



# Financial Services Industry

*The financial services industry's environmental impacts are primarily related to its carbon footprint, its reach through loans, and its financial standard setting in other industries. Despite this, the industry has done surprisingly little to decrease its environmental footprint. To change this situation, the most important potential actions exercise the precautionary principle, including defined environmental sustainability standards, collective action, and environmental requirements for investor decisions.*

The financial services industry is a vast combination of various types of companies, spanning insurance, commercial banking, investment firms, and asset management. For the purpose of an analysis of the industry's approach to sustainability, the Global Reporting Initiative (2009) divides the industry into four segments:

- *Retail banking* includes the provision of private and commercial banking services to individuals. This category includes banking for more affluent clients, such as wealth management and portfolio management services. Also, retail banking covers other services to individuals such as transaction management, payroll management, small loans, foreign exchange services, derivatives, and similar types of instruments.
- *Commercial and corporate banking* covers transactions for organizations and businesses of all sizes, including commercial and corporate banking, project and structured finance, transactions with medium-size enterprises, and the provision of financial services to government and government departments. Services include advisory services, mergers and acquisitions, equity/debt capital market services, and leveraged finance.
- *Asset management* involves handling pools of capital on behalf of third parties invested in a wide range of asset classes, including equities, bonds, cash, property,

international equities, and private hedge funds. This category includes investment banking with trading in shares and share derivatives, fixed income trading, and trading of credit derivatives.

- *Insurance* covers both pension and life insurance services provided directly or through independent financial advisors to the general public and company employees. This category includes insurance products or services for businesses and individuals and reinsurance services.

Some financial services organizations try to be full service, usually referred to as universal banks. Others attempt to specialize, such as investment banks and hedge funds. Regulations enacted in every country control what organizations can and cannot do in terms of providing financial services. Yet regardless of the restrictions, this vast industry has a major impact on economies. For example, 2008 U.S. commercial banking revenues, as one sector of financial services, were estimated to be \$695 billion (IBIS World Industry Reports 2008).

Due to the worldwide economic situation, from September 2008 to early 2010 the world has witnessed massive subsidies given to financial services organizations, including mandated provision of funds to U.S. banks under the Troubled Asset Relief Program (TARP). Any commentary on financial services cannot ignore the tremendous power these organizations have on the world economies, as witnessed by their primary role in the various government bailouts during the economic recession (United States Government Accountability Office 2009). This early twenty-first-century crisis is clearly a collective failure of financial markets as well as of government policies and financial sector regulation and supervision.

The financial services industry has a tremendous impact on organizations by influencing personal wealth, access to education through loans, community viability, and even

the ability of governments to implement policies. Given its size and its tremendous leverage on world economies, this industry must take a major role to improve the environment. These influences are magnified when loans are not available to fund innovations for decreasing a business's environmental footprint. This article addresses what is being done in the financial services industry related to environmental sustainability and the challenges the industry sector will face going forward.

## Sustainable Practices and Innovations

Many different discourses occur around sustainability, making definition of the term difficult and the identification of relevant corporate practices equally difficult (Dryzek 2005; Gray 2006). The scholar Arie Ullmann (1985), one of the first to analyze sustainability in financial services, concludes that social reporting, in general, is a confused state of varied theories, concepts, and inconsistent functional terms. More recent data and improved theory show a weak relationship between environmental performance and corporate disclosure sustainable practices (McCammon 1995). The relationship between market performance and social disclosure is far from conclusive, however (see Gray 2006 for a review of this literature).

Thus when we discuss the financial services industry performance as related to environmental sustainability, we should keep in mind the confused state of definitions and of relationships and the lack of incentives to invest in socially responsible activities. We cannot conclude that the industry is not interested or unwilling. We can conclude that the investment targets are far from clear. We can conclude that the more data that point to the industry's actual or perceived environmental impacts, the more corporate action will change. The demonstrable impacts will influence organizational reputation, perceived management competence, and risk management (Orlitsky and Benjamin 2001). In light of this confusion around theory and measurement, we can point to some directions that the industry is taking.

One way to phrase these discourses is to compare and contrast definitions of sustainability as the politics of constraint versus the politics of the possible:

Environmentalism offered something profoundly important to America and the world. It inspired an appreciation for, and an awe of the beauty and majesty of, the nonhuman world. It focused our attention . . . but environmentalism has also saddled us with the albatross we call the politics of limits, which seeks to constrain human ambition, aspiration, and power rather than unleash and direct them. (Nordhaus and Shellenberger 2007, 16–17)

The politics of constraint expect certain actions to be taken that limit our use of resources and focus our attention on humans as the main cause of environmental degradation. Preservation, conservation, and a more radical “limits to growth” approach refer to a massive need to survive (Meadows, Randers, and Meadows 2004). Environmental groups combat the impacts of business organizations on our society, such as those in the financial services, and create an adversarial atmosphere among the various societal stakeholders. This type of discourse defines *sustainability* as preserving at least what we have today without further deterioration in our economy, our environment, and our society, a classic reference to the Brundtland Commission's commentary on sustainable development (United Nations World Commission on Environment and Development 1987).

This discourse contrasts with the rhetoric of ecological modernization and the green parties across the world. These other approaches emphasize positive actions that balance a triple bottom line approach, that is, a balance of outcomes in light of the inevitable growth our world faces. It approaches the issues of sustainability as the cooperative efforts that support human growth with innovation and new approaches to intractable problems. Extreme aspects of this discourse have been advocated by ecofeminists or ecospiritualists (Dryzek 2005).

These two discourses (or views) on the financial services industry define most approaches that have been taken to address environmental sustainability. Regardless of the approach the industry takes on environmental sustainability, both lead one to conclude that the precautionary principle is the prudent course of action. This principle specifies that regardless of the state of knowledge about environmental sustainability, we should act as if we need dramatic actions to offset the ill effects of environmental degradation (Gollier, Jullien, and Treich 2000). This principle demands that financial services organizations take deliberate actions to offset carbon emissions and act in a manner that increases beneficial outcomes for our environment.

Before proceeding, however, we must note that the discourse around sustainability is matched by a discourse on risk and the financial services industry. Many commentators on the recent financial turmoil point to the way in which financial markets affect peoples psychologically, and how peoples' reactions impact the industry. These impacts stem from citizens' insecurity about investments, the lack of trust of corporate managers, and the desire to have



governments punish corporations for losing money, despite the fact that investing comes with risks and rewards. Thus the focus on sustainability, and whether or not the industry follows the politics of constraints or the politics of the possible, may be influenced by society's view of the financial services industry.

## What Organizations Are Doing

The impact of the financial services sector on society and the environment derives mostly from the capital it employs—from financing infrastructure projects in developing nations to providing loans to businesses—with effects that can change the risk profiles of borrowers and lenders (PricewaterhouseCoopers 2009). The industry has a large built environment, as evidenced by branches of banks, large office towers, and a tremendous energy infrastructure to support trading and communication related to all sorts of markets and information exchange.

The industry faces, now as in the past, a myriad of challenges and opportunities to impact environmental sustainability. If one were to take a broad view of sustainability that includes environment and society, some of the major issues that financial services organizations face are brand and reputation management; environmental and social impacts of project financing; accessibility to services for underserved markets (Yunus 2003); environmental and social risk management in lending related to climate change (and the impact on borrowers, insurers, financial markets); socially responsible investment, lending, and marketing; compliance with regulatory requirements; and the environmental footprint of facilities.

Some authors state that financial services organizations—especially those in Europe—have a financial motivation to integrate sustainability into business (Russo and Fouts 1997). The scholar Olaf Weber (2005) maintains that integrating sustainability practices into the banking business is motivated by philosophical backgrounds, such as anthroposophy, or personal concerns, such as the agendas of public bank owners. These strategies lead to new sustainable products, such as venture capital funds and microcredit funds, or green mortgages, all of which are needed to foster sustainable development. Weber (2005) also found that financial institutions use five approaches (which he calls “models”) to successfully integrate sustainability into the banking business: event related integration of sustainability, sustainability as a new banking strategy, sustainability as a value driver, sustainability as a public mission, and sustainability as a requirement of clients. Several of these challenges can be discussed under two headings: climate change initiatives, including those related to operations and the built environment, and environmental impact investing, including socially responsible investing and markets.

## Climate Change Initiatives

The shift to a low-carbon economy is already under way, and businesses—especially energy, transport, and heavy manufacturers—are finding that they must get ready for it. Despite creating relatively low emissions as they conduct their work, financial services are not immune from a need to respond.

Changes in the global climate system during the twenty-first century are projected to have dramatic impacts on the world, including temperature increases, the rise in sea levels, dramatic precipitation and humidity changes, extreme wind and rain storms, and related events (Sussman and Freed 2008, 5).

If current climate science holds true and we take the average predictions, global greenhouse gas emission ideally should decrease by 90 percent from today's levels by 2050, containing global warming below 2°C (IPCC 2007). To reach this goal, the economy's carbon productivity would have to increase by 5 to 7 percent a year, compared to a historic rate of just 1 percent. Carbon productivity, which shows how emissions performance of an economy develops over time, is measured in gross domestic product (GDP) per unit of greenhouse gas emissions. This prescription decouples economic growth from emission growth (Enkvist, Nauclér, and Oppenheim 2008).

If humanity already possesses the fundamental scientific, technical, and industrial know-how to solve the carbon and climate problem for the next half century, then we would expect that the financial services industry has at its disposal a portfolio of technologies to meet the climate challenges we face. The financial services industry, unlike many industries, has shown surprisingly little evidence of activity in these areas. Some businesses take voluntary reductions in emissions, signing protocols such as the American College & University Presidents' Climate Commitment (2010). Buying carbon credits, investing in new technologies, and changing product designs are other carbon mitigation strategies. Few of these strategies are evident in the financial services industry (Hoffman 2006).

Many companies describe how climate change began as an endeavor within a functional area (such as environmental affairs) but diffused from the periphery to the core and, in the process, became an issue of strategic importance to the company. No such evidence exists in the financial services industry. In fact, by analogy, the finance and accounting functional areas were viewed as most resistant for climate-related strategies.

Swiss Re—the world's second largest reinsurer, providing insurance to insurance companies—was one of the first companies in the financial services industry to announce that it would eliminate or compensate for all of its greenhouse gas (GHG) emissions, with a goal of becoming

carbon neutral by 2013. Swiss Re believes that reductions in global greenhouse gas emissions can be achieved through energy efficiency measures and by purchasing high-value emission certificates. It claimed to have reduced its own carbon dioxide emissions by more than 25 percent from 2003 to 2007 and offset the remaining emissions through certified emission reduction certificates, declaring to be a greenhouse gas neutral company since October 2003 (Swiss Re 2007).

Swiss Re is a classic example of using the precautionary principle. Swiss Re CEO Jacques Aigrain stated that “in the distribution of possible future outcomes of global warming, there is a significant tail representing very serious consequences. It is the prudent approach—a common practice in insurance and issues of financial stability—which requires us to take action today to mitigate global warming and to adapt to its consequences” (SEC 2007).

Industry views vary on whether or not climate change is significant. In a recent survey, Charles Schwab replied “N/A” to the question about physical risk of climate change, while Lehman Brothers stated that “physical risks pose a threat to the operations of all financial services firms and therefore the financial markets overall” (Sussman and Freed 2008, 10). Travelers, one of the largest providers of personal and commercial property and casualty insurance products in the United States, has taken several notable actions: using extensive risk modeling that includes climate change as a major risk factor, offering risk control services, and engaging in extensive community and government outreach to create greater awareness of this risk category.

Also in the United States, newresourcebank (2006) in the San Francisco Bay area offers extensive green resources. Some other efforts are made by Lloyd’s Banking Group’s sponsorship of the Corporate Leaders Group on Climate Change—part of the Prince of Wales’s Business & the Environment Programme (2009), which is a collective business initiative to think about, challenge, and debate issues of corporate sustainability.

The financial services sector shows very little evidence of creating a positive impact on our environmental sustainability. This industry sector, unlike several others, does not have any coordinated effort to mitigate climate changes impacts, does not seem to have a systematic focus on climate change, and does not seem to put environmental sustainability at the forefront of its organizational strategies. Yet some progress has been made toward environmentally focused investing.

## Environmentally Focused Investing

One place where the politics of possibility take concrete form is at the intersection of investment and innovation. Financial services organizations have modeled some of their investment strategies not on pollution control efforts but rather on past investments in infrastructure (such as railroads and highways) and innovative solutions for new businesses.

The financial sector began taking environmental risk into consideration by optimizing its own environmental performance (Weber 2005). There were two main reasons for this. First, banks wanted to decrease costs by reducing their use of energy, water, and materials (McCammon 1995). Second, they wanted to show their clients that “it pays to be green.” As a next step, they introduced environmental risk management processes into credit management; some losses in the credit business caused by environmental risks justified such measures. At the same time, banks regarded the increase in environmental attitudes in society as a business opportunity. They subsequently created specialized credit products and mortgages as well as “green” or socially responsible funds, which invest in environmentally friendly or sustainable firms.

It has become increasingly difficult, however, to ascertain which kinds of measures or products labeled “green,” “socially responsible,” or “sustainable” have which kind of effect, both on banks and on sustainable development. Furthermore, it is difficult to determine which banks and financial institutions are the “sustainability leaders” in their sector.

One way the financial services industry has influenced sustainability efforts has been through the publication of information about companies’ climate change efforts. These publications are aimed mainly at investors. Europeans had been the first to conduct this information exchange, such as Europe’s utility sector sponsoring a publication with several new variables that made it possible to measure carbon emission against production and revenues. Goldman Sachs (2004) Energy Environmental and Social Index, a U.S. example of such a publication, is based on an analysis of thirty environmental and social metrics in eight categories.

The Carbon Disclosure Project (CDP) is a more ambitious effort. It is an independent not-for-profit organization that holds the largest database of corporate climate change information in the world. Based in the United Kingdom, it works with shareholders and corporations to disclose greenhouse gas emissions of major corporations. The CDP, which includes a group representing institutional investors that manages \$10 trillion in assets, sent questionnaires to five hundred of the world’s largest companies (mainly companies within the airline, automobile, retail, steel, power, insurance, and technology industries)



asking them to explain their emissions policies and strategies. The project published the results for investors to note in their future investment decisions (CDP n.d.).

Since its formation in 2000, CDP has become a major standard for carbon disclosure methodology and process, providing to the global marketplace primary climate change data obtained from responses to CDP's annual information requests, issued on behalf of institutional investors, purchasing organizations, and government bodies.

Institutional investors (such as banks, pension funds, and insurance companies) who signed CDP's information requests are known as signatory investors. CDP currently has 475 signatory investors, including global investment/finance houses such as Banco do Brasil, Barclays, HSBC, Goldman Sachs, Merrill Lynch, Mitsubishi UFJ, Morgan Stanley, National Australia Bank, Nedbank, and Sumitomo Mitsui Financial Group. Of the signatory investors interviewed for a CDP study, approximately 60 percent methodically identified which companies in their portfolio were either not responding to CDP or were providing poor or trivial answers (Riddell and Chamberlin 2007). The investors then used this information to further engage with these companies on the issue of climate risk. Twenty-six percent then went on to support shareholder resolutions for better disclosure on climate risk from some companies not complying with CDP disclosure.

Of the signatory investors interviewed, 13 percent encouraged their investment bankers to use CDP data when making new lending decisions. One pension fund identified their inclusion of climate risk evaluation criteria in their request for proposals to fund managers, citing that those fund managers who were able to demonstrate their signatory status to CDP were more likely to be awarded the contract. All of the investors interviewed agreed that the CDP data is a valuable resource and incorporated it into their decision-making process at some level (CDP n.d.).

As corporations create internal infrastructure to better understand GHG emissions accounting, the quality of data is expected to improve. Reviewing the CDP responses over the past five years alone is evidence that corporations are listening to their investors and responding to the threat of climate change.

Calvert, a socially responsible investment company, demonstrated particularly progressive use of CDP data conducting the following best practices:

- A qualitative analysis using CDP data evaluates companies on a sector-by-sector basis. The utility sector is the main target, but additional areas of focus are the oil and gas, auto, financial, insurance, and manufacturing sectors.
- Calvert specifically looks for a company's public policy outlook, mitigation strategies, trajectory information, management opportunities, and level of qualitative

information provided in a company's response to the CDP questionnaire.

- The information provided through CDP provides a platform for leaders and laggards, which is then incorporated into the decision-making process Calvert follows to invest in well-managed corporations.
- Calvert engages nonresponding corporations, which in some cases leads to shareholder resolutions and in others a change in response status to the CDP (n.d.).

Another effort that involved the financial services industries was the formation of the Equator Principles, a financial-industry benchmark for determining, assessing, and managing social and environmental risk in project financing (Equator Principles 2009).

Another comprehensive project has been the United Nations Environment Programme Finance Initiative (UNEP FI), a global network of signatories and partner organizations across the banking, insurance, and investment communities that focuses on the latest developments and emerging issues on finance and sustainability. UNEP FI works closely with over 170 financial institutions who are signatories to the UNEP FI Statements and a range of partner organizations to develop and promote linkages between the environment, sustainability, and financial performance. Through regional activities, a comprehensive work program, training programs, and research, UNEP FI carries out its mission to identify, promote, and realize the adoption of best environmental and sustainability practice at all levels of financial institution operations.

In the United States, the Coalition for Environmentally Responsible Economies (CERES, pronounced "series") is a national network of investors, environmental organizations, and other public interest groups working with companies and investors to address sustainability challenges such as global climate change. Its mission is to integrate sustainability into capital markets for the health of the planet and its people. CERES launched and directs the Investor Network on Climate Risk (INCR), a group of more than seventy leading institutional investors with collective assets of more than \$7 trillion. Another effort is the Institutional Investors Group on Climate Change (IIGCC), a forum for collaboration between pension funds and other institutional investors on issues related to climate change. They seek to promote better understanding of the implications of climate change among members and other institutional investors; IIGCC also encourages companies and markets in which their members invest to address any material risks and opportunities to their businesses that are associated with climate change and to shift to a lower-carbon economy.

Swiss Re was ahead of the curve with its publication *Tackling Climate Change* in 1994. Swiss Re sought to bring climate change into policy and investment decisions,

recognizing that it was more at risk from the physical impacts of climate change than many organizations. The insurance industry, in general, could experience dramatically increased costs due to growth of climate-related effects, including growth in natural disasters, disease, and mortality rates over the next ten years (UNEP FI 2002). In 2004, for example, the industry registered around \$40 billion weather-related natural catastrophe losses, the largest amount in recorded history.

In 1996, Swiss Re started building up a sustainability portfolio of investments in companies supporting sustainable development, with particular emphasis on efficient resource utilization. Target investments focus primarily on alternative energy, water and waste management, and recycling. Investment clusters range from infrastructure / project finance-type investments to “CleanTech” venture capital. In 2006, the portfolio value grew substantially to CHF 376 million (CHF is the symbol for the Swiss franc). In April 2007, Swiss Re announced the successful close of the EUR 329 million European Clean Energy Fund, one of the largest funds of this type in Europe (Swiss Re 2007). The fund, a U.N.-accredited investment vehicle, provides capital to European clean energy projects that are environmentally beneficial and generate carbon credits or tradable renewable energy certificates. Swiss Re was the anchor investor in the fund and acts as carbon advisor for the selected projects (Swiss Re 2007). The fund was placed in Europe by Swiss Re’s affiliate, Corning Research and Consulting. Other insurance companies have followed Swiss Re’s lead, and many have been developing more accurate underwriting tools, such as catastrophe models, to establish appropriate exposure-based rates for insurance.

Some financial services companies have linked existing products to environmental sustainability, including complementary product offerings and emissions offsets (van Bellegem 2001). For example, GE’s Money Earth Rewards Platinum MasterCard links purchases with offset products, similar to British Petroleum’s Global Choice Program (Deutsch 2007). Barclay’s offers the Barclaycard Breathe, from which .05 percent of what clients spend on the card goes to U.K.-based PURE, the Clean Planet Trust to fund government-approved environmental projects.

One small but interesting innovation occurred in Japan (Japan for Sustainability 2004). In 2003 three popular Japanese musicians—Takeshi Kobayashi, Kazutoshi Sakurai, and Ryuichi Sakamoto—established a bank in Japan, known as the AP Bank Co. (AP stands for “Artists’ Power” and “alternative power”). It was based on the Mirai Bank (Future Bank), which was launched and headed by environmental activist and writer Yu Tanaka. The Mirai Bank accepts funds invested by citizens and offers low-interest loans for environmental projects or citizen-based activities that the bank wants to encourage. Thus inspired by the

Mirai Bank, Kobayashi, Sakamoto, and Sakurai decided to establish a bank of their own to provide low-interest financing for activities related to renewable energy, energy conservation, and environmental protection.

Merrill Lynch (2009) has taken bold moves despite its financial difficulties. As a provider of capital, the company facilitated financing for renewable and clean energy investments. Merrill Lynch claims that as a proprietary investor it promoted investments in renewable and clean technologies, as a global wealth manager it provides solutions to integrate environmental investing into client portfolios, and through global research it publishes reports that highlight the risks and opportunities associated with the renewable and clean energy industry.

In the financing for Ulu Masen Ecosystem in Aceh, Indonesia, Merrill Lynch—in partnership with Carbon Conservation (working on behalf of the governor of Aceh)—came up with a deal that provides carbon financing for the world’s first independently validated avoided deforestation project, which is compliant with Community, Climate, & Biodiversity Alliance (CCBA) standards (2008). CCBA is a partnership between leading companies, NGOs, and research institutes seeking to promote integrated solutions to land management around the world. The CCBA has developed voluntary standards to help design and identify land management projects that simultaneously minimize climate change, support sustainable development, and conserve biodiversity. It may not be the first avoided deforestation program, but it was one of the first to harness the power of an international investment bank and to link environmental benefits with companies’ product offerings.

Merrill Lynch is using credits to create packaged products for institutional clients who want to offer ethical products to their retail customers. For example, a power company that wishes to offer a carbon-neutral electricity tariff, an airline offering carbon-neutral flights, or a car manufacturer who wants to carbon-neutralize its cars, would use Merrill’s products.

Wells Fargo & Company (2008) announced that it has provided more than \$3 billion in environmental financing—surpassing its goal to provide \$1 billion in environmental finance commitments—two years ahead of schedule. Wells Fargo environmental financing included the provision of \$2 billion in financing for building projects designed to meet U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) certification requirements; investing and committing more than \$700 million to support solar and wind projects nationwide, enough to generate enough clean, renewable energy to power about 475,000 households; providing \$500 million to support customers who have made environmental sustainability a key part of their missions; and providing \$50 million

to support nonprofit organizations that improve the environment in low- to moderate-income communities. Wells Fargo's \$1 billion lending target was part of its ten-point environmental commitment aimed at helping to integrate environmental responsibility into its business practices (CSWire 2006).

Hewlett-Packard, PepsiCo, Procter & Gamble, and eight other global companies will measure their supply-chain emissions as part of their efforts to reduce greenhouse gases and to inform investors of their carbon footprint. The data will be fed to banks and funds, such as Goldman Sachs, Merrill Lynch, and HSBC Holdings, to help guide their lending and investment decisions (Morales 2008).

In 2007 Morgan Stanley partnered with Norwegian Det Norske Veritas (DNV), an independent risk-management and consulting foundation, to launch a Carbon Bank (Environmental Leader 2007). HSBC—the world's largest banking group—developed the Climate Confidence Index, which aimed to gauge public trends in attitudes about climate change and make them available to the public (HSBC 2007). The launch of the HSBC Climate Confidence Index is part of HSBC's broader strategy to contribute to tackling climate change. Other initiatives include the Global Environmental Efficiency Program, a \$90 million commitment to reduce its own direct environmental impacts; the Carbon Finance Strategy to help clients respond to the challenges and opportunities of creating a low-carbon economy; and the HSBC Climate Partnership, a \$100 million program involving four environmental groups and HSBC's employees to help reduce the impacts of climate change worldwide.

These projects provide a more hopeful look at what the industry is doing. Yet compared to other industries and the needs for environmental impact, the efforts are relatively meager. Unlike other sectors, the financial services industry has not focused on the challenges surrounding environmental sustainability and the need to play a major role in addressing these challenges. The next section addresses what the industry could do to address these challenges.

## What Could the Industry Do?

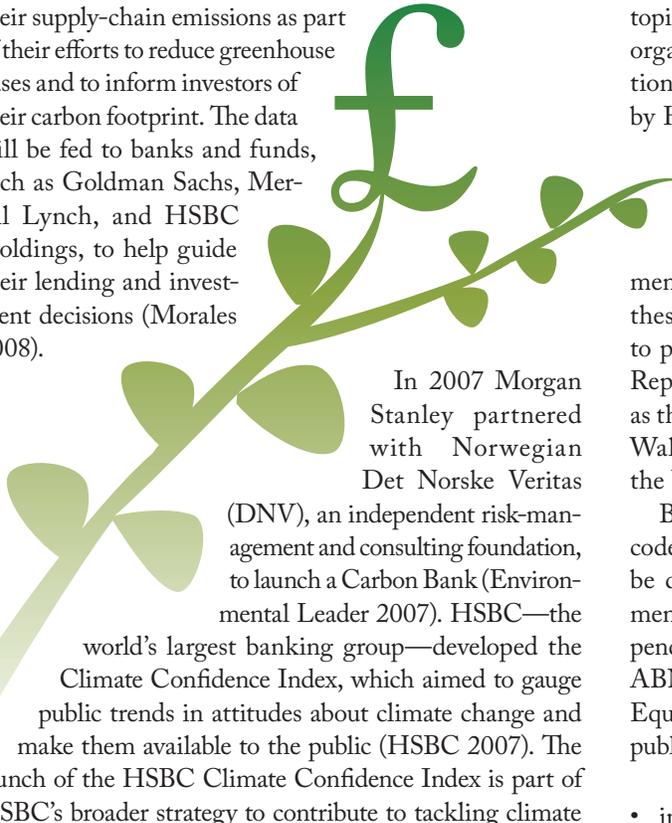
If one were to consider only the short run, the outlook is bleak that the financial services industry will support and

be part of environmental sustainability initiatives. The preoccupation with survival, the lack of evidence that their efforts have had any impact, and the lack of focus on environmental sustainability will contribute to a decrease in activity in this important area.

The financial services industry could have a major role to play, however. The industry could continue its development of investment metrics. A most important topic would be to verify the investment returns in those organizations that support and achieve climate reduction versus those that do not. For example, the efforts by HSBC, UNEP FI, Swiss Re, and others could have a major impact on the valuations of companies. If these financial services companies could produce data that investors trust, then substantial investments could be made to decrease the world's environmental footprint. In all likelihood, however, to produce these data the financial services organizations will need to partner with other organizations, such as the Global Reporting Initiative, or independent rating agencies, such as the Institute of Chartered Accountants in England and Wales or the Financial Accounting Standards Board in the United States (Gray 2006).

Banks should collectively adopt a set of principles in a code for responsible and sustainable banking that should be drafted in close consultation with national governments. According to Herman Mulder (2009), an independent advisor, the head of Group Risk Management at ABN AMRO from 1998 to 2006, and the initiator of the Equator Principles, such a code may include the following public commitments:

- incorporate and actively foster corporate social responsibility (CSR) and sustainable development (SD) in mainstream banking operations “in its own sphere of influence”; invest an explicit percentage of capital on an annual basis in SD business; set an explicit target for generating revenue from SD business; incorporate SD targets in business targets and performance appraisals; raise staff awareness and create active staff engagement by special programs;
- publish business principles, policies, analytics, risk management procedures, toolkits, performances in operations; define clear and consistent no-go interventions; offer an independent “grievance” procedure, allowing stakeholders to challenge the performance of an individual institution;
- incorporate SD issues in research, advisory, and lending operations with respect to its public and private sector clients; require similar, sector-specific disciplines from major clients, including the material contributors to the supply and distribution chains; emphasize the importance of verification and certification of products and services;



- require CSR and SD to be an explicit responsibility of a member of the European Managing Board or the United State's Boards of Directors; appoint a member in the European Supervisory Board or Boards of Directors in the United States with strong CSR and SD credentials; create an independent Advisory Council to the Board with focus on CSR and SD.

Another move the industry could make is to clean up its "own house" by enforcing high environmental standards for its buildings and workforce activities. Wachovia's major project in Charlotte, North Carolina, is exemplary (Charlotte Observer 2009). It plans to build its office tower according to Gold LEED certification standards and share space with Wake Forest University in an attempt to create a cultural campus that is both sustainable and efficient. Bank of America applied for Platinum certification for its New York office building in Bryant Park, yet another U.S. example of notable performance.

Bank of America, HSBC, Citigroup, and Swiss Re were once the sustainability leaders in the financial services sector, but their recent difficulties, especially Citigroup's, will curtail much of their efforts. Smaller, more versatile and less encumbered financial services organizations will likely lead the way for financing sustainability efforts. For example, in the United States, regional banks such as North Carolina-based BB&T could be leaders in financing renewable energy projects.

Banks manage and lend money. Most financial services organizations have capital requirements and offer incentives for people and companies to do business with them. Yet few have incorporated ways to monitor how clients implement and comply with environmental and social requirements built into agreements or transactions.

Further analyses will be necessary to measure the impact of integrating sustainable practices into the business strategies of the financial sector; initial approaches that can fulfill this necessity already exist. One example of such an approach is the sustainability balanced scorecard, which indicates the relation between the economic, environmental, and social performance of a firm (Figge et al. 2002).

## Outlook

The financial services industry can help implement sustainable business practices by providing a market for climate exchange. This would involve facilitating markets that trade carbon credits, helping firms participate in the markets, and developing instruments that would provide financial security in such transactions. The aim of financial organizations such as the Chicago Climate Exchange, European Climate Exchange, Insurance Future Exchange, Montréal Climate Exchange, and Tianjin Climate Exchange is to

apply financial innovation and incentives to advance social, environmental, and economic goals through cap and trade systems with global affiliates and projects worldwide; derivatives exchanges that offer standardized and cleared futures and options contracts on emission allowances and other environmental products are also planned. These financial institutions need to be supported and regulated, similar to other financial exchanges.

In sum, the industry will not, in the short run, make significant strides in the area of environmental sustainability. Yet with some political will and customer pressure, the industry could eventually increase its presence in support of environmental sustainability.

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*See also* Accounting; Climate Change Disclosure; CSR and CSR 2.0; Equator Principles; Green GDP; Investment, CleanTech; Investment, Socially Responsible; Risk Management; Social Enterprise; Sustainable Value Creation; Transparency; United Nations Global Compact

## FURTHER READING

- American College & University Presidents' Climate Commitment (ACUPCC). (2010). Retrieved January 20, 2010, from <http://www.presidentclimatecommitment.org>
- The Banker. (2008, October). The Banker investment banking awards 2008. Retrieved August 15, 2009, from <http://www.ml.com/media/112394.pdf>
- Callens, Isabelle, & Tyteca, Daniel. (1999). Towards indicators of sustainable development for firms—a productive efficiency perspective. *Ecological Economics*, 28(1), 41–53.
- Carbon Disclosure Project (CDP). (n.d.). Retrieved March 23, 2009, from <http://www.cdproject.net/>
- Charlotte Observer. (2009, February 27). Duke energy to move HQ to tower built for Wachovia. Retrieved March 10, 2009, from <http://www.newsobserver.com/business/story/1421353.html>
- Climate, Community, & Biodiversity Alliance (CCBA). (2008). CCB standards. Retrieved February 18, 2009, from <http://www.climate-standards.org/>
- Coulson, Andrea, & Monks, Vivienne. (1999, April). Corporate environmental performance considerations within bank lending decisions. *Eco-Management and Auditing*, 6(1), 1–10.
- CSRWire. (2006, April 6). Wells Fargo invests \$5 million in renewable energy fund. Retrieved March 23, 2009, from <http://www.csrwire.com/News/5357.html>
- Deutsch, Claudia H. (2007, July 25). G.E. unveils credit card aimed at relieving carbon footprints. Retrieved March 15, 2009, from [http://www.nytimes.com/2007/07/25/business/25card.html?\\_r=2](http://www.nytimes.com/2007/07/25/business/25card.html?_r=2)
- Dryzek, John S. (2005). *The politics of the Earth: Environmental discourses* (2nd ed). Oxford, U.K.: Oxford University Press.
- Edwards, Pamela; Birkin, Frank; & Woodward, David. (2002). Financial comparability and environmental diversity: An international context. *Business Strategy and the Environment*, 11(6), 343–359.
- Enkvist, Per-Anders; Nauc ler, Tomas; & Oppenheim, Jeremy M. (2008, April). Business strategies for climate change. *The McKinsey Quarterly*, 2, 24–33.

- Environmental Leader. (2007, August 14). Morgan Stanley's carbon bank to provide offset services. Retrieved March 22, 2009, from <http://www.environmentalleader.com/2007/08/14/morgan-stanleys-carbon-bank-to-provide-offset-services/>
- Equator Principles. (2009). Retrieved March 10, 2009, from <http://www.equator-principles.com/principles.shtml>
- Figge, Frank; Hahn, Tobias; Schaltegger, Stefan; & Wagner, Marcus. (2002). The sustainability balanced scorecard—Linking sustainability management to business strategy. *Business Strategy and the Environment*, 11, 269–284. Retrieved August 15, 2009, from <http://www.sustainabilitymanagement.net/public/04%20The%20Sustainability%20Balanced%20Scorecard.pdf>
- Gibbs, Richard. (2007, October). The economics of sustainability risk reporting (SRR). *in Finance*, 121(4), 39–40.
- Global Reporting Initiative. (2009). Sustainability reporting guidelines & financial services sector supplement. Retrieved August 15, 2009, from <http://www.globalreporting.org/NR/rdonlyres/46FAAF92-F39D-44D4-8EFE-0276FB34A0FC/0/ReportingGuidelinesandFSSSFinal.pdf>
- Goldman Sachs. (2004, February 24). *Global energy: Introducing the Goldman Sachs energy environmental and social index*. Retrieved April 27, 2009, from <http://www.pewclimate.org/docUploads/Goldman%20EESI%20Index.pdf>
- Gollier, Christian; Jullien, Bruno; & Treich, Nicolas. (2000, February). Scientific progress and irreversibility: An economic interpretation of the “precautionary principle.” *Journal of Public Economics*, 75(2), 229–253.
- Gray, Rob. (2006). Does sustainability reporting improve corporate behaviour? Wrong question? Right time? *Accounting & Business Research*, 36, 65–88.
- Hoffman, Andrew. (2006). *Getting ahead of the curve: Corporate strategies that address climate change*. Retrieved August 15, 2009, from [http://www.pewclimate.org/docUploads/PEW\\_CorpStrategies.pdf](http://www.pewclimate.org/docUploads/PEW_CorpStrategies.pdf)
- HSBC. (2007). HSBC launches international survey of public attitudes towards climate change. Retrieved March 24, 2009, from <http://www.hsbc.com/1/2/sus-index>
- IBIS World Industry Reports. (2008). Commercial banking in the U.S., December 4. Retrieved January 11, 2010, from [http://www.mindbranch.com/about/publisher\\_info.jsp?pubcode=538](http://www.mindbranch.com/about/publisher_info.jsp?pubcode=538)
- Investor Network on Climate Risk (INCR). (2007). Retrieved March 20, 2009, from <http://www.incr.com/Page.aspx?pid=198>
- Intergovernmental Panel on Climate Change (IPCC). (2007). *Climate change 2007: Synthesis report*. Retrieved January 18, 2010, from [http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4\\_syr.pdf](http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf)
- Japan for Sustainability. (2004, July 29). Japanese musicians establish eco-friendly bank. Retrieved March 29, 2009, from <http://www.japanfs.org/en/pages/025659.html>
- Knecht, Frans. (1997). Relevance of environmental performance to corporate value. Paper presented at the Environment and Financial Performance, New York. Cited in Rob Gray (2006), Does sustainability reporting improve corporate behaviour? Wrong question? Right time? *Accounting & Business Research*, 36, 65–88.
- Louche, Céline. (2001). The corporate environmental performance—financial performance link: implications for ethical investments. In Jan Jap Bouma; Marcel Jeucken; & Leon Klinkers (Eds.), *Sustainable banking: The greening of finance* (pp. 187–200). Sheffield, U.K.: Greenleaf.
- McCammon, A. L. T. (1995). Banking responsibility and liability for the environment: What are banks doing? *Environmental Conservation*, 22(4), 297–305.
- Meadows, Donella; Randers, Jorgen; & Meadows, Dennis. (2004). *Limits to growth: The 30-year update*. White River Junction, VT: Chelsea Green.
- Melnyk, Steven; Sroufe, Robert; & Calantone, Roger. (2003). Assessing the impact of environmental management systems on corporate and environmental performance. *Journal of Operations Management*, 21, 329–351. Retrieved August 15, 2009, from <http://www2.bc.edu/~sroufe/jom2003.pdf>
- Merrill Lynch. (2009). Environmental sustainability. Retrieved April 14, 2009, from [http://www.ml.com/?id=7695\\_8134\\_13653\\_71406](http://www.ml.com/?id=7695_8134_13653_71406)
- Morales, Alex. (2008, January 21). Eleven multinationals to assess their “carbon footprint.” *The Washington Post*, A16. Retrieved August 15, 2009, from <http://www.washingtonpost.com/wp-dyn/content/article/2008/01/20/AR2008012002319.html>
- Mulder, Herman H. (2009). Values-based, sustainable, responsible, banking. Retrieved December 11, 2009, from [www.worldconnectors.nl/upload/cms/252\\_SUSTAINABLE\\_BANKING.doc](http://www.worldconnectors.nl/upload/cms/252_SUSTAINABLE_BANKING.doc)
- newresourcebank. (2006). Green resources. Retrieved March 23, 2009, from <http://www.newresourcebank.com/community/resources.php>
- Ng, Serena, & Mollenkamp, Carrick. (2009, March 7). Top U.S., European banks got \$50 billion in AIG aid. *Wall Street Journal*. Retrieved August 12, 2009, from [http://online.wsj.com/article/SB123638394500958141.html?mod=rss\\_Today%27s\\_Most\\_Popular](http://online.wsj.com/article/SB123638394500958141.html?mod=rss_Today%27s_Most_Popular)
- Nordhaus, Ted, & Shellenberger, Michael. (2007). *Break through: From the death of environmentalism to the politics of possibility*. Boston: Houghton Mifflin.
- Orlitsky, Marc, & Benjamin, John D. (2001, December). Corporate social performance and firm risk: A meta-analytical review. *Business & Society*, 40(4), 369–396.
- PricewaterhouseCoopers Global. (2009). Financial services. Retrieved March 15, 2009, from <http://www.pwc.com/extweb/industry.nsf/docid/79508408741F5B78852570D20076B902>
- Prince of Wales's Business & the Environment Programme. (2009). Retrieved January 11, 2010, from [http://www.cpi.cam.ac.uk/our\\_work/executives\\_seminars/bep.aspx](http://www.cpi.cam.ac.uk/our_work/executives_seminars/bep.aspx)
- Randjelovic, Jelena; O'Rourke, Anastasia R.; & Orsato, Renato J. (2003). The emergence of green venture capital. *Business Strategy and the Environment*, 12(4), 240–253.
- Repetto, Robert, & Austin, Duncan. (1999, September 22). Estimating the financial effects of companies' environmental performance and exposure. *Greener Management International*, 27, 97–110.
- Riddell, Zoe, & Chamberlin, Brittany. (2007). *Carbon disclosure project—Investor research project*. Retrieved August 13, 2009, from <http://www.google.com/search?hl=en&q=Investor+research+project+Riddell+and+Chamberlin&aq=f&coq=&aqj=>
- Russo, Michael, & Fouts, Paul. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal*, 40(3), 534–559.
- Schaltegger, Stefan, & Figge, Frank. (2000). Environmental shareholder value: Economic success with corporate environmental management. *Eco-Management and Auditing*, 7(1), 29–42.
- Schaltegger, Stefan, & Figge, Frank. (2001). Sustainable development funds: Progress since the 1970s. In Jan Jap Bouma; Marcel Jeucken; & Leon Klinkers. (Eds.), *Sustainable banking: The greening of finance* (pp. 203–210). Sheffield, UK: Greenleaf.
- Schmidheiny, Stephan, & Zorraquin, Federico. (1996). *Financing change: The financial community, eco-efficiency, and sustainable development*. MIT Press: Cambridge, MA.
- Schmid-Schönbein, Oliver, & Braunschweig, Arthur. (2000). *EPI-finance 2000: Environmental performance indicators for the financial industry*. Zurich: E2 Management Consulting AG.
- Scholz, Roland; Weber, Olaf; Stünzi, J.; Ohlenroth, W.; & Reuter, A. (1995). *Umweltrisiken systematisch erfassen. Kreditausfälle aufgrund ökologischer Risiken—Fazit erster empirischer Untersuchungen* [The systematic measuring of environmental risk. Credit defaults caused by environmental risk—results of a first study]. *Schweizer Bank*, 4, 45–47.
- Securities and Exchange Commission (SEC). (2007). Petition for interpretive guidance on climate risk disclosure (p. F-5). Retrieved December 11, 2009, from <http://www.sec.gov/rules/petitions/2007/petn4-547.pdf>

- Sharma, Sanjay, & Ruud, Aundun. (2003). On the path to sustainability: Integrating social dimensions into the research and practice of environmental management. *Business Strategy and the Environment*, 12, 205–214.
- Siddiqui, Firoze, & Newman, Peter. (2001). Grameen shakti: Financing renewable energy in Bangladesh. In Jan Jap Bouma; Marcel Jeucken; & Leon Klinkers (Eds.), *Sustainable banking: The greening of finance* (pp. 88–95). Sheffield, U.K.: Greenleaf.
- Stigson, Björn. (2001). Making the link between environmental performance and shareholder value: The metrics of eco-efficiency. In Jan Jap Bouma; Marcel Jeucken; & Leon Klinkers (Eds.), *Sustainable banking: The greening of finance* (pp. 166–172). Sheffield, U.K.: Greenleaf.
- Sussman, Francis G., & Freed, J. Randall. (2008). *Adapting to climate change: A business approach*. Arlington, VA: Pew Center on Global Climate Change.
- Swiss Re. (2007). Swiss Re announces final close of EUR 329 million European Clean Energy Fund. Retrieved March 24, 2009, from <http://www.swissre.com/pws/media%20centre/news/news%20releases%202007/swiss%20re%20announces%20final%20close%20of%20eur%20329%20million%20european%20clean%20energy%20fund.html>
- Ullmann, Arieh. (1985). Data in search of a theory: A critical examination of the relationship among social performance, social disclosure and economic performance of US firms. *Academy of Management Review*, 10(3), 540–557.
- United Nations Environmental Programme (UNEP). (1992). Statement by banks on the environment and sustainable development. UNEP: Rio de Janeiro.
- United Nations Environment Programme Finance Initiative (UNEP FI). (2002). CEO briefing on climate change. Retrieved April 27, 2009, from [http://www.unepfi.org/fileadmin/documents/CEO\\_briefing\\_climate\\_change\\_2002\\_en.pdf](http://www.unepfi.org/fileadmin/documents/CEO_briefing_climate_change_2002_en.pdf)
- United Nations World Commission on Environment and Development (WCED). (1987). *Report of the world commission on environment and development: Our common future*. Retrieved April 27, 2009, from <http://www.un-documents.net/wced-ocf.htm>
- United States Government Accountability Office. (2009, March 31). Troubled asset relief program: March 2009 status of efforts to address transparency and accountability issues. Retrieved April 27, 2009, from <http://www.gao.gov/products/GAO-09-504>
- van Bellegem, Theo. (2001). The green fund system in The Netherlands. In Jan Jap Bouma; Marcel Jeucken; & Leon Klinkers (Eds.), *Sustainable banking: The greening of finance* (pp. 234–244). Sheffield, U.K.: Greenleaf.
- van den Brink, Timo, & van der Woerd, Frans. (2004). Industry specific sustainability benchmarks: An ECSF pilot bridging corporate sustainability with social responsible investments. *Journal of Business Ethics*, 55(2), 187–203.
- Weber, Olaf. (2005). Sustainability benchmarking of European banks and financial service organizations. Retrieved August 15, 2009, from <http://www.cleanerproduction.com/Training/Banks/Refs/Sustainability%20benchmarking%20in%20Euro%20banks.pdf>
- Wells Fargo. (2008, December 22). Wells Fargo exceeds \$3 billion in environmental financing: Issues progress report on environmental finance activities. Retrieved April 4, 2009, from [https://www.wellsfargo.com/press/2008/20081222\\_\\_Environmental\\_Funding](https://www.wellsfargo.com/press/2008/20081222__Environmental_Funding)
- Yunus, Muhammad. (2003). *Banker to the poor: Micro-lending and the battle against world poverty*. New York: PublicAffairs.



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