# Environmental

PROGRESS REPORT 2009

Goldman Sachs

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### Executive summary

In our *Environmental Policy Framework (Framework)*, we articulate our belief that a healthy environment is necessary for the well-being of society, our people and our business, and is the foundation for a sustainable and strong economy. Since the inception of our *Framework* in 2005, we have experienced significant changes in our industry and the global economy. Throughout this time, the applicability and implementation of our *Framework* has deepened with the increased connectivity between the environment and the broader economy. Through these changes, our *Framework* has acted as an important compass that has kept our commitment to environmental stewardship resolute. We remain firmly dedicated to furthering market-based solutions that can benefit both our environment and our business.

### OUR PROGRESS

The firm implements our environmental strategy across three areas: our core businesses, our operations and our thought leadership in global markets. During the past year, we made progress in each of these areas, benefiting our business and clients, the environment and global markets.

- We continued our support of the commercialization of clean energy technologies through direct investment and underwriting activities. Since 2006, we have invested approximately \$3 billion in clean energy, providing critical funding that emerging industries need to ramp up and achieve the economies of scale that will help them become cost-competitive. We have also raised more than \$10 billion for our clean energy clients around the world.
- Cogentrix Energy, a Goldman Sachs subsidiary that develops and owns power projects, has continued to shift its primary focus to clean energy, pursuing new opportunities in renewable energy while upgrading or repowering conventional thermal plants to cleaner, more efficient methods of power generation. Since 2008, Cogentrix has invested over \$300 million to acquire and develop a portfolio of concentrated solar thermal, photovoltaic, run-of-river hydro and wind energy projects. The renewable portfolio consists of 200 megawatts of operational or in-construction projects and

850 megawatts of projects in various stages of development. As an example of this commitment to clean energy, in August 2010, Cogentrix Energy announced that it had entered into a contract with Public Service Company of Colorado (PSCo), an Xcel Energy company, for a solar generating project to be located near Alamosa, in southern Colorado. The 30 megawatt solar generating project will be the largest facility of its type in the world and is expected to be completed in the second quarter of 2012.

- We are a market leader in climate-based commodities, providing liquidity and risk management for clients and markets worldwide. In October 2009, we announced a \$12 million carbon offset transaction with Blue Source and CE2 Carbon Capital, one of the largest publicly announced carbon offset transactions in North America.
- We continued to develop and place catastrophe-linked securities that offer our clients financial protection from physical climate risks and other natural catastrophes. In 2009, we placed eight transactions totaling \$1.4 billion including for first-time issuers Assurant and Flagstone.
- The GS SUSTAIN research team, which integrates the sustainability of corporate performance into our fundamental industry and financial analysis, applied their framework to over 800 large global companies across 22 industries. Since its inception in June 2007 through 2009 year-end, the GS SUSTAIN Focus List, which brings together leaders identified in each of these industries, has outperformed the MSCI All Country World Index by 17.5% on an equally weighted basis.
- Our US Responsible Equity strategy recently achieved a strong, three-year track record. The strategy seeks to "do good" and "do well" by blending environmental, social and governance (ESG) factors with fundamental research and a proprietary, forward-looking, quantifiable process that assesses 20+ business practices for each ESG category (60 total).
- We served as a founding member of the Green Exchange<sup>TM</sup> venture for markets focused on solutions to climate, renewable energy and other environmental challenges. This builds on our existing investments that aim to build market infrastructure for environmental commodities, such as APX and Markit.

## • Upon LEED<sup>®</sup> certification of our new global headquarters at 200 West Street in New York, our LEED-certified portfolio will expand to 3.8 million square feet, making the firm one of the world's largest owners of LEED-certified commercial real estate.

- In the development of 200 West Street, we awarded over \$300 million in contracts to minority and women-owned businesses, the largest amount ever in the history of New York State's Minority and Women-Owned Business Enterprise program.
- Our global carbon emissions intensity measures continued to decline. Since 2005, we have reduced emissions per full time occupant in our workplace (less data centers) by 33%.
- Since 2006, we have invested more than \$5 million through our Center for Environmental Markets in partnerships with corporations, NGOs and academic institutions to further market-based solutions to environmental issues. In 2009, we expanded our partnerships to include General Electric and the World Resources Institute on a Water Risk Index, and Duke University's Nicholas Institute for Environmental Policy Solutions on climate legislation.

### OUR COMMITMENT

Moving forward, we will continue to work on many fronts and have established a new objective for reducing the impact of our operations. In addition to our 2012 pledge, we are committed to reducing carbon emissions from our facilities through incremental reductions year-over-year to zero by 2020. This pledge extends our previous 2012 commitment to reduce indirect greenhouse gas emissions by 7% from leased and owned offices from a 2005 baseline. We will continue to apply creativity, talent and enthusiasm toward achieving this goal, in conjunction with the vision set forth in our *Framework*.

## About this report

This is the fourth consecutive year Goldman Sachs has reported on our environmental initiatives.

This year's Environmental Progress Report, copies of previous reports and more information on Goldman Sachs' Environmental Policy Framework are available online at WWW.GS.COM/ENVIRONMENTALMARKETS/REPORTS.

For further information on Goldman Sachs' environmental policies and performance, please see <u>www.gs.com/environmentalmarkets</u>.

# The environment & our core business

### Business selection & environmental advisory

### HOW WE MANAGE ENVIRONMENTAL AND SOCIAL RISK

A healthy global environment supports the growth of economies and communities. As a firm, we depend on strong and sustainable economies and communities to survive and thrive. As a result, we view environmental and social stewardship as one of our responsibilities, including proactively seeking solutions that enable our firm, our clients and society to minimize the risks associated with certain business activities.

We assess and manage environmental and social risk with the same disciplined approach that we use when managing all business risks. We seek diverse opinions, escalate relevant issues and hold our people accountable for their judgment and decisions. Our *Environmental Policy Framework (Framework)* and due diligence guidelines provide a concrete basis for evaluating the many considerations that enter into a deal or transaction. We are committed to adhering to the Equator Principles [www.EQUATOR-PRINCIPLES.COM] where they apply.

### For more information on the Framework, please see <u>www.gs.com/environment</u>.

Our Environmental Markets Group (EMG) coordinates and oversees the *Framework*, while respective business units are responsible for implementation. The Board of Directors reviews the *Framework* and its implementation annually. EMG is comprised of experienced investment bankers and sits in the Executive Office, reporting to the Office of the Chairman, giving it both expertise and access to senior leadership.

The *Framework* embodies our commitment to finding effective, market-based solutions to address climate change, ecosystem degradation and other critical environmental issues, and to creating new business opportunities that benefit the environment. The broad scope of our business and our diverse client base enables us to advise and influence clients who represent many different perspectives and participate in many different markets. Our *Framework* provides guidance for our people to consider the context of deals or transactions to reach the decision that best reflects our values.

### SELECTING BUSINESS AND ENGAGING WITH CLIENTS

As a firm we place importance on considering the environmental impacts and practices of our clients and potential clients when we make business selection decisions. Our advice to our clients helps them develop business strategies that take advantage of opportunities and reduce the environmental and social impacts of their businesses.

We ask our financing and principal investing teams to conduct an environmental, social and governance (ESG) review for opportunities in the normal course of their due diligence before committing to business on behalf of the firm. As appropriate, advisory, trading and asset management teams also conduct ESG reviews. Teams from EMG and our Business Intelligence Group (a research and due diligence group that supports all business lines and the firm's committees in making fully informed regulatory, commercial and reputational risk management decisions) assist each deal team in evaluating a transaction that has climate change or ESG-related sensitivity. Their findings are passed on to key committees for review and input. Transactions that have a particularly high level of ESG sensitivity are escalated for discussion and a final decision involving key business leaders, members of the Management Committee or the Chairman's Office. When we identify a potentially significant issue - including governance, the environment, labor or human rights - we prefer to address the potential issue and encourage the client to assume more sustainable practices. By doing so, we differentiate our advice and serve the interests of our clients by helping them improve their environmental, social and governance practices. We believe this approach upholds our responsibility, advances the client's understanding and practice of sustainable actions, effectively manages risk and yields greater benefits both for the client and broader society.

As an advisor, we help our clients better manage risks and seize opportunities associated with environmental and social issues. For example, we leverage our experience as a participant in the European Union's carbon market and in other environmental commodities by providing insights into the markets and helping structure products that help clients manage carbonrelated risk in the emerging US and Canadian voluntary and pre-compliance markets. When clients seek our assistance in a transaction, we often use that opportunity to engage them in strategic dialogue and encourage them to incorporate environmental and social factors into their business plans. When we invest our own funds in privately held companies, our people often gain membership on companies' boards of directors. Through these client relationships, we monitor and guide a company's operations and environmental compliance.

#### OUR DUE DILIGENCE GUIDELINES

In addition to the firmwide review process, we equip teams in sensitive sectors with due diligence guidelines and training to evaluate new business opportunities effectively. This includes background on current ESG issues and sensitivities in the sector, and a framework of questions to discuss with a company. Our due diligence guidelines span eight industry sectors. Within several of these sectors, we have subsector guidelines.



Our people, in relevant business areas, also receive training on our ESG due diligence process and *Framework* as new hires. In addition, they have ongoing training, including dialogues with EMG and external stakeholders, as well as regular updates on firm policies and activities.

#### TRANSACTIONS REVIEWED BY EMG BY SECTOR (2009)

SECTOR	NUMBER OF TRANSACTIONS REVIEWED	PERCENT
Biofuels	12	4.3
Chemicals	19	6.8
Forestry	13	4.6
Metals and mining	100	35.6
Oil and gas	58	20.6
Power generation	70	24.9
Transportation	5	1.8
Water	4	1.4
TOTAL	281	

### BALANCING ECONOMIC GROWTH AND THE ENVIRONMENT

We have long-standing relationships with a diverse base of clients around the world, including those in environmentally sensitive sectors, such as oil and gas, power generation, forestry and mining. When we are approached by our clients in these sectors to provide advisory and corporate financing, we carefully weigh the opportunities that are created from these transactions, such as economic development and job creation, with the potential environmental impact. In doing so, we closely monitor legislative and regulatory developments, engage with environmental, non-governmental organizations (NGOs) and stay abreast of emerging sector trends.

An example is in emerging economies, where we face business selection decisions in the power sector that must balance the access to electricity in the region required for economic growth with the available electricity generation sources, which often include fossil fuels. As part of our analysis, we work with our clients to better understand the analysis driving the particular investment decision, including the energy needs in the region, the company's current generation portfolio and the feasibility of low-carbon alternatives. In instances where a company is

expanding in an area or region with a significant energy deficit and the company has demonstrated a commitment toward low-carbon generation as part of its portfolio, we have provided financing to help gain reliable access to power and support the underlying economic growth in the region.

### FINANCING THE TRANSITION TO A LOW-CARBON ECONOMY

Providing capital for low-carbon technologies is one of the key ways we further marketbased solutions to the environmental challenges we face. Since 2006, we have raised more than \$10 billion in financing for our clean energy clients around the world.

In September 2009, we executed the largest clean tech initial public offering of the year by acting as joint bookrunner for A123 Systems, a leading provider of advanced lithium ion batteries in the global marketplace. The IPO raised a total of \$438 million, which will be used primarily for capital expenditures related to the expansion of A123 Systems' manufacturing facilities in Michigan.

A123 Systems is one of the world's leading suppliers of high-power lithium ion batteries. The batteries use its patented Nanophosphate<sup>™</sup> technology, which is built on intellectual property from the Massachusetts Institute of Technology and is designed to deliver a superior combination of power, safety and life. This technology has potentially game-changing applications for transportation (electric vehicles), electric grid services and portable power.

### Environmental & social investments

### INVESTING IN A CLEAN ENERGY FUTURE

Each of our businesses has an important role to play in furthering market-based solutions to meet the environmental and societal challenges we face. To encourage the responsible flow of capital, have a positive impact on the communities where our clients and we do business, and drive attractive returns for our shareholders, we look for opportunities to invest in and finance transactions that have social and environmental benefits. We take the same disciplined approach to these investments and market opportunities as we do with our traditional investments and markets: all must meet the interests of our clients and generate long-term value for our shareholders. The guidance provided by our *Framework* helps us to evaluate market opportunities across our business activities and areas.

Since the inception of the *Framework* in November 2005, we have invested nearly \$3 billion in clean energy, providing critical funding that these emerging industries need to ramp up and achieve the economies of scale that will help them become cost-competitive.

In 2009, we:

- Significantly expanded our investments in solar energy with the acquisition of Sunray Energy, Inc., through our subsidiary Cogentrix Energy. Sunray owns and operates Solar Energy Generation Systems I and II (SEGS I & II), the first two utility scale solar trough plants in the world, which have a capacity of approximately 43 megawatts and deliver electricity to Southern California Edison. We are in the process of implementing a capital investment program to retrofit and upgrade the delivery capability that will enhance the efficiency and reliability of Sunray's solar installations.
- Signed a power purchase agreement to construct and operate a wind project in Puerto Rico. The power plant will have a capacity of 50 megawatts.
- Continued to develop run-of-river hydroelectric projects. As a result of the ongoing developments, we recently completed our first run-of-river hydroelectric generating plant that has 23 megawatt capacity. Three additional run-of-river hydroelectricity projects are under development totaling 165 megawatts.

## • Continued to actively pursue solar development projects in the southwest U.S., which have enabled us to put into an advanced stage of development 120 megawatts of solar energy as of mid-2010.

- Increased our investments in solar photovoltaic cell manufacturers Suniva and SpectraWatt, building on our initial investments in 2008.
- Became a founding member of the Green Exchange<sup>™</sup> venture, which trades environmental futures, options and swap contracts for markets focused on solutions to climate, renewable energy and other environmental challenges. This new exchange offers effective and innovative financial tools to consumers, industrials, project developers, investors and others who wish to participate in these developing markets. This builds on earlier investments that aim to build market infrastructure for environmental commodities, such as APX and Markit.



### CLEAN ENERGY INVESTMENTS

### Trading & capital markets

### MAKING MARKETS IN CLIMATE-RELATED COMMODITIES

We continue to act as a market maker in emissions trading, weather derivatives, renewable energy credits (RECs) and other climate-related commodities, and look for ways to play a constructive role in promoting the development of these markets. By making markets through which these commodities can be easily traded, we enable more liquid markets. This in turn helps our clients manage their risks, such as greenhouse gas emissions, more effectively and reduce carbon emissions at a lower cost.

In Europe, we have been market makers in the European Union Emissions Trading Scheme since its inception in 2005. In 2007, we established a North American Environmental Commodities Team that facilitates the purchase and sale of carbon offsets, RECs and other new climate-related commodities.

We announced a \$12 million US carbon offset transaction with Blue Source, a leading climate change offset portfolio company in North America, and CE2 Carbon Capital, one of the largest investors and owners of carbon commodities and carbon emission reduction projects in the United States. These projects meet the rigorous quality standards of the Climate Action Reserve and Voluntary Carbon Standard. The transaction represented one of the largest publicly announced carbon offset transactions in North America.

In addition to managing the policy risk from carbon, we continue to create financial products that offer companies financial protection from physical climate risks, such as hurricanes and other natural catastrophes. In 2009, we placed eight transactions totaling \$1.4 billion, including transactions for first-time issuers Assurant and Flagstone. These transactions enable insurers to manage natural catastrophe risk through the capital markets and effectively provide them with collateralized coverage for hurricane and earthquake risk in the United States. These products also help meet the diversification needs of our investor clients.

For more information, please see <u>www.gs.com/environmentalmarkets</u>.

### Global Investment Research

### INNOVATIVE THINKING FOR A CHANGING WORLD

Key long-term structural shifts, such as climate change, increased competition for resources and the emergence of a new middle class, are shaping the world. The GS SUSTAIN team in the Global Investment Research (GIR) division has created an investment philosophy that identifies the companies best positioned to sustain structural leadership within their industries and make the most of the related commercial advantages.

To do this, the philosophy employs objective, quantitative analysis of the quality of companies' management, including how they manage environmental, social and governance (ESG) factors, their strategic positioning and their forecasted return on capital.

The GS SUSTAIN Focus List brings together the leaders we identify in each of the sectors examined to date. It includes mature industry leaders well positioned to sustain superior returns on capital in established industries and emerging industry leaders well positioned to sustain rapid growth. The GS SUSTAIN Focus List is aimed at long-term (3–5 years), long-only outperformance with a low turnover of ideas. Since its inception in June 2007 through 2009 year-end, the GS SUSTAIN Focus List has outperformed the MSCI All Country World Index by 17.5% on an equally weighted basis.

Our GS SUSTAIN team expanded its analysis of the investment implications of climate change, including a major research report, *Change is coming: A framework for climate change – a defining issue of the 21st century.* 

In addition to GS SUSTAIN, we continue to cover Alternative Energy and Environmental Technology companies. As of year-end 2009, we cover more than 40 alternative energy companies around the world, including producers of wind, solar, biofuels, geothermal and fuel cell technologies.

The Global Markets Institute (GMI) continues to conduct global macroeconomic research on environmental themes, such as the impact of climate change, energy efficiency, energy policy and the challenges of reconciling environmental protection with economic growth. This research also encompasses demographic themes, such as aging populations, urbanization and the role of women in global economies.

For a listing of select GIR reports from 2009, please see Appendix A on page 29.

### Investment Management

### ANTICIPATING THE CHANGING NEEDS OF OUR CLIENTS

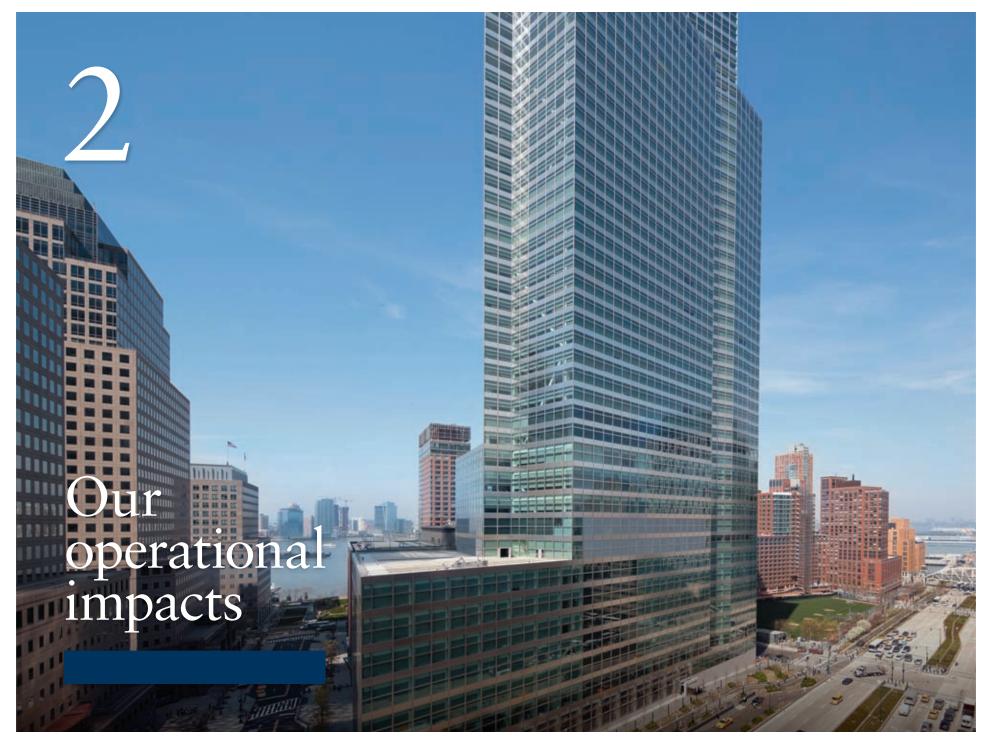
As environmental issues and climate change, in particular, are at the forefront of investors' minds, Goldman Sachs Asset Management (GSAM) has developed investment strategies that seek to generate long-term capital appreciation through investments in companies engaged in socially responsible activities.

Goldman Sachs pioneered the GS SUSTAIN Focus List, which investors can utilize to consider the global forces, including climate change, increased competition for resources and the emergence of a new middle class that are shaping today's investing world. Institutional and individual investors have access to these companies through the GS Sustain Portfolio and other vehicles managed by GSAM in collaboration with Global Investment Research. The strategy had \$295 million in managed assets as of December 31, 2009.

For more information on the GS SUSTAIN investment philosophy, please see www.gs.com/gssustain.

GSAM's US Responsible Equity strategy aims to generate excess returns versus the S&P 500 while investing in companies engaged in responsible activities across the three categories: environmental, social and governance (ESG). Blending these factors with fundamental research focused on alpha generation, the strategy benefits from a 20-person investment team that includes four ESG-focused specialists. The team seeks to identify ESG leaders based on an in-house, proprietary scoring system that is comprehensive, forward-looking and quantifiable – not solely based on exclusionary screens. The team leverages its access to company management teams to influence high ESG standards. As of December 31, 2009, the US Responsible Equity portfolio had \$86 million in managed assets.

For more information on the US Responsible Equity strategy, please email GS-AM-FE-CPM-VALUE@GS.COM.



Goldman Sachs' new global headquarters, 200 West Street, New York City.

### Workplace sustainability

We take the same innovative approach to environmental stewardship in our workplace as we do in our core businesses. Our own operations are managed in conformance with a comprehensive environmental policy helping to ensure that our facilities and business practices maximize efficiencies and adopt leading-edge environmental safeguards.

In 2009, we continued to implement our *Carbon Emissions Reduction Framework*, opened our new global headquarters in New York (which is anticipated to attain Leadership in Energy and Environmental Design (LEED®) Gold Certification in 2010), reduced the impacts of our technology systems and expanded the renewable energy portfolio of our power-producing subsidiary Cogentrix.

### REDUCING CARBON EMISSIONS

Through the implementation of our *Carbon Emissions Reduction Framework*, we continue to work to fulfill our commitment to reduce carbon emissions from our leased and owned offices by 7% by 2012 from our 2005 baseline. As a result, our carbon emissions intensity measures continue to decline. In our workplace (less data centers), we have reduced our emissions per full-time occupant (FTO) by 33%, and our emissions per dollar net revenue by 12%, compared to the firm's 2005 baseline. Despite these gains in efficiency, overall emissions have increased to 275,360 metric tons largely as a result of growth in the firm's data processing requirements. (See chart on page 13.)

The *Carbon Emissions Reduction Framework* was adopted to provide a holistic approach for internal stakeholders to engage in developing innovative solutions to reducing the firm's carbon emissions. Some highlights of our actions to support our *Carbon Emissions Reduction Framework* include:

- Consolidating operations into energy-efficient real estate
- » Our move to a new global headquarters at 200 West Street is designed to result in overall energy savings of 10 million kilowatt hours annually compared to our former Lower Manhattan campus.
- Improving space utilization through workplace standards and increased occupancy rates
- » In consolidating our New York and New Jersey campuses, we reduced our usable square footage per seat by 15%.

- Consolidating data centers to increase efficiency
- » We recently completed dedicated and more energy-efficient data centers aligned with our hub locations to accommodate both new and legacy capacity.
- Implementing demand management and energy conservation measures at existing facilities
- » We achieved a 3% energy use saving through new lighting controls, adjusting temperature set-points, equipment set-point optimization and equipment run-time optimization.
- » In 2007 and 2008, we purchased over 99 million kilowatt hours, or 48,000 metric tons annually of a blend of on-shore wind, hydroelectric, biomass and landfill gas-generated renewable energy, to power our London campus.

### A NEW CARBON REDUCTION COMMITMENT: NET ZERO BY 2020

We are committed to reducing our carbon emissions from our facilities beyond the 2012 pledge through incremental reductions year-over-year to zero by 2020. We have set this target with the understanding that many policy makers, clients and other stakeholders have called for reductions of this magnitude and pace to avert the most deleterious consequences of climate change. To meet this target, we are partnering with industry leaders and experts to develop, test and implement innovative strategies to reduce energy use and carbon emissions in our facilities.

Recognizing that additional measures will be required, we are also purchasing and will continue to evaluate opportunities to purchase direct renewable energy and a combination of domestic and internationally generated carbon offsets. Criteria to be considered in our selection of renewable energy and carbon offsets include the integrity of carbon emissions reduction, quality of verification and carbon accounting methodologies, as well as social co-benefits, such as poverty alleviation, sustainable economic development and improved health. Where possible, we will look to further market-based mechanisms, such as forest carbon.

#### CARBON OFFSETS

Leveraging the firm's multiyear alliance with E+Co, a non-profit that invests in clean energy businesses in developing countries, we have entered into a transaction to purchase up to 50,000 Gold Standard Verified Emissions Reductions (VERs). These VERs will be generated through the manufacture and sale of energy-efficient cooking stoves by local artisan manufacturers (Toyola in Ghana and Katene in Mali). The stoves are 40% more efficient than traditional stoves used in the region, which greatly reduces the amount of charcoal necessary to cook. This in turn reduces carbon dioxide emissions and deforestation, improves indoor air quality and provides savings for families in their fuel expenses. Through carbon credits, the local manufacturers expect to further expand their businesses, thereby increasing both direct and indirect jobs and helping to promote sustainable economic development in the region.

#### ENHANCED TRANSPARENCY

To provide increased transparency regarding our environmental performance, we are publicly disclosing our 2010 report to the Carbon Disclosure Project (CDP), a global non-profit organization that facilitates informed dialogue among shareholders and corporations for the purpose of creating a rational response to climate change. Goldman Sachs has been a signatory to the CDP and has reported its carbon emissions to the CDP since the publication of our 2005 baseline in 2006.

To view our report, which will be released to the public in fall 2010, please see <u>HTTP://CDPROJECT.NET</u>.



A worker from Toyola (an E+Co investment company) inspecting a cookstove top.

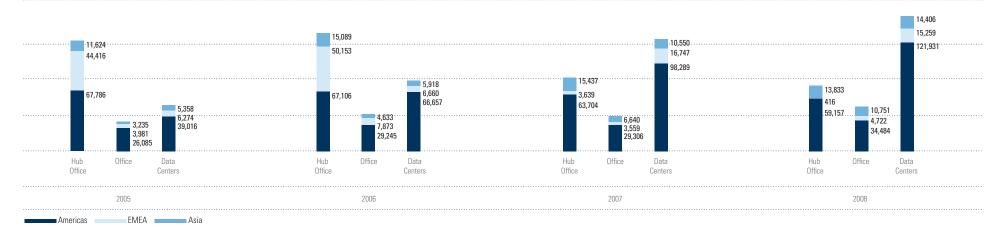
### GLOBAL EMISSIONS SUMMARY 2008

	2005 BASELINE	2007	2008	2008 VS. 2007	2008 VS. 2005 BASELINE
Global Facilities Reported	102	159	172	13	70
Total RSF Area (SF)	10,926,532	11,577,202	12,523,928	946,726	1,597,396
Total Global Full-Time Occupants (FTO) <sup>1</sup>	29,135	32,379	34,099	1,720	4,964
Utility Consumption					······
Gas (Therms)	1,200,201	1,936,119	1,677,858	-258,261	477,657
Oil (Gallons)	53,830	196,892	80,401	-116,491	26,571
Electricity (KWh)	397,592,301	559,072,996	653,765,788	94,692,792	258,173,487
Grid Average (KWh)	397,592,301	457,347,926	550,587,622	93,239,696	152,995,321
Renewable Sources (KWh)	0	101,725,070	103,178,166	1,453,096	103,178,166
Steam (MLbs)	27,292	63,347	52,926	-10,421	25,634
Carbon Emissions Equivalents					
Scope 1 Emissions					
Gas-Metered (MT)	6,361	10,285	8,893	-1,392	2,532
Oil – Metered (MT)	554	2,028	828	-1,200	274
Gross Scope 1 Emissions	6,915	12,313	9,721	-2,592	2,806
Scope 2 Emissions					
Electricity – Metered (MT)	174,932	231,791	243,151	11,360	68,219
Electricity – Estimated (MT)	24,269	46,423	67,799	21,376	43,530
Steam – Metered (MT)	1,657	3,845	3,213	-632	1,556
Gross Scope 2 Emissions	200,858	282,059	314,163	32,104	113,305
Gross Scope 1 and 2 Emissions	207,773	294,372	323,884	29,512	116,111
Emissions Reduction from Renewable Electricity Sources	0	46,499	48,524	2,025	48,524
Net Scope 1 and 2 Emissions	207,773	247,873	275,360	27,487	67,687
Net Scope 1 and 2 Emissions, excluding data centers	157,125	123,753	122,012	-1,741	-35,113
Intensity Measures <sup>2</sup>					
Emissions/FTO (MT/FTO)	7.13	7.66	8.08	5%	13%
Emissions/FTO excluding data centers (MT/FTO)	5.41	3.83	3.62	-5%	-33%
Emissions/RSF (MT/SF)	0.019	0.021	0.022	5%	16%
Emissions/RSF excluding data centers (MT/SF)	0.015	0.011	0.010	-9%	-33%
Emissions/\$ Net Revenue (MT/million dollars)	8.23	5.39	12.39	130%	51%
Emissions/\$ Net Revenue, excluding data centers (MT/million dollars)	6.23	2.69	5.49	104%	-12%
<sup>1</sup> Full-time occupant includes full-time employees (FTE) and full-time contingent workers (FTC).					

<sup>2</sup>Intensity measures based on net scope 1 and 2 emissions.

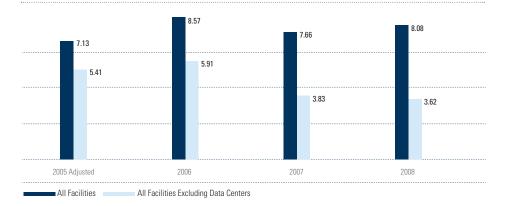
See Appendix B on page 30 for methodology.

#### EMISSIONS BY FACILITY TYPE BY REGION (IN METRIC TONS)



Compared with 2007, carbon emissions from our hub offices decreased by 11% (9,374 MT) during 2008 due to the progressive implementation of our Carbon Emissions Reduction Framework. Regional office emissions rose by 26% due to increased headcount outside hub locations. Carbon emissions from our data centers increased by 21% due to increased computation demand from business growth, increased electronic trading and regulatory obligations.

#### EMISSIONS PER FULL-TIME OCCUPANT (FTO) (IN METRIC TONS)



In 2008, the firm's global headcount increased by 5% compared with 2007, while emissions per FTO for all facilities rose by 5%, from 7.66 to 8.08 MT per FTO due to increased data-processing demand. The long-term 33% decrease in emissions per FTO in our workplace (less data centers), compared with our 2005 base year results from the implementation of our Carbon Emissions Reduction Framework.



### EMISSIONS PER RENTABLE SQUARE FOOT (IN METRIC TONS)

In 2008, the firm's global footprint increased by 8% to 12.5 million rentable square feet (RSF) compared with 2007, while emissions per RSF for all facilities rose by only 5% over 2007. In our workplace (less data centers) emissions per RSF have declined by a total of 33% since 2005. This reduction results from the implementation of our Carbon Emissions Reduction Framework.



### EMISSIONS PER \$ MILLIONS NET REVENUE (IN METRIC TONS)

All Facilities All Facilities Excluding Data Centers

In 2008, the firm's net revenue declined by 52% to \$22 billion compared with 2007. As such, overall emissions per dollar net revenue increased substantially in 2008. In our workplace (less data centers), emissions per dollar net revenue decreased by 12% compared with 2005, as a result of the Carbon Emissions Reduction Framework.

## Managing our technology footprint

Goldman Sachs takes a multifaceted approach to sustainability with our technology, a significant component of our operations. Our technology footprint is primarily driven by business growth (the need for more computation) and regulatory obligations. In response, we have adopted three principles that help us make commercially sound decisions while minimizing our environmental impact.

## 1. Influence vendors to provide products and approaches that reduce or maintain levels of energy consumption and/or increase utilization, including:

- Lower energy-demand computer chips.
- Virtualization software for increased utilization. We also encourage companies to invest in virtualization to foster market competition and increased functionality.
- Denser, high-performance disks.
- More efficient network switches and increased use of PoE (Power over Ethernet) technology.

### 2. Influence engineered solutions that maximize resource efficiency:

- Encourage hardware manufacturers to reduce system-wide energy use.
- Encourage more energy-efficient hardware designs, such as variable speed fans and power systems that distribute resilience at appropriate levels.
- Work with established and start-up vendors to develop functionality to support the management of technology capacity across compute farms, extending the capability of our global server footprint.
- Increase the use of employee-owned remote-access technology (handheld, home office or laptop) for corporate purposes through investment in Software as a Service, desktop virtualization and enterprise security.

### Cogentrix

- Make significant investments in our virtual desktop infrastructure to:
- » Reduce power and cooling needs.
- » Reduce the need for dedicated remote access servers, workstations and laptops for Business Continuity Planning.
- » Increase trading floor seating density to reduce the overall number of floors and associated power costs.

### 3. Drive internal behavior to incorporate sustainability firmwide by:

- Defining a system architecture that significantly increases utilization.
- Designing a Holistic Data Center that minimizes energy requirements at any given level of business function.
- Reducing server purchases and related energy consumption by using the contingency of our server farms to offset ad hoc demand, managing their capacity to maximize utilization and applying an upgrade-in-place philosophy.
- Including space and energy consumption in the managed costs of our servers.
- Implementing a structured server reuse program, instead of automatically discarding old servers and upgrading to new ones.

### REDUCING DATA CENTER BUILD-OUT

Our approach has dramatically reduced the year-on-year cost of our server farms per work unit, and in 2009 allowed us to shut down a colocation site by consolidating capacity into existing sites.

### INFLUENCING MORE ENERGY-EFFICIENT COMPUTING

We sought to reduce the rising energy requirements for cooling the more powerful CPU chips used by the computers in our data centers. By leveraging our relationship and purchasing power, we prompted a leading chip maker to redesign its chips to run at lower temperatures.

### GENERATING POWER MORE EFFICIENTLY

Cogentrix is a Goldman Sachs subsidiary and a US-based independent power producer. As of 2009 year-end, Cogentrix had minority interests in 13 power plants and full ownership in four plants. The portfolio consists of a balanced mix of power facilities, including highly efficient gas-fired combined-cycle, rapid-start peaking, solar thermal and more efficient coal-fired power plants. Together these plants have a total generation capacity of approximately 3,350 megawatts.

Through its access to our capabilities in energy trading, innovative financial strategies, disciplined management practices and risk management, Cogentrix now delivers energy more efficiently. Under our ownership, it has launched initiatives to restructure power contracts, remarket power supplies, physically upgrade and expand assets, enhance operational performance and provide for a more stable funding base.

Since 2008, Cogentrix has redirected its development efforts to focus on renewable energy generation with substantially all of its capital investments having been toward renewable energy. It has invested over \$300 million to acquire and develop a portfolio of concentrated solar thermal, photovoltaic, run-of-river hydro and wind energy projects. The portfolio consists of 200 megawatts of operational or in-construction projects and 850 megawatts of projects in various stages of development. (For more information on our recent investments in renewable energy, see page 6.)

In the future, Cogentrix plans to continue to design, secure financing, and build and operate better, cleaner and lower-cost power plants. In addition, Cogentrix will pursue improved environmental performance of its existing facilities through:

- Better materials management on-site.
- Incremental improvements in plant efficiency.
- 1 1 7
- Upgrades to more efficient equipment when existing equipment is retired.
- Expansion of photovoltaic and concentrating solar thermal technologies.
- Cleaner-burning natural gas-fired electric generation.

For more information, please see www.cogentrix.com.

#### COGENTRIX: 2008 TOTAL CARBON DIOXIDE EMISSIONS SUMMARY

SITE EMISSIONS – EQUITY BASED S	OLID FUEL SITES	GAS FUEL SITES	TOTAL
Total Power Generation CO <sub>2</sub> Emissions (MT)	6,115,766	287,642	6,403,408
CO <sub>2</sub> Emissions for Energy Production (MT)	5,756,992	284,131	6,041,124
Net MWh Generated	4,370,904	622,417	4,993,321
Total MWh Generated (Net + Steam)	4,955,685	636,791	5,592,476
Ton CO <sub>2</sub> per Net MWh	1.32	0.46	1.21
Ton CO <sub>2</sub> per (Net + Steam) MWh	1.23	0.45	1.15

Based on California reporting protocols, CO<sub>2</sub> estimations are made based on Cogentrix Energy, LLC's ownership fraction of each operating asset as of December 31, 2008, and as such are impacted by asset sales and acquisitions within the portfolio.

See Appendix C on page 31 for methodology.

### AWARD-WINNING WATER REDUCTIONS

General Electric presented its Ecomagination Leadership Award to the Cogentrix plant in Battleboro, NC for achievements in water reuse. The plant implemented a solution to conserve an estimated 3 million gallons of water annually, equivalent to approximately 22% of its current water usage, greatly reducing demand on municipal freshwater sources that had been stressed by a historic drought.

### Green buildings

Our green building standards help ensure that the design, construction and operation of new capital projects result in healthier, more energy-efficient work environments. Where possible, interior improvements to existing buildings and new developments include measures to enhance energy efficiency, decrease water consumption, reduce the use of raw materials and promote a healthy indoor environment. We take a commercial approach to identifying sustainable products and technologies, and work to integrate programs that are consistent with sound business practices and result in a meaningful mitigation of environmental impacts.

- Upon LEED® certification of 200 West Street, our new global headquarters in New York City, the firm's LEED-certified portfolio will expand to 3.8 million square feet, including 30 Hudson Street (Jersey City, NJ) and 71 South Wacker Street (Chicago, IL), making the firm one of the world's largest owners of LEED-certified commercial real estate.
- The firm is in the planning and development stages of an additional 1.2 million square feet of anticipated LEED-certified office projects in the United Kingdom, India and the United States.

### CREATING A HIGH-PERFORMANCE GLOBAL HEADQUARTERS

Since 1869, when Marcus Goldman began conducting business from the basement of a row house at 30 Pine Street, Goldman Sachs has called Lower Manhattan home. Today, this commitment continues with the opening of our new global headquarters at 200 West Street. Our objective was to create a high-performance workplace that reflects and engenders the culture of the firm and embodies excellence in urban design. Construction began in 2006 and has provided jobs for approximately 11,000 people in New York. In the development of 200 West Street, we awarded over \$300 million in contracts to minority and womenowned businesses, the largest amount ever in the history of New York State's Minority and Women-Owned Business Enterprise program. In addition, over one-third of all of the hours worked in the construction of the building were performed by women and minorities.

The firm's sustainability measures at 200 West Street include water and energy conservation, improved quality of air and light in the workplace, and the use of renewable and recycled materials.

*Water conservation.* A green roof helps minimize heat gain and reduce stormwater runoff. Stormwater from the roof is collected instead of flowing into city sewers and reused for

cooling and irrigation. Combined with low-flow plumbing fixtures, these measures help 200 West Street save 16 million gallons of water each year.

*Energy conservation and improved light and air.* Energy efficient systems help save over 10 million kilowatt hours of energy each year, while improving the environmental quality of the workplace. An under-floor air conditioning system employs unique heat transfer and air-circulation strategies to enhance air quality, and allows each person to control the temperature around his or her desk. Floor-to-ceiling windows provide occupants with natural light. This access to daylight combines with the building's automatic daylight dimming system and other efficient lighting measures to provide for a healthier work environment while significantly reducing energy usage and costs. Underground sits one of the largest thermal ice storage systems in North America, with 92 ice tanks that cool the building by making 1.7 million pounds of ice each night. Making ice at night significantly reduces our demand for energy during peak daytime hours.

*Renewable and recycled furnishings and materials*. Non-toxic, sustainably produced and recycled furnishings contribute to good indoor environmental quality and result in less waste. Sustainable content includes reclaimed teak wood flooring of demolished houses and reclaimed white oak from demolished timber barns. Other recycled content includes terrazzo flooring with 40% recycled glass chips and recycled rubber flooring.

### LEED-CERTIFIED REAL ESTATE

BUILDING	ADDRESS	LEED RATING	SF	
30 Hudson Street	Jersey City, NJ	NC v2.0 Certified	1,556,915	
71 South Wacker Street	Chicago, IL	Cl v1.0 Pilot Certified	135,000	
TOTAL CERTIFIED			1,691,915	
PENDING CERTIFICATION				
	ADDRESS	I FED RATING	SF	ANTICIPATE CERTIFICATION YFAI
3UII DING				

Upon LEED certification of our new global headquarters at 200 West Street, Goldman Sachs will be one of the world's largest LEED-certified commercial real estate holders.<sup>1</sup>

<sup>1</sup>Based on certification records provided by the US Green Building Council (USGBC).

#### LEED PROJECTS UNDER DEVELOPMENT

BUILDING	ADDRESS	LEED RATING	SF	ANTICIPATED CERTIFICATION YEAR
Battery Park City Hotel &				
Retail Complex (Site 25)	New York, NY	NC v3.0 Gold	620,000	2011
222 South Main	Salt Lake City, UT	CI v3.0 Gold	154,000	2011
555 California Street	San Francisco, CA	CI v3.0 Gold	50,000	2011
440 South LaSalle	Chicago, IL	CI v3.0 Gold	50,252	2011
PBC 4-10	London	CI v3.0	210,917	2012
Sunriver	Bangalore	CI v2.0 Gold	161,484	2011
TOTALSF			1,246,653	

#### CONSTRUCTION WASTE MANAGEMENT\*

DIVERTED MATERIALS BY TYPE	TONS OF MATERIAL
Wood	2,705
Metal	490
Gypsum Wallboard	1,953
CMU	408
Paper and Cardboard	526
Fills, Fines & Regrinds	40
Masonry	93
Rubbish	76
Sub-Total Diverted Material	6,291
RESIDUAL MATERIALS BY TYPE	
Wood	-
Metal	-
Gypsum Wallboard	436
CMU	-
Paper and Cardboard	-
Fills, Fines & Regrinds	-
Masonry	-
Rubbish	929
TOTAL RESIDUAL	1,365
Sub-Total	7,656

TOTAL (%) RECYCLED 82% In light of the significant construction work our firm undertook last year, we have begun tracking

construction waste for the first time in 2009 and intend to report on it annually going forward. \*Includes waste from 200 West Street and 77 Water Street in New York, the Tokyo Childcare Center and renovation of the 9th floor of

\*Includes waste from 200 West Street and 77 Water Street in New York, the Tokyo Childcare Center and renovation of the 9th floor of Peterborough Court in London.

### Responsible products & programs

We are committed to increasing our use of recycled and environmentally certified wood, paper and print products, using energy-efficient equipment and purchasing more organic and sustainably harvested products and supplies. Where appropriate, environmental performance criteria are integrated into our vendor contracts in support of this commitment. The ability to partner with us to provide sustainable products and services is an important consideration in selecting vendors. Co-developing commercially advantageous sustainable business solutions with our vendors has enabled us to both improve our own environmental performance and positively influence the environmental and social practices of the vendors in our global network.

For example, we have worked closely with our principal food service vendors over the past several years to eliminate consumption of over 310,000 pounds of non-biodegradable Styrofoam/Polystyrene products, replacing them with paper, recyclable plastic and compostable alternatives.

In tandem, our facilities management vendors have implemented a robust recycling program in our food service outlets and, where commercial composting has become available, we have begun implementing composting in our kitchens, cafeterias and pantries. In 2009, 63% of our paper and food service waste was diverted through this utilization of recyclable and compostable consumables, coupled with an active recycling and composting program. We continue to develop our strategy as new sustainable processes become available in the market.

Beginning in 2009, 25% of the spend on food and other food service-related consumables by the firm's New York and New Jersey food service providers is required by contract to be sustainable, under the following criteria: USDA Organic, Rainforest Alliance® certified, Fair Trade certified or produced within 100 miles of our facilities. Globally, we provided 61,000 pounds of Rainforest Alliance certified coffee in pantries at our facilities for use by our employees.

### REDUCING PRINTING IMPACTS

In 2005, we centralized our global variable print operation under our long-term collaborative provider RR Donnelley. We worked together to revise operational practices, including retooling equipment to accommodate double-sided printing and dramatically reducing the amount of ink used on forms at two production facilities. Concurrently, we worked with RR Donnelley to achieve Forest Stewardship Council<sup>®</sup> (FSC) certification in both locations. These programs have supported the sustainable management of our paper use while reducing costs and time to market.

#### SINGLE USE WATER BOTTLE CONSUMPTION

	2008	,	200			
	BOTTLES	BOTTLES/ FTO	BOTTLES	BOTTLES/ FTO	% REDUCTION	% REDUCTION/ FTO
TOTAL BOTTLE USE	435,903	13	342,123	10	22%	18%

We reduced plastic water bottle use by 22% (18% per person) between 2008 and 2009. In catering, we replaced single use plastic water bottles with reusable filtered water dispensers.

### PAPER CONSUMPTION

	2008		2	009			
		THOUSANDS OF SHEETS/FTO	MILLIONS OF SHEETS	THOUSANDS OF SHEETS/FTO	% REDUCTION	% REDUCTION/FTO	
FSC-certified Mixed Sources Office Paper	441.5	12.95	276.8	8.49	37%	34%	
EP4 75% Recycled Paper	54.3	1.59	40.4	1.24	26%	22%	
Mixed Paper Types Printed in FSC-certified Facility	66.7	1.96	61.4	1.88	8%	4%	
Other Paper Types	10.2	0.30	7.6	0.23	25%	22%	
% Sustainable Paper	989	6	98%	)			
TOTAL PAPER USE	572.7	16.80	386.2	11.84	33%	29%	

We reduced overall paper use by 33% and paper use per FTO by 29% between 2008 and 2009. By 2009, 98% of global paper use was sustainable, either FSC-certified Mixed Sources, EP4 75% recycled or printed offsite in an FSC-certified print facility. Paper reductions are a result of increased double-sided printing, paper use awareness, and innovation in our onsite and offsite print processes.

### GLOBAL WASTE METRICS 2009 (TONS)

					OBAL
MATERIAL DETAILS	AMERICAS	EMEA	ASIA	WASTE	POUNDS OF WASTE/FTO
DIVERTED MATERIAL					
Recycled Confidential Paper	1,819	259	74	2,153	132
Recycled Paper*	525	71	136	732	45
Recycled Trash	228	429	10	669	41
Compost	16	0	4	20	1
Recycled Cooking Oil	7	0	0	7	0
Recycled Cardboard	333	0	8	341	21
TOTAL DIVERTED MATERIAL	2,928	759	233	3,923	241
RESIDUAL MATERIAL					
Wet Trash to Landfill	667	1,120	206	1,993	122
Wet Trash to Waste to Energy	282	0	65	347	21
TOTALRESIDUALMATERIAL	948	1,120	271	2,340	144
% DIVERTED	76%	40%	46%	63%	

\*Paper removed from Wet Trash

In 2009, 63% of office and food service waste was diverted through recycling globally, as well as the introduction of commercial composting in our cafeterias, catering and pantries in New York and New Jersey.

### EQUIPMENT OPTIMIZATION

In 2008, we began a process of maximizing energy efficiency from our printers and copiers by removing over 850 printing devices from our equipment fleet. This year, we have extended that process by replacing equipment with new, more energy-efficient models, beginning with our move to our new global headquarters at 200 West Street. We estimate this resulted in 176,000 watts of energy savings daily.

#### GREEN CLEANING PRODUCTS

In 2008, we began tracking the use of green cleaning products. In our London offices, bleach-based products are no longer used, and the use of green-certified janitorial supplies has increased from 75% to 90%. In our New York and New Jersey offices, 80% of wood, metal and stone maintenance supplies and 70% of the janitorial supplies are green certified products. In 2009, we introduced green cleaning products in India.

#### CERTIFICATIONS AND AWARDS

Our facility at 30 Hudson Street, which was named the first Green Shield certified office facility in the country, renewed its annual certification for our environmentally friendly pest management program. Green Shield is an independent, non-profit certification program that promotes effective, prevention-based pest control while minimizing the need for pesticides. This certification was achieved in partnership with our on-site vendors.

Our facility in Chicago received a Tier 1 Ranking in the Chicago Green Office Challenge, the highest-ranking tier for implementing energy efficiency policies and procedures. A program of Mayor Richard M. Daley and the City of Chicago Department of Environment, the Green Office Challenge recognizes businesses for their environmental stewardship efforts.

### EMPLOYEE ENVIRONMENTAL AWARENESS PROGRAMS

Since 2006, employee-led environmental networks have been operating in cities worldwide. These groups have conducted successful employee awareness campaigns on recycling, composting, double-sided printing, and mug and water bottle reuse, which have enabled us to achieve significant levels of employee support and improved our performance in each of these areas. To further build employee engagement in reducing our operational impacts, we created a quarterly environmental newsletter that provides updates on the firm's environmental efforts.

# Our environmental thought leadership

## Center for Environmental Markets

Our Center for Environmental Markets (CEM) conducts independent research with partners to explore and develop public policy options and tools for furthering market-based solutions to environmental challenges. CEM partners with corporate clients, academic institutions and non-governmental organizations (NGOs) to bring diverse perspectives and complementary skills together, and shares its findings through publications, research papers, conferences, tools and targeted outreach to clients, investors and policy experts. We leverage our role in the global capital markets and our position as an advisor, financier, co-investor and market maker to convene leading thinkers and create solutions that have a constructive impact on environmental issues. Since 2006, we have invested more than \$5 million through the CEM in our partnerships.

CEM's current initiatives in 2009 include:

### CLIMATE POLICY

- *Climate Legislation: Conquering Cost.* In mid-2009, CEM forged a partnership with Duke University's Nicholas Institute for Environmental Policy Solutions to explore the interrelationship of policy design options underlying climate and energy legislation with the goal of optimizing costs. As of year-end 2009, two Congressional workshops have been held that brought together diverse perspectives from business, NGOs and legislative staff. Three topics were analyzed and explored in-depth: offsets and addressing uncertainty; allowance price containment mechanisms, including strategic reserve; and improving definitions and allocation mechanisms for Energy-Intensive-Trade-Exposed industries. These discussions were informed with analytic support from the Nicholas Institute.
- *Beyond Copenhagen: The Role of the Private Sector.* Goldman Sachs took an active role in the December 2009 UN Climate Change Conference in Copenhagen, engaging with corporate clients, investors, policy makers, NGOs and other market participants. In partnership with the International Energy Trading Association, Goldman Sachs convened a group of senior executives to explore the potential of a global climate deal and policy initiatives that can help further the efforts of the private sector.
- *Thought Leadership Forum with National Geographic*. Goldman Sachs hosted speakers from *National Geographic* magazine for a discussion about their efforts to engage and inform people about the issue of global climate change. Through award-winning photographs and video, the speakers addressed the evidence and impact of climate

change and shared first-hand experiences from the field. More than 1,000 people registered to attend this event, a reflection of the powerful interest of the firm's people in environmental issues.

• *Navigating the American Carbon World*. Goldman Sachs participated in a panel sponsored by the California Climate Action Registry, the International Emissions Trading Association and Point Carbon, focused on the future of American climate policy. Focusing on the firm's approach to market-based solutions to environmental issues, we discussed the key levers and facilitators that will enable a transition to a low-carbon economy.

### **CLEAN ENERGY**

- *Solar Thermal Technology*. CEM and the World Resources Institute (WRI) partnered on a WRI research paper entitled *Juice from Concentrate* focusing on concentrated solar thermal technology.
- US-China Clean Energy Cooperation. Our firm shared market insights and perspectives in dialogues focused on US-China cooperation around climate and energy issues at events hosted by the Brookings Institute and The Climate Group.
- *Energy Efficiency*. Together with the Harvard Business School Green Business Alumni Association, we co-hosted a conference entitled "The Future of Energy Efficiency."

### TERRESTRIAL CARBON

- *Reduced Emissions from Deforestation and Forest Degradation (REDD).* Deforestation and land-use change accounts for approximately 20% of global greenhouse gas emissions. To help address this issue, CEM has been partnering with the Woods Hole Research Center (WHRC) since 2006 to examine how to value forest ecosystem resources and services, and to analyze economic alternatives to forest destruction and degradation.
- *Forest Carbon Index.* In 2008, CEM and Resources for the Future (RFF) sponsored a multiyear interdisciplinary research effort to support the integration of forestry policy into the emerging global greenhouse gas emissions market. As part of that effort, in 2009 RFF developed the Forest Carbon Index, which compiles and displays global data relating to biological, economic, governance, investment and market readiness conditions for every forest and country in the world, identifying the best places and countries for forest carbon investments.

### GS SUSTAIN

• *Forest Carbon Offsets.* The Wildlife Conservation Society and Goldman Sachs conducted an executive briefing entitled "Forest Carbon Offsets and the Emerging US Climate Change Legislation." The briefing brought together clients, NGOs and foundations to highlight the importance of international forest carbon offsets and the need for a market mechanism that will value standing forests and reduce deforestation.

### WATER

• *Water Resources*. We are collaborating with GE and World Resources Institute (WRI) to develop a tool to measure water-related risks facing companies and their investors. The resulting Water Index will establish a standardized approach for identifying risks around access, costs and potential disruption, weighted by industry and benchmarked against basin and national averages. As water scarcity begins to impact company performance, the Water Index will help investors to "price in" these underappreciated risks, driving investments to support more hydrologically efficient designs and technologies. The Index is under development and the initial phase will be validated and available through the WRI website in the second half of 2010.

In addition to the initiatives described above, we have partnerships and are involved with the following organizations:

- The Wharton School's Initiative for Global Environmental Leadership
- UC Davis Energy Efficiency Center
- The Business & Sustainability Council convened by Conservation International
- World Resources Institute's Corporate Consultative Group
- The Climate Group

For more information on CEM, please see the Center for Environmental Markets page on WWW.GS.COM/ENVIRONMENTALMARKETS.

### INFLUENCING THINKING ON SUSTAINABILITY

GS SUSTAIN is a unique global equity strategy designed to identify future leaders across global industries through objective, quantifiable analysis of the key drivers of corporate performance. Since the GS SUSTAIN team published its first research in 2003, it has developed a framework that brings together analysis of companies' financial performance, industry positioning and management of the environmental, social and governance issues facing each industry. To date, the GS SUSTAIN framework has been applied to over 800 large global companies across 22 industries. The total market capitalization of the companies to which we have applied the GS SUSTAIN framework represents approximately 90% of the MSCI All Country World Index. The research team, which has grown to 10 analysts located in New York, London and Hong Kong, works closely with analysts in each sector group to ensure the research reflects their combined expertise and understanding of the sectors they cover.

The GS SUSTAIN framework is based on our finding that companies able to sustain superior returns on capital consistently outperform. Effective management of ESG issues, in turn, is a key element of long-term leadership in global industries. By integrating objective, quantifiable analysis of companies' ESG policies and performance with industrial and financial analysis, GS SUSTAIN identifies the companies in each industry best positioned to sustain long-term industry leadership and ultimately to deliver equity market outperformance over the longer term.

GS SUSTAIN influences the thinking of investment professionals both within our firm and far beyond. Our GS SUSTAIN professionals routinely present their analysis and conclusions to many of the largest fund managers worldwide and have developed strong relationships with both traditional managers and those with a socially responsible or environmental focus. Our innovative philosophy also shapes the thinking of leading sustainable investing organizations such as the United Nations Global Compact and the UN Principles for Responsible Investing. The GS SUSTAIN team regularly presents the conclusions of its research to investors, companies, NGOs and policy makers at industry conferences and events. Examples of GS SUSTAIN research pieces on climate change during 2009 include:

- GS SUSTAIN: Copenhagen conference to bring renewed focus on climate change (November 18, 2009).
- GS SUSTAIN: Change is coming: A framework for climate change a defining issue of the 21st century (May 21, 2009).

For more information, please see <u>www.gs.com/gssustain</u> and Appendix A, page 29, of this report.

In addition to GS SUSTAIN, the Global Markets Institute (GMI) continues to conduct global macroeconomic research on environmental themes, such as the impact of climate change, energy efficiency, energy policy and the challenges of reconciling environmental protection with economic growth. This research also encompasses demographic themes, such as aging populations, urbanization and the role of women in global economies. Examples of GMI research on climate change and energy policy during 2009 include:

- Next Stop: Copenhagen On the road to a new global climate change treaty (November 2009).
- Alternate Energy: Prospects for Policy, Finance and Technology (June 2009).

For more information, please see www.gs.com/gmi.

## Our investment in conservation

### Tierra del Fuego

In September 2004, Goldman Sachs and the Wildlife Conservation Society (WCS) announced an unprecedented partnership to protect Karukinka, or "our land," the original name given to this area in the language of the Selk'nam, a now extinct indigenous people of Tierra del Fuego. This first-of-its-kind private/public partnership was established with committed funding of \$18.9 million from Goldman Sachs and its employees and WCS to ensure financial viability of the conservation efforts.

Our involvement began in 2002 when, as part of our normal course business activities, Goldman Sachs purchased defaulted notes that were collateralized by 680,000 acres of relatively pristine land on the island of Tierra del Fuego. In determining the disposition of this wilderness, our team looked beyond traditional options and identified a rare opportunity to preserve this ecologically significant land by establishing a protected area for the benefit of future generations.

### PROGRESS TO DATE

The partnership with the Wildlife Conservation Society and the people of Chile is in its fifth year. The conservation model is noteworthy for its Chilean leadership and local support. The Advisory Council was established with 15 members, of which 11 are Chilean nationals representing experts and leaders from academic, scientific and business communities. The project is being led by a Chilean and has extensive support from the government and local community.

WCS's overall conservation goal is to transform Karukinka into a 21st century model for conservation that will develop new financial and ecological mechanisms for long-term sustainability of biodiversity conservation in the world.

To that end, the following initiatives have been undertaken to date:

*Ecological integration of Karukinka*. In 2007, WCS purchased an additional tract of land from the Onamonte Community. With the purchase, what were originally two separate tracts of land became one integrated area, which is important for ecological sustainability. Karukinka now spans more than 735,000 acres.

*Management for conservation.* Karukinka is being managed as a private, protected area for the public good, and to that end, WCS has continued to facilitate and promote educational and research activities while opening up opportunities for visitors. Key initiatives undertaken to date include:

- Establishment of permanent rangers and inclusion of WCS rangers in the National Association of Rangers.
- Strengthening staff capacity in safety procedures, biological and ecological monitoring, and assisting researchers and visitors as local guides.
- Continuing to build infrastructure to further open sites to visitors, including a camping site and trails in the Vicuña Sector.
- Implementing fire prevention and mitigation plans.
- Sponsorship of numerous local scientific seminars and workshops.
- Educational programs, including publication of "Exploring Nature in Magallanes," which has been distributed in Magallanes and nationally through the Ministry of Education.
- Established Cooperation Agreement with Liceo Hernando de Magallanes, the sole high school in Porvenir, in November 2009 to strengthen the partnership and explore new ways to promote Karukinka and conservation among the local community members.

*Invasive species control.* A key conservation goal in Karukinka is restoring the natural cycles that have been disturbed by invasive species. Beavers, which were introduced on Tierra del Fuego in the 1940s, have spread throughout the island and have had a detrimental impact on the ecosystems, particularly due to their massive destruction of forest trees. To reduce or eliminate the invasive species and restore the ecosystems, the following initiatives have been undertaken:

- Large-scale experiments to evaluate the effect of beaver control on ecosystem recovery.
- Feasibility study that provides the basis for the design and implementation of a binational beaver eradication program in its entire Southern Cone distribution range.

- Development of the Strategic Plan of the Bi-National Beaver Eradication Plan and bilateral discussions between the Chilean and Argentine governments on beaver eradication in Tierra del Fuego.
- Bi-National Agreement for beaver eradication was signed in September 2008 and WCS attended the first official Bi-National meeting in Buenos Aires in May 2009.
- Development of partial beaver removal plans in experimental sites for habitat restoration in Karukinka watersheds.
- Implementation of a pilot program to remove feral pigs in Vicuña, Karukinka, in association with Servicio Agricola y Ganadero.

Conservation research and monitoring. Another important objective is to advance the understanding of endangered ecological resources, including *Nothofagus* forests, endangered species such as guanaco and culpeo fox, and vital ecological processes. The following progress has been made toward this objective:

- Continued research on guanaco ecology and migratory processes, including radio tracking.
- Selection of "Tierra de Guanacos" to receive financial support from the National Program for School Science Explora, the only project selected in the region and one of 17 at the national level.
- Successful trapping of fuegian foxes for health and genetic sampling.
- Partnership between WCS and University of Magallanes to conduct GIS work that will improve the Karukinka baseline and develop tools for analysis of specific threats, such as guanaco herbivory.

- Established Karukinka Fellowship program to fund priority research in Karukinka among Chilean graduate students. Four scholarships have been awarded, one each year, from 2006 to 2009, and applications are being accepted for 2010.
- Established cooperation agreement with the Universidad Austral to promote the integration of Karukina into academic, scientific and education activities developed in conservation.

*Sustainable development*. A key effort that WCS has undertaken is developing a public use plan utilizing low-impact economic activities that generate value for the local community. The following are key highlights:

- Official agreement with the Ministry of Public Works in mid-2009, which is expected to promote the restoration of Karukinka road and development of high quality roads in Patagonian protected areas.
- Development and promotion of Lago Escondido as a fishing spot in Tierra del Fuego.
- Development of five new trails in Vicuña to enable visitors to appreciate Karukinka while minimizing environmental impact.
- Exploration of two new potential tourism areas, including Jackson Bay and the hills south of La Paciencia Bay, to integrate into the trail system.
- Official integration into the Tourism Cluster of the Magellan Region, a public agency that works to promote tourism interests in the region.
- Development of significant educational programs in Tierra del Fuego for local children and teachers.

*Conservation beyond Karukinka*. In addition to preserving Karukinka, WCS is promoting the protection of wildlife and ecosystems in the broader Tierra del Fuego complex and across the Patagonian landscapes. Key initiatives are:

- "Coastal Marine Conservation at the End of the World" was initiated in 2009 to strengthen the integrated terrestrial-marine management of Karukinka, and to use this experience to help establish and build up a unique network of effective conservation areas in coastal Patagonia and Tierra del Fuego.
- Convening of workshops, including a Marine Workshop in Punta Arenas in September 2009, that brought together about 30 scientists; offering two international courses for 60 participants on "Wild birds surveillance for avian influence" in conjunction with SAG and APHIS in November 2009; convening a Regional Workshop to promote the use of wild birds in health surveillance, with participation of 10 countries of the region, with more than 100 attendees from the public and private sectors, including OIT and OFA, among others.
- Advising on the location of areas of high conservation value and representing local NGOs as a key stakeholder in the coastal zoning of the Magallanes region.
- Selection of the WCS project "Marine mammals and sea birds from Tierra del Fuego" to receive financial support from the Regional Program of Environmental Protection under the National Commission of Environment.
- Protecting the unique wildlife, landscapes and seascapes of the Benardo O'Higgins National Park, particularly the endangered huemul deer. WCS has established a formal cooperation agreement with the Chilean National Parks Service to protect the park, provided conservation training remote assistance to their rangers in relation to monitoring activities of the huemul deer and supported wildlife surveys in the park.

For more information on Tierra del Fuego, please see www.gs.com/tdf.

### Appendix A: Global Investment Research, client reports in 2009

### GS SUSTAIN

### GS SUSTAIN: Monthly Focus

Global: Automobiles: Identifying global long-term winners: Toyota, Volkswagen and Fiat (November 27, 2009)

GS SUSTAIN: Copenhagen conference to bring renewed focus on climate change (November 18, 2009)

GS SUSTAIN – Media: Returns dispersion across the media value chain (November 16, 2009)

Global: Portfolio Strategy: The BRICs Nifty 50: The EM & DM winners (November 4, 2009)

GS SUSTAIN – Financials: Evolution in a postcrisis world: Sustainable returns in global financials (October 22, 2009)

GS SUSTAIN: Why taking a long-term view in Asia is important (October 8, 2009)

GS SUSTAIN – Retail & Apparel: Sale or returns: Sustainable returns in global Retail & Apparel (September 2, 2009)

GS SUSTAIN – Software & Services: Scaling the network – capturing share to drive returns (June 5, 2009)

GS SUSTAIN: Low-carbon consumer: Green becomes mainstream (June 4, 2009)

GS SUSTAIN: Low-carbon energy: May the wind blow for carbon capture and storage (June 2, 2009)

GS SUSTAIN: Low-carbon industry: Efficiency to win out in the toughest challenge (June 1, 2009)

GS SUSTAIN: Low-carbon transport: Charged for growth (May 27, 2009)

GS SUSTAIN: Change is coming: A framework for climate change – a defining issue of the 21st century (May 21, 2009)

Global: GS SUSTAIN: Beneficiaries of China strength (April 23, 2009)

GS SUSTAIN: Quality versus size: Why now is the time for high-return stocks (February 9, 2009)

GS SUSTAIN: Reacting to climate change: Considering nuclear options (January 13, 2009)

### GLOBAL ALTERNATIVE ENERGY RESEARCH

Global: Energy: Planner (Weekly)

Manz Automation (M5ZG.DE) Buy: Order book risk/reward; even more reasons to Buy; 65% upside (November 5, 2009)

Europe: Alternative Energy: Developers: Corporate activity boosts valuations, though cash burn risks remain for some (November 3, 2009)

Gurit (GUR.S) Buy: Operational leverage on revenue recovery: Upgrade to Buy (November 2, 2009)

Solar Millennium (S2MG.DE) Buy: Strategic assets in a rapid growth industry; onto Conviction Buy List (October 23, 2009)

Phoenix Solar AG (PS4G.DE) Buy: Onto Conviction Buy List: Benefiting from volume growth in solar (October 22, 2009)

Europe: Alternative Energy: Wind: Risk of limited orders reflected in valuations, while growth potential offers material upside (October 16, 2009) Europe: Energy: Alternative Energy: Choosing winners in renewable energy from higher BRICs growth expectations (September 8, 2009)

Europe: Energy: Alternative Energy: European Solar: The sun sets on the West, rises in the East; buy equipment and ReneSola (August 19, 2009)

Vestas Wind Systems (VWS.CO) Buy: Order inflow picking up, valuations at trough levels (August 5, 2009)

Renewable Energy Corporation (REC.OL): Off Conviction Buy on lower upside; remains Buy with Nkr63 PT (July 30, 2009)

Gamesa Corp Tecnologica SA (GAM.MC) Buy: 2009 guidance looks achievable; reiterate Conviction Buy (July 23, 2009)

Europe: Energy: Alternative Energy: Developers: Focus remains on operating assets and EBITDA as credit tightness continues (July 14, 2009)

Solar Millennium (S2MG.DE): US deal potential reflected – downgrading to Neutral (June 25, 2009)

### GLOBAL ECONOMIC RESEARCH

Global Economics Weekly: 09/45 – Our 2009 GES: Growth Conditions Get a 'Stress Test' (December 16, 2009)

Global Economics Paper: 192 – The Long-Term Outlook for the BRICs and N-11 Post Crisis (December 4, 2009)

Global Economics Paper: 180 – The Outlook for the Dollar in the Next Decade (February 17, 2009)

Global Economics Paper: 179 – Finding 'Fair Value' in Global Equities: Part I (February 6, 2009)

### Appendix B: Carbon emissions reporting methodology for leased & owned facilities

### METHODOLOGY

The firm's carbon emissions tracking methodology was developed through advisory services from an outside consultant and is based on the EPA Climate Leaders Greenhouse Gas Inventory Protocol and the Greenhouse Gas Protocol, co-developed by the World Resources Institute and the World Business Council for Sustainable Development.

#### UTILITY TRACKING DATABASE

Emissions are tracked through an internally developed online emissions tracking database, which records global facility utility information. This database helps the firm track carbon emissions and utility consumption. Global consumption data based on utility bills is collected monthly in local units and normalized into US units. Carbon emissions factors sources are listed under Emissions Factors.

### METHODOLOGY FOR CALCULATING ESTIMATED EMISSIONS

In cases where utilities are rent inclusive, energy consumption is estimated by applying an average energy use per square foot based on performance of similar metered facilities; local emissions factors are subsequently applied. In the case of co-located data centers, we estimate emissions by applying an average energy consumption figure to actual server quantities in each facility and subsequently applying local emissions factors.

### EMISSIONS FACTORS

US-based facilities: eGrid Subregion Emission Factors year 2006, version 2.1: http://www.epa.gov/cleanenergy/ energy-resources/egrid/index.html

Facilities outside the US: International Energy Agency (IEA) Electricity Emission Factors for all fuels (2006 edition): http://data.iea.org/ieastore/statslisting.asp

Gas Emissions Factors – Based upon recommendations from our environmental consultant, the natural gas emissions factor applied to all global facilities was 5.3 kg/therm.

Oil Emissions Factors – Based upon recommendations from our environmental consultant, the distillate and residual oil emissions factor applied to all global facilities was 10.3 kg/gallon.

Updated emissions factors are applied in the year they become available.

### FACILITY TYPES

Emissions are evaluated based on three facility types: Hub Office, Office and Data Center.

- Hub Office: Office space in major business centers, including Bangalore, Hong Kong, London, New York and Tokyo.
- Office: Office space outside major business centers.
- Data Center: Space dedicated to data processing and storage, including stand-alone data centers, colocated data centers and data center space within office buildings.

### CHANGES TO REPORTING METHODOLOGY

In 2008, we enhanced our utility tracking process so that we are now able to capture data from facilities smaller than 5,000 square feet, which had been previously excluded.

The firm's revenue-based emissions intensity measure reflects Emissions/\$ Net Revenue (in millions), based on "Net Revenues, including interest income" as stated in the firm's annual Consolidated Statement of Earnings.

#### REPORTING PERIOD

We currently report emissions-related data on a one-year lag from our financial statements.

#### ONE MONTH TRANSITION PERIOD

In connection with becoming a bank holding company, we were required to change our fiscal year-end from November to December. This change in our fiscal yearend resulted in a one-month transition period that began on November 29, 2008 and ended on December 26, 2008. Net combined Scope 1 and Scope 2 emissions for the transition period were 29,178 MT. Appendix C: Carbon emissions reporting methodology for Cogentrix

Total  $CO_2$  emissions are expressed as "total power generation" and hence do not include all sources of  $CO_2$ , such as space heating,  $SO_2$  control, etc. Our reporting methodology mirrors the protocol used in California, which takes into account steam generation for other uses and the double work steam does in cogeneration. More specifically:

- Emissions per MWh (tons/net MWh) take into account power generated.
- Emissions per MWh (tons/net + steam MWh) take into account additional steam generation and use.
- The Steam Production Emissions Allocation equation calculates a MWh equivalent for the steam exported, which is then used in the tons per net + steam MWh calculation.
- The Pro Rata Ownership-Based Emissions shown in the summary table take into account Cogentrix's percent ownership interest in each site.
- The Year-End Ownership-Based Emissions shown in the summary table reflect what 2008 emissions would be if the percentage ownership in each plant at the end of 2008 is applied to the full-year emissions.

CO<sub>2</sub> emission factors from the California protocol for bituminous coal, oil and natural gas are used except for waste coal (Scrubgrass and Northampton), TDF (Richmond) and fiber rejects (Cedar Bay), where the emission factors are adjusted to the carbon in the fuel.



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