage, vertical market expertise, and the ability to leverage data analytics to drive improved business outcomes. Lexmark should also be on the short list of vendors when looking to partner with a supplier to establish, implement, and monitor a sustainability program for the printing environment.

Ricoh

Ricoh is positioned in the Leaders category in this 2023-2024 IDC MarketScape for the worldwide sustainability programs and services hardcopy market.

Founded in 1936, Ricoh's headquarters are in Tokyo, Japan.

Quick facts about Ricoh include:

- **Employees:** 81,017
- **Global market coverage:** Operates in approximately 200 countries in the Americas, EMEA, and Asia/Pacific
- **Top industry focus:** It serves a wide range of customer industries and can address the needs of any vertical. Specific targeted verticals include education, finance, government, healthcare, insurance, legal, manufacturing, retail, and utilities.
- **Ideal customer size:** SMB, upper midmarket, and enterprise
- **Distribution:** Ricoh sells direct and through various commercial channel partners and office equipment dealers.
- **Services/solutions evaluated:** Sustainability programs and services
- **Delivery models evaluated:** Scope and focus include key metrics looking at business services, corporate strategies, business operations, products and business models, and governance/risk/compliance measures offered in the context of sustainability.
- **Key differentiator:** Ricoh notes that its commitment to sustainability is a fundamental part of its heritage, touching every part of the company, from manufacturing to distribution, business sites, and recycling. Ricoh acknowledged its corporate responsibility to minimize its impact on the environment decades ago. In 1976, Ricoh established a company Environmental Promotion Section, and the company remains focused on driving sustainability through its business and operations while developing innovative technologies to help customers reduce their carbon footprint and lessen their environmental impact.

- **Key sustainability targets identified:** Ricoh also aims for zero GHG emissions across the entire value chain and a switch to 100% renewable energy by 2050.

Strengths

- **Reducing emissions:** Ricoh's commitment to environmental conservation has been woven into its manufacturing, logistics, product use, and final disposal process since 1976. Through technological innovations, Ricoh collaborates with suppliers to address key issues related to energy conservation, global warming and pollution prevention, resource conservation, and recycling. Ricoh became the first Japanese company to participate in RE100, a global initiative aimed at utilizing 100% renewable energy globally by 2050. Currently, all Ricoh A3 MFPs are assembled using power derived from 100% renewable energy.
- **Sustainability across the portfolio:** In addition to its printing hardware, Ricoh has a vast array of related businesses, including business process optimization (BPO), cloud and infrastructure, cybersecurity, digital experiences, digital workspace, and graphic communications. Within each of these business sectors, Ricoh supports multiple components of the U.N. Sustainable Development Goals (SDGs), and Ricoh works to further align those goals with its own material issues. Ricoh claims that every product it builds or service offering it delivers has features or capabilities supporting sustainable business practices.
- **Reuse and recycling:** Since the early 1990s, Ricoh has positioned "resource conservation and recycling" as one of the pillars of its environmental conservation activities. Ricoh has developed a global reuse and recycling program for MFPs, printers, supplies, and consumable parts collected from customers by region and product. Ricoh notes that it has a built-in supply chain for returned components because it operates primarily on a lease-based business model for MFPs, which allows the takeback of used equipment at the end of each device's contracted life with the customer.
- **Managed print and automation services:** Ricoh's Managed Print & Automation Services help businesses to optimize print infrastructure to improve efficiency, reduce cost, enhance security, and drive sustainability. Ricoh offers a range of solutions and services through its MPS program that can be tailored to meet individual customer needs to reduce the IT burden, simplify fleet management, and enable the digitization of document workflows.

Challenges

- **Related services portfolio:** Ricoh offers a vast array of both print- and nonprint-related services for customers across a full range of industries and use cases. Given the depth of its services portfolio, it can sometimes be difficult for customers to determine which services are best suited for specific customer needs. IDC believes that Ricoh's overall services strategy could be improved with greater emphasis on how its services are differentiated.

Consider Ricoh When

Organizations should consider Ricoh if they are looking for a print vendor that can help to address sustainability objectives across the entire print and document infrastructure. Ricoh should also be on the short list of vendors when looking for a partner to better enable a hybrid working model. Ricoh has the tools and expertise to help facilitate collaboration, creativity, and productivity for flexible working environments, which can help companies reduce their environmental impact.

Sharp

Sharp is positioned in the Major Players category in this 2023-2024 IDC MarketScape for the worldwide sustainability programs and services hardcopy market.

Sharp's headquarters are in Osaka, Japan. The company has been majority owned by Taiwanese Foxconn Group since 2016.

Quick facts about Sharp include:

- **Employees:** 44,993
- **Global market coverage:** Operates in 160+ countries in the Americas, EMEA, Asia/Pacific, China, and Japan
- **Top industry focus:** Education, government, healthcare, and legal
- **Ideal customer size:** SMB, upper midmarket, and enterprise
- **Distribution:** Sharp sells direct and through various commercial channel partners and office equipment dealers.
- **Services/solutions evaluated:** Sustainability programs and services
- **Delivery models evaluated:** Scope and focus include key metrics looking at business services, corporate strategies, business operations, products and business models, and governance/risk/compliance measures offered in the context of sustainability.
- **Key differentiator:** Sharp believes that it has a social responsibility to use its business to contribute to solving social problems, including reducing its impact on climate change and respecting human rights. Under its policy of ESG-focused management, Sharp is concentrating on three goals: improving technological strength, fostering global awareness, and making the most of its people.
- **Key sustainability targets identified:** Sharp is working toward realizing a sustainable global environment by pursuing long-term goals set in three fields of action with 2050 as the target year: climate change, resource recycling, and safety and security.

Strengths

- **Product life-cycle management:** Sharp performs a life-cycle assessment (LCA) on its products to identify their impact on the environment throughout their service life and uses the results in product planning and development.
- **Renewable energy:** Sharp introduced the use of PV systems, green power, and other power sources to its domestic and overseas production bases and is advancing the use of renewables to do its part in creating a decarbonized society. In fiscal 2022, the launch of new PV systems at plants in Thailand and Indonesia greatly increased Sharp's electricity generation.
- **Resource recycling:** Sharp has been working to reduce waste and recycle as much as possible as it looks to contribute to building a circular economy. As a part of its commitment to the environment, Sharp Electronics offers customers a zero-waste toner recycling program for all Sharp consumables, including cartridges, bottles, toner collection containers, and drum units.

Challenges

- **Functionality or offering strategy:** Sharp's overall sustainability strategy is not well articulated. Based on the *Sharp Sustainability Report 2023*, Sharp is investing in several areas to drive sustainability both in its products and business operations. IDC believes that Sharp's overall offering strategy could be improved by working to promote these efforts more widely.

Consider Sharp When

Sharp continues to expand its print-related portfolio while continuing to drive into adjacent product areas, such as laptops and AV solutions. As the office landscape continues to evolve, Sharp is adding to its legacy copy/print portfolio with a greater focus on a broader set of IT solutions.

Toshiba

Toshiba is positioned in the Major Players category in this 2023-2024 IDC MarketScape for the worldwide sustainability programs and services hardcopy market.

Toshiba's headquarters are in Tokyo, Japan. Toshiba is organized into six different subsidiaries that together form Toshiba Group. The six subsidiaries are Electronic Devices and Storage Solutions, Building Solutions, Energy Systems and Solutions, Infrastructure Systems and Solutions, Digital Solutions, and Retail and Printing Solutions. Retail and Printing Solutions, which Toshiba Tec Corp. in Tokyo leads, is the Toshiba business unit that competes in the copy and print marketplace.

Quick facts about Toshiba include:

- **Employees:** 106,648
- **Global market coverage:** Toshiba Tec operates in 140+ countries around the world.
- **Top industry focus:** Education, financial, government, healthcare, legal, manufacturing, and retail
- **Ideal customer size:** SMB, upper midmarket, and enterprise
- **Distribution:** Toshiba sells direct and through various commercial channel partners and office equipment dealers
- **Services/solutions evaluated:** Sustainability programs and services
- **Delivery models evaluated:** Scope and focus include key metrics looking at business services, corporate strategies, business operations, products and business models, and governance/risk/compliance measures offered in the context of sustainability.
- **Key differentiator:** Toshiba Tec aims to create a sustainable society based on its corporate philosophy: "Create with you – keeping our customers in mind all the time and everywhere." Toshiba prioritizes climate care and sustainability throughout its business activities. The company is focused on three key materiality issues related to the environment: response to climate change, response to the circular economy, and consideration of ecosystems.
- **Key sustainability targets identified:** Toshiba aims to reduce its carbon emissions by 70% by 2030, with the goal of becoming carbon neutral by 2050.

Strengths

- **Product life-cycle management:** Toshiba employs strict Green Procurement Guidelines that are geared toward creating "environmentally conscious products." The entire process decreases the negative environmental impacts at each stage of the product life: selection of the raw materials, manufacturing, circulation, consumption, and end of life/recycling.
- **Erasable toner technology:** Toshiba's ECO MFP is a monochrome multifunction printer that utilizes a specially developed blue erasable toner technology, allowing documents to be printed and then erased so that the paper can be reused multiple times (as many as 10-12 times in some cases). According to Toshiba, 30-40% of office documents are used temporarily. In fact, Toshiba claims that approximately 90% of documents that are printed are disposed of within one week. With the ECO MFP, print jobs can be erased by putting the used

documents in a paper drawer designated for erasing. Toshiba also offers a hybrid device that is equipped with both the standard black toner (for documents that are to be retained) and blue toner (for documents to be recycled). For higher production requirements, Toshiba also offers a standalone unit so that customers can erase printed pages offline. Toshiba's erasable toner technology reduces the environmental impact of printing by dramatically reducing waste and paper consumption.

- **Toshiba managed print-as-a-service (MPaaS):** Toshiba offers a wide range of professional and consulting services. A key part of Toshiba's go-to-market strategy is focused on MPS, or what Toshiba calls MPaaS. Toshiba takes a vendor-agnostic approach to MPaaS, with the ability to monitor and manage multibrand print fleets. Toshiba also partners with other printing equipment manufacturers and resells devices from companies, including Brother, HP Inc., and Lexmark. As a result, the sustainability programs that Toshiba offers through its MPaaS engagements are supported across multiple hardware brands in the fleet.
- **Recycling and reforestation:** Toshiba supports a circular economy with its EcoSmart recycling program, which allows for 100% recycling of Toshiba-provided imaging consumables. Through this program, all cartridges can be recycled with zero waste going to Landfills. Toshiba also partners with PrintReleaf to provide customers with an automated process for calculating their paper footprint in real time. Leveraging this data, customers can pursue reforestation initiatives and/or produce carbon offset credits.

Challenges

- **Functionality or offering strategy:** Toshiba's branded hardware portfolio mostly comprises A3-sized office MFPs, which means it must partner with others for certain types of devices. As described previously, this provides some advantages for Toshiba in terms of the ability to manage multibrand printer fleets. However, it also means that Toshiba must rely more heavily on partners for sales of scanners, single-function printers, and large format machines.

Consider Toshiba When

Organizations should consider Toshiba if they are looking specifically for printing equipment with eco-friendly capabilities built in from the ground up. With its focus on the "greening of products," Toshiba emphasizes areas such as mitigating climate change, efficient use of resources, and management of chemical substances. Toshiba should also be on the short list of vendors when looking for a supplier that can provide a clear path to implementing climate-reduction activities within the print environment.

Xerox

Xerox is positioned in the Leaders category in this 2023-2024 IDC MarketScape for the worldwide sustainability programs and services hardcopy market.

Xerox's headquarters are in Norwalk, Connecticut. The company was founded in 1906 in Rochester, New York, as The Haloid Photographic Company, which manufactured photographic paper and related equipment.

Quick facts about Xerox include:

- **Employees:** 20,500
- **Global market coverage:** Xerox operates in 160+ countries around the world.
- **Top industry focus:** Education, financial, government, healthcare, and retail
- **Ideal customer size:** SMB, shared office, upper midmarket, and enterprise.

- **Distribution:** Xerox sells direct and through various commercial channel partners and office equipment dealers.
- **Services/solutions evaluated:** Sustainability programs and services
- **Delivery models evaluated:** Scope and focus include key metrics looking at business services, corporate strategies, business operations, products and business models, and governance/risk/compliance measures offered in the context of sustainability.
- **Key differentiator:** Xerox notes that sustainability is critical to its way of doing business. Xerox aligns its business goals for the environment with six key pillars to make a worldwide impact: carbon footprint, paper, clean air and water, waste, chemical management, and health and safety.
- **Key sustainability targets identified:** Xerox is targeting a 60% reduction in GHGs (Scope 1 and 2) by 2030 (from 2016), with the goal of achieving net-zero carbon emissions by 2040.

Strengths

- **Designing for sustainability:** Xerox views product and life-cycle management as critical to its overall approach to sustainability. Xerox designs its products to enable environmental responsibility by selectively choosing parts, designing for efficiency in operation, and extending the life of parts through reuse in manufacturing. Xerox also routinely performs LCAs as a means of technically evaluating the environmental and health impact of its product's materials, manufacturing, distribution, use, and end of life. Through these LCAs, Xerox is able to quantify the carbon footprint of its products to continually reduce its environmental impact while helping customers reduce their overall footprint.
- **Circular economy:** Xerox notes that it was remanufacturing products long before the term "circular economy" became popular. In support of its strategy for enabling a circular economy, Xerox is committed to collecting and reusing equipment at the end of its useful life. In 2022, 5,210 metric tons of equipment and parts-related waste were diverted from landfills to be recycled at Xerox's U.S. Reverse Logistics Center. Globally, that figure is an impressive 27,999 metric tons.
- **Remanufactured/refurbished hardware:** Xerox first introduced remanufacturing into its business operations in 1959. Today, Xerox's remanufactured equipment offerings include certified previously owned and factory-produced new product lines. Xerox remanufactured equipment offerings reuse up to 95% of the components by weight, without compromising on quality or performance, including environmental certifications. Xerox has committed to expanding remanufacturing offerings, and increasing availability across product families and geographies.
- **Xerox Green World Alliance:** Xerox also collects and reuses consumable supplies at end of life. Through the Xerox Green World Alliance program, customers can return spent cartridges to Xerox. In 2022, Xerox customers from around the world returned over 4.3 million cartridges, toner containers, and other used supply items, equaling 2,700 metric tons. In the same year, more than 1.6 million Xerox toner cartridges were manufactured using recovered cartridges.
- **Related services portfolio:** Xerox offers an extensive range of professional and managed services to help customers across a broad spectrum of applications. A sampling of these services includes reforestation services; MPS, capture and content services, IT services, cloud services, remote work and telecommuting, e-waste management, and environmental monitoring. More specifically, Xerox's MPS advanced analytics leverages data from printers and end users to offer clients valuable insights into their sustainability metrics, such as water usage, tree consumption, and CO2 emissions. These insights can be used to identify sustainability trends and perform "what-if" analyses to understand the sustainability impacts of increased scanning and duplexing.

Challenges

- **Go to market:** Xerox's print services business is heavily weighted toward larger enterprise accounts. Like many hardcopy vendors, Xerox needs to continue to extend its direct capabilities to the indirect channel for servicing SMB customers. At the same time, Xerox must continue to equip channel partners with the necessary tools, resources, and expertise required to effectively serve the SMB customer.

Consider Xerox When

Organizations should consider Xerox if they are looking for a supplier with expertise across the full range of office technology requirements. Xerox brings a wealth of experience, expertise, and resources to the printing market. The breadth and depth of its product/solutions portfolio are matched by an extensive range of professional and managed services offerings. Xerox's approach to sustainability is comprehensive, not only in what it is doing to optimize its own operations but also in the ways it can help its customers achieve their own environmental goals.

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 represents the market share of each individual vendor within the managed print and document services market.

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

For the purposes of this study, sustainability programs and services include elements related to corporate and strategy issues, which are instrumental in defining an organization's ESG strategy and goals and designing and implementing structures, processes, and technologies that help the organization reach its goals.

Along with addressing corporate strategic initiatives, IDC will assess the vendor's products, solutions, and services to evaluate features/functions designed to help customers and channel partners achieve measurable results for environmental sustainability. Products and solutions will include all print and nonprint-related portfolios from individual hardcopy OEMs. Services could include both professional and managed consulting services combined with a tech-enabled solution for achieving, monitoring, measuring, capturing data, and reporting on sustainability initiatives.

Evaluation addresses sustainability issues across several primary segments:

- Corporate strategies
- Business services
- Business operations
- Products and business model
- Governance/risk/compliance measures
- IDC taxonomy

For more in-depth definition of the market, see *IDC's Worldwide Environmental, Social, and Governance Business Services Taxonomy, 2023* (IDC #US50035421, January 2023).

Strategies and Capabilities Criteria

Tables 1 and 2 provide key strategy and capability measures, respectively, for the success of hardcopy vendors in delivering sustainability programs and services.

TABLE 1

Key Strategy Measures for Success: Worldwide Sustainability Programs and Services Hardcopy

Strategies Criteria	Definition	Weight (%)
Functionality or offering strategy	<ul style="list-style-type: none"> ▪ The vendor demonstrates a road map based on customer and partner input, with plans to extend and develop its solutions and services to address sustainability within the markets it serves. A wide variety of approaches will be employed to ensure increased functional and industry capability, including market sensing capabilities, offering reinforcements, strategic hiring, and training. To ensure maximum impact, organizations will need to increase their ability to construct offerings that leverage those capabilities and provide precise value to clients. In addition, effective firms must have a solid strategy for uncovering future client requirements. ▪ Products and services planned for the next three to five years are continually updated to account for the changing landscape. The vendor demonstrates its ability to address the ever-changing needs of business in terms of sustainability. ▪ This criteria looks specifically at how vendors are executing on the road map. What is the planned rate of introduction of new features, functions, and capabilities targeting sustainability within the markets it serves? 	40.00
Corporate strategy	<ul style="list-style-type: none"> ▪ This evaluation of the vendor's own sustainability business should demonstrate specific investments for achieving corporatewide sustainability initiatives. It identifies variables such as corporate purpose, climate-related goals or targets, how those are measured, and a timeline for progress. ▪ This criteria evaluates strategic initiatives and investments to drive sustainability throughout the vendors' own operations and business model. This includes sustainability metrics in areas such as materials sourcing and procurement, supply chain, carbon offsetting, waste management, hazardous materials management, deforestation efforts, and other variables for addressing climate impact. ▪ It evaluates the vendor on sustainability monitoring, reporting, and disclosure. Vendors should demonstrate methodologies for advising on sustainability disclosure processes and facilitating monitoring through the setting of KPIs and other metrics. 	32.00
Innovation	<ul style="list-style-type: none"> ▪ The vendor has provided consistent innovation in facing the challenges of product design and delivery and minimizing environmental impact. 	10.00
Delivery	<ul style="list-style-type: none"> ▪ The vendor ensures that consultants and subject matter experts are educated on all corporate sustainability programs/capabilities and up to date on key ESG trends and strategies. 	5.00
Growth	<ul style="list-style-type: none"> ▪ This criteria evaluates the extent to which the vendor is leveraging its sustainability strategies to drive overall growth. The growth strategy covers the mission, direction, and goals by which a vendor will capture a growing share of the total addressable markets where it competes. 	8.00
R&D pace/productivity	<ul style="list-style-type: none"> ▪ The vendor produces thought leadership on relevant ESG/sustainability topics. 	5.00
Total		100.00

Source: IDC, 2023

TABLE 2

Key Capability Measures for Success: Worldwide Sustainability Programs and Services Hardcopy

Capabilities Criteria	Definition	Weight (%)
Functionality or offering	<ul style="list-style-type: none"> ▪ The vendor demonstrates that its products can provide clients with a holistic approach to addressing sustainability. Products and solutions will include all print- and nonprint-related hardware portfolios. Vendors should identify benefits that might drive financial and societal value from specific sustainability features/capabilities. ▪ The vendor demonstrates its ability to offer products that address the specific capabilities listed for driving sustainability and reducing environmental impact: <ul style="list-style-type: none"> ▪ Product design and life-cycle management ▪ Materials usage ▪ Energy efficiency ▪ Recycling and circular economy ▪ Waste reduction ▪ Packaging ▪ Reducing emissions ▪ This criteria evaluates the vendor's consultancy and implementation services (professional and managed) to deliver maximum customer benefit in areas related to sustainability. It includes an analyst's evaluation in areas related to service delivery, implementation, ongoing management, execution against targeted SLAs, and support. Specific areas of focus will include the overall delivery model (on premises/cloud, local/remote, onshore/offshore, or hybrid models), solutions and technology deployment, interoperability with existing systems, global delivery, and ongoing program management and support. ▪ The ideal set of offerings includes solutions and services that address the full spectrum of sustainability metrics. 	38.00
Portfolio benefits	<ul style="list-style-type: none"> ▪ This criteria is an evaluation of the vendor's ability to provide a suite of services to help customers achieve sustainability metrics and goals. Services could include both professional and managed consulting services combined with a tech-enabled solution for achieving, monitoring, measuring, capturing data, and reporting on specific sustainability initiatives. ▪ It is an evaluation of vendor's ability to provide a suite of software/solutions in support of its products and services to help customers achieve sustainability metrics and goals. 	20.00
Customer satisfaction	<ul style="list-style-type: none"> ▪ This criteria evaluate the customers' perception of their overall satisfaction. 	10.00

TABLE 2

Key Capability Measures for Success: Worldwide Sustainability Programs and Services Hardcopy

Capabilities Criteria	Definition	Weight (%)
Customer service delivery	<ul style="list-style-type: none"> ▪ Customer service is educated and trained in all aspects of sustainability metrics related to its products and services. Training and education are routinely reinforced with new information as appropriate. ▪ This criteria involves an analyst's evaluation of the firm's ability to leverage sustainability metrics delivered through products and services to gain net-new business and retain customers for repeat business. ▪ This criteria demonstrates the vendor's global capabilities for delivery and support of sustainability measures relative to the markets it serves. This evaluates how well the vendor's customer service is vertically aligned and able to service and support global customers and partners, showcase local presence, penetrate the existing customer base, and impact customer retention. 	20.00
Marketing	<ul style="list-style-type: none"> ▪ This criteria evaluates the vendor's ability to communicate the value of its sustainability offerings relative to its services/solutions and delivery methodologies/tools. This evaluates communications to both end-user customers and channel partners. 	6.00
Go to market	<ul style="list-style-type: none"> ▪ This criteria evaluates how well the vendor is equipping its channel partners with the necessary marketing, service, and sales/support tools to address customer opportunities through sustainability programs and solutions. 	6.00
Total		100.00

Source: IDC, 2023

LEARN MORE

Related Research

- *IDC FutureScape: Worldwide Imaging, Printing, and Document Solutions 2024 Predictions* (IDC #US51283923, October 2023)
- *Print Security Business Priorities* (IDC #US50781224, September 2023)
- *Market Analysis Perspective: Worldwide Next-Gen Document Services, 2023* (IDC #US50129623, September 2023)
- *Worldwide and U.S. Managed Print and Document Services and Basic Print Services Market Shares, 2022: SMB Growth Helps Sustain Overall Market* (IDC #US50129823, July 2023)
- *Worldwide and U.S. Managed Print and Document Services and Basic Print Services Forecast, 2023-2027* (IDC #US50129723, July 2023)
- *IDC MarketScape Criteria: Worldwide Sustainability Programs and Services Hardcopy 2023 Vendor Assessment* (IDC #US50240023, May 2023)

Synopsis

This IDC study assesses sustainability programs and services among the most prominent global hardcopy vendors and identifies their strengths and challenges. This assessment discusses both quantitative and qualitative characteristics that position vendors for success in this important market. This IDC study is based on a comprehensive framework to evaluate sustainability measures as part of the vendor's corporate strategy, business operations, products, and services.

"Sustainability has become a top motivating factor for businesses considering the adoption of print-related services," says Robert Palmer, research VP for IDC's Imaging, Printing, and Document Solutions group. "Companies want to work with print services providers that share their values when it comes to mitigating environmental impact. At the same time, businesses are looking to deploy technologies and services to help advance their own sustainability goals and objectives."

About IDC

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.).

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