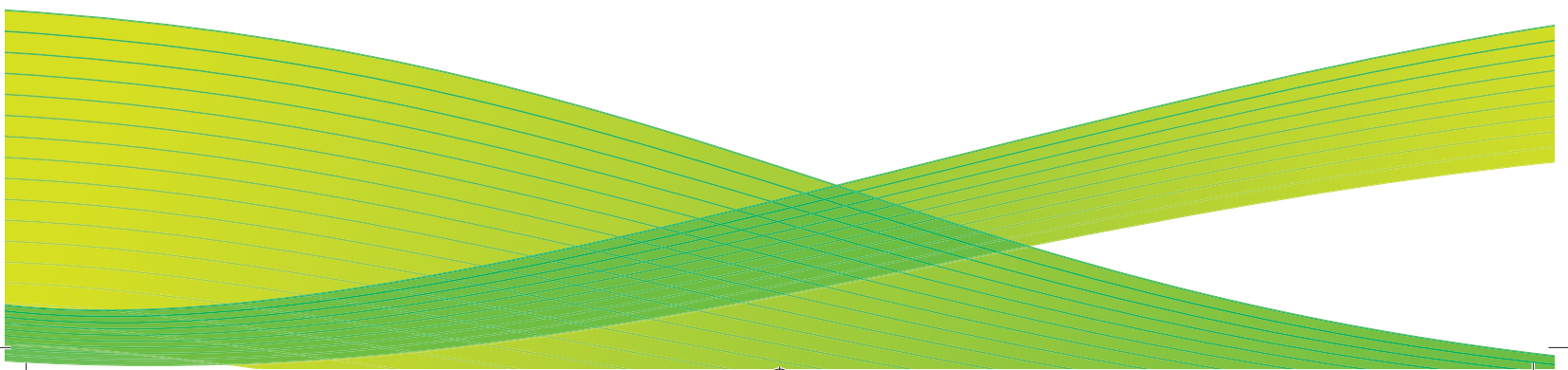


# White Paper

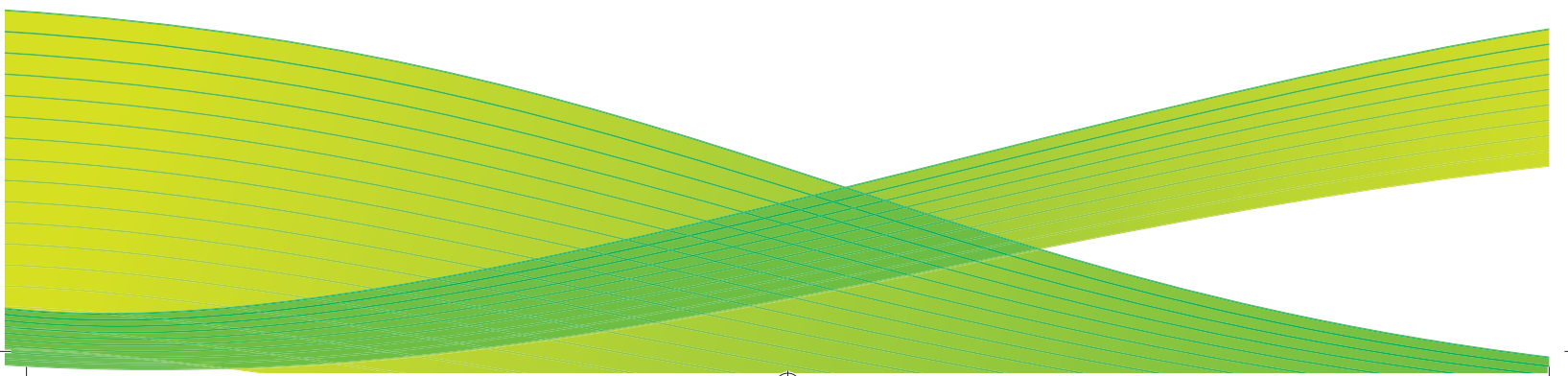
## Smarter Ways to Green: How to Make Sustainability Succeed in Your Business.

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## White Paper

# Smarter Ways to Green: How to Make Sustainability Succeed in Your Business.

### The Ultimate Reality Check:

Recognising the profound significance of global warming and climate change.

**“Over the last 50 years, human activity has altered ecosystems at a faster rate and on a larger scale than at any time in human history.”**

**-U.N. Millennium Ecosystem Assessment**

In 2007, the Nobel Peace Prize was awarded to the United Nation’s Intergovernmental Panel on Climate Change (IPCC) for its exhaustive scientific research on global warming and climate change. The organisation shared the award with former U.S. Vice President Al Gore, who produced the Oscar-winning documentary, *An Inconvenient Truth*.

A month after receiving the award, the IPCC published the final version of its breakthrough report, which was based on six years of research involving 2,500 scientists from 130 countries around the globe.

The report points out that atmospheric concentration of greenhouse gases has increased dramatically as the result of human activities, which range from the wholesale destruction of rain forests to the burning of fossil fuels in our cars and manufacturing plants.

One result of global warming is the prospect of catastrophic climate change that can lead to floods, droughts, desertification, an increase in extreme weather events, dramatic changes in precipitation and agricultural yields, forced migrations and political instability.

These potential problems are now discussed almost daily in scientific journals and newspapers around the world. At the same time, alarming environmental trends and events are already being documented.

- Ground levels have dropped 15 feet in parts of Alaska due to the melting of the permafrost.
- The snowcap that has covered Mount Kilimanjaro for 11,000 years has all but disappeared.
- The surface area of the world’s glaciers has decreased by 50 percent since the beginning of the 20th century.
- Spring butterflies now appear six days earlier in England than they did only 20 years ago.

“Things that normally happen in geologic time are happening during the span of a human lifetime,” Daniel Fagre, a scientist with the U.S. Geological Survey’s Global Change Research Program, told *National Geographic* magazine a few years ago.

As a result, the image of a helpless polar bear stuck on a melting ice floe has become an emotionally compelling symbol of the threat of unabated global warming to every living thing on earth.

## Global warming isn’t the only environmental problem.

The way we live our lives has also had a harmful impact on air and water quality and the natural forests that play such an important role in absorbing carbon dioxide.

In China, industrial pollution has had a damaging impact on rivers and lakes. As a result, current estimates say that as many as 300 million people in the world’s most populous country may not have access to safe drinking water. Around the globe, the World Resources Institute estimates that as many as 1 billion people do not have safe, clean water to drink.

New studies from the developed world indicate that long-term exposure to air pollution is increasing rates of heart disease and premature deaths.

Due to slash-and-burn agriculture and other factors, the world’s forests are being depleted, exacerbating the problem of global warming. In Indonesia and Central Africa, natural forests are even being cut down to grow crops that will be used in the development of biofuels. All told, the World Wildlife Fund (WWF) estimates that the planet loses nearly 36 million acres of natural forest a year.

In addition, streams carrying nitrogen and phosphorus from farm fields in major agricultural areas are having a serious impact on coastal waters, creating “dead zones” in our oceans that cannot support fish or people. And an increasing number of countries in Africa, Asia and Latin America are experiencing critical water shortages.

In Australia, we’re facing a severe, multi-year drought that has forced countless farmers into bankruptcy and placed pressure on state and federal governments to invest in sustainable water management strategies for Australia’s major cities.

In the 2008 budgets, the Australian Federal Government and the New South Wales State governments have planned multi million dollar investments in water resources. In effect, this means, buying water back from farmers to secure so called ‘ecological water flows’ for one of Australia’s major river systems, the Murray-Darling.

Whilst we witness the effects of climate change on our water resources daily, Australians need to be aware that they have a significant role to play in reducing green house gas emissions. Many are surprised to know Australia is a big green house gas polluter. In fact Australians are the highest per-capita greenhouse gas polluters in the developed world (this is UN IPCC data quoted by WWF). Australia’s total emissions are similar in magnitude to those of the

United Kingdom and France, yet those countries have much larger populations. This is due to the fact that we generate electricity largely by burning high-emission coal and use energy inefficiently.

The internationally renowned conservationist, Professor Tim Flannery, believes change is feasible. Demand management of electricity can actually save costs and the opportunities to create a thriving renewable energy industry in Australia are great. “The fixes can be simple and they’re not going to cost anyone a great deal” Professor Flannery commented, “We’re simply going to have to start investing in new energy infrastructure. We are richer in alternative energy than many other countries. In fact I’d say we’re almost uniquely blessed (as) “the Middle East of renewable sources of energy”.

### **The worldwide problems will only increase as developing nations develop.**

Around the world today, 4 billion people fight to survive on the equivalent of about \$5 Australian dollars per day. But clearly, leaders in the developing world hope for a time when their people will rise to the living standards of the industrialised world.

But lets consider the implications of development on a massive scale. If 6 billion people suddenly have the lifestyle of the developed world , our planet will surely be doomed. In fact, according to the United Nations Environmental Program (UNEP), it would take three Planet Earths to support everyone in a consumption-oriented Western lifestyle. At the UN’s summit on the world food crisis, June 2008, the Secretary General, Bang Ki-Moon announced, “Food production needs to rise by 50 per cent by the year 2030 to meet the rising demand”.

And remember, the population of the world is estimated to exceed 9 billion by the year 2050, which will only magnify all the environmental challenges we face today.

### **Sustainability: The new global moral imperative.**

Given the wealth of evidence, there is only one rational way to respond to this looming crisis: We must adopt a sustainable global lifestyle ... clean up our air and waters ... and minimise our overall impact on the environment.

In other words, we must bring our human needs back into balance with the needs of the planet. We must also redefine the very concept of economic growth so that it no longer results in resource

depletion and environmental degradation. In a damaged world, sustainability and sustainable development are no longer ideals. They are vital necessities for the present ... and the future.

“Sustainable development can reduce vulnerability to climate change,” says the IPCC’s Summary for Policymakers (2007). “Many impacts can be avoided, reduced or delayed by mitigation.”

**“Sustainable development can reduce vulnerability to climate change ... Many impacts can be avoided, reduced or delayed by mitigation.” -The Intergovernmental Panel on Climate Change Fourth Assessment (2007).**

### **Clear signs that the light is turning green.**

Given the urgency of the situation, sustainability—which essentially is the ability to meet our own needs without adversely affecting future generations—has become the watchword of our age. And it has inspired a tidal wave of exciting green developments that ranges from recycling, renewable energy and hybrid cars to the redesign of products, packaging, factories and manufacturing processes. Intergovernmental efforts, public-private partnerships and market incentives to reduce greenhouse gas emissions are also an essential part of the equation. In all of these efforts, businesses play a vital, transformative role.

### **Perceptual barriers to business progress.**

Despite the incontrovertible importance of sustainability, many organisations today still struggle to justify a meaningful investment in green initiatives, because they perceive the efforts will generate added costs, not concrete business benefits.

This misperception presents a major problem for global progress. Because it’s impossible to launch and maintain a substantive green improvement program in a profit-oriented organisational structure unless it delivers a definable ROI.

This quandary leads some companies to engage in green initiatives that lack real substance. Since these efforts run the risk of being labeled greenwashing by watchdog environmental groups, the investment can do more harm than good, considering the potential for a public relations backlash and damage to the brand.

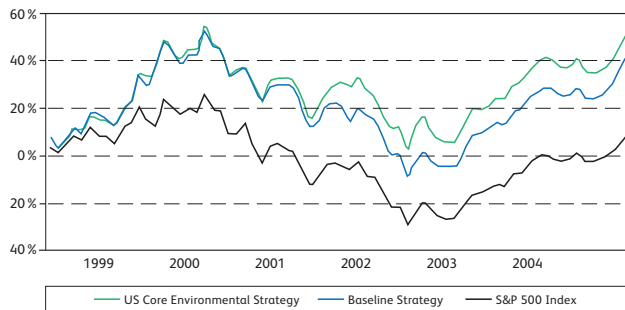
## Proving the value of sustainability with “smarter ways to green.”

There is a pragmatic solution to this problem, however. Case studies from virtually every industry show that it’s possible for businesses today to develop green initiatives that will make a quantifiable contribution to both the environment and the bottom line.

What’s more, these efforts often deliver other qualitative benefits, including improvements in employee morale, customer loyalty and brand image, to name a few. All of these valuable business results are definitely within reach when you take a disciplined, pragmatic and committed approach to the development and implementation of a smart sustainable strategy.

It’s all part of the effort to make sustainability succeed in the real-world context of your business. It’s all part of finding “smarter ways to green.” In addition, there is a growing body of evidence that suggests that companies with a proven commitment to the environment tend to outperform other companies in terms of their stock value.

A few years ago, for example, State Street Global Advisors and Innovest Strategic Value Advisors published a groundbreaking study that found a positive correlation between green policies and financial outperformance (see below). The green line tracks the performance of companies that make environmental issues a core part of their business strategy. The study corroborated earlier research on the topic.



Even a conservative interpretation of this correlation suggests two things:

- Well-managed companies today are concerned about sustainability.
- A sincere commitment to environmental progress is good for business.

The importance of this connection is also reflected in the increasing attention that investors and asset managers are giving to companies included in the Dow Jones Sustainability Indexes. These indexes—which were established in 1999—monitor the performances of companies that are playing a leading role in the global sustainability movement.

Consider it further proof that smart sustainability initiatives are now being viewed as a valuable asset to a company’s present ... and future.

**“We have a basic notion that unless we find a solution for environmental problems, we will not achieve sustainable growth in the coming years.”**

- Hiroyuki Watanabe, Managing Director, Toyota

## Fuji Xerox commitment to sustainability

Climate change has put environmental sustainability high on both corporate and government agendas. The Fuji Xerox focus on customers, quality and environmental performance means that we have been addressing some key principles of corporate sustainability for some time. Environmental sustainability is well-embedded in our business, thanks to a long-standing commitment to environmentally responsible product design, an extended producer responsibility program that is second to none, and ISO-certified environmental site management.

‘By embracing extended producer responsibility and through its approach to remanufacturing of equipment and parts, Fuji Xerox has demonstrated a commitment to environmental responsibility and efficiency. Fuji Xerox Australia can be justifiably proud of its efforts to become a ‘sustainable corporation’ by grasping the strategic business value and opportunities inherent in sustainability challenges. Its leadership in aspects of corporate sustainability provides a benchmark for other organisations.’

Dexter Dunphy, Distinguished Professor, School of Management, University of Technology, Sydney.

Fuji Xerox Australia is known for its Eco Manufacturing Centre, a state-of-the-art engineering facility for the remanufacture of parts and sub-assemblies removed from equipment during service. Since it opened in 2000, the Centre has remanufactured close to 250,000 parts each year. This not only avoids waste to landfill, it also saves the company significant costs. These local efforts are mirrored by our parent company, which has established an Asia Pacific Integrated Recycling Centre, capable of achieving 99% resource recovery from end-of-life equipment returned by operating

companies. By incorporating policies for future remanufacturing and recycling into our product design process since 1995, the Fuji Xerox Group have avoided almost 100,000 tons of carbon emissions and reduced the requirements for raw materials by 17,400 tons, as of October 2007.

### Green breakthroughs prove that progress is possible.

The example cited above proves that it's possible to develop green innovations that help the environment and the balance sheet. And there are countless examples from virtually every other industry.

Manufacturers, service sector companies, professional service firms, retailers, Internet and telecommunications companies ... they are all finding smart ways to make sustainability work in their businesses. Here are just a few examples:

- The Six Green Star-rated City of Melbourne building known as 'CH2' which opened in August 2006 aims to reduce electricity consumption by 82 per cent, reduce gas consumption by 87 per cent, reduce emissions by 87 per cent and reduce mains water supply by 72 per cent. On these estimates it was projected that CH2 would pay for its sustainability features, worth \$11.3 million, in a decade.

An independent report evaluating the post-occupancy results of the first year of full operations of CH2, has found it will pay for its sustainability features in seven years – three years ahead of schedule. Lord Mayor John So said whilst CH2 had acquired 18 awards and vast international accolades and interest since it opened in October 2006, the results confirmed the assumptions made in the business case for CH2 – and in fact exceeded them. Interestingly the assessment also states that staff productivity has improved by 10.9% and this results in a cost saving of over two million dollars.

- 3M's Pollution Prevention Pays (3P) program has helped eliminate more than 900 million kilograms of pollutants from the environment. When it was launched in 1970, it achieved \$1 billion in savings the very first year.
- The Xerox manufacturing plant for advanced EA Toner in Webster, New York, includes more than 3,000 sensors that maximise energy efficiency by optimising heating, cooling and lighting.

### Smarter Ways to Green: Seven keys to sustainability success in your business.

But how do you develop a green initiative that will pay off for your business?

Based on our long history of green innovations at Xerox—a history that dates back more than a quarter century and encompasses every aspect of our business—here are some of the keys to success:

#### 1. Explore the entire value chain of your business.

Don't narrow your focus to one functional area. Open your mind to improvements and innovations that could reduce environmental impacts throughout your value chain, from beginning to end. When you take time to consider all of the working components of your value chain, you will dramatically expand the playing field for smart green initiatives.

#### 2. Use disciplined, quantitative analysis to identify your best opportunities.

Analytical tools and methodologies developed for proven quality management programs like Lean Six Sigma can help you identify problems and opportunities that will produce the biggest benefits in the shortest time frame.

Pareto charts, for example, help focus attention on the small number of sources that cause the biggest problems. The chart is a tool based on the famous Pareto Principle—best known as the "80-20 rule"—which was named for Vilfredo Pareto, the Italian economist who noted that 80 percent of the income in Italy went to 20 percent of the population. For more information on the use of Pareto charts, visit <http://www.isixsigma.com/tt/pareto>.

A number of organisations—including Fuji Xerox—have also developed environmental calculators to help businesses and consumers assess their environmental impact on a number of key factors, including paper use and carbon savings. These calculators provide information that can facilitate the development of smart green projects.

#### 3. Make sure the proposed improvement or innovation will deliver both economic and environmental benefits.

In today's highly competitive business environment, quantifiable benefits are an essential requirement for any "smart way to green." So it's important to assess the win-win potential of any project before you begin active development.

In a world where the effective utilization of resources is of paramount importance, there's simply no substitute for a disciplined analysis of costs and benefits prior to project development and launch.

#### 4. Look for easy wins that will deliver a fast payback.

You may find ways to make a bigger impact down the road. But in the beginning, you need to win broad-based support for your efforts from senior leaders and other stakeholders.

Projects that produce a quick, concrete ROI will prove the value of sustainability inside your company and set the stage for more ambitious undertakings in the future.

Here are a few suggestions for quick easy wins that every company can take advantage of today.

- Cut paper use in half through double-sided printing and copying.
- Replace hard-to-manage desktop printers, copiers and scanners with one efficient multifunction system that can reduce energy use by 50 percent.
- Use the scan to e-mail capabilities of modern multifunction systems to reduce the need to print and mail hard-copy documents.
- Use recycled paper or sustainable stocks like Fuji Xerox Green Wrap. Look for papers with certification from the Forest Stewardship Council. These papers are made from trees harvested in a way that protects endangered forests.
- Use Lean Six Sigma tools and methodologies to analyse your enterprise wide document infrastructure and identify ways to optimise it in terms of environmental sustainability, operating costs and efficiency.
- Outsource document management to experts who will help you improve quality, lower costs and reduce energy and paper use by taking advantage of industry best practices and the latest technology.

All of these efforts can produce the quick easy wins that will advance the cause of sustainability in your organisation.

#### 5. Think “partnerships.”

To maximise your opportunity for success, you need to team up with suppliers, customers, outsourcing providers and other partners.

At Fuji Xerox, for example, we work with all of the partners in our value chain to reduce waste, energy use, greenhouse gases and our overall environmental impact. It's all part of our effort to achieve one of our long-standing company goals:

We want to operate waste-free manufacturing facilities that produce waste-free products that help our customers create waste-free work environments.

Partnerships with leading environmental organisations can also be beneficial in advancing the cause of sustainability. After all, these organisations often have information and best practices that will help you reduce your environmental impact.

They can also encourage your suppliers to adopt green policies and processes. At a time in human history when global warming and climate change pose a threat to everyone, partnerships inside and outside the business world are essential for success—for a simple reason: They help us achieve much more ambitious goals than we ever could by working on our own.

When looking to partner with an organisation you may consider evaluating their sustainability credentials from some of the common pillars of sustainable business practice. Does the partner organisation have policies or initiatives in the following areas?

1. Sustainable paper credentials
2. Paper efficient features
3. Energy efficient features
4. Design for the environment in product manufacture
5. Sustainable supply chain management
6. End of life product take back and responsible disposal
7. Cartridge recycling
8. ISO 14001 certification and an externally assured sustainability report
9. Good Environmental Choice Australia certification
10. Corporate commitment

#### 6. Be innovative.

The necessity to reinvent our global lifestyle is driving innovation throughout the world. Renewable energy ... green chemistry, design and construction ... green manufacturing and recycling processes ... they are all examples of what may some day be viewed as one of the most creative engineering periods in history.

In some cases, these innovations represent dramatic breakthroughs. The rapid commercialisation of wind farms, geothermal energy sources and solar fields is an obvious example.

In other cases, green goals are inspiring evolutionary improvements in the way we approach virtually every business process, from the design of efficient factories and packaging and the development of new products to the optimisation of document processes and the creative use of by-products and waste.

No question about it. Innovation is a vital cog in the big sustainability machine. So when you begin working on green initiatives, think outside the box. Take a fresh look at the way you operate throughout your value chain. And look for opportunities to innovate. It could lead to breakthrough results—for the environment and your business.

### **7. Win people over with your passion, energy and inspiring determination.**

There's one more key to success that needs to be included on this list. It's the importance of bringing spirit, enthusiasm and determination to the task of leading any green initiative.

It's easy to do that when you consider what's at stake. Smart green initiatives can help you reduce costs, improve your efficiency, drive innovation, build employee morale, and enhance your brand image—all of which add tremendous value to the bottom line.

They also make a valuable contribution to the future of the world. After all, scientific projections show that efforts to stabilise carbon dioxide levels in the atmosphere will significantly slow the pace of global warming and help prevent environmental catastrophes.

In a very real sense, it's a privilege to be involved in work of such far-reaching importance. If you let that sense of mission inspire you, you will bring a deep sense of commitment and determination to your efforts, which will inspire those around you. That, in turn, will help you become even more effective as a champion of smart green sustainability in your organisation.

### **We can't change the past. But we can change the future.**

The issues we face are very serious. But this is the best time in history to be involved in the global sustainability movement.

It gives us the opportunity to make a real difference for our companies, our customers, our communities and the world around us. What's not to like about that?

But the key to success in the demanding, cost-conscious world of business is to make sustainability sustainable by developing and implementing effective green practices that deliver a clear ROI in terms of both the planet and the bottom line.

This goal presents a real challenge to every organisation. But it can be achieved by finding "smarter ways to green."

### **About the Authors**

#### **Patricia Calkins**

Patricia A. Calkins is the vice president of Environment, Health and Safety for Xerox Corporation. She is responsible for developing and implementing sustainability policies and strategies throughout Xerox that help save hundreds of millions of dollars annually for the company worldwide. She is dedicated to strengthening Xerox's position as a pioneer in sustainability and is committed to smart environmental management that demonstrates that doing what's right for the environment is not a cost of doing business, but an opportunity to benefit the world in which we work and live.

#### **Amanda Keogh**

Amanda Keogh is the Manager of Environment and Sustainability for Fuji Xerox Australia. Having spent a number of years in research on corporate sustainability and gaining a masters degree in sustainable development, she has a well-informed view of best practice in this area. Her responsibility includes further embedding sustainability in the business planning process and designing programs to improve the organisation's sustainability performance.

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Visit [www.fujixerox.com.au/sustainability](http://www.fujixerox.com.au/sustainability) to download Fuji Xerox Australia's sustainability report or find tools and documents to assist your business in building sustainable business practices.

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