

Océ

White paper

Environmental Sustainability



Why Green Business is Good Business





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Introduction:

Seeds of change

In 1962, environmental activist Rachel Carson published her landmark book, “Silent Spring.” At the time, she couldn’t have imagined that it would be another 45 years before her call for change and environmental stewardship would reach a tipping point. While the movement to go green is finally reaching critical mass, the green revolution began many years ago. In 1987, the World Commission on Environment and Development/the Brundtland Commission published “Our Common Future” for the United Nations, a report that outlined essential environmental strategies for achieving environmentally sustainable development.

The watershed moment came five years later in 1992, when former presidential candidate, environmentalist, and Nobel Peace Prize Winner, Al Gore, published his book “Earth in the Balance” followed by the Oscar-winning documentary “An Inconvenient Truth.” These works and others like them sounded a wake-up call—we ignore the dangers of climate change at our own risk.

The growing sustainability movement took hold, igniting awareness of the importance of sustainability as a business practice. Today, businesses everywhere are seeking out products and processes that enable them to minimize environmental impact and support a sustainable future.

Executive Summary

This white paper describes the increasing impact of environmental sustainability on large format printing. It seeks to define sustainability and covers some of the trends, strategies and actions businesses can take to ensure that they are working with sustainable technology providers. In this white paper, you’ll learn the “markers” to look for in a prospective print technology vendor.



Environmental sustainability: What is it, anyway?

Environmental sustainability centers around the notion that we have a responsibility to future generations to reduce our carbon footprint today. While a universal definition of sustainability has yet to be established, the World Commission on Environment and Development (the Brundtland Commission) defines it as *“development that meets the needs of the present without compromising the ability of future generations to meet their needs.”*

Sustainability is by nature, about the future. It is about business practices that balance the interests of people, the planet, and profitability. Fortunately, awareness is growing. Customers are challenging manufacturers to find better ways to protect and preserve resources. Environmentally conscious companies are initiating efforts to balance what is good for business with what is good for the planet. For many companies, sustainability has just recently become part of their corporate mission. For others, environmental sustainability is an opportunity to “green-wash” their products and brands. For a rare few, it has been a part of their DNA for years.

The Challenge:

Finding sustainable business partners

As sustainability becomes a criterion for working or not working with a potential vendor, the challenge many companies face is determining if that provider is truly sustainable. Whether you're in a reprographics shop or a corporate engineering/architectural print environment, it can be tough to separate reality from hyperbole. Fortunately, there are certain "markers" to look for when you're seeking sustainable business partners. Look for a history of sustainable practices, a commitment to recycling, efforts to give parts and products a "second life," energy efficient engineering, a forward-looking approach to waste and emissions handling, compliance with sustainability regulations, and any awards that recognize the company for environmentally responsible business practices.

Is your technology vendor a leader in environmental sustainability?

As more and more technology vendors jump on the green bandwagon, how do you determine if a vendor is environmentally sustainable? Whether you are evaluating an existing technology partner or a potential one, if environmental sustainability matters to you and your business, it pays to know the score. Considering a vendor? Compare the vendor with Océ in this checklist and see how each one stacks up.

Environmental Sustainability Checklist	Vendor A	Océ
A track record of environmental sustainability		✓
Products and components that can be recycled		✓
A remanufacturing process/program		✓
Recycling as part of the company's routine practice		✓
Products and components engineered for re-use		✓
A second life for products and parts		✓
Facilities for collection, transport and processing of products at the end of their useful lives		✓
Sustainable logistics processes		✓
Procedures that minimize energy consumption, emissions, and waste		✓
Programs to reduce packaging and use recycled materials in packages		✓
Use of green/renewable energy sources for heating, cooling, production		✓
Initiatives in place to reduce paper usage during testing		✓
Programs in place to reduce ozone, dust, and toner emissions		✓
Photoconductors & consumables that last longer to reduce waste		✓
Products engineered for low heat, noise, dust and ozone emissions		✓
Products that are ENERGY STAR, RoHS and ISO 14001 compliant		✓
Membership in the U.N. Global Compact		✓
Receipt of awards for its sustainable practices		✓



Looking to the past to see the future

Ironically, while sustainability is about the future, one of the best ways to determine if a company is truly sustainable is to look at its history. Is sustainability a fashionable mantle that the company has suddenly donned? Or has sustainability been part of its DNA for years? Look for a company that can demonstrate sustainable business practices—before it was fashionable to do so. Key indicators? Consider companies that have taken steps to reduce the use of toxic materials, that designs sustainability into new products, and reduces, recycles, and re-uses materials. Ask a prospective provider if they have sustainable processes for handling waste and emissions and transporting materials—and ask them to show you how sustainability is being incorporated into business models and strategic planning cycles—evidence that the company is continuing to refine its focus on a sustainable future.

Reuse and recycling ...

While it isn't the only component of sustainability, recycling is an essential pillar of a wider program of sustainable business practices. While many companies continue to send used machines to landfills (because their focus is selling equipment today), truly sustainable companies create products with components that can be recycled. They support recycling in their manufacturing and routine business practices, along with a remanufacturing process. Recovering parts and materials for re-use or recycling reduces consumption of new materials and parts. It also eliminates the waste inherent in the manufacture of new materials.

>>Taking action ...

Looking for a vendor committed to reuse and recycling?

Ask them these questions...

- Do you have a remanufacturing policy?
- Are products and component materials engineered to be re-used in new systems?
- How are machines handled at the end of their economic lives?
- Are components reclaimed, recycled, or remanufactured—or are they sent to a landfill?
- Do components stay in play—or are they discarded as waste?

Giving products a second life

Océ has emerged as a leader in re-use and recovery by organizing appropriate collection, transport and processing facilities for products that have reached the end of their useful lives. Many Océ products are given a second or third life in the company's Asset Recovery facilities and placed on the market again to minimize waste. In addition, many Océ products are designed with a family approach—they are modular and upgradeable, so they can be upgraded to higher levels of performance rather than discarded or replaced. For example, Océ TDS and Océ TCS families of products are engineered for scalability, which in a sense, takes the notion of recycling and re-use to the next level.

Environmental Stewardship

Environmental stewardship ... it's about how a vendor does business ...

Of course, there's more to sustainability than recycling. Increasingly, it's a matter of how a company does business. When it comes to production printing and document management hardware, you want a company with a record of implementing sustainable business practices. Does the company meet stringent standards for quality and environmental responsibility through procedures that minimize energy consumption, emissions, and waste? What about logistics—moving parts or equipment from Point A to Point B? Has the company adapted its processes to support a sustainable environmental program? Is it powering truck fleets with alternative fuels like biodiesel? Is it using carbon-neutral biomass fuels to power its production plants? What about emissions? Is it working to reduce or eliminate them?

Case in point, Océ optimizes its manufacturing processes in many ways. It does not produce any toxic waste, does not use CFCs, halons, or substances that deplete the ozone layer in manufacturing. Océ has reduced paper consumption during testing by 90 percent since 1995 and has set up a dedicated asset recovery department that organizes the flow of returned goods and maximizes their re-use value. What's more, as overpackaging becomes an increasing concern, Océ keeps packaging to an absolute minimum and uses recyclable materials whenever possible. Re-usable pallets and containers are delivered to Océ through a carefully constructed network that minimizes handling, pallets and packaging.

The use of energy is another important environmental indicator considering the greenhouse gas emissions caused by burning natural gas and other fuels. Sustainable companies use green or renewable energy sources for heating, cooling, and production, and/or are studying ways to reduce energy consumption and improve efficiency. As for the product you're considering—if you want to determine if it's energy-efficient, look for the familiar ENERGY STAR emblem. ENERGY STAR is a US government-backed program created by the EPA to help businesses and individuals protect the environment through superior energy efficiency. Any product that bears the ENERGY STAR logo has met stringent guidelines for energy efficiency. Not every company will be able to respond in the affirmative on all counts—but look for an overarching pattern of eco-friendly business practices.

Waste handling and emissions

Waste handling and emissions are top-of-mind concerns for sustainability. Waste handling comes in three basic flavors—hazardous chemicals, industrial waste and domestic waste. Most industrial waste can be recycled, so look for a company that recycles and re-uses these components—and designs photoconductors and consumables to last longer. Meanwhile, reducing ozone, dust, and toner emissions should be a key initiative for any eco-responsible company.

Toner Emissions

The issue of particle emissions from toner-based products or laser printers is one that has captured the attention of environmentally conscious companies around the world. Information has been issued indicating that laser printers produce dust emissions and ultra-fine particles (UFP).

In response, Océ states, “During the design and manufacturing process, Océ always pays a great deal of attention to product safety. Océ adheres to strict technical standards that are constantly updated to include the latest developments in materials, substances, and ergonomics. These standards take into account current legislation, regulations and industry standards and are often much stricter than official regulations. Before a product is released to the market, independent institutes such as TÜV and Cetecom in Germany and Underwriter Laboratories (UL) in the United States test Océ equipment.”

As a result, Océ products:

- Comply with relevant safety laws and standards
- Do not expose users to any known health risks when operated correctly
- Have been tested by independent expert institutes
- Are accompanied by adequate health, safety and environmental information including Product Safety Data Sheets and Material Safety Data Sheets on consumables and supplies.



Sustainability begins with R&D

Say you've determined that a potential business partner employs environmentally sustainable business practices, encourages recycling, and offers products that are energy efficient. What about the future? Truly sustainable companies design products based on an awareness of their environmental impact from the earliest stages of product development.

For example, Océ actively designs sustainability right into its products. The popular Océ TDS700, Océ TDS600, Océ TDS450, and Océ TDS320 wide format print engines are based on the unique patented Océ Eco Design technology. They distinguish themselves from conventional technologies with their extremely low energy consumption, lower ozone and heat emissions and quiet operation. These products do not need any warm-up time enabling them to start printing immediately. After printing, the printer goes into stand-by mode drastically reducing energy usage. An additional advantage to the low energy usage is the production of less heat. Not only do these products have a low environmental impact, they save money in energy costs compared to conventional printing technologies. There's also no need to worry about ozone emissions, which can be responsible for causing headaches, sore throats or respiratory problems. The average maximum ozone emission of Océ Eco Design printers is between 0.001 and 0.005 ppm. This is about one-tenth the ozone emissions of conventional printing technologies.

Compliance with standards

Compliance with regulations and standards also plays a role in many technology companies' strategies. Most notable is the Restriction of Hazardous Substances Directive (RoHS), which became effective in Europe in July of 2006 and in California in January 2007. RoHS places limits on the use of six hazardous materials (lead, cadmium, mercury, hexavalent chromium, polybrominated biphenyl (PBB) and polybrominated diphenyl ether [PBDE] flame-retardants) in new electrical and electronic equipment.

The UN Global Compact encourages a precautionary approach to environmental challenges, initiatives that promote greater environmental responsibility and development of environmentally friendly technologies through research, innovation, and self-regulation.

ISO 14001 compliance indicates that a company has met one of the world's most respected standards for environmental responsibility. Compliance with any of these directives indicates a commitment to sound environmental practices.

Supporting a tradition of sustainability

Océ is committed to the certification of all operating companies and the group as a whole to meet all relevant standards. The company sets and meets rigorous goals for protecting the environment in the design, development, and manufacture of its products. This commitment has earned its products awards, certifications, and recognition in the United States and around the world. As our record demonstrates, we believe in environmental stewardship. From the way we use and re-use components, energy and water consumption to our eco-friendly approach to waste handling and emissions, Océ remains committed to reducing ozone, dust, and toner emissions.

- In 1927 Océ invented an ammonia-free, diazo copying process for technical drawings
- In 1958 Océ launched a new production process using a paper coating that reduced solvents by 80 percent
- Océ established Europe's first award for research in the field of environmental protection in 1975
- In 1983, Océ installed paper-coating machines for both new and renewed processes that enabled up to 97% of solvents used to be recovered.
- In 1997 the Océ manufacturing site in Venlo received ISO-14001 certification for its environmental management system
- Océ products have met the criteria of the United Nations Global compact since 2002
- Océ is proud to be one of the first companies to be RoHS compliant
- Océ has been included in the Dow Jones Sustainability Index since 2004
- In 2006, Océ received FedEx Kinko's Best in Sustainability/Environmental performance award at their annual supplier summit
- Océ is an ENERGY STAR partner, committed to products that meet ENERGY STAR guidelines

Beyond the Ordinary

At Océ, green business is good business

Increased sensitivity to environmental concerns is a growing priority among the world's leading companies. In an increasingly global economy, no company can afford to ignore the environmental impact of business, especially when efficient environmental management can have a positive impact on the bottom line. And as more customers demand that business partners prove they are sustainable, green business is becoming good business.

Long before the idea of environmental care gained the importance it has today, forward-thinking companies were already putting it into practice. For companies like Océ, sustainability has been a defining philosophy—as far back as 1958 when the company launched a new production process using a paper coating that reduced the use of solvents by 80 percent. The company has continued to expand its sustainability focus ever since, finding innovative ways to use and re-use components, optimize energy and water consumption and reduce waste and ozone, dust and toner emissions.

Sustainability continues to be a cornerstone of the company's approach to business. The sustainability focal points for the Océ wide format printing systems are:

- Minimize energy consumption per print
- Maximize reuse of materials and minimize landfill
- Minimize emissions of ozone, dust, toner and noise
- Minimize wasted and unnecessary prints

Summary:

Océ conducts business activities in a socially responsible manner to minimize health, safety and environmental risks. Being one of the first companies to be RoHS compliant, subscribing to the 2002 UN Global Compact Declaration and achieving listing in the Dow Jones Sustainability Index are just a few ways Océ goes beyond the minimum requirements to achieve our goals. As more companies learn to balance what's good for business with what's good for the planet and seek out partnerships with companies that are green—many more businesses will see the advantages of taking the lead as environmental stewards and agents of change.



**Printing for
Professionals**

Océ helps the people who make our world. Companies everywhere use Océ technical documentation systems in manufacturing, architecture, engineering and construction. Each week, high-speed Océ printing systems produce millions of transaction documents such as bank statements and utility bills. And in offices around the world, people use Océ professional document systems to keep the wheels of business and government turning. Océ is also at work in publishing on demand, newspaper production and wide format color for spectacular display graphics. It all helps our professional customers go 'Beyond the Ordinary' in printing and document management.

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