

# Sustainability Leaders, 2024

A review of sustainability initiatives by major print vendors



## Executive summary

Print manufacturers and their partners face a complex landscape of rising energy costs, stricter regulations, and growing demands for sustainability from stakeholders and customers. Notable regulations that can impact a global basis include the EU Ecodesign for Sustainable Products Regulation (ESPR), the Right to Repair, and the EU Corporate Sustainability Reporting Directive (CSRD) being phased in for the FY24 reporting period. To address the climate crisis and reduce greenhouse gas emissions (GHGs), the industry must prioritise carbon reduction and commit to ambitious sustainability targets. Print manufacturers are committing to reducing not only their own GHGs but also the emissions resulting from their own supply chains and customers.

While many OEMs aim to achieve net-zero emissions by 2050, several vendors are setting more ambitious targets. HP and Xerox have committed to net-zero emissions by 2040. Lexmark has a 2035 net neutrality target, and Epson targets carbon-negative status by 2050. These targets often reflect the company's overall global operations, not solely the manufacturing of printing products. This acceleration towards earlier target dates is driven by factors such as increased experience in collecting and utilising emissions data. Quocirca expects that these early target dates and terminology differentiators will increasingly be used as competitive differentiators.

There is a clear trend towards increased adoption of renewable energy sources within the industry. Epson is a notable example, having achieved almost 100% renewable electricity usage across all its global sites by 2023. This significant step demonstrates the company's commitment to sustainability and its ability to implement large-scale renewable energy solutions. HP follows in second place, achieving 59% renewable electricity usage in its global operations, a significant step towards its goal of 100% renewable electricity by 2025.

Accelerating the transition to a sustainable print industry necessitates a shift away from the linear 'take-make-dispose' model and towards circular economy principles, leveraging and extending the leasing, reusing, repairing, refurbishing, and recycling services seen within mature managed print services (MPS) models.

Over the past year, print vendors have continued to enhance the environmental credentials of their product portfolio. This includes increasing the use of post-consumer recycled (PCR) materials in devices, improving energy efficiency, and implementing comprehensive recycling programmes for consumables and hardware. A sustainable-by-design approach and lifecycle assessments (LCAs) have become standard practices across the industry. New refurbishment programmes were launched in 2024, such as HP Renew Solutions, offering certified refurbished PCs and printers, further extending the life of devices and reducing electronic waste. Remanufactured product lines from Canon, Lexmark, Ricoh, and Xerox are also available.

The print industry, while making strides in product sustainability, must prioritise providing accurate and reliable environmental impact data to customers. Currently, fragmented approaches and a lack of data standardisation hinder customers' ability to assess the true environmental footprint of their print infrastructure, encompassing hardware (manufacture, delivery, and usage), paper, and consumables. Despite 83% of IT decision-makers in Quocirca's 2024 Sustainability study recognising the importance of environmental data, they are struggling to get what they need from vendors. Print vendors must bridge this gap to empower informed decision-making and drive sustainable practices.

Sustainability assessments have become essential tools for evaluating and improving the environmental impact of printing practices, but the quality and scope can vary significantly between different MPS providers. While some providers focus solely on traditional print environments, others take a broader approach, evaluating opportunities for digitisation and business process optimisation to further reduce environmental impact. A leading offering, launched in September 2024, is the Xerox Verified Carbon Neutrality Service, an MPS offering developed to the ISO 14068 carbon neutrality standard and independently verified. Another notable launch in 2024 was Ricoh's new Sustainability Services Dashboard, developed in partnership with Watershed, which reports on emissions data associated with Ricoh Digital Services.

This report provides an overview of the print vendor sustainability landscape in 2024, exploring how vendors are accelerating sustainability goals across business operations, how sustainability is embedded across products and services through circular programmes, and how the channel is being supported. The report includes detailed profiles for participating vendors: Brother, Canon, Epson, HP, Konica Minolta, Ricoh, Sharp, Toshiba, and Xerox. Print vendors' sustainability targets are summarised in the Appendix.

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## Quocirca Sustainability Vendor Landscape, 2024

Quocirca's Sustainability Vendor Landscape is a visual representation of the environmental commitments of the major print manufacturers and the breadth and depth of their sustainability-led products and services. Please note that for this 2024 report, Quocirca has made some changes to the criteria used in the Strategy and Completeness of Offering sections to represent better how sustainability is addressed by the vendor and delivered to the market.

*This evaluation is intended as a starting point only. Please note that Quocirca's scoring is based on an unweighted model. Prospective buyers should use this as guidance, along with the more detailed vendor profiles, to assess suppliers based on their specific requirements.*

### Strategy

Each vendor has been scored on a range of criteria encompassing its overall sustainability strategy and commitments, as well as its vision for its print business. Published ESG data is used to evaluate sustainability commitments. Please note that the published ESG data used is for the whole company group, as vendors do not provide print business ESG data separately.

- **Vision and strategy.** The comprehensiveness of the vendor's sustainability strategy and its evolutionary vision to lower environmental impact across its business.
- **Maturity of offerings.** How developed the vendor's sustainability offerings and services for its clients are.
- **Sustainability commitments.** Commitments to net zero and progress in reducing Scope 1, 2, and 3 emissions. This includes energy usage, renewable energy usage, total waste output and waste recycled, total water used, and target dates and percentage of reduction in CO<sub>2</sub> or CO<sub>2</sub>-equivalent outputs.
- **Circular strategies.** These relate to strategies in areas such as remanufacturing, recycling, and product life extension.
- **Market credibility.** The effectiveness of the vendor's initiatives to promote its brand, increase awareness of its sustainability offerings, and influence market development. This includes clarity, differentiation, and internal/external consistency in the vendor's market messages.
- **Sustainability technology innovation.** This considers technology across the hardware, software, and services portfolio. It also considers the use of emerging technology, such as AI or blockchain, to enhance sustainability efforts by improving tracking and verifying emissions.
- **Alliances and partnerships.** This considers environmental partnerships on a global and regional basis and how vendors are collaborating in cross-industry initiatives. It also evaluates partnerships with third-party ISVs.
- **Channel strategy.** This evaluates channel enablement strategies through partner programmes that offer channel partners training and certification to enhance their sustainability and create stronger propositions for their customers.

### Completeness of offering

This evaluates vendors' approaches to customer enablement and how they are helping customers reduce their carbon footprint. It considers the following:

- **Breadth and depth of product portfolio.** This looks at environmental features across the portfolio, including energy efficiency, eco modes, and use of recycled materials. It also considers print management features that minimise wasteful printing and optimise device utilisation rates.
- **Recycling programmes.** Under the WEEE Directive, which was originally mandated in the EU, most countries require vendors to offer equipment take-back at end of life. This criterion looks at vendors' basic and advanced recycling programmes for print devices and consumables.
- **Remanufacturing/refurbishment.** Some vendors offer specific programmes for refurbishing and reusing print devices, while others focus on complete remanufacturing. These often change more parts than refurbishment and offer greater guarantees and support. Some vendors offer both services.
- **Sustainability services.** This evaluates the breadth and depth of services encompassing environmental assessments and carbon footprint calculators, MPS offerings, environmental analytics, cloud-based platforms, and digital workflow automation capabilities.

Figure 1 represents Quocirca’s view of the Sustainability Vendor Landscape:

- **Leaders.** Leaders demonstrate a strong vision and commitment to net zero and have strength and depth across the board for both completeness of sustainability offerings and strategy vision and execution. This includes innovation and differentiation in AI adoption and solutions such as sustainability assessments and services.
- **Major players.** Vendors that have established sustainability products and services but may lack vision and a differentiated sustainability roadmap. These vendors may be focused primarily on the channel ecosystem.
- **Contenders.** These vendors have a weaker strategy and sustainability-led product portfolio and may lag in environmental features with a less differentiated sustainability roadmap.

The Quocirca Vendor Landscape is a graphical representation of Quocirca’s opinion of the market based on Quocirca’s scorecard methodology. This information is provided as a visual representation only and should be combined with other sources to determine the suitability of any vendor. Quocirca does not endorse any vendor, product, or service. Information is based on the best available resources, and opinions reflect judgement at the time. All opinions are subject to change.



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**Figure 1. Quocirca Sustainability Vendor Landscape, 2024**

## Vendor profile: Xerox

### Quocirca opinion

Xerox has retained its top position in Quocirca's Sustainability Leaders 2024 market assessment. Xerox's multifaceted approach, encompassing product improvements, innovative services, and environmental transparency, has helped it reinforce its leading position in 2024. Building on its net-zero 2040 commitment, Xerox has made significant progress in improving the environmental performance of its products, including increased energy efficiency and use of recycled materials. The company continues innovating with services such as its Verified Carbon Neutrality offering and its CareAR remote service platform while excelling in deep analytics expertise and a broad workflow automation solutions portfolio to help customers reduce their environmental footprint. Xerox's strong remanufacturing strategy and transparent reporting on environmental impacts further solidify its leadership in sustainable solutions.

### Continued progress towards net-zero 2040 goal

Xerox continues to make progress towards its ambitious net-zero by 2040 goal. In October 2024, it reported that it was on track to achieve 60% GHG emission reductions in Scopes 1 and 2 and a 35% reduction in Scope 3 from the 2016 baseline to meet its 2040 net-zero goal. In 2023, Xerox Scope 1 and 2 GHG emissions totalled 110,430 tCO<sub>2</sub>e, a 58.9% reduction from the 2016 baseline. In 2023, quantified Scope 3 emissions decreased by 8.5% compared to 2022.

### Maximising circularity across the product portfolio

Xerox has a long heritage in embedding circularity across the product lifecycle, since 1959. Its comprehensive approach to circularity follows a four-pillar approach: design, manufacturing, consumption, and extended life. Since 2009, Xerox has diverted more than 590,000 metric tonnes of returned equipment, parts, and supplies from landfill by remanufacturing, reusing, or recycling. Product families are designed with a high level of commonality to maximise the reuse of parts and support refurbishment and remanufacturing. Xerox remanufactured and refurbished devices, such as Xerox Certified Pre-Owned devices, which are reported to reduce carbon footprints by at least 90% during the manufacturing and raw material stage.

### Increasing usage of PCR materials

Xerox provides detailed data about the use of PCR materials across its product portfolio and aims for all new products to have a minimum of 25% PCR at launch. Its latest product launches have included devices with 10–52% PCR plastic content and toner cartridges with up to 39% reclaimed plastic. It reports that the average PCR plastic across its product portfolio is 9%, with up to 52% in some models. The average percentage of PCR plastic for products launched in 2023 was 36%, and all of them contained 25% or more. In addition, goals have been established to eliminate single-use plastics and increase recycled content in packaging to 30% or greater by 2028.

### Recycling programme growth

The Xerox Green World Alliance (GWA) is a collection and reuse/recycling programme for spent consumables. Today, Xerox reports that more than 35 countries currently participate in the Xerox GWA. This was a key part of Xerox achieving 99% of its landfill avoidance target for equipment and supplies in 2023. Xerox also launched a Right to Repair programme in compliance with right-to-repair regulations.

### Stringent energy efficiency standards

All Xerox devices include energy-saving features such as duplex, N-up printing, energy-saving modes, high-yield cartridges, and smart print drivers. Its innovative Earth Smart print driver features unified settings, allowing users to choose paper-saving features and providing them with paper-saving information. Xerox VersaLink, AltaLink, and PrimeLink products are EPEAT Gold certified, and 92% of its current portfolio is EPEAT registered at Silver or Gold level. Xerox reports that since 2010, all its eligible new products have achieved 100% ENERGY STAR certification. It has stringent standards around energy efficiency, with the current average energy consumption of its devices approximately 31% below ENERGY STAR limits.

Additionally, Xerox EA toners are designed to be energy efficient, with more prints per kilogram than traditional toner. Notably, this toner is also de-inkable, meaning it can be removed from the paper and the paper can be recycled.

### Advanced analytics expertise

Xerox has deep expertise in adopting a data-driven approach to its services offerings. Verified Carbon Neutrality Service is integrated into MPS Advanced Analytics and helps organisations identify how their printing practices align with their sustainability goals. The new version of MPS Advanced Analytics launched in 2024 included a carbon footprint assessment dashboard.

### AI innovation

Xerox is actively using AI to improve device performance and service quality. Its CareAR family of augmented reality and interactive 3D support services helps reduce service time and travel. Xerox estimates that over 850 metric tonnes of CO2e have been saved with remote services powered by AI and CareAR. Xerox also incorporates AI technology, such as a predictive AI dashboard that provides insights into consumables and device health, ALTO AI with RPA for predictive service and customer self-help provision, and within MPS for AI-enabled analytics to right-size fleets.

### Summary

Xerox is strongly positioned to support organisations in creating and maintaining sustainable workplaces. The company offers a growing range of products and services designed to reduce environmental impact. It has a clear strategy to enhance its products with new environmental features and expand its services to focus on digital workflow automation using AI-powered solutions such as RPA and intelligent document processing (IDP). The company has established a strong foundation for a data-driven approach to environmental sustainability for its customers and continues to excel in this area.

## Strengths and opportunities

### Strengths

- **Strongly embedded circularity approach.** Xerox has a well-established circularity programme incorporating design, manufacture, in-use, and end of life. Its devices are designed for commonality to facilitate their reuse in refurbished and remanufactured devices. Certified pre-owned Xerox devices reportedly have a 90% lower carbon footprint in the manufacturing and raw material phase, data that is useful in educating the growing market for remanufactured devices. Xerox reports clearly on the PCR content of its devices and has achieved notable increases.
- **Extensive product, solutions, and services portfolio.** Alongside a strong focus on improving the environmental performance of its product portfolio, Xerox offers one of the broadest solutions and services portfolios to help customers monitor and report on environmental impact.
- **Data-driven expertise.** Xerox draws on its impressive data analytics capability to offer evidence-backed solutions to customers that help them identify, track, and report on progress towards sustainability goals in the print environment. Its MPS Advanced Analytics solution now includes a carbon footprint assessment dashboard and Verified Carbon Neutrality Service enabling customers to identify their print carbon footprint, devise a reduction plan, and offset the remainder, providing progress updates through the analytics dashboard.
- **AI and augmented reality sustainability innovation.** Xerox is drawing on AI and AR to support sustainability initiatives across device servicing, performance, MPS fleet design, and digital workflow optimisation. AI solutions across the fleet and within the service portfolio are delivering not only benefits to Xerox but visible impacts to customers around consumables usage, predictive servicing, and user help.
- **Channel engagement and certification.** Xerox has improved its channel support and made completion of its partner courses mandatory for participation in its main sales and incentives programmes. It provides campaign support and pre-sales engagement information to partners to help them shape customer conversations around sustainable goals.

### Opportunities

- **Expand carbon calculators to encompass digital workflow services.** As the paper-digital transition matures and shifts away from devices and physical pages towards digital document flows, carbon calculators should be enhanced to encompass the impact of digital workflows. These can be optimised

for processing power and storage, and customers should be able to continuously improve these processes beyond the original shift from paper.

- **Amplify Xerox Certified devices strategy.** The market for remanufactured and refurbished devices is set to expand in the medium term, driven by regulation and economic conditions, meaning customers will start to seek high-performance, cost-effective remanufactured solutions. Competitors are also strengthening their strategy in this area so, with a strong offering already in place, Xerox can benefit from this shift by educating its market around the benefits of its remanufactured range.

## Sustainability strategy

Sustainability has been codified into Xerox's company values since it was founded. Its sustainability strategy is aligned with the United Nations SDGs. Sustainability goals are core to corporate strategy and associated with six areas: carbon footprint, clean air and water, the circular economy, paper, chemical management, and health and safety.

Xerox's approach is to use technology and services to improve customers' efficiency and effectiveness, often resulting in reduced waste, for example, of time, process steps, or paper, which, in turn, results in reduced environmental impact. This reflects the importance of a close relationship between business performance and sustainability within corporate strategy.

Alignment between corporate strategy and sustainability is supported by a Corporate Social Responsibility (CSR) Council chaired by Xerox's chief growth and disruption officer and comprising executive committee members (including the CEO). Four years ago, Xerox adopted discrete environmental, social, and governance (ESG) executive compensation metrics tied to sustainability, specifically climate. In 2023, the ESG metrics were extended to all bonus-eligible managers to drive sustainability goals. Climate-related risks are included in the Enterprise Risk Management programme.

Xerox is both meeting and tracking towards environmental targets that include net-zero emissions by 2040. Notably, it met the first GHG reduction target that was set in 2003 in 2016. A new goal was established to reduce Scope 1 and 2 emissions by an additional 25% by 2025. Having achieved that by the end of 2019, the renewed goal is to reduce Scope 1 and 2 emissions by at least 60% by 2030, against the 2016 baseline. During 2023, it was at 58% of the target, although this is subject to an external audit.

For Scope 3 emissions, it is tracking towards a 35% reduction by 2030 across the full value chain, compared to the 2016 baseline. It is looking to achieve a 25% reduction in energy use by 2025 and was almost halfway there (49%) in 2023.

Xerox is included in Corporate Knights' Global 100 Most Sustainable Corporations List and ranked 18<sup>th</sup> on Forbes' annual Net Zero Leaders list.

## Product sustainability and circularity

Products are created to contribute to the circular economy, with Xerox operating a four-pillar, closed-loop system covering design, manufacturing, consumption, and extended life and including global collection programmes for end-of-life management and remanufacturing.

### Lifecycle assessments

Capabilities to support sustainable practices are evident across the product portfolio. To help understand the complete environmental impact, lifecycle assessments are being carried out on all products. They have been completed for 79%, up from 74% last year and 63% the previous year. Lifecycle assessments reflect the commitment to the quantitative element of Xerox's sustainability strategy. Elsewhere, the EarthSmart print driver feature supports sustainable practices by encouraging responsible printing habits among end users, enabling the sustainable print option to be selected with a single click.



**Environmental certifications**

Products designed to achieve environmental performance certifications, primarily ENERGY STAR, EPEAT, and Blue Angel, contribute to carbon emissions reduction. The objective is for office products to be 25–30% below ENERGY STAR energy consumption limits. On average, Xerox says its products exceed that. The company reports that all newly launched and eligible products have achieved ENERGY STAR and/or EPEAT certification.

**Toner innovation**

Xerox Emulsion Aggregation (EA) advanced toner is an example of how R&D work is reducing the environmental impact of printing. The toners are energy efficient during manufacturing. During use, they reduce the energy investment per page compared to conventional toner because more prints can be made per pound/kilogram of EA toner. The toner is de-inkable so it can be removed from the paper and the paper can be recycled.

**Recycling and reuse**

Circularity is a significant part of how Xerox delivers on its sustainability strategy, so equipment and supplies are designed and manufactured to be reused/remanufactured/recycled to avoid landfill. Of the 100% landfill avoidance target for products, Xerox achieved 99% for equipment and supplies in 2023 and 96% for operations. New printers and multifunction printers use 10–52% PCR plastic content and up to 39% reclaimed plastic in toner cartridges. Xerox is working towards a minimum of 25% PCR plastic. The average was 36% for products launched in 2023.

Product families are designed with a high level of commonality to maximise reuse. This allows remanufactured parts to achieve ‘like-new’ performance specifications while reusing up to 95% of the machine components by weight without compromising quality or performance. Xerox recently launched a Right to Repair programme, making spare parts and service documentation available to customers at their request, in compliance with applicable right-to-repair laws and regulations.

The Xerox Green World Alliance take-back programme is designed to simplify the process of recycling spent consumables. In 2024, the toner cartridge remanufacturing part of the programme was extended to the AltaLink B81xx, VersaLink B70xx, and VersaLink B71xx families of devices. Beyond that, the programme is key to earning EPEAT registration for devices and identified as a critical contributor to achieving the 2040 net-zero GHGs goal.

**Remanufacturing**

A remanufacturing programme also contributes to the Net Zero action plan. Under the Xerox Certified Pre-Owned programme, used black-and-white printers and colour presses are reconditioned to meet the standards of newly manufactured Xerox products. They go through a nine-point quality process, with each system configured to customer order and adjusted to Xerox specifications.

**Supply chain**

Xerox has adopted the RBA Code of Conduct for its supplier code of conduct. Xerox’s Compliance Program is used alongside the code to instil social, environmental, and ethical governance practices. Risk assessments are carried out before suppliers can participate in the Xerox Compliance Program. During the course of business, if there are cases of non-conformance, suppliers are required to produce a comprehensive corrective action plan. The time frame for action is immediate to 180 days depending on the severity. For difficult areas such as reporting GHG emissions, Xerox provides guidance on calculating and reporting.

In support of its own Scope 3 and overall net-zero commitments, Xerox is working to increase engagement with suppliers. This includes sharing GHG emission data and requiring their commitment to carbon-neutral and/or net-zero goals.

Xerox purchasing agents operate under the socially responsible purchasing policy that gives preference to those suppliers and goods/services that meet voluntary standards such as ENERGY STAR, EPEAT, and ISO 14001 certification.

## Partnerships

- **UNFCCC's Race to Zero and SBTi's Business Ambition for 1.5°C campaigns.** Xerox has aligned its climate mitigation targets with the most ambitious aim of the Paris Agreement, and is also part of the DOE Better Climate Pledge, which sets carbon reduction targets and encourages solution sharing across major US companies.
- **UN SDGs, the Global Reporting Initiative (GRI), and SASB.** In 2023, Xerox applied to partner with the UN Global Compact.
- **Responsible Business Alliance (RBA) and Responsible Minerals Initiative (RMI).** Xerox has been a member of RBA since 2008 and adopted the RBA Code of Conduct as its supplier code of conduct.
- **Ecodesign for Sustainable Products Regulation.** Xerox is a member of EuroVAPrint and Digital Europe and participating in development of the Ecodesign for Sustainable Products Regulation, including the Digital Product Passport.
- **Task Force on Climate-related Financial Disclosure (TCFD).** Xerox has supported the TCFD framework since 2020.
- **European Remanufacturing Council.** Xerox joined the council in 2024.
- **PrintReleaf.** PrintReleaf administers reforestation and carbon offsetting services for Xerox MPS clients. Since partnering with PrintReleaf, Xerox, along with its clients, reports that it has reforested more than 475,000 trees across the world, from the Amazon to Madagascar, offsetting the use of more than 3.9 billion pages.
- **ENERGY STAR.** Xerox collaborated to roll out ENERGY STAR criteria for remanufactured products, referred to as revision 3.1. It also assisted in the development of ENERGY STAR 3.2 for professional imaging equipment.
- **EPEAT.** Xerox participates in the Electronic Product Environmental Assessment Tool (EPEAT), a voluntary standard for product ratings that measures the environmental impact of electronics products.
- **Global Electronics Council (GEC).** Xerox has worked with the GEC on the development of new EPEAT criteria.
- **Wildlife Habitat Council.** In 2023, Xerox partnered with the Wildlife Habitat Council to commit to over 200 volunteer hours. Activities included planting pollinator gardens to support native species at the Morrow Meadow in Rock Creek Park in the US and removing invasive species and clearing paths for improved land management with the London Wildlife Trust in the UK.

## Sustainability services

- **Xerox Reforestation and Carbon Offset Service.** This was one of the first vendor reforestation programmes allowing customers to balance paper consumption with tree-planting. It is run with PrintReleaf, which also offers Xerox Carbon Offset Services that allow customers to purchase carbon credits from certified carbon offset projects worldwide. Xerox Reforestation and Xerox Carbon Offset Services are automated by a direct feed of page volume between Xerox Services Manager and PrintReleaf. PrintReleaf then reverse-calculates how many trees were required and how much carbon was emitted for the paper consumed.
- **Xerox Managed Print Service (MPS).** The MPS offering helps customers lower energy use and emissions, reduce paper consumption and waste, and transform paper-based processes to digital. Analytics supports fleet optimisation, typically at the beginning of an MPS contract or after significant location/user changes. The environmental and cost impacts of current printer fleets can be shown compared to an optimised future state.
- **Carbon offset service.** As part of Xerox Managed Print Services, customers can use the Xerox Reforestation Service and Xerox Carbon Offset Service powered by PrintReleaf, which offsets the environmental impact of paper use through reforestation and carbon offset programmes. Xerox reports that it has 63,400 metric tonnes of CO<sub>2</sub>e, with sustainability analytics and dashboards informing more responsible print practices. Over 3.2 billion pages have been offset with PrintReleaf and global reforestation projects.
- **MPS Advanced Analytics.** After implementation of an MPS contract, MPS Advanced Analytics is used to monitor the fleet and provide insight for improved decision-making. One of the modules in MPS Advanced Analytics, Sustainability Analytics, helps organisations identify how their printing practices align with their sustainability goals. The metrics measure and show the organisation's MPS impact on paper, water, carbon dioxide, and energy. It attempts to limit the environmental impact of these metrics by avoiding paper usage. The data is provided at a location level to help identify areas for improvement and best practice. A new version of MPS Advanced Analytics was launched in 2024 that included carbon footprint assessment dashboards. This includes lifecycle carbon footprint assessment dashboards to help customers understand

both the emissions and avoidances related the device manufacturing, usage, service, and end-of-life recycling.

- **Verified Carbon Neutrality Service.** Available to MPS customers from September 2024, this MPS sustainability offering assesses customers' carbon footprint associated with office printing, provides support to develop a carbon reduction plan, and procures carbon credits to offset lifecycle carbon emissions. Customers can set carbon reduction targets and see progress against targets through new MPS Advanced Analytics dashboards. The carbon footprint methodology comprehends impacts across all product lifecycle stages, and the offering was developed in accordance with ISO 14068 carbon neutrality standard. Third-party verifications are conducted, with opinion statements provided to customers. Carbon credits are sourced from globally recognised registries. The Verified Carbon Neutrality Service will be available to Xerox MPS customers starting from September 2024.
- **MPS Renewal Advisor Tool.** Xerox has established a methodology that determines the remaining useful life of devices, based on factors such as service history, age, usage, and technology obsolescence. By assessing a fleet using this data, it can recommend retaining an optimised set of existing equipment. Xerox devices are designed to be upgraded with the latest security and digital transformation software, allowing them to remain relevant and useful for longer periods of time.
- **Innovation Advisor.** This tool allows Xerox and channel partners to work with clients to assess their level of technological innovation in managing work style changes. It is used to help define current MPS innovation maturity against five areas, one of which is Sustainability, and provide actionable insights.
- **Environmental Monitoring.** IT services through Xerox's Managed Services offerings can help organisations monitor and manage environmental factors to improve sustainability efforts. This can include deploying sensors, IoT devices, and data analytics platforms to collect real-time information on energy usage, air quality, water consumption, and other relevant environmental metrics. The data can be used to identify areas for improvement and optimise resource utilisation.

## Channel enablement

Xerox has expanded its channel support, providing a range of sustainability-specific training and content as part of its channel communications to help partners build their own sustainability knowledge so they can interact knowledgeably with customers.

- **Sustainability support content and workshops.** Xerox includes sustainability content such as regulations and Xerox compliance, technology roadmaps, and ecolabels in every major channel event. Past and future examples include the 2023 Worldwide Partner Summit in Miami, 2024 Production and Premier Partner events (EMEA, North America), and the 2025 Worldwide Partner Summit, where sustainability will be one of the major themes. One-day workshops aimed at partners' salesforces address how security, productivity, and sustainability work together to differentiate Xerox offerings. A total of 820 delegates representing 190 channel partners across Western Europe had attended this one-day workshop as of July 2024.
- **Training and accreditation.** The 'How Xerox can help customers achieve their sustainability goals' e-learning module is available in 6 languages and helps sales professionals increase their sustainability knowledge. It is mandatory learning for partners' salespeople assigned to Xerox Core Offerings and was made mandatory for the Velocity channel in 2024. It is also a pre-requisite to benefit from the Xerox Rewards platform. Additional optional learning modules on the circular economy, greenhouse gas emissions, and digital services are being developed to strengthen direct and accredited partners' salesforce expertise and credibility.
- **Campaign support.** A range of support activities are provided. Funds and assets are available to help partners nurture interest and generate demand based on their clients' sustainability goals. The Email Engine tool has pre-loaded campaign emails that channel partners can use to run co-branded demand generation campaigns. The Xerox Partner Portal has a sustainability landing page featuring key sustainability updates and resources to promote awareness and easy access.
- **MPS integration with PrintReleaf.** The MPS-API enables partners to link their MPS client's volume to PrintReleaf so they can provide automated reforestation and carbon offset services. Dashboards, notifications, and reporting provide visibility of usage and let the client set rules that help reduce waste and achieve other sustainability goals such as carbon reduction.
- **Pre-sales tools.** These include Innovation Advisor, Rapid Assessment Tool, MPS Advanced Analytics, Workflow mapping tool, Renewal Advisor, and Proposal Generator and feature environmental elements to embed sustainability as part of pre-sales engagements and to evidence value and outcomes.

## Recommendations

### Buyer recommendations

End-user organisations should focus on the following activities to understand and minimise the environmental impact of their print activities.

- **Assess the availability and transparency of suppliers' environmental data during procurement.** Quocirca's end-user Sustainability Trends study reveals that customers lack the environmental data they believe they require to report their carbon footprint accurately. It also shows that the lack of this data is a core inhibitor to their understanding of the environmental impact of their print activities. Buyers should look for energy efficiency data and third-party ecolabel certifications such as ENERGY STAR, EPEAT, and Blue Angel; data on the proportion of recycled materials in devices; and active promotion and easy use of energy-saving modes. Transparency in the net-zero progress of print suppliers and the channel, particularly in areas such as renewable energy usage, supply chain metrics, raw materials, and manufacturing impacts, should be factored into procurement processes because of their impact on net-zero commitments.
- **Undertake sustainability assessments.** To evaluate and optimise the print environment, sustainability assessments should be undertaken to examine current print infrastructure, usage analysis, and cost analysis for direct and indirect costs, along with an environmental impact evaluation to generate a custom sustainability report with actionable recommendations. Ensure assessments include device lifecycle assessments and carbon footprint data from suppliers because they will improve accuracy and help with regulatory compliance such as CSRD. The scope of sustainability assessments is expanding and starting to be able to assess the environmental impact of digital services and link print sustainability strategies to corporate strategies.
- **Encourage sustainable practices.** Cloud print services and MPS can encourage or enforce best practices and rules. Duplex, booklet, pull, or PIN printing can help minimise wasteful printing. Intelligent print management tools can ensure the most appropriate device is used for each print job by automatically routing large jobs to lower-cost, more energy-efficient devices and applying eco-settings to print jobs, such as lower-quality print for non-important jobs or full black-and-white printing for jobs that do not require colour. Look for devices with fast warm-up times, deep-sleep and toner-saving modes, low-temperature toners, and refillable ink bottles.
- **Embrace digital transformation.** Smart MFPs can provide document capture and management and enable automated document workflows. Activity logging for individual users and departments can be used to create audit logs and identify wasteful users or groups. Digital transformation minimises inefficient and costly paper use while enhancing productivity and security and maintaining audit trails. These digital capabilities will increasingly use AI and machine learning to optimise document processes. Ensure that devices chosen interoperate with software from ISVs that can then further enable digital workflows and enterprise application integrations.

### Supplier recommendations

Print vendors should prioritise collaboration, the availability of sustainability data, clear sustainable messaging, and market education to help customers lower their carbon footprints.

- **Collaborate and partner.** Demand is growing for decisive action and greater transparency in sustainability practices from print manufacturers. Suppliers have committed to net-zero goals but will not achieve transformative change by acting alone. A collaborative approach between print manufacturers, ISVs, and channel partners can accelerate sustainability progress and drive meaningful change. By leveraging the unique strengths of this ecosystem – spanning hardware, software, and services – the industry can develop best practices and reframe the sustainability narrative to focus on the intersection of print and digital technologies.

- **Provide channel partners with environmental data.** Sustainability is a priority for channel partners that are under pressure to track Scope 3 emissions and must evaluate their vendor partners' sustainability credentials. Channel partners also play a critical role in the success of print vendors' sustainability strategies, promoting sustainability practices throughout the product lifecycle and offering end-of-life product take-back and recycling programmes to reduce e-waste. Channel partners also face calls from customers to help them achieve their sustainability goals. Partners need clear environmental data from their suppliers, but Quocirca's channel research indicates a sustainability gap between their requirements and what is available. Priority action areas for suppliers include clear and detailed metrics on product lifecycle impact, help with saving customers energy across print fleets, and sustainability-focused deal support and information. There are also calls for data on recycled-materials usage, carbon footprint assessment services, and access to carbon offsetting.
- **Draw on sustainability assessments to inform sustainability decisions and educate the market.** Provide sustainability assessment services to uncover opportunities to modernise customers' print landscapes and move towards more expansive assessments that can assess digital services outside the conventional print landscape. Ensure the assessments also deliver sustainability roadmaps for customers to act on. Sustainability assessments should be used to educate the market about environmentally responsible printing practices. For example, the carbon footprint data of different devices can provide a tangible demonstration of the impact of printing decisions and the quantifiable benefits of sustainable print approaches, sparking the adoption of best practices.
- **Harness AI throughout the print lifecycle.** Suppliers must suitably harness AI to help themselves, partners, and customers optimise for sustainability – while being aware of the need to manage the environmental costs of running AI models themselves. AI can be used across the print value chain for design, production, logistics, workflow automation, waste and consumables management, predictive maintenance, and remote management, including augmented reality (AR)-assisted remote assist, to determine the best approach for end-of-life processes. AI co-pilots that adjust printer settings in real time can also improve the end-user experience and quality of outputs while reducing waste and providing a step towards digitisation.
- **Promote remanufactured and refurbished products as sustainable end-of-life options.** Refurbishment programmes retune, repair, and redistribute used products. Remanufactured products are rebuilt from individual components that could be used or repaired or new parts. They are often overlooked, but both contribute to sustainability by prolonging product lifetimes, reducing waste and carbon emissions, and supporting the circular economy

## About Quocirca

Quocirca is a global market insight and research firm specialising in the convergence of print and digital technologies in the future workplace.

Since 2006, Quocirca has played an influential role in advising clients on major shifts in the market. Our consulting and research are at the forefront of the rapidly evolving print services and solutions market, trusted by clients seeking new strategies to address disruptive technologies.

Quocirca has pioneered research in many emerging market areas. More than 10 years ago we were the first to analyse the competitive global market landscape for managed print services (MPS), followed by the first global competitive review of the print security market. More recently Quocirca reinforced its leading and unique approach in the market, publishing the first study looking at the smart, connected future of print in the digital workplace. The [Global Print 2025 study](#) provides unparalleled insight into the impact of digital disruption, from both an industry executive and end-user perspective.

For more information, visit [www.quocirca.com](http://www.quocirca.com).

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