

2012

CEO PERSPECTIVES

THE BUSINESS IMPERATIVE

FRAMEWORK FOR ACTION

COMPANY COMMITMENTS

TOOLS AND RESOURCES

# *The new* BUSINESS IMPERATIVE: VALUING NATURAL CAPITAL

## FEATURING 24 BEST PRACTICE COMMITMENTS BY:





## CEO *perspectives*

**“NURTURING A GREENER WORLD THROUGH SUSTAINABLE INNOVATION AND DEVELOPMENT SAVES MONEY, CREATES VALUE AND HELPS DEVELOP NEW MARKETS.”**

Ursula Burns, *Chairman & CEO, Xerox*

“Companies that value and integrate biodiversity and ecosystem services into their strategic plans are best positioned for the future.”

Andrew Liveris, *Chairman & CEO, The Dow Chemical Company*

“We are in this for the long haul, in keeping with our responsibility to help preserve the environment around us for future generations.”

Andy Taylor, *Chairman & CEO, Enterprise Holdings*

**“RESTORING FOREST ECOSYSTEMS IS AN IMPORTANT PART OF DISNEY’S COMMITMENT TO MINIMIZE OUR IMPACT ON THE ENVIRONMENT AND PROTECT IT FOR FUTURE GENERATIONS. INVESTING IN FORESTS IS A NATURAL SOLUTION TO HELP US REACH OUR GOAL OF NET ZERO DIRECT CARBON EMISSIONS, WHILE ALSO PROTECTING VALUABLE WATERSHEDS AND HABITATS THAT WILDLIFE AND COMMUNITIES DEPEND UPON.”** Robert A. Iger, *Chairman & CEO, The Walt Disney Company*

“Patagonia’s **brand value is deeply entwined with nature**, so environmental stewardship has always been part of our core business .... With our commitment to the bluesign® standard, we strive to further reduce the impacts of textile manufacturing on the environment, ensure workers’ safety, consumer safety and brand protection.”

Casey Sheahan, *President & CEO, Patagonia*

“Ecolab is fortunate to have considerable water management expertise, and **we’re sharing this expertise with others who are working on the serious water challenges** facing our world.”

Douglas M. Baker, Jr., *Ecolab Chairman & CEO*

**“By holistically addressing sustainability opportunities across our businesses, including understanding the value of services derived from forest ecosystems and identifying business offerings focused on natural resource management, we have been able to advance more revenue opportunities building on our core land and forest assets.”**

Dan Fulton, *President & CEO, Weyerhaeuser*

**“AS A COMPANY AND THROUGH FEMSA FOUNDATION, WE HAVE A SERIOUS AND PROFOUND COMMITMENT TO IMPROVE ENVIRONMENTAL, ECONOMICAL, AND SOCIAL ASPECTS OF COMMUNITIES. WE UNDERSTAND THAT IT IS ONLY THROUGH THE BALANCE OF THESE THREE DIMENSIONS THAT WE CAN ACHIEVE THE SUSTAINABILITY WE NEED TO KEEP ON WORKING AND GROWING.”**

José Antonio Fernández Carbajal, *Chairman & CEO, FEMSA, and President of the Board, FEMSA Foundation*

“Powering the Possible is more than a statement about our commitment to corporate responsibility — it’s the truth about technology and what it’s enabling in the world.”

Michael Dell, *Founder, Dell*

“Duke Energy has long understood that forest health is important to our business, for carbon storage as well as for the role it plays in keeping communities — our customers — healthy.”

Jim Rogers, *Chairman, President & CEO, Duke Energy*



# *the* BUSINESS IMPERATIVE



# *the* BUSINESS IMPERATIVE

## **NATURE PROVIDES TRILLIONS OF DOLLARS WORTH OF INPUTS AND SERVICES VITAL TO LONG-TERM BUSINESS SUCCESS.**

Each year, our planet's complex land and water systems — a “natural living infrastructure” — produce an estimated \$72 trillion worth of “free” goods and services essential to a well-functioning global economy. Because these benefits aren't bartered and sold in the marketplace, their value is exceedingly hard to monetize on corporate or government financial statements. As a result, this value has largely been left unaccounted for in business decisions and market transactions. This is starting to change. Top executives at some of the world's biggest companies are awakening to the profound business value of Earth's natural assets — and the business imperative of safeguarding them. Without healthy ecosystems, water and raw materials that were once cheap and abundant can become so costly they erase profits and threaten entire business models. Local communities where companies operate can become unstable, unsafe or otherwise inhospitable. And without natural barriers to protect workers and facilities from increasingly extreme weather patterns and other disasters, even the best-run companies can be hit with catastrophic losses.

### **NATURAL GOODS AND SERVICES ON WHICH THE GLOBAL ECONOMY DEPENDS**

CLEAN WATER AND AIR ♦ AFFORDABLE RAW MATERIALS AND COMMODITIES ♦ FERTILE SOIL TO GROW CROPS  
♦ ABUNDANT FISH STOCKS ♦ BUFFERS TO FLOODS, DROUGHTS, FIRES AND EXTREME WEATHER ♦ BARRIERS TO  
THE SPREAD OF DISEASE ♦ BIOLOGICAL INFORMATION TO PROPEL SCIENTIFIC AND MEDICAL BREAKTHROUGHS

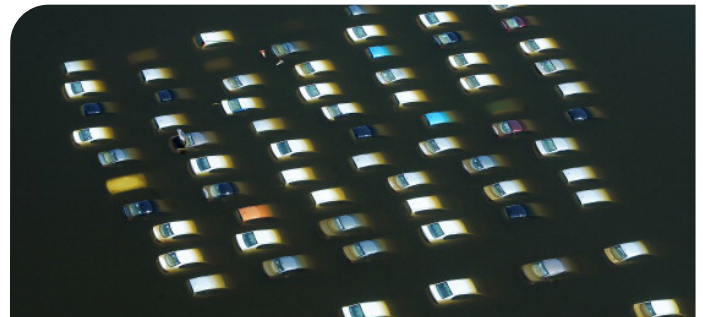
## MOST OF THE WORLD'S ECOSYSTEMS CRITICAL TO BUSINESS SUCCESS ARE COLLAPSING—MULTIPLYING BUSINESS RISKS.

Two-thirds of our planet's land and water ecosystems are now significantly degraded due to human activity. Climate change is accelerating the damage. The UN estimates that our collective mismanagement of natural assets is costing the global economy an estimated \$6.6 trillion a year — nearly 11 percent of GDP — through effects like contamination of water supplies, loss of fertile land to soil erosion and drought, and supply chain disruptions from deforestation and overfishing. At the current trajectory — a conservative scenario unless things change dramatically — these costs could skyrocket to

\$28 trillion by 2050. No company is immune to the risks from these mounting damages. As naturally produced goods and services are compromised or lost altogether, companies could experience supply chain disruptions, be forced to introduce costly alternatives to traditional inputs or face new regulatory and legal risks. Few will escape pressure from stakeholders (including regulators and investors) to be accountable for their contribution to the problems. In 2012 KPMG estimated that if companies had to pay for their own environmental bills, they would lose 41 cents for every \$1 in earnings.

According to a survey of over 500 multinational companies sponsored by DHL Supply Chain, more than half of global supply chains were disrupted by bad weather in 2011. Forty-nine percent of businesses reported a loss of productivity from such disruption, 38 percent of respondents saw increasing costs, and 32 percent lost revenues.

Supply Chain Standard, 12 December 2011



*Cars outside a Honda factory in Thailand in November 2011, submerged by severe flooding.*

PHOTO: CHRISTOPHE ARCHAMBAULT/AFP/GETTY IMAGES

## IN THE FACE OF GOVERNMENT INERTIA, THE PRIVATE SECTOR HOLDS THE KEY TO SAFEGUARDING ITS OWN FUTURE INTERESTS.

The challenge of reversing these trends should not fall to business alone, but the private sector can no longer afford to wait for governments to act with the speed, scale and vision required. The good news is that companies have the power to leapfrog slow government efforts with their own innovative solutions to ecosystem management. Doing so today will give companies a greater measure of control and competitive advantage.

## 24 PIONEERING COMPANIES HAVE COME TOGETHER TO ARTICULATE THIS NEW BUSINESS IMPERATIVE AND TO LEAD BY EXAMPLE.

Taken together, their commitments demonstrate the range of benefits that accrue to companies willing to get out in front of these challenges today — from minimizing risks and cutting costs, to enhancing brand and identifying new opportunities for revenues and growth. Equally important, these commitments point to practical and achievable actions available to companies considering meaningful next steps.

## 4 BUSINESS BENEFITS

The 24 companies featured in this report are united in the view that immediate leadership to safeguard well-functioning ecosystems is a business imperative, not a matter of philanthropy.

By prioritizing ecosystems in business planning and investments, companies stand to benefit in **4 mutually reinforcing ways**:

**REDUCE RISKS**

**CUT COSTS**

**ENHANCE BRAND**

**FUEL GROWTH**

## REDUCE RISKS

- ✦ Avoid supply chain and operational disruptions caused by scarcities of natural resources.
- ✦ Reduce threats to business continuity and harm to facilities, workers and communities in places vulnerable to extreme weather, flooding, drought, fires, desertification or resource scarcity.
- ✦ Stay ahead of impending regulatory changes that could limit product or production choices.
- ✦ Avoid fines, suspensions, lawsuits or other liabilities due to over-exploitation or contamination of natural systems, and improve relationships with local communities and host governments.
- ✦ Avoid damage to corporate reputation and brand.

**Darden Restaurants, one of the largest buyers of seafood in the world, faces a significant threat to their business continuity and success. According to the UN Food and Agriculture Organization (FAO), nearly a third of global fish stocks are over-exploited, depleted or recovering while 50 percent of stocks are fully exploited.** To help address the fishery crisis and its potential to undermine global food supply, Darden has committed to rebuild troubled fisheries through Fishery Improvement Projects (FIPs), beginning in and around the Gulf of Mexico with partners Publix Super Markets and Sustainable Fisheries Partnership (SFP).

Read more about Darden's commitment: [Catalyzing Industry to Rebuild World Fisheries](#)



## CUT COSTS

- ✦ Discover new ways to slash expenses and increase margins, as reducing ecosystem impacts helps reveal opportunities to boost resource productivity and increase energy efficiency.
- ✦ Save money by reducing waste and recapturing valuable materials that otherwise could harm ecosystems.
- ✦ Avoid costly manmade “gray infrastructure” expenses by opting instead for “natural infrastructure” investments in restoration of healthy forests, wetlands, watersheds and coastal ecosystems — often the cheaper and more effective long-term solution.
- ✦ Explore natural solutions to cut costs on stormwater management, flood mitigation, air quality management, carbon sequestration, water purification and climate-related threats.
- ✦ Postpone or avoid cost increases due to rising resource scarcities by investing in sustainable sourcing practices.

“There’s really no issue more important than ensuring that the world’s water resources are safeguarded and conserved for the sustainability of our business and the communities we serve. The new processes we are putting in place will make it possible to better quantify the value that water provides, and to ensure that we protect these vital resources for the long term.”

**Greg Koch**, Director of Global Water Stewardship, The Coca-Cola Company

Read more about Coca Cola's commitment: [Engaging Bottlers in Sustaining Global Water Systems](#)



## ENHANCE BRAND AND REPUTATION

- ◆ Win trust and loyalty from growing ranks of customers that value sustainability leadership.
- ◆ Differentiate brand from competitors by communicating superior purchasing, operating or investment practices.
- ◆ Draw and retain top talent, as a growing number of employees value working for a company with a culture and values they share.
- ◆ Attract investors and lenders who increasingly factor companies' environmental performance and exposures into their decisions.

"Given the role that trees and forests play in the health of the global environment, and because fiber is such an important aspect of our business, Kimberly-Clark is exploring innovative solutions to provide the high quality products customers and consumers demand while ensuring sustainability of the world's forests. We're proud to announce our aggressive new target to significantly reduce our Forest Fiber Footprint, including a goal to transition at least 50 percent of wood fiber sourced from natural forests to alternate fiber sources by 2025, and to join so many other leading companies who are taking steps to value nature in their business models."

**Suhas Apte**, Vice President of Global Sustainability

Read more about how [Kimberly-Clark Plans To Reduce Its Forest Fiber Footprint](#)



## FUEL REVENUE GROWTH

- ◆ Win sales by meeting customers' growing demands for products and services that do no harm to sensitive ecosystems.
- ◆ Create new revenue opportunities by innovating solutions that alleviate pressure on the environment or restore healthy ecosystems.
- ◆ Exploit opportunities to educate consumers about high-performance sustainable products to increase demand and create new market segments.
- ◆ Leverage emerging "natural capital" markets such as water-quality trading, wetland banking and threatened species banking, and natural carbon sequestration.

In [The Next Environmental Issue for Business, McKinsey Global Survey Results](#)

Fifty-nine percent of respondents viewed biodiversity and ecosystem issues as more of an opportunity than a risk for their companies.

"HanesBrands is excited to introduce flax fiber to its product line, which we hope will not only provide a superior, natural product to our customers by enhancing wicking capabilities and durability when combined with cotton, but also offer several ecological benefits including reduced pesticide use, lower water use, improved soil health and avoided deforestation."

**Mike Faircloth**, Chief Supply Chain Officer, HanesBrands Inc.

Read more about Hanesbrands commitment:

[Introducing Innovative Products Using Sustainable Flax Fiber](#)

**HANES** Brands Inc



# A FRAMEWORK *for* ACTION

# A FRAMEWORK *for* ACTION

**The 4 business benefits** of prioritizing ecosystems within business strategy — (1) cutting costs, (2) reducing risks, (3) enhancing brand and reputation, and (4) growing revenues — are mutually reinforcing and can be achieved through a variety of approaches.

Several practical actions are available to companies considering meaningful next steps to seize opportunities.

**REDUCE RISKS**  
**CUT COSTS**  
**ENHANCE BRAND**  
**FUEL GROWTH**

1. Assess your company's impacts and dependencies on ecosystems
2. Put a price on nature's value
3. Optimize resource use to minimize environmental degradation
4. Invest strategically in conservation and restoration
5. Engage your value chain to bring solutions to scale
6. Innovate in materials, processes and products
7. Build natural instead of manmade infrastructure
8. Leverage new natural capital markets and investment tools
9. Join forces

## 1. ASSESS YOUR COMPANY'S IMPACTS AND DEPENDENCIES ON ECOSYSTEMS

Forward-thinking companies are analyzing their interconnected web of environmental impacts and dependencies across the entire value chain — from sourcing raw materials or semi-finished goods, through manufacturing and processing, packaging and shipping, product use and the end-of-life or “re-use” phase.

Businesses that map, monitor and measure their impacts and dependencies on ecosystems can better assess materiality, mitigate impacts and identify opportunities for cost

savings and new revenues. Traditional environmental management systems and due diligence tools are often ill-equipped to evaluate the full risks and opportunities arising from the use and degradation of ecosystems. Fortunately, several new tools are now available to help companies undertake this process, and leading NGOs — [The Nature Conservancy](#), [World Resources Institute](#) among others — are partnering with companies to guide their analyses and planning. Companies can now produce reliable, predictive models connecting business and ecosystem impacts.

### ◆ [Determining the Business Value of Ecosystem Services in Brazil](#)

Read more about Dow Chemical's commitment to analyze the company's impacts and dependencies on ecosystems at their joint venture production site in Santa Vitória, Brazil. This project is the second pilot in a groundbreaking effort announced in 2011 to help build a roadmap – for Dow and other companies – to assess nature and the services it provides, and ultimately, put an economic value on nature that can inform business decision making.



### ◆ [Powering the Possible for the Environment](#)

Read more about Dell's commitment to put their technology and expertise to work to provide solutions for some of the world's most challenging environmental issues, including the quantification of nature's value.



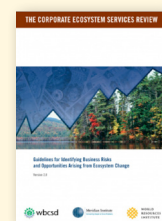
### ◆ [Brazilian Business and Ecosystem Services Partnership](#)

The Brazilian Business and Ecosystem Services Partnership has been launched by several leading companies including Anglo American, Grupo Maggi, PepsiCo, Vale, Votorantim, and Walmart in partnership with the Center for Sustainability Studies of the Getulio Vargas Foundation, the Brazilian Business Council for Sustainable Development, and the World Resources Institute to demonstrate the business benefits of healthy ecosystems in the Amazon and strengthen the capacity of companies to incorporate this information into business planning. [Learn more.](#)



- ◆ World Resources Institute's [Corporate Ecosystem Review](#) (ESR) helps managers develop proactive strategies for managing business risks and opportunities arising from their company's dependence and impact on ecosystems. [Click here for additional tools.](#)

**[More company case studies and examples.](#)**





## 2. PUT A PRICE ON NATURE'S VALUE

Companies can position themselves for long-term success by working today to put a monetary value on what nature does for their businesses — and by calculating the costs of damage to healthy ecosystems. Doing so can improve business decision making by exposing significant costs and benefits that could seriously impact the bottom line but which traditional financial analyses usually miss. The first pilot project underpinning [Dow Chemical's innovative collaboration with The Nature Conservancy](#) to improve the science and practice of valuing ecosystem services is already revealing these kinds of opportunities related to Dow's Freeport, Texas site.

In addition, the valuation of “natural capital” makes financial disclosure more robust and gives companies the option of pursuing integrated reporting.

It's becoming easier to obtain the data necessary for valuation. Companies are beginning to automate systems to monitor ecosystem impacts and natural resource usage and are using database dashboards that receive feeds from remote field sensors to enable real-time observation and comparison. This, in turn, facilitates reliable tracking of supply chains and certification chains.

- ◆ In 2011, sport lifestyle company PUMA developed and implemented a first-of-its-kind “[Environmental Profit & Loss Account](#)” (E P&L) (which measures and places a monetary value on the use of ecosystem services across a company's entire supply chain. The environmental impact for greenhouse gas emissions (GHG), water use, land use, air pollution and waste, generated through the operations and supply chain of PUMA was valued at Euro 145 million in 2010. The French multinational holding company PPR (parent to PUMA, Gucci, Stella McCartney and Yves Saint Laurent among others) announced plans in 2011 to implement a Group E P&L analysis across its Luxury and Sport & Lifestyle brands by 2015, citing the potential to identify “new opportunities across the supply chain to enhance the sustainability of PPR's products” while improving efficiency and driving innovation. [More info](#)

“Placing a monetary value on our impacts – on natural services – has helped to illustrate the potentially negative impact depleted ecosystems can have on a business' future performance...[T]he sustainability of business itself depends on the long-term availability of natural capital.”

**Jochen Zeitz**, *Executive Chairman of Puma and Chief Sustainability Officer of PPR*,  
in [PUMA's Environmental Profit and Loss Account](#) for the year ended 31 December 2010



- ◆ “By holistically addressing sustainability opportunities across our businesses, including understanding the value of services derived from forest ecosystems and identifying business offerings focused on natural resource management, we have been able to advance more revenue opportunities building on our core land and forest assets.” **Dan Fulton**, *President & CEO, Weyerhaeuser*

### **Driving Sustainability for Additional Value with Forest Solutions and Ecosystem Services**

Read more about Weyerhaeuser's commitment to quantify 18 new ecosystem indicators and grow their ecosystem-based business lines through Weyerhaeuser Solutions.



- ◆ [WBCSD's Guide to Corporate Ecosystem Valuation](#) is a groundbreaking framework that enables companies to consider the actual benefits and value of the ecosystem services they depend upon and impact, giving them new information and insights to include in business planning and financial analysis.

[More company case studies and examples.](#)



### 3. OPTIMIZE RESOURCE USE TO MINIMIZE ENVIRONMENTAL DEGRADATION

Companies that work to reduce their impacts on ecosystems often discover new opportunities to boost resource productivity and efficiency — resulting in cost savings that go straight to the bottom line. Driving resource productivity on an end-to-end basis, through supply and value chains, can create significant business benefits. Introducing stringent efficiency measures to manage water and other natural resources reduces pressure on critical systems while creating opportunities to cut costs and increase profit margins. Waste management solutions that optimize resource reuse and recycling while keeping toxins out of circulation have the dual benefit of saving/making money while also protecting valuable ecosystems. Manufacturing companies in particular may be able to recapture valuable materials, including usable metals and minerals, while reducing harmful emissions and keeping hazardous materials out of critical land and water ecosystems. Often, the costs of investing in resource productivity and

efficiency strategies are more than offset by energy and cost savings achieved — and, in some cases, by the revenues generated by selling recaptured materials.

The industries with perhaps the most to gain may be those with the biggest “footprint” on ecosystems — energy, mining, infrastructure, manufacturing and agriculture. These industries significantly impact and rely upon well-functioning ecosystems: their web of impacts and dependencies stem from the extraction of raw materials and extending through industrial processing, electricity generation and final outputs. For these industries in particular, **avoiding, minimizing and offsetting impacts to natural infrastructure is simply smart business.** In addition to generating cost savings, they can **reduce their exposure** to legal and regulatory risks, maintain their “**social license**” to operate and support the ecosystems on which they and their stakeholders depend.

#### ◆ Water Reduction, Recapture and Restoration

Read more about Clorox’s commitment to reduce water consumed by a further ten percent by concentrating product formulas and improving manufacturing practices.



#### ◆ Safeguarding Ecosystems Through Cost-Effective Waste Management

Read more about GM’s commitment to reduce ecosystem impacts by achieving landfill-free status at 100 manufacturing sites and 25 nonmanufacturing sites.



#### ◆ Protecting Natural Infrastructure through E-Waste Stewardship

Read more about Lockheed Martin’s commitment to reduce potential damage to natural infrastructure by reducing water, land, and air pollution resulting from the disposition of electronic waste.



[\*\*More company case studies and examples.\*\*](#)

## 4. INVEST STRATEGICALLY IN CONSERVATION AND RESTORATION.

For decades, most companies have viewed investments in ecosystem conservation and restoration as optional philanthropic acts designed to produce broad social and economic benefits. Today, however, **companies increasingly see investments in “natural infrastructure” as important — sometimes mandatory — to advancing key business objectives.**

For instance, companies with large carbon footprints have invested in healthy forests as a cost-effective tool to

support their overall strategy to reduce their climate impacts. Brands that depend heavily on water are investing in watersheds to avert water scarcities that could drive up costs or harm communities in which they operate. Businesses that rely on affordable agricultural goods are investing in efforts to keep soils healthy and productive. Companies that operate in regions with particularly vulnerable ecosystems are working to protect them to safeguard or enhance their reputations.

### ◆ Investing in Natural Solutions

Read about Disney’s commitment to scale up forest restoration investments and quantify ecosystem benefits and services other than carbon.



### ◆ Restoration of Appalachian Forests with American Chestnut

Read about Duke Energy’s commitment to assess the viability and safety of reintroducing the American Chestnut tree to reclaimed surface-mine lands in Central Appalachia.



### ◆ Enterprise Rent-A-Car 50 Million Tree Pledge

Read more about Enterprise’s commitment to help restore public lands and protect municipal watersheds by underwriting the planting of 50 million trees.



### ◆ The Amazon’s Juma Reserve & the Sustainable Development of Fairfield by Marriott Hotels in Brazil

Read more about Marriott’s commitment to sustain the preservation of the Juma Reserve in Brazil.



### ◆ Reducing Paper Use and Protecting North American Forests

Read more about TD Bank’s commitment to protect forested areas in the United States and Canada equivalent to the paper TD uses.



[More company case studies and examples.](#)

## 5. ENGAGE YOUR VALUE CHAIN TO BRING SOLUTIONS TO SCALE

Company value chains provide opportunities for investments in natural infrastructure to have a multiplier effect, helping businesses achieve the scale needed to realize meaningful and measurable benefits, in particular in terms of minimizing supply chain risks and bottlenecks. Actively engaging affiliates, suppliers, brands, and other partners can be complex, but it

is key to durable, lasting solutions — whether the challenge is sustainably sourcing raw materials, conserving and restoring precious resources such as forests and freshwater, optimizing manufacturing processes, or bolstering workers, facilities and local communities from the perils of extreme weather, flooding or fires.

### ◆ Engaging Bottlers in Sustaining Global Water Systems

Read more about Coca-Cola's commitment to fully implement a new system-wide corporate standard for water resource sustainability at all 900+ bottling plants in their supply chain.

*The Coca-Cola Company*

### ◆ Catalyzing Industry to Rebuild World Fisheries

Read more about Darden's commitment to rebuild troubled fisheries through Fishery Improvement Projects (FIPs).

 **DARDEN**  
Sustainability

### ◆ Protecting Ecosystems and Brand Integrity: Scaling up Patagonia's Commitment to the bluesign® Standard

Read more about Patagonia's commitment to engage their suppliers to ensure 100 percent adoption of the sustainable bluesign® standard for apparel in their 2015 product line.

**patagonia®**

### ◆ Rewarding Low-Impact Forest Management by Valuing Carbon Benefits

Read more about Xerox's commitment to develop and test a groundbreaking methodology that values carbon savings associated with improved forest management practices and forest certification.

**xerox** 

[More company case studies and examples.](#)

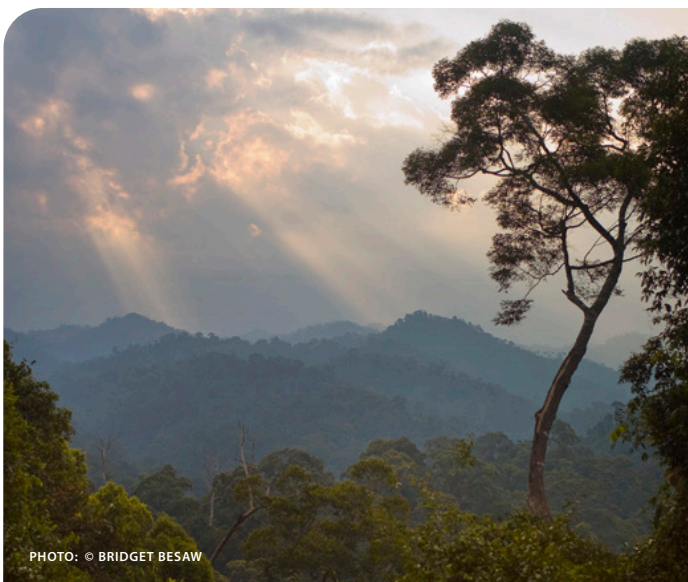


PHOTO: © BRIDGET BESAW

*The dense tropical forest of Berau, Indonesia. The Nature Conservancy is working with industries such as Xerox with a goal to protect 250,000 square kilometers of forest in the region. These efforts are in conjunction with a unique nationwide program that will use forest conservation to directly lower carbon emissions and combat climate change, while also protecting biodiversity and improving the livelihoods of local communities.*

## 6. INNOVATE IN MATERIALS, PROCESSES AND PRODUCTS

In the years ahead, customer demand will accelerate for products and services that reduce dependence on natural resources and minimize negative impacts on ecosystems. **By anticipating and meeting customers' emerging needs in a resource-constrained world, companies can gain competitive advantage and seize new opportunities for revenue growth.**

A rapidly growing number of companies are already profiting by offering solutions that save customers money through increased energy and resource efficiencies. But **leading-edge companies see the benefits for today and tomorrow of making sustainability considerations part of a holistic innovation model** — one that makes **sustainability attributes standard** among all the factors considered when developing solutions for customer needs. To be sure, many sustainability-related

innovations will not generate quick payback and may require significant **up-front investments with an eye towards long-term benefits**. However, companies that are serious about innovating for sustainability cite many **collateral business benefits** produced along the journey. Their progress affords them new opportunities to differentiate their products and brands and to tap into growing markets for certified or eco-labeled products and services. Their search to anticipate future customer needs generates new ideas for delivering value to customers today. And their efforts to break barriers and forge new ground unveils opportunities for future revenue growth — perhaps involving entirely new business models — that they otherwise would not have considered until competitors got there first.

### ◆ **Hanes Commitment**

Read more about Hanesbrands' commitment to develop and commercialize the incorporation of flax fiber into select products that have traditionally been 100% cotton or cotton/poly blends.

**HANES** Brands Inc

### ◆ **Kimberly-Clark Plans To Reduce Its Forest Fiber Footprint**

Read more about Kimberly-Clark's commitment to transition 50 percent of wood fiber sourced from natural forest to alternate fiber by 2025.

 **Kimberly-Clark**

### ◆ **100% Certified Sustainably-Sourced Palm Oil**

Read more about Unilever's commitment to purchase 100 percent of its palm oil from traceable sources by 2020.

  
Unilever

### ◆ **Driving Sustainability for Additional Value with Forest Solutions and Ecosystem Services**

Read more about Weyerhaeuser's commitment to quantify 18 new ecosystem indicators and grow their ecosystem-based business lines through Weyerhaeuser Solutions.

  
Weyerhaeuser

[More company case studies and examples.](#)

## 7. BUILD NATURAL INSTEAD OF MANMADE INFRASTRUCTURE

Strong, reliable manmade (“gray”) infrastructure undergirds a healthy marketplace, and most companies depend heavily on it to operate effectively and efficiently. Yet increasingly, companies are seeing the enormous potential for “natural infrastructure” in the form of wetlands and forests, watersheds and coastal habitats to perform many of the same tasks as gray infrastructure — sometimes better and more cheaply.

For instance, investing in protection of coral reefs and mangroves can provide a stronger barrier to protect coastal operations against flooding and storm surge during extreme weather, while inland flooding can be reduced by strategic investments in catchment forests, vegetation and marshes. Forests are also crucial for maintaining usable freshwater sources, as well as for naturally regulating water flow.

Putting funds into maintaining a wetland near a processing or manufacturing plant can be a more cost-effective way of meeting regulatory requirements than building a wastewater treatment facility, as evidenced by the Dow Chemical Seadrift, Texas facility, where a 110-acre constructed wetland provides tertiary wastewater treatment of five million gallons a day. While the cost of a traditional “gray” treatment installation averages >\$40 million, Dow’s up-front costs were just \$14 million.

For companies reliant on agricultural systems, improved land management of forests and ecosystems along field edges and streams, along with the introduction of more diversified and resilient sustainable agriculture systems, can minimize dependency on external inputs like artificial fertilizers, pesticides and blue irrigation water.

- ◆ **Forested wetlands treat more wastewater per unit of energy and have a 6–22 fold higher benefit cost ratio than traditional sand filtration in treatment plants. Coastal wetlands in the U.S. provide storm protection services valued at 23 billion USD annually.**

Source: United Nations Environment Programme Dead Planet, Living Planet, 2010

- ◆ Cost of 110 acre constructed wetland for tertiary wastewater treatment of 5 million gallons a day at Dow’s Seadrift, TX facility: \$1.4 Million  
Cost of traditional “gray” treatment installation: >\$40 Million



- ◆ **Natural Systems for Sustainable Water Management**

Read about Alcoa’s commitment to expand its comprehensive program of sustainable water management.



- ◆ **Engaging Clients to Improve Water Stewardship with Green Infrastructure**

Read about CH2M Hill’s commitment to engage their Operations and Maintenance (O&M) Business Group clients in water stewardship improvements.



**[More company case studies and examples.](#)**



## 8. LEVERAGE NEW NATURAL CAPITAL MARKETS AND INVESTMENT TOOLS

Over the past decade, the world has seen an acceleration of market-oriented experiments hinging on the idea of paying for once-free ecosystem services. Governments as well as private firms and NGOs are working to pioneer innovative market mechanisms that offer new incentives for economic actors to maintain and restore natural systems. Existing models for [“Payments for Ecosystem Services \(PES\)”](#) can be grouped into four main categories:

1. **Direct payments** to landowners or managers to maintain or enhance healthy ecosystems — often paid for through the issuing of [forest bonds](#) or creation of [water funds](#) that gather investments from the beneficiaries of ecosystem services.
2. **Regulation-driven trading of ecosystem “credits”** between buyers and sellers within a regulated market of a particular ecosystem service. For instance, the State of Victoria, Australia oversees the purchase and sale of “water shares” that give users the right to consume a set amount of water. In the United States., the Clean Water Act requires developers that damage wetlands to offset their impacts by protecting, enhancing, or restoring a similar wetland area in the same watershed — or by paying a third party to do so, either directly or by purchasing “credits” from a “wetland mitigation bank.”
3. **Voluntary trading of ecosystem “credits” and other direct private payments** in which individuals contract directly with sellers offering ecosystem services. For instance, a landowner planting timber to sequester carbon might sell certified carbon credits to a company seeking to offset its carbon emissions.
4. **Purchase of certified products or services** deemed to have a neutral or positive effect on ecosystem services such as Forest Stewardship Council certified wood.

(PES) deals are emerging wherever businesses, public-sector agencies, and nonprofit organizations are looking for new ways to solve thorny environmental challenges. These schemes can change incentive structures and provide a new source of income for land management, restoration, conservation, and sustainable-use activities. Most transactions focus on valuation of one particular ecological service or attribute such as reducing global warming emissions or protecting habitat for an endangered species. Increasingly, transactions involve “bundling” of ecosystem services such as valuing a forest tract for its ability to soak up carbon dioxide and help purify drinking water among other things.

ForestTrends and the Ecosystem Marketplace have produced a comprehensive up-to-date (2012) [matrix of the primary markets for nature’s services](#).

### ◆ The Natural Infrastructure Innovative Financing Lab

Read about EKO Asset Management’s commitment to launch an innovative platform to accelerate the development of financial instruments that support investment in green infrastructure retrofits on public and private property.



### ◆ Latin American Water Funds Partnership:

Read about FEMSA’s and its Foundation’s commitment to invest in an innovative conservation mechanism that helps protect watersheds in Brazil and other countries in the region.



[More company case studies and examples.](#)

## 9. JOIN FORCES

Through collaboration and collective action, companies can help establish markets, get meaningful initiatives to scale and raise the bar across industries.

Taken alone, one company's effort to quantify their ecosystem dependencies or another's investment in the restoration of a particular forest or watershed may seem to make a small dent in the massive challenges before us, but collectively, they are

having a significant impact — fortifying key natural infrastructure, and ushering in a sea change in how industry views its relationship to the natural world.

For companies seeking credible expert partners, a legion of expert NGOs stand at the ready to help navigate the challenges of ecosystem valuation and investment.

### INVITATION TO COLLABORATE: JOIN NIKE IN A COALITION TO PROTECT BRAZILIAN FORESTS AND LEVERAGE VOLUNTARY CARBON MARKETS



- ◆ Companies with business interests in Brazil are invited to join as partners in Mata no Peito, a new coalition effort initiated by Nike to help restore and protect vital Brazilian forest ecosystems. Mata no Peito was inspired by Nike's groundbreaking decade-long voluntary greenhouse gas reduction project, which resulted in millions of tons of offsets, registered on Winrock's American Carbon Registry (ACR). Leveraging carbon markets, Nike will sell and transparently retire these offsets on behalf of partnering companies seeking to voluntarily offset their carbon footprints or those who wish to help offset spectator participation in the upcoming World Cup. Mata no Peito partnership offers multiple benefits for participating companies: the opportunity to demonstrate progress towards emissions reduction goals/carbon neutrality; deploy effective and unique branding to build a positive reputation in Brazilian markets, and help scale innovative projects to protect and restore Brazil's forests. [Get involved](#)



[Click here for a list of collaborative corporate-led efforts to advance best practices in ecosystem valuation and investment.](#)

[More company case studies and examples.](#)

- ◆ **Supporting the Alliance for Water Stewardship International Water Stewardship Standard**  
Read more about Ecolab's commitment to expand its support of the Alliance for Water Stewardship (AWS) in establishing the International Water Stewardship Standard.



[More company case studies and examples.](#)





# *company* COMMITMENTS



P.J. Simmons, *Executive Director of the Corporate Eco Forum* with President Clinton at the 2011 Clinton Global Initiative

In September 2011, the Corporate Eco Forum and The Nature Conservancy announced a joint effort at the [Clinton Global Initiative](#) to mobilize a critical mass of major companies to initiate projects and investments (“commitments”) that effectively demonstrate the need for business to protect and restore green infrastructure around the world including forests, fresh water and marine systems.

## 24 LEADING COMPANIES ROSE TO THE CHALLENGE.



- ◆ All commitments include an implementation plan and measurable targets. The Corporate Eco Forum will solicit annual progress reports and update commitment summaries with impacts and outcomes.

COMPANY	INDUSTRY / SECTOR	COMMITMENT NAME	ECOSYSTEM FOCUS	APPROACH
<a href="#">Alcoa</a>	Mining	<a href="#">Using Natural Systems for Sustainable Water Management</a>	Freshwater, Watersheds	Natural Infrastructure Investment
<a href="#">CH2MHILL</a>	Infrastructure	<a href="#">Engaging Clients to Improve Water Stewardship with Green Infrastructure</a>	Freshwater, Watersheds	Natural Infrastructure Investment
<a href="#">Clorox</a>	Consumer Products	<a href="#">Water Reduction, Recapture and Restoration</a>	Freshwater	Optimization of Resources
<a href="#">The Coca-Cola Company</a>	Food & Beverage	<a href="#">Engaging Bottlers in Sustaining Global Water Systems</a>	Freshwater	Optimization of Resources
<a href="#">Darden Restaurants</a>	Food Services	<a href="#">Catalyzing Industry to Rebuild World Fisheries</a>	Fisheries	Value Chain Engagement
<a href="#">Dell</a>	Technology	<a href="#">Powering the Possible for the Environment</a>	Potentially all	Value Chain Engagement
<a href="#">Disney</a>	Consumer Products/ Entertainment	<a href="#">Investing in Natural Solutions</a>	Forests	Strategic Conservation/ Restoration
<a href="#">The Dow Chemical Company</a>	Chemicals	<a href="#">Determining the Business Value of Ecosystem Services in Brazil</a>	Freshwater, Forests, Soil	Assessment and Valuation of Ecosystem Services
<a href="#">Duke Energy</a>	Energy	<a href="#">Restoration of Appalachian Forests with American Chestnut</a>	Forests	Assessment and Valuation of Ecosystem Services
<a href="#">Ecolab</a>	Water and Energy	<a href="#">Supporting the Alliance for Water Stewardship International Water Stewardship Standard</a>	Freshwater	NGO Partnership
<a href="#">EKO Asset Management</a>	Finance	<a href="#">NatLab – The Natural Infrastructure Innovative Financing Lab</a>	Freshwater, Watersheds, Forests	Strategic Conservation/Restoration
<a href="#">Enterprise Holdings</a>	Automotive	<a href="#">Enterprise Rent-A-Car 50 Million Tree Pledge</a>	Forests, Watersheds	New Market Mechanism
<a href="#">FEMSA</a>	Food & Beverage	<a href="#">Latin American Water Funds Partnership</a>	Freshwater, Watersheds	Strategic Conservation/Restoration
<a href="#">General Motors</a>	Automotive	<a href="#">Safeguarding Ecosystems Through Cost-Effective Waste Management</a>	Freshwater, Soil	New Market Mechanism
<a href="#">HanesBrands</a>	Apparel	<a href="#">Introducing Innovative Products Using Sustainable Flax Fiber</a>	Freshwater, Soil, Forests	Optimization of Resources
<a href="#">Kimberly-Clark</a>	Consumer Products	<a href="#">Kimberly-Clark Plans To Reduce Its Forest Fiber Footprint</a>	Forests	Material, Product & Process Innovation
<a href="#">Lockheed Martin</a>	Technology	<a href="#">Protecting Natural Infrastructure through E-Waste Stewardship</a>	Freshwater, Soil, Air	Optimization of Resources
<a href="#">Marriott International</a>	Tourism & Hospitality	<a href="#">Amazon's Juma Reserve &amp; the Sustainable Development of Fairfield by Marriott Hotels in Brazil</a>	Forests	Strategic Conservation/Restoration
<a href="#">Nike</a>	Apparel	<a href="#">Mata no Peito Coalition for Brazil Forest Projects</a>	Forests	Cross-Industry Coalition
<a href="#">Patagonia</a>	Apparel	<a href="#">Protecting Ecosystems and Brand Integrity: Scaling up Patagonia's Commitment to the bluesign® Standard</a>	Freshwater	Value Chain Engagement
<a href="#">TD Bank</a>	Banking	<a href="#">Reducing Paper Use and Protecting North American Forests</a>	Forests	Strategic Conservation/Restoration
<a href="#">Unilever</a>	Consumer Products	<a href="#">100% Certified Sustainably-Sourced Palm Oil</a>	Forests	Material, Product & Process Innovation
<a href="#">Weyerhaeuser</a>	Forest Products	<a href="#">Driving Sustainability for Additional Value with Forest Solutions and Ecosystem Services</a>	Forests	Valuation of Ecosystem Services/ Innovative Business Model
<a href="#">Xerox</a>	Technology	<a href="#">Rewarding Low-Impact Forest Management by Valuing Carbon Benefits</a>	Forests	Value Chain Engagement



## NATURAL SYSTEMS FOR SUSTAINABLE WATER MANAGEMENT



“Alcoa’s sustainable water strategy will have enormous benefits for water systems connected to our operations and, to date, has resulted in significant capital cost and operating savings compared to conventional tank-based treatment systems – over the last eight years, we estimate savings of at least \$50 million, with this only increasing when implemented across all appropriate Alcoa locations.” *Kevin J. Anton, Chief Sustainability Officer, Alcoa*

### BY 2015, ALCOA COMMITS TO:

◆ **Expand its comprehensive program of sustainable water management through:**

1) rainwater harvesting, 2) use of ecological natural based systems to treat waters and wastewaters to a quality suitable for recycle/reuse back within the facility or discharge back to the community for their use, and 3) zero water discharge.

Alcoa will make their sustainable water management technologies available externally, for example, implementing this strategy for a 4,000 M3/day flow at the Ma’aden Aluminum Complex in the Kingdom of Saudi Arabia.

**Rainwater harvesting** relates to greening surface areas (including roofs) to minimize runoff generation and capturing storm runoff for treatment and use back in the facility. **Engineered Natural Wastewater Treatment (NEWT)** refers to treatment of harvested rainwater, process wastewaters and sanitary wastewaters through natural-based systems without the use of chemicals. The process includes the use of a passive, **natural wetland environment to acclimate natural bacteria to remove and biodegrade organics from a manufacturing wastewater**, and to use bauxite residue (a by-product from Alcoa’s alumina refining process) to disinfect the treated

effluent prior to its reuse as a makeup water supply to a manufacturing process. This option is **extremely cost-effective compared to traditional waste treatment systems** which require high energy use and operating expenditure, are maintenance intensive, and often produce sludges or filter-cake that must be landfilled.

By harvesting rainwater and treating waters and wastewaters for recycle/reuse, Alcoa is focused on achieving **zero water discharge from some facilities**. This green technology approach uses natural processes to maintain water quality and provide a closed-loop process with reduced energy, greenhouse gas emissions and waste to land fill.

Since 2005, Alcoa has been developing and deploying the appropriate technologies and scientific approaches aimed at helping our locations achieve this sustainable water strategy. Alcoa is committed to sustainable water management approaches when replacing and upgrading water infrastructures at operating locations as the first alternative and has already installed I-NEWT in several operations.



## ENGAGING CLIENTS TO IMPROVE WATER STEWARDSHIP WITH GREEN INFRASTRUCTURE



“While improving the sustainability of CH2M HILL’s own operations expresses our values, improving the sustainability of the projects we deliver for clients offers the potential to address global issues in a much more powerful way. In partnership with our clients, we can restore damaged ecosystems, develop sustainable infrastructure, manage operations to conserve resources and place a value on ecosystem services that allows communities to plan a combination of engineered solutions and natural, green infrastructure to deliver a healthy community, economy, and environment to future generations.”

Jennifer Whitney, *Enterprise Director Sustainable Solutions, CH2M HILL*

### BY 2013, CH2M HILL COMMITS TO:

- ◆ **Engage their Operations and Maintenance (O&M) Business Group clients in water stewardship improvements by discussing opportunities with 20 percent of U.S. clients by the end of 2012.**

This commitment is a part of CH2M HILL’s Environmental Management System (EMS) and will be evaluated annually for continuous improvement and expansion to other areas of their business globally. Of the thousands of projects that CH2M HILL completes annually around the world, the close, ongoing work with their O&M clients is a particularly rich area for measuring the results from presenting clients with innovative options that meet their needs while ensuring exceptional water stewardship.

Sustainability is integral to CH2M HILL’s operational excellence and is a key component of their 2015 business strategy. The interconnected global issues of water, energy, and environment poses new challenges for CH2M HILL and their clients, necessitating a sustainable, holistic approach

to problem-solving. For many of their clients, this requires careful consideration of natural resources, energy use, transportation and land development as well as the effect that economic growth has on water, energy and the environment. [Natural treatment systems](#), [O&M](#), and [green building design](#) represent service portfolios where the issues of valuing natural resources are paramount. Innovative engineering solutions are needed to address the water-energy-environment nexus, and many solutions can be found by valuing natural resources and relying on green infrastructure development techniques.

---

*For more information about CH2M HILL’s sustainable design services, the projects where the company has actively helped clients reduce their impacts on the built environment, and the people who make it possible, visit [Sustainable Solutions](#). In their [Sustainability Report](#), CH2M HILL discloses the sustainability impacts of their internal operations ([environmental](#), [social](#), and [economic](#)), as well as [client services](#).*

## WATER REDUCTION, RECAPTURE AND RESTORATION



“At Clorox, nearly half our sales are from products that have water as a key ingredient. Maintaining freshwater health is fundamental for us, and we have found opportunities both in our supply chain and in our product development areas to realize ambitious water reduction and protection goals while also reducing business risks and costs, distinguishing our brands, meeting our consumers’ needs and growing our company.”

*Bill Morrissey, Vice President of Environmental Sustainability, The Clorox Company*

### OVER THE NEXT FIVE YEARS, CLOROX COMMITS TO:

- ◆ **Reducing water consumed by a further 10 percent by concentrating product formulas and improving manufacturing practices.**
- ◆ **Restoring water used by expanding and improving Clorox’s current waste water treatment infrastructure.**

100-200 million gallons of fresh water resources annually will be either recycled, restored or conserved. Water consumption will be reduced by concentrating liquid bleach and cleaning products and reducing the amount of water used in processing, which is currently close to 500 million gallons a year. **Best practice processes for water reduction will be standardized across the entire manufacturing plant network,** alongside new processes that recapture materials and reintroduce them back into manufacturing, keeping them out of the waste stream.

Restoration efforts include investments in Chile, Venezuela, Costa Rica and Peru that modernize and increase capabilities to effectively treat waste streams generated, and also allow use of environmentally safer water treatment chemistry, keeping toxins out of sensitive watersheds.

Clorox has reduced its water use by 14 percent over the past four years, and this commitment builds on that achievement. Clorox is fully committed to reducing the environmental impact of its operations and products and believes that goes hand in hand with the company’s financial success, as described in their 2011 Integrated Annual Report, **Think Outside the Bottle.**

Part of Clorox’s commitment includes rolling out a new concentrated bleach product throughout the US marketplace over the next two years — a 33 percent concentration which reduces the amount required from  $\frac{3}{4}$  to  $\frac{1}{2}$  cup per use, and which will save about 50 million gallons of water per year.



## ENGAGING BOTTLERS IN SUSTAINING GLOBAL WATER SYSTEMS

*The Coca-Cola Company*

“There’s really no issue more important than ensuring that the world’s water resources are safeguarded and conserved for the sustainability of our business and the communities we serve. The new processes we are putting in place will make it possible to better quantify the value that water provides and to ensure that we protect these vital resources for the long term.”

Greg Koch, Director of Global Water Stewardship, The Coca-Cola Company

### BY 2013, THE COCA-COLA COMPANY COMMITS TO:

- ◆ Fully implement a new system-wide corporate standard for water resource sustainability. All 900+ bottling plants in Coca-Cola’s supply chain will be required to evaluate water risks and vulnerabilities, and to develop and implement a comprehensive source water protection plan.

an amount of water equivalent to what is used in all Coca-Cola beverages and production and established comprehensive metrics for water stewardship. To date, the company has achieved 96 percent compliance on full wastewater treatment, toward 100 percent by the end of 2012, and, through almost 400 community-watershed projects in 94 countries, are replenishing 35 percent of production volume, toward 100 percent by 2020.

The source water protection plans will require close collaboration with water resource experts and will leverage the company’s water footprint assessment tool. Plans will address critical water challenges at the watershed level, from hydrological vulnerabilities to local government management capacity, and will consider not only the water resources used to produce Coca-Cola beverages but those used by surrounding communities as well. Source water protection plans will be reevaluated and updated on five-year intervals. Water is a key ingredient in all of The Coca-Cola Company’s products. It is essential to the company’s operations and the well-being of the communities and ecosystems where it operates. In response to the very real and growing vulnerability of the freshwater that sustains its business, the company set a [long-term goal](#) to safely return to communities and nature





## CATALYZING INDUSTRY TO REBUILD WORLD FISHERIES



“Fishery Improvement Projects extend Darden’s effort to preserve world marine ecosystems that benefit our environment, fishing communities and people around the globe who rely on seafood as a sustainable source of protein. By working with retailers like Publix, organizations such as the Sustainable Fisheries Partnership, and a host of industry, NGOs, scientists and government entities, we are building an alliance with a common vision to improve fisheries and move the seafood sustainability conversation forward.” Roger Bing, Vice President, Seafood Purchasing, Darden

- ◆ In 2011, Darden Restaurants announced a commitment at the Clinton Global Initiative to rebuild troubled fisheries through targeted Fishery Improvement Projects (FIPs). Over three years, Darden will create an alliance of companies, NGOs and other groups to support the launch of three targeted FIPs to help combat illegal fishing, enhance productivity and reduce negative ecological impacts. The alliance will work strategically to raise awareness of the importance of FIPs and identify additional partners for implementation.

The initial FIP was launched in partnership with Publix Super Markets and Sustainable Fisheries Partnership in the U.S. Gulf of Mexico. The focus is to support the rebuilding of commercial reef fish fisheries, primarily grouper and red snapper, using several tools including the development of data collection methods to enhance management, testing different gear types to reduce interactions with sea turtles, and building new markets for the fish as populations recover.

Darden serves a wide variety of foods, but seafood is the single largest item in Darden’s overall “food basket,” making up more than 30 percent of the total food we buy. However, demand for this healthy, affordable protein to feed a rapidly growing global population is fast outpacing supply. For Darden, this is more than a social and environmental concern; it’s a **core business issue**. Darden has a vested interest in ensuring that the supply

of seafood remains available, affordable and meets high quality and safety standards.

Darden believes that wild fisheries and aquaculture will be essential in meeting the growing demand for seafood and that both methods can be conducted sustainably and in ways that preserve and enhance ecosystems. Darden has both an opportunity and obligation to help make this sustainable fisheries vision a reality and is working to do so within company operations and by leveraging their influence in the larger seafood supply chain.

This commitment adds to Darden’s long history of contributions to support sustainable fisheries and aquaculture.



*In 2011, Darden was recognized by the Clinton Global Initiative as an exemplary approach to addressing environmental challenges.*





## POWERING THE POSSIBLE FOR THE ENVIRONMENT

“Powering the Possible is more than a statement about our commitment to corporate responsibility — it’s the truth about technology and what it’s enabling in the world”.

Michael Dell, *Founder, Dell*

Powering the Possible is Dell’s commitment to put the company’s technology and expertise to work where it can do the most good for people and the planet. Technology can help accelerate and amplify solutions being developed to address pressing issues challenging the world’s ecosystems, whether in scientific research facilities, in field conservation efforts or in the minds of social entrepreneurs.

### BY 2013, DELL COMMITS TO:

- ◆ **Allocate financial and human resources to put Dell technology and expertise to work to provide solutions for some of the world’s most challenging environmental issues.**
- ◆ **Partner with one or more leading organizations whose primary mission is to conserve or quantify ecosystem services.**

This commitment builds on significant conservation, improved forest management and reforestation projects and partnerships initiated since 2007.

Natural ecosystems that grow and thrive are vital to the proper functioning of Dell’s business, including the well-being of employees, suppliers and customers. As a result, Dell has long been committed to conservation as part of a comprehensive approach to sustainable business practices.

The link between forests and climate change has long been clear to Dell. Dense forest canopies absorb heat, store vast quantities of CO<sub>2</sub> and release billions of metric tons of water into the air every day, generating rainfall and regulating the earth’s climate. Dell’s efforts in this action area include the

[Dell Plant-a-Tree program](#) that has raised more than \$2.3M and enabled more than [500,000 trees to be planted since 2007](#), as well as Dell’s multi-part approach to [mitigating climate change through forest stewardship](#).

Energy is a critical resource everyone relies on, including to keep technology running. Delivering breakthroughs in energy-efficient IT — from [computers](#) to [data centers](#) — helps reduce global greenhouse gas emissions, but also helps reduce stress on water supplies (40 percent of fresh water withdrawn in developed countries is associated with energy uses).

Helping protect the planet is not a job one company can do on its own. That’s why Dell is committed to partnering with organizations whose efforts to address key environmental issues can be amplified and multiplied by Dell’s technology, resources and expertise.



*The Upper Ouachita Reforestation Area, a project funded by Dell’s Plant-a-Tree program*

*Dell’s Lifecycle Approach to Sustainability*





## INVESTING IN NATURAL SOLUTIONS

“Restoring forest ecosystems is an important part of Disney’s commitment to minimize our impact on the environment and protect it for future generations. Investing in forests is a natural solution to help us reach our goal of net zero direct carbon emissions, while also protecting valuable watersheds and habitats that wildlife and communities depend upon.”

Robert A. Iger, *Chairman & CEO, The Walt Disney Company*

### BY 2015, THE WALT DISNEY COMPANY COMMITS TO:

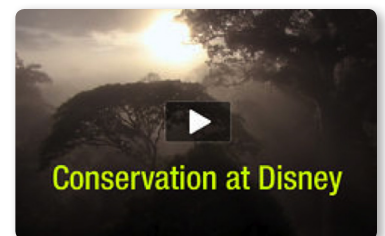
- ◆ **Fund 6,000 acres of reforestation projects.**
- ◆ **Fund one forest management project that results in enhancing carbon sequestration and provides certified wood/paper.**
- ◆ **Conduct a pilot study in partnership with leading organizations to quantify ecosystem benefits and services other than carbon.**

This commitment builds on \$20 million in conservation, improved forest management, and reforestation projects initiated since 2009.

Protecting the planet and conserving nature for future generations is a rich part of Disney’s history and a vital focus for our future. Current scientific conclusions indicate that reductions in greenhouse gas emissions are urgently required to avert accelerated climate change. Scarcity of natural resources and threats to ecosystems and biodiversity are serious environmental issues. These challenges demand fundamental changes in the way businesses use natural resources, and Disney is no exception.

In 2009, Disney announced a set of ambitious long-term goals around energy and carbon emissions, ecosystems, waste and water to reduce the company’s environmental impact.

These goals are rooted in the recognition that a healthy environment is essential to Disney’s long-term success. Disney’s business operations are reliant on natural resources, so conserving and utilizing these resources responsibly is important. Healthy forests are a natural solution for sequestering carbon efficiently and cost-effectively while providing many other valuable benefits. By improving the valuation of natural systems, Disney may also be able to make strategic investments in natural solutions that support efficient resource use.



## DETERMINING THE BUSINESS VALUE OF ECOSYSTEM SERVICES IN BRAZIL



“This collaboration is designed to help us innovate new approaches to critical world challenges while demonstrating that environmental conservation is good for business. Companies that value and integrate biodiversity and ecosystem services into their strategic plans are best positioned for the future.” *Andrew Liveris, Chairman & CEO, The Dow Chemical Company*

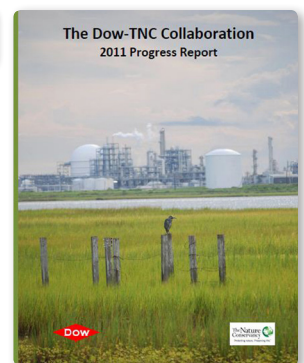
### BY 2012 DOW COMMITS TO:

- ◆ Establish a second pilot site in Santa Vitória, Brazil.
- ◆ Analyze impacts and dependencies on ecosystem services in the region — specifically related to crop production (sugar cane to (Polyethylene and biomass fuel); access to freshwater sources; forest habitat; sediment reduction (i.e., erosion control) and nutrient retention.
- ◆ Publish second annual Progress Report.

In alignment with [Dow's 2015 Sustainability Goals](#), the company embarked on a bold new experiment in 2011 — a five-year, \$10 million [collaboration with The Nature Conservancy](#) to determine the business value of ecosystems services. Scientists, engineers and economists from both organizations have been working together at Dow's Texas Operations in Freeport — the first pilot site — to analyze services that nature provides to Dow's operations and the community — including water, land, air, oceans and a variety of plant and animal life. Dow's long-term vision is to leverage analysis and findings at current and future pilot sites to influence practices and operations at Dow's business units globally and guide the decision-making of other companies and organizations

through open-source access to the resulting models, tools and learnings generated from the [collaboration](#).

Dow and The Nature Conservancy have created a [collaboration website](#) to share [progress](#) from this groundbreaking initiative, which aligns with the company's broader focus on [global conservation](#).



## RESTORATION OF THE AMERICAN CHESTNUT TO CENTRAL APPALACHIAN FORESTS



“Duke Energy has long understood that forest health is important to our business, for carbon storage as well as for the role it plays in keeping communities — our customers — healthy. Central Appalachia is a core fuel supply region for us, and we hope that investing in the reintroduction of the American chestnut on former surface mining sites will bring back this once great tree to Appalachian ecosystems while offering sustainable sources of lumber for local industry and biomass for electricity generation in the future.”

*Jim Rogers, Chairman, President & CEO, Duke Energy*

### BEGINNING IN EARLY 2013, DUKE ENERGY COMMITS TO:

- ◆ **Conduct carefully monitored field tests on transgenic American chestnut trees, to assess the viability and safety of reintroducing the species to reclaimed surface-mine lands in Central Appalachia.**

To support this commitment, Duke will finance the laboratory production of transgenic blight-resistant American chestnut seedlings, recently developed by The Forest Health Initiative; and work with academia, coal suppliers and landowners to find suitable sites for test plots. Duke will fund the plantings, and will interface with regulatory entities and stakeholders to monitor and document the viability and safety of the new seedlings through three, three-year, three-acre test plots.

The American chestnut tree, once a dominant species throughout the eastern United States, was blighted by fungus in the early 20th century. By conducting field tests on transgenic trees, this commitment helps support Duke Energy's strategy to support forest health, increasingly viewed as a necessary strategy for mitigating greenhouse gas emissions. Studies indicate the American chestnut may be the best temperate species for sequestering carbon. In addition,

the species may provide an excellent native species choice for planting on reclaimed surface mines, as it should do well on the soil conditions typical of these sites. It also grows quickly and produces a dense, rot-resistant wood, making it an excellent source of high-quality lumber and potentially a sustainable source of biomass for electric production. The nuts could provide a food source for people and wildlife. These characteristics could help fuel economic growth for the Central Appalachian region.

Duke Energy has long understood the value of forests to their business and has participated in [numerous forest restoration projects](#) as well as wetland restoration projects.



*Learn more about the Forest Health Initiative effort to develop a test-species of fungus-resistant American chestnut tree.*

## SUPPORTING THE ALLIANCE FOR WATER STEWARDSHIP INTERNATIONAL WATER STEWARDSHIP STANDARD



“Water scarcity and poor water quality impact more than a billion people around the world and millions die every year from diseases linked to water and sanitation issues. Ecolab is fortunate to have considerable water management expertise, and we’re sharing this expertise with others who are working on the serious water challenges facing our world.”

Douglas M. Baker, Jr., *Ecolab Chairman & Chief Executive Officer*

### IN 2012 ECOLAB COMMITS TO:

- ◆ **Test the draft AWS standard with select customers at several locations to gain real-world experience in applying and refining the standard.**
- ◆ **Build market awareness of the need for, and advantages of, using the standard to reduce potential water risks by minimizing the negative impacts of water use in industry.**

Expand its support of the [Alliance for Water Stewardship \(AWS\)](#) in establishing the International Water Stewardship Standard, which aims to support water users globally in taking appropriate actions to evaluate and improve their impacts on watersheds.

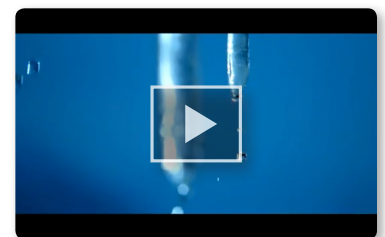
Ecolab’s two-year pledge includes both annual financial support and in-kind technical support to World Wildlife Fund, one of 10 organizations that form the AWS.

Working to ensure clean water by helping customers conserve is a key part of Ecolab’s vision to be the global leader in water, hygiene and energy technologies and services, providing and protecting what is vital. More on clean water efforts can be found at [www.ecolab.com](http://www.ecolab.com).

[Ecolab Inc.](#) is the global leader in water, hygiene and energy technologies and services that provide and protect clean water, safe food, abundant energy and healthy environments. Ecolab delivers comprehensive programs and services to the food, energy, healthcare, industrial and hospitality markets in more than 160 countries.

The Global Water Roundtable, a multi-year, multi-stakeholder standard development process sponsored by the AWS, drafted and is working to finalize the International Water Stewardship Standard. When finalized, the standard will define a set of water stewardship principles, criteria and indicators for how water should be managed at a site and watershed level in a way that is environmentally, socially and economically beneficial. The standard is intended to provide water stewards with an approach for evaluating existing processes and performances within sites and watersheds, and ensuring that responsible water stewardship actions are in place to minimize negative impacts and maximize positive impacts.

*Water is the element that connects every aspect of Ecolab’s business.*





## “NATLAB” — THE NATURAL INFRASTRUCTURE INNOVATIVE FINANCING LAB



Asset  
Management  
Partners

“Natural systems — forests, wetlands, etc. — provide us with a sort of technology, a form of infrastructure that delivers important services like clean air and water. Private investors can profit from investing in these forms of natural infrastructure to replace higher-cost gray infrastructure while generating social and environmental value.”

Ricardo Bayon, *EKO Asset Management Partners*

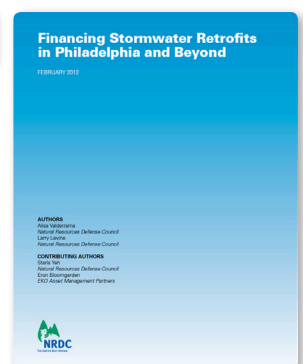
Climate change, population growth and the global recession are challenging cities around the world to address crumbling and insufficient infrastructure. A growing body of evidence suggests green or natural infrastructure solutions — such as preserved, constructed or restored forests, wetlands, watersheds and coastal ecosystems — provide affordable options for addressing wastewater treatment and stormwater management, while also providing a host of economic, social, and environmental co-benefits, including economic revitalization and green job creation. But without the proper regulatory and financial inducements, communities often follow past practices and invest in traditional “gray infrastructure.”

### TO ADDRESS THIS CHALLENGE, EKO ASSET MANAGEMENT COMMITS TO:

- ◆ Collaborate with The Nature Conservancy and Natural Resources Defense Council (NRDC) to launch “NatLab” — an innovative platform to accelerate the development of financial instruments that support investment in green infrastructure retrofits on public and private property.
- ◆ The first “NatLab” pilot will catalyze private capital investments to preserve and restore natural infrastructure in Philadelphia to address overflows and runoff from stormwater and improve water quality while also stimulating green economic growth.

recreation of natural infiltration systems — green roofs, pervious pavement, wetlands, and other techniques — that mitigate stormwater runoff and reduce combined sewage over flow events, while introducing green jobs to lower-income communities. Outcomes of the pilot will include specific policy recommendations, potential financing structures for catalyzing private capital for natural infrastructure projects and a final report for policymakers, water utilities, and other audiences to facilitate replication of the program in other cities.

Initial financing research published by NRDC and EKO suggests that there is a \$370 million private investment opportunity. NatLab will provide a blueprint for Philadelphia to meet its natural infrastructure needs and for private investors to realize returns on these kinds of green investments.



## ENTERPRISE RENT-A-CAR 50 MILLION TREE PLEDGE



“As our company marked its 50th Anniversary, this was our way of saying thanks for our first 50 years by making a really meaningful and significant commitment for the next 50. We are in this for the long haul, in keeping with our responsibility to help preserve the environment around us for future generations. We know that planting a million trees a year isn’t a complete solution, but it’s a solid step in the right direction.” *Andy Taylor, Chairman & CEO, Enterprise Holdings*

### **THROUGH 2056, IN COLLABORATION WITH THE ARBOR DAY FOUNDATION AND THE UNITED STATES FOREST SERVICE, ENTERPRISE, VIA ITS FOUNDATION, COMMITS TO:**

- ◆ **Underwriting the planting of 50 million trees over 50 years (a gift of \$50 million in today’s dollars) in national forests around the country, helping to improve the health of watersheds, which are important to the drainage of rainfall into streams, ponds, rivers and lakes.**
- ◆ **In 2012, fund plantings in state parks, as well as international locations where Enterprise operates, including Europe and Canada, and in 2013 focus on urban reforestation to assist with forest fires, drought and other urban issues — ensuring that benefits are realized by a range of communities that Enterprise’s business touches.**

According to the U.S. Forest Service, in 50 years, one tree can generate \$31,250 worth of oxygen; produce \$62,000 worth of air pollution control; recycle \$37,500 worth of water; and controls \$31,250 worth of soil erosion.

By the end of 2012, this collaborative effort will plant its 7 millionth tree — plantings which have helped preserve forests that are essential to local water sources. These included two forests in California, where 50 percent of the water supply originates in the state’s national forests. [More information and a map](#) to show the plantings across all Enterprise operations can be found on the Enterprise [Sustainability Website](#).

The 50 Million Tree Pledge, combined with Enterprise’s support of renewable biofuels research and other operational initiatives the company is undertaking, including the addition of electric vehicles to its fleet, are part of a **long-term commitment to sustain business success by sustaining the parts of the world that Enterprise’s business touches.** Investments made through this unique collaboration will help contribute to cleaner air and purer water, restored wildlife habitat, preserved natural lands for beauty and recreation; and a greener, healthier Earth for generations to come.

## WATER FUNDS INVESTMENT IN BRAZIL



“Preserving the watersheds and natural resources we have today for future generations is a priority for FEMSA, one that is deeply rooted in our 120 years of history. As a company and through FEMSA Foundation, we have a serious and profound commitment to improve environmental, economical and social aspects of communities. We understand that it is only through the balance of these three dimensions that we can achieve the sustainability we need to keep on working and growing.”

José Antonio Fernández Carbajal, *Chairman & CEO, FEMSA and President of the Board, FEMSA Foundation*

### BEGINNING IN 2012, FEMSA FOUNDATION COMMITS TO HELP PROTECT UPSTREAM WATER SUPPLIES BY:

- ◆ **Forming the Latin American Water Funds Partnership launched in alliance with The Nature Conservancy, the Inter-American Development Bank (IDB) and the Global Environment Facility to direct \$1.1 million USD to create and implement at least three Water Funds in Brazil, based on a Payments for Ecosystem Services approach.**

Healthy watersheds help minimize water treatment costs, and Water Funds allow downstream water users, such as industries and utilities, to effectively direct investments towards the preservation of key lands upstream that filter and regulate the water supply. By supporting investments in “natural infrastructure,” companies can save money on the construction of traditional manmade infrastructure such as filtration and irrigation systems. Investors — primarily large businesses and government agencies — see the Funds as a smart way to minimize treatment costs and reduce the chance of water shortages in the future.

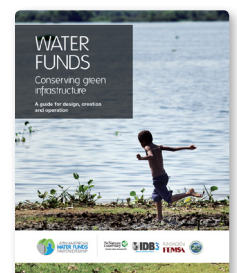
The Brazilian approach for Water Funds will generate income that will be channeled to communities that live in and around the Atlantic Forest. Communities will be paid to conduct reforestation projects, improve farming operations and fence

off sensitive streamside areas to protect water supplies.

[FEMSA Foundation's](#) commitment will see five-year results of nearly 130,000 acres of watersheds conserved, benefiting approximately 14 million people in rural and urban areas of Brazil.

According to the United Nations, over two-thirds of the global population could face water scarcity in the next 15 years. Water Funds can help turn the tide on clean water shortages around the world.

The Latin American Water Funds Partnership is the world's first initiative to engage the private and public sectors and civil society in this unique watershed conservation strategy, pioneered by [The Nature Conservancy](#).



#### WATER FUNDS MANUAL



ENGLISH



ESPAÑOL





## SAFEGUARDING ECOSYSTEMS THROUGH COST-EFFECTIVE WASTE MANAGEMENT

“GM recognizes that our long-term success requires us to be environmental stewards. Going landfill-free has been a true win-win: not only has it reduced our footprint and made us money, it’s helping to protect our watersheds and soil and enabling us to restore lands into healthy, productive ecosystems around the world.”

Michael J. Robinson, Vice President - Sustainability & Global Regulatory Affairs, General Motors Company

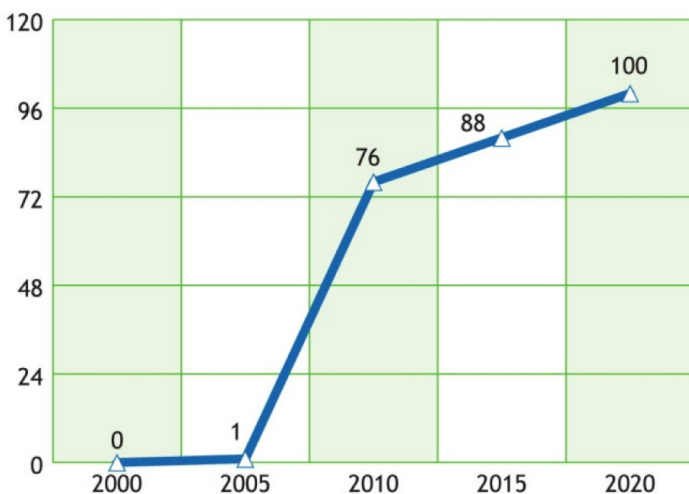
### BY 2020, GM COMMITS TO:

- ◆ Achieve landfill-free status at 100 manufacturing sites and 25 nonmanufacturing sites, thereby conserving natural resources, keeping them in their use phase, and reducing associated life cycle environmental impacts.

Waste reduction is a key component of GM’s aggressive [sustainability strategy](#). GM facilities started tracking reductions in waste 15 years ago to identify the materials being generated, reused and recycled, and reveal areas for improvement. This information was used to establish specific plant goals and metrics, which paved the way for this commitment.

*ROI - The costs associated with achieving landfill-free status are more than offset by the value to the company and to the environment. Since 2007, GM facilities have generated \$2.5 billion in revenue through recycling activities.*

### LANDFILL-FREE FACILITIES



## INTRODUCING INNOVATIVE PRODUCTS USING SUSTAINABLE FLAX FIBER

**HANES** *Brands Inc*

“HanesBrands is excited to introduce flax fiber to its product line, which we hope will not only provide a superior, natural product to our customers by enhancing wicking capabilities and durability when combined with cotton but also offer several ecological benefits including reduced pesticide use, lower water use, improved soil health and avoided deforestation.”

*Mike Faircloth, Chief Supply Chain Officer, HanesBrands Inc.*

### BEGINNING IN 2012, HANESBRANDS COMMITS TO:

- ◆ **Assist Naturally Advanced Technologies in developing a facility that will be capable of processing millions of pounds of fiber annually by 2014.**
- ◆ **Work closely with Naturally Advanced Technologies and farmers to establish an agronomic case for the introduction of flax to their farmlands.**
- ◆ **Develop and market new products that incorporate flax fiber as a complement to cotton and polyester fiber, beginning with Hanes socks in 2012.**

Hanes has a long history of delivering highly sustainable cotton products by concentrating its cotton sourcing from the eastern United States, avoiding water scarce regions and taking advantage of the most advanced farming techniques available, while also reducing the energy footprint from shipping. As the “green consumer” market segment grows, Hanes has recognized that their customers rely on them to deliver a superior product. It saw an opportunity to introduce product innovations that could partially replace polyester fiber and could lend additional benefits to traditionally 100 percent cotton products, such as superior wicking and increased product durability. While opening up great potential to differentiate the Hanes brand and grow revenues, flax also offers multiple ecosystem benefits. Flax is biodegradable and can be grown in cold climates (or off season), allowing for increased crop rotation and helping farmers use less land.

This can alleviate deforestation as farmers seek to meet increasing demands. Flax also grows quickly and needs less irrigation, pesticides and herbicides, helping to stabilize and protect local water sources.

In 2009, Hanes began working with NAT on the development of this fiber innovation and will begin producing their first flax-inclusive sock products in 2012.



*Flax beginning to bloom in Kingstree, SC area in March of 2012*

## KIMBERLY-CLARK PLANS TO REDUCE ITS FOREST FIBER FOOTPRINT



“As global demand for the world’s forest resources increases, using alternatives will be essential to the sustainability of those forests, and businesses like Kimberly-Clark. We are aggressively pursuing high-potential alternatives to the traditional fiber sources used in our industry — namely trees and traditional recycled paper streams — in order to reduce our Forest Fiber Footprint. Given the role that trees and forests play in the health of the global environment, and because fiber is such an important aspect of our business, Kimberly-Clark is setting the standard for innovation in alternate fiber usage.” *Suhas Apte, Vice President of Global Sustainability, Kimberly-Clark Corporation*

### KIMBERLY-CLARK CORPORATION ANNOUNCES AN AMBITIOUS GOAL TO:

- ◆ **Transition 50 percent of wood fiber sourced from natural forests to alternate fiber sources by 2025.**

By committing to reduce its Forest Fiber Footprint, Kimberly-Clark adds to an already impressive history of leadership in protecting the world’s forest resources and ending deforestation globally. This broad, new initiative will help protect biodiversity and reduce the impacts of fiber that the company uses while ensuring the fiber is sourced in an environmentally and socially responsible way. In addition, the initiative will also help insulate the company from continuing volatile price fluctuations in the world’s fiber market. This key alternate fiber sourcing initiative further builds on Kimberly-Clark’s recently realized Sustainability 2015 goal of [sourcing 100 percent of its wood fiber from certified suppliers](#), and the company’s ongoing commitment to map and protect high conservation value forests.

In 2011, the company used nearly 750 thousand metric tons of virgin fiber sourced from natural forests. To meet its consumer needs, it uses six percent of total market pulp demand. Therefore, the company must support a [sustainable supply of fiber](#) — sustainable not simply for its requirements but equally for the health of the global ecosystems. **Forests are important natural resources that the business community, including Kimberly-Clark, must continuously and collaboratively work to preserve.**

Practicing sustainability at Kimberly-Clark is part of the work it does every day. A key component of its Global Business Plan calls for increasing the positive impact of its sustainability efforts. That’s why in 2011, K-C launched Sustainability 2015, the most comprehensive sustainability strategy in its company’s history. [Sustainability 2015](#) reflects the full circle of its social responsibilities — to contribute more to the environmental, social and economic success in the communities it operates in around the world.



**Definition of Natural Forest:** A forest which has spontaneously generated itself on the location and which consists of native species (a species that naturally exists at a given location or in a particular ecosystem) with natural ecosystem functions.

## PROTECTING NATURAL INFRASTRUCTURE THROUGH E-WASTE STEWARDSHIP



“Our management of electronic waste is critical to our business and industry. Responsible stewardship of e-waste keeps potentially hazardous materials out of land and water ecosystems — and has security benefits as well. We’re focused on continually improving infrastructures to advance the world we want.”

Christopher E. Kubasik, *President & Chief Operating Officer, Lockheed Martin*

### IN 2012, LOCKHEED MARTIN COMMITS TO:

- ◆ Reduce potential damage to natural infrastructure by reducing water, land and air pollution resulting from the disposition of electronic waste (e-waste\*) by instituting stringent practices for the responsible management, disposition and tracking of e-waste.
- ◆ Develop K-12 educational outreach materials on this topic for use by educators and students.

Sales of electronics continue to grow globally — exponentially in developing areas such as India — yet a startling gap remains between e-waste generated and e-waste recycled. This commitment will heighten awareness of adverse impacts from improper management of e-waste; increase the number of certified e-steward suppliers supporting Lockheed Martin’s business; and will assess internal e-waste practices through an audit process.

This commitment aligns with Lockheed Martin’s [Go Green](#) program, which was established in 2008 to reduce adverse environmental impacts from our operations and achieve a 25% absolute reduction in carbon emissions, waste to landfills and water usage by 2012.



## THE AMAZON'S JUMA RESERVE & THE SUSTAINABLE DEVELOPMENT OF FAIRFIELD BY MARRIOTT HOTELS IN BRAZIL



“Marriott International sees environmental sustainability as critical to our business. With an increase in global travel comes a growing need to conserve precious resources and lessen our impact — within our hotel operations and beyond. This will help sustain travel and tourism for many years to come.”

*Arne Sorenson, President & CEO, Marriott International*

### IN 2012, MARRIOTT INTERNATIONAL COMMITS TO:

- ◆ **\$500,000 to sustain the preservation of the Juma Reserve. As Marriott grows its presence in Brazil, it will make an investment in Juma as each of 10 new Fairfield by Marriott hotels opens its doors to guests. The Fairfield by Marriott hotels will be constructed to sustainable building standards.**
- ◆ **This commitment builds on a \$2 million initial investment made in 2008 under a historic agreement with the Amazonas Sustainable Foundation and the Government of Amazonas to preserve the Juma Reserve's 1.4 million acres of rainforest. Through this agreement, Marriott is helping to preserve the future particularly for Juma's residents, who in turn will help protect the rainforest from illegal farming and logging.**

According to Conservation International and other environmental experts, the destruction of tropical forests contributes 20 percent of the world's greenhouse gas emissions. But conserving rainforests — particularly the Amazon, considered the “lungs of the planet” — is one of the most effective ways to mitigate the impact these emissions have.

Investing in strategic conservation initiatives, including the Juma REDD+ project in the Brazilian Amazon Rainforest and fresh water project in Sichuan Province, China, creates greater economic development locally while ensuring a healthier planet for all, both of which are key to Marriott's long-term business success.

Marriott's long-term sustainability goals, established in 2007 to guide the company's progress toward a more sustainable future, are to:

- ◆ Further reduce energy and water consumption 20 percent by 2020
- ◆ Empower hotel development partners to build green hotels
- ◆ Green Marriott's supply chain
- ◆ Educate and inspire associates and guests to conserve resources
- ◆ Address environmental challenges through innovative conservation initiatives including rainforest preservation and access to fresh water





## PROTECTING ECOSYSTEMS AND BRAND INTEGRITY: SCALING UP PATAGONIA'S COMMITMENT TO THE BLUESIGN® STANDARD

**patagonia®**

“Patagonia’s brand value is deeply entwined with nature, so environmental stewardship has always been part of our core business. How our clothes are made is part of that equation, and that requires new kinds of relationships with our suppliers to ensure our manufacturing processes aren’t damaging ecosystems. With our commitment to the bluesign® standard we strive to further reduce the impacts of textile manufacturing on the environment, ensure workers’ safety, consumer safety and brand protection. Through collaboration, we hope that commitments similar to ours will become common in the apparel industry.”

Casey Sheahan, CEO, Patagonia

### PATAGONIA COMMITS TO:

- ◆ **Using bluesign® approved materials in its product line. Beginning with the Fall 2015 product season, Patagonia’s goal is to increase the percentage of bluesign® approved fabrics and trims used in new apparel products to 100 percent.**

To achieve this ambitious goal, Patagonia will continue to introduce new bluesign® approved fabrics and trims, and convert existing materials to bluesign® approved fabrics and trims.

The chemicals used for textile manufacturing are often hazardous and sometimes toxic. Chemical residues that wash out often end up in wastewater that can pollute streams, soil and oceans. Others go skyward, polluting the air. A lot of fresh water and energy also go into making fabric.

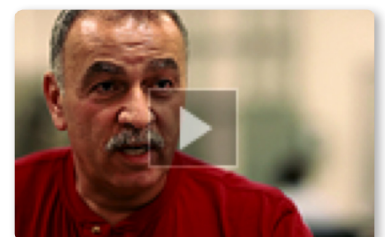
The bluesign® Standard sets “best practices” for the use of chemicals and resources — including water and energy — in the textile industry. Textile manufacturers who are bluesign® system partners agree to establish management systems to improve environmental performance in five key areas of the production process: resource productivity, consumer safety,

water emissions, air emissions and occupational health and safety. They regularly report their progress, are subject to on-site audits, and must meet improvement goals to maintain their status.

Patagonia became involved in promoting the bluesign® standard to their supply chain early on, and in 2007 became the first official bluesign® brand member. bluesign® approved fabrics currently comprise 15 percent of the total fabric used in Patagonia products — the goal of this commitment is to increase that to 100 percent.



[website](#)



## REDUCING PAPER USE AND PROTECTING NORTH AMERICAN FORESTS



“The TD Forests program is very much part of our goal to embed an environmental perspective into our business. With TD Forests, we are expanding the bank’s environmental initiatives to address paper usage through two pillars of reduce and grow — reduce paper use and grow the area of protected forest habitat in the U.S. and Canada.”

Karen Clarke-Whistler, *Chief Environment Officer, TD Bank Group*

### IN 2012, TD BANK COMMITS TO:

- ◆ Invest in a major forest conservation initiative called **TD Forests** to protect critical forest habitat in the United States and Canada.
- ◆ Protect forested areas in both countries equivalent to the paper TD uses — that’s roughly two football fields of forest each and every day.
- ◆ Finalize a partnership with a U.S.-based nonprofit conservation organization with the goal of protecting forests across TD Bank’s Maine to Florida footprint. TD has already formed an innovative partnership with the Nature Conservancy of Canada to increase the area of protected forest habitat across TD’s business footprint in Canada.

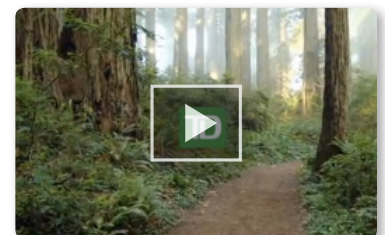
The TD Forests Initiative will address customer and employee demand for using less paper, will reduce business expenses while increasing efficiency, will enhance communities where its customers and employees live and work and will benefit the environment.

By choosing to conserve forests, TD isn’t just protecting the trees — it’s helping to protect all of the life that lives in-between.

TD’s environmental roots are deep. The bank has been involved in environmental conservation, education and volunteering for more than 20 years. TD Forests is the next chapter in TD Bank’s [growing environmental initiative](#).

This commitment will help TD Bank Group (TD) and its U.S.-based subsidiary, TD Bank, reach their goal to reduce paper usage in North America by at least 20 percent by 2015.

Each year TD will track paper use, calculate the equivalent area of forest, and with the help of its conservation partners, the bank will protect the equivalent amount of critical forest habitat.







## 100% CERTIFIED SUSTAINABLY-SOURCED PALM OIL

“Unilever’s business is part of a complex supply chain, including farmers and plantation owners, processors, refiners and traders of raw materials. To meet our ambitious target of 100 percent traceable palm oil we’ll need to work closely with all of them to transform farming practices and encourage a wider move towards sustainability within the industry. Given the large volumes of palm oil that we buy, achieving traceability by 2020 is a significant challenge, but we believe that by setting ambitious targets can we drive change in our business and in the wider world.”

Gail Klintworth, *Corporate Sustainability Officer, Unilever*

In 2012, Unilever announced that it had achieved a 2015 target of 100 percent sustainable palm oil, covered by Green Palm Certificates, a full three years ahead of schedule, making the company the single largest purchaser of GreenPalm certificates globally. Though such certification is a positive step, it is only one step along the way to true palm oil sustainability.

### UNILEVER FURTHER COMMITS TO:

- ◆ **Purchase 100 percent of its palm oil from traceable sources by 2020.** This means that the company will be able to track all certified oil it buys back to the plantation on which it was originally grown, providing further sustainability assurance throughout the supply chain.

To help achieve this goal, Unilever is in advanced stages of discussions with the Indonesian government regarding building a \$100 million dollar plant in Sumatra, which will not only cut back on transport and save money but will make it easier to trace the sources of the palm oil used. Agriculture and forestry are the largest contributors to global greenhouse gas emissions and are major drivers of climate

change. Half of Unilever’s raw materials come from either farms or forests. Therefore, the company is committed to sourcing sustainably all its agricultural raw materials by 2020, as set out in the [Unilever Sustainable Agriculture Code](#). As well as protecting the planet’s natural resources, sustainable sourcing helps Unilever to **manage a core business risk by ensuring security of supply for the long term**. Sustainable sourcing helps to **maintain soil fertility, enhance water quality, reduce greenhouse gas emissions and protect biodiversity**. It also contributes to better incomes and livelihoods for farmers and their workers. GreenPalm certificates support the production of palm oil certified to the standards of the [Roundtable on Sustainable Palm Oil](#).

In November 2010, Unilever set out their [Sustainable Living Plan](#), committing to a ten year journey towards sustainable growth. What makes the Plan different is that it applies across the value chain. Unilever is taking responsibility not just for its own direct operations but for its suppliers, distributors and — crucially — for how consumers use their brands.

## DRIVING SUSTAINABILITY FOR ADDITIONAL VALUE WITH FOREST SOLUTIONS AND ECOSYSTEM SERVICES

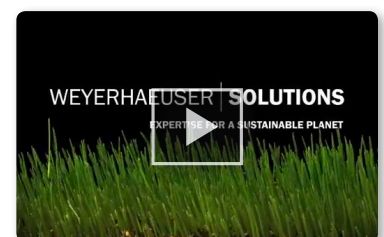


“By holistically addressing sustainability opportunities across our businesses, including understanding the value of services derived from forest ecosystems and identifying business offerings focused on natural resource management, we have been able to advance more revenue opportunities building on our core land and forest assets.” *Dan Fulton, President & CEO, Weyerhaeuser*

### WEYERHAEUSER COMMITS TO:

- ◆ A comprehensive sustainability strategy with 42 targets to be achieved by 2020.
- ◆ Establish and report annually against a comprehensive set of indicators to quantify 18 ecosystem services provided by Weyerhaeuser forestlands. In addition to traditional wood products, these values will measure clean water, soil productivity, habitat for fish and wildlife, hydrology, and recreation and cultural benefits.
- ◆ Leverage renewable resource management expertise to launch Weyerhaeuser Solutions, a new business line that helps clients unlock the economic and environmental potential of forests to mitigate risks, diversify investments, and expand economic opportunities.

Weyerhaeuser’s vision is to provide superior sustainable solutions for the world. Based on expertise developed over a century of renewable resource management and through useful and innovative products — providing shelter, personal hygiene, clothing and energy — the company solves important problems for people and the planet. This commitment will help Weyerhaeuser achieve its 2020 target to deliver sustainable forest solutions, including maintaining or enhancing the ecosystem services provided by its timberlands and increasing revenues from ecosystem services and Weyerhaeuser Solutions.



## REWARDING LOW-IMPACT FOREST MANAGEMENT BY VALUING CARBON BENEFITS



“What gets measured, gets managed ... and should be recognized. Our commitment with The Nature Conservancy is to establish a methodology for quantifying the carbon benefits associated with improved forest management, with the goal of enabling incentives for such actions. We can drive improved forest management across the paper supply chain while at the same time support local communities and regional economic development goals.”

*Diane P. O'Connor, Vice President, Xerox Environment, Health, Safety & Sustainability*

### BETWEEN 2012 AND 2014, XEROX COMMITS TO:

- ◆ **Partner with The Nature Conservancy and the Tropical Forest Foundation to develop and test a groundbreaking methodology that values carbon savings associated with improved forest management practices and forest certification.**
- ◆ **The methodology will be based on a pilot project to monitor, report and verify emissions reductions through improved logging in Berau, Indonesia.**

This initiative is intended to lay critical ground work to enable “quantification” of forest carbon value. No organization has yet to assess the carbon benefits associated with the improved management and certification of production forests at the scale proposed by this commitment.

As one of the largest distributors of paper for office printers and copiers, Xerox's long-term success is dependent on a truly sustainable paper supply chain. Recognizing that challenges facing the paper industry extend beyond the paper companies themselves, Xerox has adopted a multi-pronged approach, leveraging partnerships with customers, suppliers and key stakeholders. Starting with the source of the fiber used to make the paper, through its manufacture and use, Xerox has successfully minimized environmental impact while meeting customers' business needs. Consumers and corporations are increasingly demanding legal and certified timber products and the United States, while other buyer nations are implementing laws and regulations to stem the trade in illegal timber-based products. However, progress is slow and there

remain significant gaps in both human and institutional capacity in transitioning to a legal and sustainable timber supply model.

This commitment will improve current practices and help companies make better sourcing decisions by supporting advances in the science and metrics needed to align sustainable forest conservation with market-based carbon reduction incentives. Scientists from The Nature Conservancy estimate that adopting improved forest management practices can reduce forest destruction and carbon emissions by as much as 45 percent without reducing the timber taken to market. By allowing landowners to achieve forest certification, this approach can also support community and regional economic development goals.

This commitment builds on a long history of corporate sustainability at Xerox and a partnership between Xerox and The Nature Conservancy that goes back to 2006. Early collaborations with The Conservancy focused primarily on enabling sustainable forestry practices through greater supply of certified fibers. As the relationship evolved and scientific evidence grew around the importance of forest carbon, the partnership was expanded to include efforts toward realizing forest value in climate change dynamics.

*Children of Xerox employees take a look at the many ways Xerox is involved in green efforts.*





# TOOLS *and* RESOURCES

## SECTIONS

**TOOLS AND STANDARDS FOR ECOSYSTEM ASSESSMENT,  
VALUATION AND STRATEGY DEVELOPMENT**

**RESOURCES DESCRIBING THE BUSINESS VALUE OF ECOSYSTEMS**

**CORPORATE-LED EFFORTS TO VALUE NATURAL CAPITAL**

**ADDITIONAL COMPANY CASE STUDIES AND EXAMPLES**

## TOOLS AND STANDARDS FOR ECOSYSTEM ASSESSMENT, VALUATION AND STRATEGY DEVELOPMENT

The ARIES Consortium, [ARIES: Artificial Intelligence for Ecosystem Services](#), 2012

Business for Social Responsibility (BSR) Insight, [Measuring Environmental Performance: The Business Case for New Tools](#), 2010

Business for Social Responsibility (BSR), [Measuring Corporate Impact on Ecosystems: A Comprehensive Review of New Tools](#), 2008

Conservation International, Bird Life International, International Union for Conservation of Nature and UNEP, [Integrated Biodiversity Assessment Tool](#)

Convention on Biological Diversity, [Review of the Biodiversity Requirements of Standards and Certification Schemes: A Snapshot of Current Practice](#), 2011

Forest Trends, The Katoomba Group, UNEP, [Payment for Ecosystem Services: Getting Started](#), 2008

Global Canopy Foundation, [Understanding Forest Bonds: A Guide to Raising Up-Front Finance for Tropical Forests](#), 2011

Global Canopy Foundation, [Forest Footprint Disclosure Project](#), 2009

Global Environmental Management Initiative (GEMI), [Local Water Tool](#)

Global Environmental Management Initiative (GEMI), [Connecting the Drops Toward Creative Water Strategies: A Water Sustainability Tool](#)

Global Reporting Initiative, UNEP and CREM Biodiversity Indicators Partnership, [Approach for Reporting on Ecosystem Services: Incorporating Ecosystem Services into an Organization's Performance Disclosure](#), 2011

IPIECA, [Ecosystem services guidance: Biodiversity and ecosystem services guide and checklists](#), 2011

Natural Capital Project, [InVEST: Integrated Valuation of Environmental Services and Tradeoffs](#)

The Natural Value Initiative, [Ecosystem Services Benchmark V1. The benchmark tool and individual company analysis template](#)

The Natural Value Initiative, [Tread lightly. Biodiversity and ecosystem services risk and opportunity management within the extractive industry](#), 2011

NatureServe, [Ecosystem-Based Management Tools Network](#), 2011

UNEP et al., [Measuring and Monitoring Ecosystem Services at the Site Scale](#), 2011

World Business Council for Sustainable Development, [Global Water Tool](#), 2011

World Business Council on Sustainable Development, [Guide to Corporate Ecosystems Valuation](#), 2011

World Resources Institute, [Corporate Ecosystem Services Review: Guidelines for Identifying Business Risks & Opportunities Arising from Ecosystem Change](#), 2012

World Resources Institute, [Nature in Performance: Integrating Ecosystem Services into Business Performance Systems](#), 2012

World Resources Institute, [The Aqueduct Atlas Water Risk Assessment Tool](#)

## RESOURCES DESCRIBING THE BUSINESS VALUE OF ECOSYSTEMS

- Aldersgate Group, [Pricing the Priceless: The Business Case for Action on Biodiversity](#), 2011
- Business for Social Responsibility (BSR), [The Quiet \(R\)Evolution in Expectations of Corporate Environmental Performance](#), 2012
- Cambridge Natural Capital Programme, [Building a Leadership Narrative for Business](#), 2011
- Cambridge Natural Capital Programme, [Resilient Value Chains Report](#), 2011
- Cambridge Natural Capital Programme, [Understanding and Managing the Business Risks and Opportunities](#), 2011
- David Gardiner & Associates, LLC for Calvert Investments, Ceres and Oxfam America, [Physical Risks from Climate Change: A guide for companies and investors on disclosure and management of climate impacts](#), 2012
- Deutsche Bank Research, [Climate Change: Forest Conservation Must be Given Higher Priority](#), November 2011
- Eurosif, [Biodiversity Theme Report](#), 2009
- ForestTrends, [Ecosystem Marketplace](#)
- ISIS Asset Management, [Is Biodiversity a Material Risk for Companies? An Assessment of the Exposure of FTSE Sectors to Biodiversity Risk](#), 2004
- International Union for the Conservation of Nature and Rio Tinto, [Exploring Ecosystem Valuation to Move Toward Net Positive Impact on Biodiversity in the Mining Sector](#), 2011.
- KPMG, [Sustainable Insight: The Nature of Ecosystem Service Risks for Business](#), May 2011
- McKinsey & Company, [The Next Environmental Issue for Business: McKinsey Global Survey Results](#), 2010
- McKinsey Global Institute, [Resource Revolution: Meeting the world's energy, materials, food and water needs](#), 2011
- Millennium Ecosystem Assessment, [Ecosystems and Human Well-Being: Opportunities and Challenges for Business & Industry](#), 2005
- Noragric, Department of International Environment and Development Studies at the Norwegian University of Life Sciences , [Can Markets Protect Biodiversity: An Evaluation of Different Financial Mechanisms](#), 2011
- United Nations Framework Convention on Climate Change Private Sector Initiative, [Private Sector Initiative's \(PSI\) – database of actions on adaptation](#)
- United Nations Environment Program, International Ecosystem Management Programme, [Securing a Green Economy through Ecosystem Management](#), 2011
- United Nations Environment Programme (UNEP), [Dead planet, living planet: Biodiversity and ecosystem restoration for sustainable development](#), 2010
- United Nations Environmental Programme (UNEP), [The Economics of Ecosystems and Biodiversity Report for Business](#), 2010
- World Business Council for Sustainable Development, [Business Ecosystems Training \(BET\)](#), 2012
- World Business Council for Sustainable Development, [Responding to the Biodiversity Challenge: Business Contributions to the Convention on Biological Diversity](#), 2010
- World Resources Institute & AT Kearny, [Rattling Supply Chains: The Effect of Environmental Trends on Input Costs for the Fast-Moving Consumer Goods Industry](#), 2008



## CORPORATE-LED EFFORTS TO VALUE NATURAL CAPITAL

WWF, [Living Planet Report 2012: Biodiversity, Biocapacity and Better Choices](#), 2012

WWF, [Green Game Changers: 50 Innovations to Inspire Business Transformation](#), 2011

[BSR Ecosystem Services Working Group](#) focuses on emerging risks and opportunities associated with corporate reliance on, impact to, and revenue opportunities from ecosystem services and environmental markets.

[Cambridge Natural Capital Leaders Platform](#), a business-led program focusing on practical evidence, action and policy influence. The cross-sector Platform was set up in 2010, as part of the Cambridge Natural Capital Programme, with 20 influential companies with a global reach. The Platform addresses the impacts of ecosystems and natural capital loss and degradation on business, their customers and wider society.

[Ecosystem Markets Task Force](#), a UK business-led, independent task force brings together industry leaders and experts from a wide range of sectors, ranging from banking and biodiversity conservation to beauty, to look for ways in which companies can improve both the environment and their bottom line.

[World Business Council for Sustainable Development](#) (WBCSD) has been working on ecosystem issues for 15 years. The Focus Area helps build capacity and develop tools to assess risks and opportunities related to business impacts and dependencies on ecosystems, and also engages in the global biodiversity and ecosystem policy debate.

## ADDITIONAL COMPANY CASE STUDIES AND EXAMPLES

Click on the company name below to advance to that example.

AES Corporation ♦ Aggregate Industries UK ♦ Alcoa ♦ Akzo Nobel ♦ Allegheny Power  
 Anheuser-Busch Inc ♦ Arcelor Mittal ♦ Astrazeneca ♦ Barrick Gold ♦ Bayer Health Care  
 Bristol-Myers Squibb ♦ British American Tobacco ♦ BP ♦ Campbell Soup Company  
 Canopy Capital ♦ Cargill ♦ ChevronTexaco ♦ Citi ♦ Clean Water Services ♦ Coca-Cola  
 Cook Composites and Polymers ♦ Daimlerchrysler ♦ Dell ♦ Duke Energy ♦ Dupont  
 The Ecoenterprises Fund ♦ Enel Latin America ♦ Esri ♦ ExxonMobil ♦ Upstream Research  
 Company ♦ General Motors ♦ Glaxosmithkline ♦ Goldman Sachs Google ♦ Halma  
 Hitachi Chemical ♦ Houston BPS ♦ HSBC ♦ IBM ♦ Ingenio El Potrero ♦ JPMorgan Chase  
 Mars ♦ Michelin ♦ Mondi ♦ Northrup Grumman ♦ Novartis ♦ Pfizer ♦ PPR  
 PSA Peugeot-Citroen ♦ Questar Market Resource ♦ Rabobank ♦ Ricoh ♦ Rohm & Haas  
 Root Capital ♦ Sab Miller ♦ South Africa Water Corporation ♦ Sprint ♦ Syngenta  
 Toyota North America ♦ Xerox ♦ Unilever ♦ Verde Ventures ♦ Volkswagen



## 2012

### LEAD AUTHORS

[Amy O'Meara, The Corporate Eco Forum](#)

[P.J. Simmons, The Corporate Eco Forum](#)

### IN COLLABORATION WITH

[Michelle Lapinski, The Nature Conservancy](#)

### SPECIAL THANKS TO

Dorothee D'Herde, McKinsey & Company

Caroline Hermans, Clinton Global Initiative

Louise Kantrow, International Chamber of Commerce

Dorothy Maxwell and Claudia McMurray, The Prince of Wales International Sustainability Unit

Jessica McGlyn, WBCSD U.S., Inc.

Ram Nidumolu, InnovaStrat

Sarah Nolleth, The Prince's Accounting for Sustainability Project (A4S)

Suzanne Ozment, World Resources Institute

Chris Turner, World Business Council for Sustainable Development



<http://www.corporateecoforum.com>

The Corporate Eco Forum (CEF) is an elite, invitation-only membership organization comprised of predominantly Fortune and Global 500 companies with combined revenues of over \$3 trillion. CEF provides a year-round safe, neutral space for VP and C-level executives to exchange leading-edge insights and forge “next practices” in corporate sustainability.

## CEF MEMBERS

3M, Air Products, Alcoa, American Express, ArcelorMittal, Bayer, Boeing, BP, Cargill, CA Technologies, CH2M Hill, Chevron, Cisco, The Clorox Company, Coca-Cola, Darden Restaurants, Dell, Deloitte, Dow Chemical, Duke Energy, Eastman Kodak, Ecolab, Enterprise Holdings, Ernst & Young, FedEx, Fidelity Investments, Ford Motor, Gamesa, GE, General Motors, Google, Grubb & Ellis, Hanesbrands, Hewlett-Packard, IBM, Ingersoll Rand, International Paper, Intuit, Johnson & Johnson, Kaiser Permanente, Kimberly-Clark, Kohl's, KPMG, LANXESS, Lockheed Martin, Marriott, Microsoft, Motorola Solutions, News Corporation, Nike, Northrop Grumman, Oracle, PG&E, Procter & Gamble, Sabre, Sanmina-SCI, SAP, Siemens, Sony Pictures, SunGard, Sybase, Symantec, Tata Consultancy Services, Tiffany & Co., Timberland, TPG Capital, Transocean, Unilever, United Technologies, UPS, Veolia Water, The Walt Disney Company, Waste Management, Wells Fargo, Weyerhaeuser, Xerox.



<http://www.nature.org>

The Nature Conservancy is a leading conservation organization working around the world to protect ecologically important lands and waters for nature and people. The Conservancy and its more than 1 million members have protected nearly 120 million acres worldwide.

## DESIGN AND DIGITAL PUBLISHING

[Peter Hill, Hill + Love](#)

HILL + LOVE