



Private Sector Engagement with Ecosystem Services

January 2015 UPDATE



About This Working Paper

This working paper was written by Sissel Waage and Corinna Kester. The detailed corporate activity tables were created by Corinna Kester.

It emerges from the efforts of BSR's Ecosystem Services Working Group (ESWG), which was formally launched in January 2007. Since its launch, BSR has tracked the corporate uptake of ecosystem services (ES) concepts and practices. Specifically, we have documented the growing list of companies that publicly describe work on ES and natural capital issues. This research has resulted in periodic updates in the form of working papers.

Originally issued in March 2013, this paper has been revised to include new developments throughout the 2013 calendar year. Its purpose is to help corporate employees to understand the full range of companies working on ES issues and the closely related natural capital domain. We hope that this paper will help corporate representatives better understand the ways they can engage with and factor ES impacts and dependencies into business decision-making processes.

This paper's scope is restricted to tracking companies that explicitly name ES and natural capital in their own publicly available materials, which also sometimes occurs in how they define biodiversity (which is, in certain companies, defined as including ES). Therefore, companies that are publicly describing their work on climate change and carbon, water, and other individual environmental issues are *not* included. Rather, we focus on companies that assert that they are using an integrated approach to consider multiple ES parameters concurrently.

The research methods that inform this paper combine both a literature review, primarily based on online documents, and interviews with thought and practice leaders conducted over the since BSR launched this line of research. Our intent has been to generate the most inclusive list of companies that are asserting in the public domain that their business is engaged with ecosystem services issues.

We are grateful for support and input from both past and current corporate members of [BSR's ESWG](#), including (in no particular order): Sarah Connick, Rich Woods, Laura Napoli, Nina Springer, Greg Biddinger, Joanna Cochrane, Mikkel Kallesoe, Sachin Kapila, Roberto Bossi, David Norris, Ann George, Cristian Strickler, Teague Raica, Shirley Oliveira, Rachel Kennedy, Mark Johnston, Maarten Kuijper, Judy Gunderson, Mark Weick, Jonathan DiMuro, Rich Helling, Melissa Barbanell, Gail Ross, Nathan Monash, Tabby Resane, Nick Cotts, and Craig Duxbury.

Please direct comments or questions to Sissel Waage at swaage@bsr.org and Corinna Kester at ckester@bsr.org.

DISCLAIMER

BSR publishes occasional papers as a contribution to the understanding of the role of business in society and the trends related to corporate social responsibility and responsible business practices. BSR maintains a policy of not acting as a representative of its membership, nor does it endorse specific policies or standards. The views expressed in this publication are those of its authors and do not reflect those of BSR members.

ABOUT BSR

BSR is a global nonprofit organization that works with its network of more than 250 member companies to build a just and sustainable world. From its offices in Asia, Europe, and North America, BSR develops sustainable business strategies and solutions through consulting, research, and cross-sector collaboration. Visit www.bsr.org for more information about BSR's more than 20 years of leadership in sustainability.

Contents

5 Introduction

8 Current Corporate Activity and Trends

Activity Area 1: Setting Corporate Policies, Standards, and/or Targets

Activity Area 2: Assessing Monetary Values of Natural Capital

Activity Area 3: Exploring and Embedding Biodiversity and Ecosystem Services into Corporate Management Systems

12 Looking Forward

**13 Appendix: Corporate Activity Related to Ecosystem Services,
*Updated January 2015***

Introduction

Forty-seven companies from around the world now mention natural capital and ecosystem services (ES) in publicly available materials. This figure is a dozen more than we documented in the 2013 edition of this paper. It is based on a review of publicly available corporate reports from companies around the world and media coverage that reference private sector work on these issues. This working paper offers a snapshot of corporate ecosystem services activity and strengthens the business case for companies to take action.



As more companies explore and engage with these issues, the business case for corporate action on natural capital and biodiversity and ecosystem services (BES) continues to strengthen.

The foundation of the internal business case rests on continual improvement of how companies identify risks and opportunities, particularly associated with costly project delays and supply chain challenges, as well as reputation and privilege-to-operate issues. In addition, many companies are actively assessing how to maintain long-term access to key natural resource-based inputs, particularly water. Considering the availability of these resources today and over time, while taking into account the ecological and socioeconomic demands of users, can be undertaken in the context of [an ES approach](#) as it highlights system dynamics and trade-offs.

Therefore, to improve current risk and opportunity identification processes, a growing number of corporate decision-makers are expanding corporate protocols to include an assessment of their dependencies and impacts on BES. For example, one approach is by applying the Corporate Ecosystem Services Review ([ESR](#)) which was developed by the World Resources Institute (WRI) and its partners.

Early corporate leaders in this area have relayed (in interviews with BSR) that the methods can reveal new risks and help to avoid and mitigate impacts. It also can help corporate decision-makers to understand unintended consequences, cumulative impacts, and trade-offs. For example, one corporate leader said, in an interview, that an ES analysis highlighted issues that were likely to occur in the coming months and years that would not have otherwise been identified, such as saltwater intrusion into coastal freshwater aquifers or the likelihood of rising demand for water concurrent with diminishing supply in arid areas coupled with growing residential populations and industrial activity.

Because ES is about the benefits that people derive from functioning natural systems, much of this work includes stakeholder engagement around social and environmental issues. Integrating social and environmental factors within analytical frameworks can help companies better understand local residents' reliance on the environment and how corporate activities may have unintended effects.

At its best, corporate work on ecosystem services offers another way to maintain industry leadership positions and reputations as investors, competitors, and corporate-ranking organizations expand and deepen work on around these issues.

Demonstrating that companies understand and are working to address their BES impacts and dependencies will be increasingly important, as external stakeholders are asking more questions about the issues. For example, [governments around the world either are investing in ES initiatives](#) or developing related policies. These governments include Brazil, Canada, China, Colombia, the European Union, India, Israel, Japan, Nepal, Peru, South Africa, Spain, Tanzania, the U.K., the United States, and Vietnam.

In addition, the investor and financial services sector is interested in new, integrated, and ecologically accurate ways of understanding and avoiding environmental risks. Companies are being asked to demonstrate robust risk management practices that are in line with investor due diligence and corporate-ranking approaches that now include consideration of BES, as indicated by due diligence of the World Bank's International Finance Corporation (IFC) under Performance Standard 6 ([PS6](#)) as well as the 79 Equator Banks following the [Equator Principles](#).

Thought leaders, NGOs, academics, and other stakeholders are also expecting companies to strive to more fully understand their dependencies and impacts on ecosystem services. This uptick in interest is exemplified by emerging [NGO initiatives](#) around the world, including in Brazil, China, Colombia, Costa Rica, and Ecuador. The media now also covers ecosystem services issues, with stories recently, for example, in [Bloomberg](#), the [Financial Times](#), and the [Economist](#). For companies, all of this interest in ES means that the bar for international best practice is moving.

This working paper offers a snapshot of areas of activity associated with corporate uptake of ES concepts. It is based on BSR's primary research examining publicly available materials that companies and/or the media have in the public domain, as detailed in the appendix. Rather than providing information to verify or validate corporate claims, this paper documents how companies are describing their work on ES—in their own words. As an output from BSR's [Ecosystem Services Working Group](#) (ESWG), this working paper responds to corporate members' requests for BSR to provide an understanding of the private sector's current activity on this issue. Our intent is to offer intelligence on the state of play around corporate engagement with ES concepts around the world.

Ecosystem Services Defined

Ecosystem services are the benefits that functioning ecosystems provide to people. Humans realize these benefits in terms of factors that contribute to personal health, jobs, and safety. The 2005 Millennium Ecosystem Assessment (MEA) organizes ecosystem services into four overarching categories:

- » **Provisioning services:** Goods or products produced by ecosystems (e.g., food, freshwater, wood, fiber, etc.).
- » **Regulating services:** Natural processes regulated by ecosystems (e.g., regulations concerning climate, food, or disease; water purification; etc.).
- » **Cultural services:** Nonmaterial benefits obtained from ecosystems (e.g., aesthetic, spiritual, educational, recreational, etc.).
- » **Supporting services:** Functions that maintain all other services (e.g., nutrient cycling, soil formation, primary production, etc.).

Source: MEA, 2005, www.unep.org/maweb.

Ecosystem services are a core element of business infrastructure—so fundamental that they have often been overlooked. These services include protection of coastal areas and key infrastructure, such as harbors, the regulation of reliable and sufficient flows of water, the regeneration of productive soil, and carbon sequestration in plants and soil.

Ecosystem services are also essential to the approximately 450 million people whose livelihoods are dependent upon their ongoing flow, as [documented by the Intergovernmental Panel on Climate Change \(IPCC\)](#).

“Ecosystems are not only important in their own right, but they also provide essential services to human populations. Provisioning services supply food, water, minerals, medicines, construction materials, and fibers. Regulating services control climate, irrigation, disease vectors, and wastes. Cultural services interact with human spirituality and provide recreational, artistic, and aesthetic benefits. Supporting services refer to assistance with nutrient cycles and crop pollination.”

Source: Edward Cameron. “Human Rights and Climate Change: Moving from an Intrinsic to an Instrumental Approach.” *Georgia Journal of International and Comparative Law*. 2011, Vol. 38: 673–716.



Current Corporate Activity and Trends

The work on ES that the 47 companies listed in the appendix are undertaking can be synthesized into a few areas of activity, including:

Activity Area 1: Setting Corporate Policies, Standards, and Targets

Companies across multiple industries now have either corporate policies or standards related to ecosystem services, including business in the mining, oil and gas, beverage, electronics, financial services, entertainment, and tourism industries. This work is likely related to:

- » **Investors' and NGOs' work**, such as the World Bank's [IFC](#) and the [79 Equator Banks](#) inclusion of ES in due diligence processes;
- » **National governments' interest in the issue**, around the world, as documented in a 2014 BSR [report](#), and/or
- » **Internal corporate culture of sector leadership** and the desire to maintain an industry leadership position, including through adherence to the best international practices.

Examples of corporate activity (with links to the original documents provided by clicking on the company name) now include:

- » [AngloGold Ashanti](#): “Our Biodiversity Management Standard, which is based on ICMM’s Good Practice Guidance on Mining and Biodiversity and IFC Performance Standard 6, and which has been subjected to internal and external peer review, is currently being finalized. **The management standard will require each site to have a formal biodiversity action plan [which is defined to include ecosystem services] in place that has been prepared according to group-wide criteria.** With implementation of this standard, we will be reviewing biodiversity action plans in place at each operation.”
- » [Barrick Gold](#): “**Barrick’s Biodiversity Standard . . . requires us to integrate biodiversity into project planning and decision-making to assess the direct and indirect impacts of new projects (and expansion of existing projects) on ecosystem services,** to design projects that avoid potentially significant impacts on biodiversity, to exploit opportunities to protect and enhance biodiversity, to consult with stakeholders, and to engage in partnerships that address scientific and practical challenges relating to biodiversity protection or enhancement.” In another [report](#), they state, “Going forward, along with revising the Biodiversity Standard and developing a guidance document for implementation, we are focusing on risk assessments that will look at three key areas: habitats, species, and ecosystem services, using Barrick’s Formal Risk Assessment (FRA) process.”
- » [BP](#): “Ecosystems provide many services to humans . . . We recognize that our operations are dependent on these ecosystem services, notably water. Managing these dependences is therefore important to a long-term, sustainable business . . . Through our environmental and social practices, applicable **projects are required to assess sensitivities and potential impacts on ecosystem services during screening, as well as the dependence of local communities on the ecosystem services that could be affected by our operations.**”
- » [Coca-Cola’s Sustainable Agricultural Guiding Principles](#): “Promote and protect natural habitats and biodiversity through the conservation of natural flora and fauna and the **maintenance of important ecosystem services,** such as natural pest and disease controls, pollination, and freshwater flows.”

- » **EDP:** “The loss of biodiversity, and consequent **degradation of ecosystem services, is one of today’s major concerns worldwide**. Since 2007, EDP has published **a Biodiversity Policy that outlines a management approach aimed at achieving an overall positive balance** between the negative impacts of EDP operations and the minimization, offsetting, and scientific knowledge support measures that the company fosters and implements.”
- » **Fujitsu Limited:** “The recent remarkable deterioration of ecosystems makes **conserving biodiversity an urgent necessity to ensure sustainable ecosystem services** . . . To achieve that goal, we settled on the Fujitsu Group **Biodiversity Action Principles** in October 2009. In this, we introduced both (1) Pursuing the Conservation of Biodiversity and the Sustainable Use of Natural Resources in Business Activities and (2) Contributing to Building a Society that Ensures the Conservation of Biodiversity and the Sustainable Use of Natural Resources as themes for future efforts. We then established **four related action plan items in the Fujitsu Group Environmental Protection Program** (Stage VI), which started in FY 2010.”
- » **“Rabobank Group** believes it is important that clients know which ecosystem services constitute an opportunity or a business risk, and which factors can have an adverse impact on these services, including factors resulting from changes to, or dependence on, biodiversity and ecosystem services. To this end, Rabobank **formulated a new draft policy on biodiversity and ecosystem services...**”

Looking forward, as awareness of the IFC’s and Equator Banks’ requirements to include BES into due diligence processes grows, we expect that more companies will craft policies on these issues.

Activity Area 2: Assessing Monetary Values of Ecosystem Services

Currently a few companies are exploring monetary valuation of environmental factors that relate to ES and, in some cases, are even integrating these financial values into corporate accounting. While this activity is quite limited, it has received considerable media attention, as well as a few prominent supporters, as listed below. Therefore, it is worth noting and tracking in the years ahead.

A few examples of current work include:

- » **The Dow Chemical Company:** “The collaboration between Dow and the Nature Conservancy demonstrates that protecting nature can be both a global business strategy and a company priority . . . Scientists, engineers, and economists from both organizations are working together to analyze the various services that nature provides to our operations and the community . . . The work involves **validating tools and models that can assign a value to these services [from nature] in order to support Dow’s decision-making** when it comes to designing, constructing, and operating its manufacturing sites.”
- » **Novo Nordisk:** “Novo Nordisk, which is best known for making insulin to treat diabetes, has a well-established sustainability strategy through which it measures, manages, and reports its environmental impacts. **The E P&L [Environmental Profit & Loss] takes this to the next level by putting a financial value on these impacts so that their significance can be easily understood and managed alongside other business issues**. Trucost’s analysis shows that the environmental impacts of Novo Nordisk’s business cost €223 million in 2011. However, Novo Nordisk’s own operations were responsible for only 13 percent of these costs. Three-quarters came from supply chain impacts, such as greenhouse gases [GHGs] released from agricultural production of maize to make glucose, the main ingredient in

insulin. A significant benefit of the E P&L approach is that it provides a single metric to compare the relative scale of all environmental impacts across company operations, supply chains, and product portfolios. **The results of the E P&L will be used by Novo Nordisk to ensure its sustainability strategy is focused on the most costly environmental ‘hot spots’ in its business** enabling the company to reduce operational and supply chain risks from volatile energy and raw materials prices, natural resource scarcity, and regulatory costs.”

- » **PUMA and parent company Kering:** “PUMA has published an economic valuation of the environmental impacts caused by GHG emissions and water consumption along its value chain. Ultimately, PUMA’s undertaking will see the inclusion of further environmental key performance indicators in Stage 1, followed by social and economic impacts in later stages of development . . . The first results of PUMA’s E P&L have revealed that the direct ecological impact of PUMA’s operations translates to the equivalent of €7.2 million of the overall impact valuation.”
- » **Rio Tinto:** “We are designing and implementing a number of **ecosystem service valuation projects to investigate the business case and methodologies around designing and implementing ecosystem service offsets, and investments in nonoperational, land-based assets . . .** Through our collaboration with the International Union for Conservation of Nature (IUCN) economics group, we have undertaken a preliminary assessment of the biodiversity value of forest conservation projects in Madagascar . . . In 2013, we are undertaking two major ecosystem assessment and valuation projects: the value of nontimber forest projects at the QMM operation in Madagascar and the value of groundwater projects at Rio Tinto’s iron ore operations in the Pilbara region of Western Australia.”
- » **Sumitomo Mitsui Trust Bank:** “Since 2010 Sumitomo Mitsui Trust Bank has provided ‘Environmental Rating Loans,’ which evaluate [the] environmental friendliness of companies and **give preferential interest rates to companies with outstanding environmental ratings.** The rating is based on independently developed standards **where the evaluation items include environmentally friendly properties and initiatives related to natural capital,** such as water resources and biodiversity, in addition to general items, such as environmental management and climate change countermeasures.”
- » **“Webcor Builders** announced a new enterprise tool to collaborate with customers and **measure and manage natural capital costs of a construction project within the supply chain.** In partnership with Climate Earth, the Natural Capital Management System is integrated with Webcor’s BIM (building information modeling) system to provide natural capital management on any building project. This includes insights into the natural capital costs that are triggered from the use of different materials and building designs.”

Overall, this work on monetary valuation of various environmental factors is very much still in development and worth watching as it further evolves in the coming years.

Activity Area 3: Exploring and Embedding Biodiversity and Ecosystem Services into Corporate Management Systems

A few companies are drawing upon natural capital, BES thinking, and analytical approaches within corporate environmental management. Some examples include:

- » [Unilever](#): “The Natural Capital Project is forming a partnership with Unilever to determine how land-use changes will affect their commodity targets, other ecosystem services, and biodiversity. For example, as Unilever explores switching from using petroleum products to those made with biofuels, our approach can help them understand [that] the impact changes in land use resulting from their consumption decisions would ultimately impact biodiversity and the provision of ecosystem services. They are particularly interested in this information on ecosystem services so that they can incorporate it into lifecycle analysis for their products.”
- » [Weyerhaeuser](#): “As part of our 2020 Sustainability Roadmap, we committed to recognizing the ecosystem services provided by our timberlands. To help us and our stakeholders understand the full range of values our timberlands offer, we developed a plan to measure and report against a comprehensive set of 18 ecosystem services our forests provide. We are measuring these services and reporting on them annually . . .”

As exploration of work in this domain continues, numerous corporate representatives stated in interviews with BSR that the challenge facing corporate managers is the lack of widely agreed-upon, coherent guidelines on specific indicators to track, measure, and assess ES impacts and dependencies—ideally in a way that maps to existing corporate environmental assessment processes and protocols (e.g., ESAs, LCAs, etc.).

This situation is slowly being addressed as new approaches emerge, such as WRI’s ES in impact assessments ([ES in IA](#)) approach. The IFC recommends application of WRI’s [ESR](#) and is also working on further details associated with applying its performance standards (PS) related to ES, including [PS6](#), which is also now integrated into the due diligence processes of banks that have adopted the [Equator Principles](#). In addition, academics, environmental consulting firms, multilateral organizations, and other NGOs have developed numerous tools for use in decision-making processes. (For details on metrics and tools, please see BSR’s [2013 report](#) entitled “Measuring and Managing Corporate Performance in an Era of Expanded Disclosure: A Review of the Emerging Domain of Ecosystem Services Tools.”)

Looking Forward

Ultimately, the key to integrating ES into environmental management will be to demonstrate how this work contributes to project managers' goals of delivering projects on time and in budget, with as little risk as possible. The easier it is for companies to integrate new measures or approaches into existing processes, the more likely they are to adopt them.

In BSR's research, numerous corporate managers asserted that factoring ES issues and considerations into corporate decision-making has the potential to yield new insights relative to existing approaches. Specifically, corporate representatives reported in interviews that ES work has already drawn attention to:

- » *Operational dependencies* on ES;
- » *Potential supply chain risks* associated with cumulative impacts on key ES upon which suppliers rely, and
- » *Threats to local stakeholder livelihoods*, particularly in economies and rural areas that depend heavily on natural resources.

Ideally, work on ES applications in the private sector will focus on these key areas and provide businesses with the insights to justify more widespread and in-depth work on the topic, including:

1. **Documentation of corporate ecosystem services applications within decision-making processes:** This documentation would ideally show the relevance and value of ES to businesses, as well as *how* to apply the concept in corporate settings and how much it will cost to undertake ES assessments at various scales.
2. **Synthesis of lessons learned from corporate applications:** While many companies remain in a quiet, exploratory mode, there is an ongoing need for trusted independent analysts to synthesize and disseminate lessons learned to date. Companies particularly need analysts to highlight what is working and what is not so that they can increase their capability to assess risk and opportunity, realize cost savings, improve their performance, and decrease risk.
3. **Updating, maintaining, and managing knowledge related to corporate applications of ES concepts:** This knowledge might include details on advances in ES science, credible available data sets for specific geographies, reliable tools for particular applications, and case studies.

Having more of this kind of information in the public domain would enable companies to draw from a growing body of material on how systematic consideration of ES can spark innovation and effective on-the-ground action to maintain and restore the natural infrastructure upon which we all rely.

Corporate Activity Related to Ecosystem Services

Updated in January 2015

Fifty-seven companies from around the world mention natural capital and ecosystem services (ES) in publicly available materials.

To provide a snapshot of how companies are engaging to address ES, the following exhaustive table of corporate activity categorizes each activity as one or more of the following:

- » *Governance*: Mandatory company-wide policy, management approach, or measurement and reporting system addressing ES
- » *Operations*: Identifying, assessing, and factoring ES into decisions at the site and/or business unit level
- » *Philanthropy*: Encouraging or enhancing ES in a way unrelated to core business operations or impacts
- » *Research*: Conducting external-facing research on the current state of ES and/or its integration into business
- » *Strategy*: Incorporating ES into corporate business models or as a key component of revenue generation

Company (alphabetical order)	Type of Engagement	Description of Activities	Source and More Information	Partners
AB Agri <i>new in 2014</i>	Strategy	UK Farming and food supply chain group AB Agri and biodiversity offsetting brokers the Environment Bank have entered into a partnership to offer payments from the bank to farmers in exchange for the creation or restoration of wildlife habitats . The funding will be derived from the sale of "conservation credits" to developers who need to offset their environmental impact.	<i>Program booklet:</i> www.absustain.com/uploads/files/landowner_booklet_absustain-forprinters-mar.pdf	Environmental Bank
AkzoNobel	Governance & Operations	2010 report: "The Ecosystem Services Review (ESR) is now one of the sustainability tools available for use in the BU strategy process. " 2011 report: "We continue to be involved in the IUCN [International Union for Conservation of Nature] Leaders for Nature program in the Netherlands. During 2012, we will work together with peer companies on a so-called inspirational program on ecosystems. "	<i>Policy statement:</i> www.akzonobel.com/system/images/AkzoNobel_Position_Statement_Biodiversity_and_Ecosystems_tcm9-15743.pdf <i>2010 report:</i> report.akzonobel.com/2010/ar/sustainability/stakeholderactivity.html?cat=h <i>2011 report:</i> report.akzonobel.com/2011/ar/servicepages/search.php?q=ecosystem&pageID=19162&cat=b	World Business Council for Sustainable Development (WBCSD), World Resources Institute (WRI), and IUCN

American Electric Power (AEP)	Operations	<p>2013 report: “AEP’s ReCreation Land . . . encompasses 60,000 acres of land in eastern Ohio that was mined and reclaimed by Ohio Power’s Central Ohio Coal Company, an AEP subsidiary. The land now has more than 350 lakes and ponds and nearly 380 campsites that more than 3.2 million people have enjoyed since 1961. Recently, AEP partnered with the Electric Power Research Institute [EPRI] to evaluate the ecosystem services provided by the site and the possible impacts that shale gas fracking could have on these resources. Ecosystem services are resources and benefits, such as timber, fish, water, waste decomposition, pollination, or CO₂ sequestration that are supplied by ecosystems and benefit mankind. Results of the study to date have indicated no long-lasting impacts.”</p>	<p>2012 report: 2012.aepsustainability.com/ourissues/envperformance/biodiversity.aspx</p> <p>2013 report: www.aepsustainability.com/fastfacts/reports/docs/2013-GRI-Report.pdf</p>	EPRI and Wildlife Habitat Council
Anglo American	Governance & Operations	<p>“Anglo American and international environmental NGO Fauna & Flora International (FFI) have committed to a three-year strategic partnership on biodiversity conservation . . . Anglo American will strengthen its internal skills set in biodiversity and ecosystem services impact assessment and management.”</p> <p>2012 report: “In 2012, we introduced our Biodiversity Overlap Assessment (BOA) tool, designed to provide a high-level overview of the greatest business risks arising from biodiversity issues across operations, project sites, and key exploration sites. We have used the BOA tool to develop a global map of our operations in relation to protected areas, which will be used to address significant risk areas . . . Our preference is to take a risk-based approach, focusing on the potential impacts on ecosystem services and relating this to biodiversity.”</p>	<p>www.angloamerican.com/development/approach-and-policies/partnerships-and-collaboration/partnership/faunaflora.aspx</p> <p>2012 report: www.angloamerican.com/~media/Files/A/Anglo-American-Plc/reports/AA-SDR-2012.pdf</p>	FFI

<p>AngloGold Ashanti</p>	<p>Governance & Operations</p>	<p>2011 report: “Ecosystem services, especially biodiversity services, are coming under the spotlight in many countries . . . In 2011, we continued to refine our draft biodiversity management standard which will be applied to set an internal standard and common performance expectations. The standard will be finalized in 2012.”</p> <p>2012 report: “Our Biodiversity Management Standard, which is based on ICMM’s Good Practice Guidance on Mining and Biodiversity and IFC Performance Standard 6, and which has been subjected to internal and external peer review, is currently being finalized. The management standard will require each site to have a formal biodiversity action plan in place that has been prepared according to group-wide criteria. With implementation of this standard, we will be reviewing biodiversity action plans in place at each operation.”</p> <p>ES are also referenced in a restoration case study from South Africa.</p>	<p>2011 report: www.aga-reports.com/11/sustainability-report/context-and-strategy/sustainability-journey</p> <p>2012 report: www.aga-reports.com/12/os/performance/responsible-custodianship-water-land</p> <p>Case study (South Africa): www.anglogold.com/subwebs/informationforinvestors/reporttosociety04/values_bus_principles/environment/e_cs_sa_7_11.htm</p>	<p>BSR</p>
<p>Antofagasta <i>new in 2014</i></p>	<p>Operations</p>	<p>“Antofagasta aims to ‘create environmental value’ at its mining operation sites. To help evaluate opportunities and assess progress against this goal, the company is developing an Environmental Risk, Opportunity and Valuation Assessment (EROVA) tool. This will be used to determine the qualitative and quantitative value of company impacts, both positive and negative. It is a flexible framework that covers all forms of natural capital (such as biodiversity and mineral resources) and environmental impacts (such as air emissions and waste). It includes an assessment of company-related risks and opportunities and also enables a comparison of impacts across different stakeholder groups.”</p>	<p>www.antofagasta.co.uk/sustainability/environment.aspx</p>	<p>Sustain Value</p>

Barrick Gold	Governance & Operations	<p>2011 report: “Barrick’s Biodiversity Standard, developed in 2009, formalizes our stewardship activities and environmental management strategy. It requires us to integrate biodiversity into project planning and decision-making, to assess the direct and indirect impacts of new projects (and expansion of existing projects) on ecosystem services, to design projects that avoid potentially significant impacts on biodiversity, to exploit opportunities to protect and enhance biodiversity, to consult with stakeholders, and to engage in partnerships that address scientific and practical challenges relating to biodiversity protection or enhancement.”</p> <p>2012 report: “Going forward, along with revising the Biodiversity Standard and developing a guidance document for implementation, we are focusing on risk assessments that will look at three key areas: habitats, species, and ecosystem services, using Barrick’s Formal Risk Assessment (FRA) process. We completed our preliminary FRA at the Lumwana mine in Zambia in 2012.”</p>	<p>2011 report: barrickresponsibility.com/2011/environment/biodiversity</p> <p>2012 report: barrickresponsibility.com/2012/material-issues/biodiversity-management/</p>	BSR and Cross Sector Biodiversity Initiative (CSBI)
BC Hydro	Operations	<p>“The Fish and Wildlife Compensation Program compensates for the impacts to fish, wildlife, and their supporting habitats affected by BC Hydro–owned and –operated generation facilities . . . Using an ecosystem-based approach, the program defines desired outcomes and takes actions to restore, enhance, and conserve priority species and their habitats.”</p>	<p><i>Fish & Wildlife Compensation Program:</i> www.bchydro.com/about/sustainability/environmental_responsibility/compensation_programs.html</p>	Fisheries and Oceans Canada
BG Group	Operations	<p>2011 report: “In 2011, we initiated a program of work to build our understanding of ecosystem services and how they can be applied to our business.”</p>	<p>2011 report: www.bg-group.com/assets/files/cms/38919_BG_SR_2011_Performance_030412_NO_1.PDF</p> <p>2012 report: www.bg-group.com/45/sustainability/how-we-manage-sustainability/environment/#ref_sustainability12/managesustainability/howwemanageenvironment/pages/default.aspx</p>	IPIECA
BHP Billiton	Governance & Operations	<p>“Target: All operations to develop dedicated management plans, including controls to prevent, minimize, rehabilitate, and offset impacts to biodiversity and the related benefits derived from ecosystems.”</p> <p>Performance: Land and Biodiversity Management Plans were developed at all our operations.”</p>	<p>2013 report: www.bhpbilliton.com/home/about-us/sustainability/reports/Documents/2013/BHPBillitonSustainabilityReport2013_Interactive.pdf</p>	Conservation International

British American Tobacco	Governance & Operations	<p>“We recognize that we have both an impact and a dependence on biodiversity, through our business operations and use of ecosystem services, such as forest products, soil, and water . . . In order to meet this commitment, we commit to assessing our impacts, i.e., we will identify areas of high biodiversity value and understand our impacts on ecosystem services.”</p>	<p><i>Policy statement:</i> www.bat.com/group/sites/uk_3m_nfen.nsf/vwPagesWebLive/DO725ECW/\$FILE/medMD725KML.pdf?openelement</p> <p><i>Biodiversity partnership:</i> www.batbiodiversity.org/</p>	<p>Earthwatch, Fauna & Flora International (FFI), and Tropical Biology Association</p>
BP	Governance & Operations	<p>“In 2012, we engaged a global conservation organization, Fauna & Flora International (FFI), to review our biodiversity and ecosystem services practices and procedures. With FFI, we conducted internal workshops, one-on-one interviews with key personnel across BP, and external market analysis of emerging biodiversity and ecosystem services issues. Following this engagement and discussions with FFI and other individual environmental nongovernmental organizations, we are now in the process of reviewing our strategic approach to biodiversity and ecosystem services.”</p> <p>“Ecosystems provide many services to humans . . . We recognize that our operations are dependent on these ecosystem services, notably water. Managing these dependences is therefore important to a long-term, sustainable business . . . Through our environmental and social practices, applicable projects are required to assess sensitivities and potential impacts on ecosystem services during screening, as well as the dependence of local communities on the ecosystem services that could be affected by our operations.”</p>	<p>www.bp.com/sectiongenericarticle/800.do?categoryId=9048966&contentId=7083299</p> <p>www.bp.com/en/global/corporate/sustainability/environment/biodiversity-and-working-in-sensitive-areas/ecosystem-services.html</p>	<p>BSR, Conservation Leadership Programme, FFI, IPIECA, OGP, Proteus, and WCMC</p>

<p>CEMEX <i>new in 2014</i></p>	<p>Governance</p>	<p>As part of a partnership with the International Union for Conservation of Nature (IUCN), in December 2013 CEMEX introduced a Corporate Water Policy that includes the company’s commitment to protect ecosystems and biodiversity in its sites through sustainable water management. “CEMEX is fully committed to carrying out our business activities in a sustainable manner, minimizing pressure on water resources and covering three such essential aspects as resource availability, resource quality, and ecosystem integrity,” - Lorenzo H. Zambrano, CEMEX Chairman and CEO</p>	<p><i>Press Release:</i> www.cemex.com/MediaCenter/PressReleases/PressRelease20131209.aspx</p>	<p>International Union for Conservation of Nature (IUCN)</p>
<p>Coca-Cola</p>	<p>Governance & Operations</p>	<p>Sustainable Agriculture Guiding Principles: “Promote and protect natural habitats and biodiversity through the conservation of natural flora and fauna and the maintenance of important ecosystem services, such as natural pest and disease controls, pollination, and freshwater flows.”</p> <p>“Through our partnership, WWF and Coca-Cola are working to integrate the value of nature into corporate and public decision making. To achieve this goal, one of our strategies is to evaluate the impact of implementing sustainability standards on ecosystem services, using our 11 partnership geographies as proof points. Brazil is the perfect testing ground for this approach. It is here where our organizations, working with local academic partners, are analyzing the benefits of sustainable sugarcane certification on ecosystem services, such as water quality, carbon, and biodiversity.”</p>	<p><i>WWF Partnership Report:</i> assets.coca-colacompany.com/c0/92/e2ca905b4ba3ab2d5aab4c22d19e/2013-coca-cola-and-wwf-annual-partnership-review-basic.PDF</p> <p><i>Sustainable Agriculture Guiding Principles:</i> assets.coca-colacompany.com/bb/28/0d592b834e9d8fd9afcccb1829b6/sustainable-agricultural-guiding-principles.pdf</p>	<p>WWF and U.S. Agency for International Development (USAID)</p>
<p>Dow Chemical Company</p>	<p>Operations & Research</p>	<p>“The collaboration between Dow and the Nature Conservancy demonstrates that protecting nature can be both a global business strategy and a company priority . . . Scientists, engineers, and economists from both organizations are working together to analyze the various services that nature provides to our operations and the community . . . The work involves validating tools and models that can assign a value to these services in order to support Dow’s decision-making when it comes to designing, constructing, and operating its manufacturing sites.”</p>	<p>www.dow.com/sustainability/change/nature_conserv.htm</p>	<p>The Nature Conservancy and BSR</p>

<p>EDP (Energias de Portugal)</p>	<p>Operations</p>	<p>“The loss of biodiversity, and consequent degradation of ecosystem services, is one of today’s major concerns worldwide. Since 2007, EDP has published a Biodiversity Policy that outlines a management approach aimed at achieving an overall positive balance between the negative impacts of EDP operations and the minimization, offsetting, and scientific knowledge support measures that the company fosters and implements.”</p> <p>“In Spain, HC Energía continues the work of identifying and making an inventory of habitats and biodiversity existing in the areas of influence of the energy generation centers, in order to determine the initial state of these areas and establish management practices and minimize the risks to prevent the occurrence of situations of environmental risk. In 2011, environmental risk assessments (ERA) were performed [at] CH La Barca, [where] the desk work was supplemented by a field campaign to verify the current state of the environment and describe a list of indicators on the state of the ecosystem services provided.”</p>	<p>www.edp.pt/en/sustentabilidade/Risco/RiscosAmbientais/Pages/RiscoAmbiental.aspx</p> <p><i>2011 biodiversity report:</i> www.edp.pt/en/sustentabilidade/PublicacoesRelatorios/relatorios/Relatorios%20Sustentabilidade/EDP%20Relat%C3%B3rio%20de%20Biodiversidade%202011%20ENG.pdf</p> <p><i>2012 annual report:</i> www.edp.pt/en/Investidores/publicacoes/relatoriocontas/2012/Annual%20Report%202012/RelatorioContas2012_EN.pdf</p> <p><i>Biodiversity policy:</i> www.edp.pt/en/sustentabilidade/ambiente/biodiversidade/politicadebiodiversidade/Pages/Biodiversidade.aspx</p>	<p>International Union for Conservation of Nature (IUCN) and World Business Council for Sustainable Development (WBCSD)</p>
<p>Eni</p>	<p>Operations</p>	<p>“Eni considers the conservation of biodiversity and ecosystems an essential component of the way it manages its activities . . . Eni is mapping operating sites with respect to areas with a high level of biodiversity and presence of ecosystem services with the aim of differentiating operations on the basis of their relevance to such environmental considerations and to prioritize the implementation of Biodiversity Action Plans.”</p> <p>“The Ecosystem Valuation Initiative included the realization of a pilot project that Eni conducted in Italy on its onshore activities in the south of Italy in collaboration with the Fondazione Eni Enrico Mattei, WBCSD [World Business Council for Sustainable Development] and IUCN [International Union for Conservation of Nature] . . . The experience gained from the pilot project will be used in the definition of an initial evaluation method for ecosystem services designed for Eni’s activities with a complete project to be carried out in collaboration with the Fondazione Eni Enrico Mattei.”</p>	<p>www.eni.com/en_IT/sustainability/environment/biodiversity-and-ecosystems/biodiversity-ecosystems.shtml</p>	<p>BSR, WBCSD, IUCN, and Fondazione Eni Enrico Mattei</p>

<p>ExxonMobil <i>updated 2014</i></p>	<p>Operations</p>	<p>“ExxonMobil researchers developed a new framework for characterizing marine environmental sensitivities by prioritizing ecosystem services within regions of interest. During 2012, we piloted this framework in an analysis involving the Gulf of Mexico. In 2013, with the help of academic partners from the Harte Institute of Gulf of Mexico Studies, we expanded on this work by incorporating stakeholder input into the prioritization process. We held a stakeholder workshop in Houston, Texas, that included participants from the federal government and several industries, including oil and gas, wind energy, fishing and recreation. The results from this workshop indicated food, raw materials, and recreation rank highest on the list of valued ecosystem services in the Gulf region. By assessing how ecosystem services and biodiversity can be impacted by different development strategies, we can incorporate sustainability considerations into our development plans.”</p>	<p>corporate.exxonmobil.com/en/environment/environmental-performance/ecosystem-services/overview</p>	<p>BSR, WCMC, and NatureServe</p>
<p>FEMSA</p>	<p>Operations & Philanthropy</p>	<p>“In June 2012, during the United Nations Conference on Sustainable Development Rio+20, the Corporate EcoForum, and the Nature Conservancy launched the platform The New Business Imperative: Valuing Natural Capital integrating 24 initiatives from the private sector, which show the way in which leader companies are realizing their efforts in protecting and restoring ecosystems. FEMSA joined the platform and, together with the Corporate EcoForum and the Nature Conservancy, launched an invitation for more Latin American enterprises to join this knowledge exchange through initiatives for natural capital valuing.”</p> <p>“[The Latin American Partnership for Water Resources] seeks to create, implement, and capitalize at least 32 Water Funds in five Latin American countries. The goal established for 2015, with a current progress of 38 percent, is achieving the preservation of 3 million hectares of watersheds, which could benefit over 50 million people. Water Funds are an innovative way to pay for services that nature provides and to reinvest this money in efforts for watershed preservation.”</p>	<p><i>2012 sustainability report:</i> www.femsa.com/en/assets/014/22524.pdf</p>	<p>The Nature Conservancy and Corporate Eco Forum</p>

<p>Fibria</p>	<p>Operations</p>	<p>“At Fibria, the first studies and drills related to ecosystem services were performed in 2011, and they identified and quantified major ecosystem services consumed in the company’s production activities, as well as services produced from its forest management model . . . In 2012, Fibria launched a study analyzing the applicability of tools for appreciation of environmental services for its business. The company tested the application of models such as Invest (in partnership with the Nature Conservancy) and the ESR (in partnership with Votorantim Industrial’s Sustainability area). Fibria is currently building new partnerships to use ecosystem process models with field data collected from Fibria’s experiments.”</p>	<p><i>2012 report:</i> www.fibria.com.br/rs2012/en/templa-te?go=desempenho-ambiental/servicos-ecossistemicos.html</p>	<p>World Business Council for Sustainable Development (WBCSD) and The Nature Conservancy</p>
<p>Freeport-McMoRan</p>	<p>Operations</p>	<p>“We continue to closely monitor the developing concepts around ecosystem services. In 2012, we participated in BSR workshops and initiatives related to ecosystem services assessment tools and, along with several other large multinational corporations, worked to address definitions, indicators, and disclosures used to define and understand ecosystem service risks and opportunities. As this field evolves, we will continue to enhance communications on our biodiversity systems and initiatives.”</p> <p>“In 2011, we participated in a benchmarking study of biodiversity and ecosystem services within the extractives sector conducted by the Natural Value Initiative [NVI].”</p>	<p><i>2012 report:</i> www.fcx.com/sd/env/biodiversity.htm</p> <p><i>2011 report:</i> www.fcx.com/sd/pdfs/WTSD_Bk_2011.pdf</p> <p><i>Environmental policy:</i> www.fcx.com/envir/pdf/policies/Envirn/EnvPol_jul07.pdf</p>	<p>BSR and NVI</p>

Fujitsu Limited	Governance & Operations	<p>“The recent remarkable deterioration of ecosystems makes conserving biodiversity an urgent necessity to ensure sustainable ecosystem services . . . To achieve that goal, we settled on the Fujitsu Group Biodiversity Action Principles in October 2009. In this, we introduced both (1) Pursuing the Conservation of Biodiversity and the Sustainable Use of Natural Resources in Business Activities and (2) Contributing to Building a Society that Ensures the Conservation of Biodiversity and the Sustainable Use of Natural Resources as themes for future efforts. We then established four related action plan items in the Fujitsu Group Environmental Protection Program (Stage VI), which started in FY 2010.”</p> <p>“To determine how our business activities impact biodiversity, we constructed the Fujitsu Group Biodiversity (BD) Integration Index in FY 2010 and have been evaluating the degrees to which our main business areas impact biodiversity. In FY 2012, we determined that this impact had declined by 9.6 percent compared to FY 2009, because of a reduction in our energy resource consumption. Going forward, we will continue to use the BD Integration Index as an indicator of the biodiversity impacts of our business activities.”</p>	<p><i>2012 report:</i> www.fujitsu.com/global/about/environment/biodiversity/conservation/</p> <p><i>Policy statement:</i> www.fujitsu.com/global/about/environment/approach/biodiversity/</p>	Biodiversity in Good Company Initiative
Goldman Sachs	Strategy & Research	<p>“We believe that we can make a significant positive contribution to climate change, sustainable forestry, and ecosystem services through market-based solutions. As such, Goldman Sachs will aggressively seek market-making and investment opportunities in the environmental markets described [in the Environmental Policy Framework].”</p> <p>“We will establish and fund a Center for Environmental Markets to undertake independent research with partners in the academic and NGO community to explore/develop public policy options for establishing effective markets around climate change, biodiversity conservation, and ecosystem services.”</p>	<p><i>Policy statement:</i> www.goldmansachs.com/citizenship/environmental-stewardship-and-sustainability/environmental-policy-framework/environmental-policy-framework-main-page.html</p>	World Resources Institute (WRI) and Resources for the Future

<p>Holcim</p> <p><i>updated 2014</i></p>	<p>Operations</p>	<p>“Aggregate Industries UK, a subsidiary of Holcim, operates the Ripon City Quarry, in the Yorkshire Dales in England, mining sand and gravel since 1964. As part of legal requirements and its commitment to sustainable development, where relevant, the company systematically restores ecosystems as part of its extraction operations . . .</p> <p>Ecosystem valuation was considered as a tool to help identify the restoration option with the greatest benefits to local communities and the region.”</p> <p>“We have started programs to try to ascertain the “true value” of our activities. For example, our Group company in India, Ambuja Cements (ACL), supported by KPMG, undertook a project to understand the value of its social and environmental impacts and to gain insights as to the value that could be at risk by 2020. The study estimated positive and negative impacts of aspects such as water usage and rainwater harvesting, carbon and other emissions to air, the use of alternative fuels and raw materials and also considered the estimated economic value added to society.”</p>	<p>www.holcim.com/sustainable/environment.html</p> <p><i>Case study (UK):</i> www.wbcscement.org/index.php/component/docman/doc_download/1214-holcim-esr-and-valuation-usage-uk</p>	<p>International Union for Conservation of Nature (IUCN), World Business Council for Sustainable Development (WBCSD), and KPMG</p>
<p>Hitachi</p>	<p>Governance & Operations</p>	<p>“In the Hitachi Group Guide to Preservation of Ecosystems issued in March 2011, we presented all employees with our thinking on the relationship between corporate activities and ecosystems, while introducing trends and examples of initiatives being taken around the world. To further enhance understanding, in May 2012 we issued Business Assessment on the Preservation of Ecosystems and began self-evaluating the impact of our business operations on the ecosystem. We will regularly review this assessment program and make improvements throughout the group.”</p> <p>“In addition to the above corporate activities as a whole, we assessed the impact of two individual projects on ecosystems during fiscal 2011, using the Corporate Ecosystem Valuation (CEV) methodology developed by the WBCSD (World Business Council for Sustainable Development). One of the projects is the water treatment services provided by Hitachi Plant Technologies Ltd. in the Maldives. The evaluation looked at the impact on the surrounding ecosystems from the water supply infrastructure and clarified the costs incurred by Maldivian society and the environment. A second project is the GeoMation Farm agriculture information management system provided by Hitachi Solutions Ltd. The study quantified improved efficiency and reduction in environmental burden from the application of information technology (IT) to agriculture. We plan to evaluate the benefits in additional future studies.”</p>	<p>www.hitachi.com/environment/activities/stakeholder_collabo/ecosys.html</p> <p>www.hitachi.com/environment/visi on/ecosystem.html</p> <p><i>2012 report:</i> www.hitachi.com/csr/csr_images/env2012e_ecosys.pdf</p>	<p>WBCSD</p>

HSBC	Research	<p>Report finds [that] stocks of natural capital provide a direct contribution to economic output: “We believe the assessment and management of natural capital is becoming more important, particularly for countries with large and growing populations and relatively scarce natural capital, such as China and India.”</p>	<p>www.hsbc.com/news-and-insight/2013/natural-capital-implications</p>	
<p>JetBlue <i>new in 2014</i></p>		<p>Together with The Ocean Foundation, JetBlue is working to show the economic value of clean beaches by directly tying the importance of nature to their airline’s main economic measure—revenue per available seat mile (RASM). By attempting to attach actual dollar values to unspoiled shorelines, they hope to strengthen businesses’ and governments’ interest in protecting destinations and ecosystems.</p>	<p>www.jetblue.com/green/nature/</p>	<p>The Ocean Foundation</p>
<p>JPMorgan Chase <i>updated 2014</i></p>	<p>Governance & Operations</p>	<p>“Certain transactions assessed in accordance with the policy may require enhanced assessment because of the nature and extent of their environmental and social impacts. Transactions that may require enhanced assessment include those affecting or involving . . . critical habitats. Examples of critical habitats include, but are not limited to, sites with . . . species associated with key evolutionary processes or that provide key ecosystem services . . .”</p> <p>In a separate article, The Nature Conservancy and JPMorgan Chase announce a new effort to raise finance for conservation projects from institutional investors and high-net-worth individuals. JPMorgan Chase has committed an initial \$5 million to the effort and support in building out the platform infrastructure, with an aim of raising \$1 billion over the next three years.</p> <p>In a GreenBiz article, JPMorgan’s approaches to integrating natural capital into investment decisions are described, with a specific example given on environmental, social, and governance risks associated with hydraulic fracturing.</p>	<p><i>Environmental and Social Risk Assessment Policy:</i> www.jpmorganchase.com/corporate/Corporate-Responsibility/document/JPMC_Environmental_and_Social_Policy_Framework_MAY_FINAL_ada.pdf</p> <p>www.greenbiz.com/news/2013/02/21/jpmorganchase-ubs-assess-risks-tally-natural-capital-costs?page=full</p>	

<p>Kering (formerly PPR)</p>	<p>Governance</p>	<p>“An Environmental Profit & Loss [E P&L] Account is an innovative tool to measure the environmental footprint across our entire supply chain and then calculate the monetary value of the footprint as a common basis of comparison. We take a deeper look than conventional sustainability reporting by measuring water use and water pollution, waste, greenhouse gas, other air emissions, and land use beyond our own operations into our productions processes and even back to the source where we get our raw materials.”</p> <p>“Pioneered by PUMA, Kering is now rolling out E P&L analyses across the entire group to be published in 2016.”</p> <p>“The B Team is a not-for-profit initiative formed by a global group of leaders to create a future where the purpose of business is to be a driving force for social, environmental, and economic benefit . . . The B Team founders and co-chairs are Sir Richard Branson [Virgin Group] and Jochen Zeitz [Kering].”</p>	<p>www.kering.com/en/sustainability/environmental-pl</p> <p>www.kering.com/sites/default/files/e-pl-review_final_for_publicationwebsitefinal_final_1.pdf</p> <p>www.bteam.org/about/vision</p>	<p>Trucost</p>
<p>Kingfisher</p>	<p>Governance & Operations</p>	<p>“Ian Cheshire, our Group Chief Executive, chaired the Ecosystem Markets Task Force and presented the findings in early 2013 to the secretary of state, Owen Paterson. The independent, business-led Task Force examined the reliance of business on nature and explored new models for integrating economy and ecology into the business balance sheet.”</p> <p>Kingfisher aims to have a “net positive” impact on the world, focusing on four priorities: timber, energy, innovation, and communities.</p>	<p><i>2013 report:</i> www.kingfisher.co.uk/netpositive/files/reports/cr_report_2013/2013_Net_Positive_Report.pdf</p> <p>www.kingfisher.co.uk/netpositive/index.asp?pageid=1</p>	
<p>LaFarge</p>	<p>Operations</p>	<p>“Mainstreaming ecosystem considerations into business is increasingly important as a way of addressing the challenges of a resource-constrained world; we are contributing to further development of effective tools for valuing ecosystem services.”</p> <p>“The ecosystem services review and valuation project enable Lafarge, with the WWF’s expertise, to quantify the economic benefit of ecosystem services on company land. Those benefits can then be maximized in land management programs. The results are published and widely communicated to corporate environmental decision-makers . . . This project will help ecosystem services review and valuation models become a key future reference for Lafarge’s Land Management Program.”</p>	<p><i>Policy statement:</i> www.lafarge.com/04292011-sustainable_development-public_position-2010-uk.pdf</p> <p>www.lafarge.com/VIDEOS/02252011-Sustainable_Development-Lafarge_WWF_USA-transcript-uk.html</p>	<p>World Business Council for Sustainable Development (WBCSD) and WWF</p>

<p>Lyme Timber <i>new in 2014</i></p>	<p>Strategy</p>	<p>The Lyme Timber Company is a private timberland investment management organization (TIMO) that focuses on the acquisition and sustainable management of lands with unique conservation values. In a February 2014 webinar coordinated by the Yale Center for Business and the Environment and the Conservation Finance Network, a program of Island Press, Lyme Timber discussed how the company utilizes financial streams such as working forest conservation easements, New Market Tax Credits, wetland mitigation, advantageous debt arrangements, and other ecosystem service payments in addition to traditional forest product sales.</p>	<p>www.lymetimber.com/investment-strategy.html</p>
<p>Mead Westvaco (MWV)</p>	<p>Operations</p>	<p>“MWV is a leader in ecosystem-based, multiple-use, stewardship-oriented forestry. Our Ecosystem-Based Forestry approach uses multiple management zones, with each zone having one primary, and numerous secondary functions. In determining these zones, our forest managers consider water quality, site productivity, wildlife habitat, visual quality, biodiversity, and the need to protect areas of special significance.”</p>	<p>www.meadwestvaco.com/StewardshipSustainability/FiberSourcing/EcosystemBasedForestry/index.htm</p> <p>Conservation International and The Nature Conservancy</p>
<p>Merafe Group <i>new in 2014</i></p>	<p>Governance</p>	<p>Reports on their efforts to maintain and enhance natural capital in the 2013 Integrated Annual Report. "We maintain and enhance natural capital by:</p> <ul style="list-style-type: none"> • reducing our dependence on fossil fuels • eliminating waste by reusing or recycling it whenever possible • protecting biodiversity and eco-systems • wherever possible using renewable resources from well-managed and restorative eco-systems • managing resources and reserves efficiently" 	<p><i>Annual Report:</i> www.meraferesources.co.za/reports/ir_2013/per-nat-capital.php</p>

<p>Mondi</p>	<p>Governance & Operations</p>	<p>“As core members of the World Business Council for Sustainable Development (WBCSD) Ecosystems Focus Area, we are piloting aspects of the economics of ecosystems in catchment areas in South Africa . . . With the support and expertise of the Mondi Wetlands Program, we have assessed the quality of services (values) that our key wetlands provide in our South African forestry areas and have drawn up management plans to maintain or improve the services.”</p> <p>“Mondi has developed ecosystem management plans (EMPs) for our forestry operations in South Africa to help us improve the way we identify, protect, preserve, manage, and, in some cases, restore functioning ecosystems and biodiversity . . . The main focus of EMPs is on conservation areas and on minimizing the impact of plantations on ecosystem services . . . Mondi’s Sustainable Development Policy commits the group to ‘applying active stewardship of land, freshwater ecosystems, and biodiversity.’”</p>	<p><i>2012 report:</i> sd-report.mondigroup.com/2012/environment/responsible-forestry/forests-and-biodiversity</p> <p>sd-report.mondigroup.com/2012/case-study/environment/sa-ecosystem-management-plans</p> <p><i>Policy statement:</i> www.mondigroup.com/PortalData/1/Resources/sustainability_2013/reports/SDMS_PY-06_SD_POLICY_AND_SECTOR_POLICIES_REV_2013.pdf</p>	<p>WBCSD</p>
<p>National Grid <i>new in 2014</i></p>	<p>Strategy</p>	<p>National Grid awarded a contract to engineering consultancy URS to develop a framework on natural capital and ecosystem services that will be embedded into the company’s broader sustainability strategy. The proposed "Natural Grid" program will assess opportunities to enhance the existing natural environment across the company’s property portfolio and network of energy assets and improve habitats on surplus land. National Grid plans to introduce its new approach to natural capital and ecosystem services at a minimum of 50 sites in the next eight years.</p>	<p><i>URS Press Release:</i> www.urs.com/uki/press/national-grid-appoints-urs-develop-natural-capital-ecosystem-services-framework/</p> <p>www.greenbiz.com/blog/2014/04/04/national-grid-charges-natural-capital-thinking</p>	<p>URS</p>
<p>Nestlé</p>	<p>Governance & Operations</p>	<p>“Nestlé is committed to develop its business in a way that safeguards natural capital, and in particular biodiversity and ecosystem services . . . Specifically Nestlé commits to: Act as a responsible steward of natural capital, by supporting our employees to understand and make informed business decisions that will lead to safeguarding of natural capital . . . Identify the value of externalities, both in our direct operations and through our supply chains, and integrate these into our business planning framework . . . Advocate for the elimination of policy instruments (incentives, subsidies, and fiscal measures) that are harmful to natural capital . . . Advocate for the introduction of standards, regulation, and incentives to guide purchasing and investment behavior that reflects the true value of natural capital in decision-making.”</p>	<p><i>Policy statement:</i> www.nestle.com/Common/NestleDocuments/Documents/Creating%20Shared%20Value/Environment/Natural%20Capital%20Commitment%20april%202012.pdf</p> <p>www.nestle.com/csv/environmental-sustainability/biodiversity</p>	<p>WCMC, Cambridge Natural Capital Leaders Platform, and WWF</p>

<p>Novo Nordisk <i>new in 2014</i></p>	<p>Governance</p>	<p>Novo Nordisk became the first pharmaceutical company to publish an Environmental Profit & Loss (EP&L) account, the first since Puma's EP&L was published in 2011</p>	<p>2013 Annual Report: www.novonordisk.com/investors/annual-report-2013/default.asp</p>	
<p>PUMA</p>	<p>Governance</p>	<p>"PUMA has published an economic valuation of the environmental impacts caused by GHG emissions and water consumption along its value chain. Ultimately, PUMA's undertaking will see the inclusion of further environmental key performance indicators in Stage 1, followed by social and economic impacts in later stages of development . . . The first results of PUMA's E P&L have revealed that the direct ecological impact of PUMA's operations translates to the equivalent of €7.2 million of the overall impact valuation."</p> <p>From <i>The Guardian</i> (October 2012): "PUMA chairman, Jochen Zeitz, announced that the company has for the first time taken its E P&L down to a product level, which will demonstrate to consumers what products are more sustainable by putting a price tag against the environmental damage they do."</p>	<p>about.puma.com/?p=6644</p> <p>www.guardian.co.uk/sustainable-business/blog/puma-scales-up-environmental-profit-loss-product</p>	<p>Trucost</p>
<p>Rabobank</p>	<p>Governance & Operations</p>	<p>"Under the partnership WWF and Rabobank entered into in 2011 . . . With regard to the agricultural projects, the emphasis is on testing innovative sustainable farming methods (such as precision farming) that are designed to improve agricultural production in terms of increased yields, profitability, and sustainability. A secondary objective is that account managers and credit analysts receive training, where appropriate, in identifying and analyzing issues related to biodiversity and ecosystem services with which clients might be confronted."</p> <p>"Rabobank Group believes it is important that clients know which ecosystem services constitute an opportunity or a business risk, and which factors can have an adverse impact on these services, including factors resulting from changes to, or dependence on, biodiversity and ecosystem services. To this end, Rabobank formulated a new draft policy on biodiversity and ecosystem services during the year under review. This policy was discussed with WWF in 2010, and will be discussed with the group entities and a number of other relevant stakeholders early in 2011."</p>	<p>2011 report: www.rabobank.com/en/images/CSR_2011_RG.pdf</p> <p>2010 report: www.rabobank.com/en/images/Corporate_Social_Responsibility_2010_Rabobank_Group_complete.pdf</p>	<p>WWF and Conservation International</p>

RBS	Operations & Research	<p>“The Royal Bank of Scotland Group is the headline sponsor for the inaugural World Forum on Natural Capital in November [2013].”</p> <p>“Speaking at the conference, Sir Philip Hampton, Chairman of RBS Group, stated that natural capital accounting would enable banks to work out the impact of economic activity, in particular lending, on nature and society. Commenting on the changing stance of RBS toward lending policy, he said: ‘We’re also now doing much more to assess the nonfinancial risks that exist in the sectors we lend to. By looking at environmental and social impacts of those sectors, we can get a much more accurate picture of how well prepared prospective clients are for mitigating those risks, and build that into our lending decision-making process.’”</p>	<p>www.rbs.com/news/2013/08/rbs-group-to-support-ground-breaking-event-on-natural-resources.html</p> <p>www.rbs.com/news/2013/11/farmers-concerned-about-climate-change-and-natural-capital.html</p>	
Rio Tinto	Operations	<p>Rio Tinto: “We are designing and implementing a number of ecosystem service valuation projects to investigate the business case and methodologies around designing and implementing ecosystem service offsets, and investments in nonoperational, land-based assets . . . Through our collaboration with the International Union for Conservation of Nature (IUCN) economics group, we have undertaken a preliminary assessment of the biodiversity value of forest conservation projects in Madagascar . . . In 2013, we are undertaking two major ecosystem assessment and valuation projects: the value of nontimber forest projects at the QMM operation in Madagascar and the value of groundwater projects at Rio Tinto’s iron ore operations in the Pilbara region of Western Australia.”</p>	<p><i>Policy statement:</i> www.riotinto.com/documents/ReportsPublications/RTBiodiversitystrategyfinal.pdf</p> <p><i>2012 report:</i> www.riotinto.com/sustainabledevelopment2012/environment/ecosystems_services.html</p> <p><i>2011 report:</i> www.riotinto.com/sustainabledevelopment2011/environment/ecosystems_services.html</p>	IUCN, Natural Value Initiative (NVI), World Resources Institute (WRI), World Business Council for Sustainable Development (WBSCD), and Prince’s Rainforest Project
RWE	Operations	<p>“Germany’s number one power producer, RWE, and IUCN [International Union for Conservation of Nature] signed a three-year agreement on biodiversity management. Pilot projects will evaluate the impact of energy operations on ecosystems and the feasibility to adapt the choice of technology to on-site biodiversity management.”</p>	<p>www.rwe.com/web/cms/en/113648/rwe/press-news/press-release/?pmid=4008883</p>	IUCN

<p>SABMiller <i>new in 2014</i></p>	<p>Operations</p>	<p>SABMiller's Colombian subsidiary, Bavaria, saw its water bills increase several years ago due to increased costs to purify water that had been contaminated by agriculture. In 2009, The company began paying into a local water fund supported by the Nature Conservancy, the Aqueduct and Sewage Company, and the National Parks administration. The fund pays agricultural producers to move cattle off of steep slopes, switch to more ecologically friendly farming practices, and replant degraded areas. Bavaria estimated that it has paid \$240,000 into the fund so far, and will ultimately see costs for water treatment fall by \$458,000 every year in its supply area.</p>	<p><i>Case Study:</i> landscapes.ecoagriculture.org/global_review/sabmiller_case_study www.ecosystemmarketplace.com/pages/dynamic/article.page.php?page_id=10146&section=news_articles&eod=1</p>	<p>The Nature Conservancy, Colombian National Parks Administration</p>
<p>SAP <i>new in 2014</i></p>	<p>Governance, Strategy</p>	<p>In a Sustainable Brands article, Thomas Odenwald highlights SAP's approach to natural capital accounting and highlights features of SAP's integrated CSR report, including adherence to the IIRC framework and examples of natural and social capital monetary valuation.</p>	<p><i>News Article:</i> www.sustainablebrands.com/news_and_views/new_metrics/dimitar_vlahov/let's_make_it_more_relevant_systemic_sap's_thomas_odenwald</p>	
<p>Shell <i>updated 2014</i></p>	<p>Operations</p>	<p>International Union for Conservation of Nature (IUCN) and Shell have agreed to work together to address key ecosystems challenges. New initiatives include exploring the concept of 'Net Positive Impact' on biodiversity. The agreement was signed in December 2013.</p> <p>"Shell experts worked with the Nature Conservancy, along with academics and scientists from the Dow Chemical Company, Swiss Re and Unilever on a project in 2013. Together they evaluated the potential of elements from natural systems, known as green infrastructure, to increase the resilience of industrial business operations against disruptive events such as power cuts and floods."</p>	<p><i>NGO Partner Release:</i> www.iucn.org/news_homepage/?14248/IUCN-and-Shell-jointly-address-conservation-challenges www.shell.com/home/content/environment_society/environment/biodiversity/biodiversity_experts/</p>	<p>International Union for Conservation of Nature (IUCN), Wetlands International, BSR, The Nature Conservancy, Earthwatch, and EBI</p>

Sony

Operations

“To help keep balance among all life forms on the planet, business activities with conservation of the natural environment, Sony is working to maintain and recover biodiversity both from its business and social contribution activities, thereby protecting the ecosystem services and ultimately benefiting from their sustainable use . . . Targets: (1) **Conduct biodiversity assessments** at resource extraction and harvesting sites; (2) **Promote environmental contribution activities** that respond to the needs of local communities.”

“Recognizing groundwater as an important ecosystem service—and its own responsibility as a manufacturer that uses significant quantities of water in the fabrication of semiconductors—Kumamoto TEC has been working since 2003 with local residents, an environmental NGO, agricultural organizations, and agricultural cooperatives to improve groundwater recovery, thereby replenishing groundwater in neighboring rice paddies . . . Such practices are referred to as ‘**payment for ecosystem services**’ and are recognized as playing a key role in efforts to protect biodiversity.”

Policy statement:

www.sony.net/SonyInfo/csr_report/environment/biodiversity/policy/index.html

www.sony.net/SonyInfo/csr/environment/biodiversity/index.html

Sumitomo Mitsui Trust Bank	Governance & Strategy	<p>In April 2013, Sumitomo Mitsui Trust became the first company in the world to incorporate natural capital evaluation in loan criteria. The company uses a proprietary measurement model to calculate water consumption, greenhouse gas emissions, and land-use area upstream of the supply chain, on the basis of a company's purchase data, and quantitatively ascertains how much the company depends on natural capital. The result is reflected in the loan criteria.</p> <p>“The group recognizes that promoting the sustainable use of living resources through the appropriate economic and social evaluations of ecosystem services is an important issue. To this end, it has been working on the development of various financial products and services, such as eco-friendly development and construction consulting services, as well as the Biodiversity SRI Fund, an investment trust that invests in Japanese companies actively working to protect biodiversity.”</p> <p>“Since 2010 Sumitomo Mitsui Trust Bank has provided ‘Environmental Rating Loans,’ which evaluate [that] environmental friendliness of companies and give preferential interest rates to companies with outstanding environmental ratings. The rating is based on independently developed standards where the evaluation items include environmentally friendly properties and initiatives related to natural capital, such as water resources and biodiversity, in addition to general items, such as environmental management and climate change countermeasures.”</p>	<p><i>Press Release:</i> www.smth.jp/en/news/2013/E130405.pdf</p> <p><i>2012 report:</i> www.smth.jp/en/csr/report/2012/2012e_03.pdf www.smth.jp/en/csr/report/2012/2012e_09.pdf</p>
Syngenta	Operations	<p>“Since 2008, Syngenta has applied the ESR [Corporate Ecosystem Services Review] in geographic regions and corporate departments for new products and services. The sustainability department has adopted ecosystem services as an organizing concept for decision-making.”</p>	<p>www.wbcsd.org/web/projects/ecosystems/Syngenta_with_notes.pdf</p> <p>World Resources Institute (WRI), Earthwatch, and World Business Council for Sustainable Development (WBCSD)</p>
UBS	Operations	<p>In a GreenBiz article, UBS’s approaches to integrating natural capital into investment decisions are described, with a specific example on water risk given.</p>	<p>www.greenbiz.com/news/2013/02/21/jpmorganchase-ubs-assess-risks-tally-natural-capital-costs?page=full</p>

<p>Unilever</p>	<p>Operations</p>	<p>Sustainable Agriculture Code: “Unilever suppliers or farmers should participate in research to understand the value of local farmland to biodiversity and the value of farmland ecosystem services to others and how these might be enhanced.”</p> <p>“At a policy level, Unilever seeks opportunities to engage policy makers on this [biodiversity] agenda. We recently contributed to the Ecosystem Markets Task Force (EMTF) in the UK, for instance.”</p> <p>From the Natural Capital Project newsletter: “The Natural Capital Project is forming a partnership with Unilever to determine how land-use changes will affect their commodity targets, other ecosystem services, and biodiversity. For example, as Unilever explores switching from using petroleum products to those made with biofuels, our approach can help them understand [that] the impact changes in land use resulting from their consumption decisions would ultimately impact biodiversity and the provision of ecosystem services. They are particularly interested in this information on ecosystem services so that they can incorporate it into lifecycle analysis for their products.”</p>	<p><i>Sustainable Agriculture Code:</i> www.unilever.com/images/sd_Unilever_Sustainable_Agriculture_Code_2010_tcm13-216557.pdf</p> <p>www.unilever.com/sustainable-living/sustainablesourcing/biodiversity/</p> <p>www.unilever.com/images/Unilever_Suppliers_a_closer_look_at_biodiversity_tcm13-326137.pdf</p> <p><i>Natural Capital Project:</i> archive.constantcontact.com/fs150/1109486003782/archive/1110369668463.html</p>	<p>Natural Capital Project</p>
<p>Virgin Group</p>	<p>Philanthropy & Operations</p>	<p>“The B Team is a plan with a single purpose: to make business work better. How? By shifting the focus from just financial gains toward environmental and social gains as well. Our founding leaders are Sir Richard Branson (founder of Virgin Group and Virgin Unite) and Jochen Zeitz (Director of Kering and Chairman of the board’s sustainable development committee).”</p> <p>“One of the issues the B Team is seeking to address is that in the ordinary course of accounting and measurement, business doesn’t value ‘natural capital’ (the planet), nor does it pay for the true cost of its environmental impact. The B Team is currently incubating a consortium to advance a solution—the Environmental Profit and Loss (E P&L).”</p>	<p>www.bteam.org/</p>	<p>Virgin Unite</p>

<p>Veolia Environment</p> <p><i>updated 2014</i></p>	<p>Operations & Governance</p>	<p>Veolia Germany joins the 'Biodiversity in Good Company' Initiative, a multi-industry collaboration of companies engaged in the protection and sustainable use of biodiversity.</p> <p>“In line with the commitment written into its biodiversity policy, and directly linked to the Aichi objectives adopted in Nagoya and those of the French SNB (National Strategy for Biodiversity), Veolia Environment is continuing its work in three main areas: improve our knowledge of biodiversity and pursue the characterization of our impact and dependency on ecosystems; act to protect biodiversity and value ecosystem services; inform, train, and raise awareness of biodiversity issues.”</p>	<p><i>Partner Press Release:</i> www.business-and-biodiversity.de/fileadmin/user_upload/documents/Presse/140331_PressRelease_Membership_Veolia.pdf</p> <p><i>2012 report:</i> www.veolia.com/veolia/ressources/documents/2/16265_veolia-csr-performance-digest-2012.pdf</p> <p>www.veolia.com/en/medias/focus-on/biodiversity.htm</p>	<p>Biodiversity in Good Company, French Institute of Biodiversity, CEMTPP, and World Business Council for Sustainable Development (WBCSD)</p>
<p>The Walt Disney Company</p>	<p>Governance & Operations</p>	<p>“In 2009 we announced ambitious long-term goals to reduce our environmental footprint and inspire our employees, business associates, and consumers to take action to help the planet. Those goals [include] having a net positive impact on ecosystems.”</p> <p>“Through the Disney Worldwide Conservation Fund—our Disneynature film label—and our commitment to animal programs worldwide, we are working to protect and restore the magic of the natural world for generations to come.”</p>	<p>www.thewaltdisneycompany.com/citizenship/environmental-stewardship</p>	<p>WWF, World Resources Institute (WRI), and The Nature Conservancy</p>
<p>Webcor Builders</p>	<p>Operations</p>	<p>“Webcor Builders announced a new enterprise tool to collaborate with customers and measure and manage natural capital costs of a construction project within the supply chain. In partnership with Climate Earth, the Natural Capital Management System is integrated with Webcor’s BIM (building information modeling) system to provide natural capital management on any building project. This includes insights into the natural capital costs that are triggered from the use of different materials and building designs.”</p>	<p>www.constructech.com/news/articles/article.aspx?article_id=9818&SECTION=1</p>	<p>Climate Earth</p>
<p>Weyerhaeuser</p>	<p>Governance & Operations</p>	<p>“As part of our 2020 Sustainability Roadmap, we committed to recognizing the ecosystem services provided by our timberlands. To help us and our stakeholders understand the full range of values our timberlands offer, we developed a plan to measure and report against a comprehensive set of 18 ecosystem services our forests provide. We are measuring these services and reporting on them annually . . .”</p>	<p>www.weyerhaeuser.com/Sustainability/Planet/SustainableForestManagement/EcosystemServices</p>	<p>World Business Council for Sustainable Development (WBCSD)</p>

<p>YES BANK <i>updated 2014</i></p>	<p>Philanthropy & Operations</p>	<p>YES BANK joined over 40 other financial institutions to become an official supporter of the Natural Capital Declaration (NCD). The Bank will provide support and input into the development of accounting, disclosure, and reporting frameworks that incorporate natural capital considerations</p> <p>“YES BANK, India’s fourth largest private-sector bank, and TERI BCSD, an independent CEO-led industry body mainstreaming sustainability in business, signed a Memorandum of Understanding (MoU) to accelerate momentum for sustainable development, environmental management, social responsibility, and sustained economic performance, among Indian corporates . . . Some highlights of the MoU include initiatives toward natural capital which India would be discussing at the 40th G8 summit in June 2014.”</p> <p>“Starting from March 1, 2013, the YES BANK-Saevus Natural Capital Awards program will endeavor to find, reward, and showcase the finest natural capitalists of India, comprising individuals, groups, and corporations that are dedicated to spearheading biodiversity growth and environmental stewardship.”</p>	<p>www.indianexpress.com/article/business/banking-and-finance/yes-bank-endorses-natural-capital-declaration/</p> <p>www.thenaturalcapitalawards.com/about.php</p> <p>www.yesbank.in/media-centre/press-releases/fy-2013-14/yes-bank-and-teri-sign-an-mou-to-promote-sustainable-development-in-india.html</p>	<p>Saevus Magazine and TERI</p>
<p>Yorkshire Water <i>new in 2014</i></p>		<p>From The Guardian: “Yorkshire Water, part of the Kelda Group, has recently worked with Trucost to implement an environmental profit and loss account (EP&L) in an effort to integrate sustainability into its core business strategy, billing itself as the first UK water company to take this step.”</p>	<p><i>Case study:</i> www.trucost.com/uploads/publishedResearch/Yorkshire%20Water%20case%20study_2014.pdf</p>	<p>Trucost</p>