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AGENDA ITEM: 8e

TO: MEMBERS OF THE INVESTMENT COMMITTEE

I. SUBJECT: Corporate Governance Environmental Strategic Plan Update

II. PROGRAM: Global Equity

III. INFORMATION: Information Only

IV. ANALYSIS:

Executive Summary

This agenda item provides an update on staff's progress in implementing the Corporate Governance Environmental Strategy ("Strategy") and participation in INCR including addressing the 10 items of INCR's Call for Action (Attachment 1).

The objective for both the Strategy and INCR's Call for Action is to improve environmental data transparency and timely disclosure. As part of CalPERS' continued commitment to improving environmental data transparency and timely disclosure, staff will maintain its efforts as summarized by the following next steps:

- Corporate Governance Principle & Guideline Addition
- Company Engagement
- Transition Utilities GHG Reporting Project to Company Engagement
- Carbon Disclosure Project
- Continue Leadership Position in INCR

Background

In 2004, CalPERS was asked by California State Treasurer Phil Angelides and California State Controller Steve Westly to consider environmental issues with respect to the potential impact on the Fund. Further, CalPERS was asked to take an active role in encouraging companies to provide meaningful, consistent, and robust reporting of their environmental practices, risks, and potential liabilities. After exploring the issue, staff believed that improved data transparency could help long-term risk assessment at the companies in which CalPERS invests. Therefore, four targeted initiatives were identified to facilitate improving environmental data transparency.

On February 14, 2005, the Investment Committee approved the Corporate Governance Environmental Strategy and directed staff to proceed with four initiatives outlined as follows:

1) Sign onto the Carbon Disclosure Project.
2) Support GHG data transparency within the auto industry, including support of shareholder proposals and potential Focus List candidates.
3) Explore opportunities to improve GHG data transparency within the electric power/utilities industry.
4) Recognize corporate disclosure "Best Practices".

On June 13, 2005, staff presented the Investment Committee with an update on staff's progress of implementing the four initiatives.

On May 16, 2005 per staff's request, the Investment Committee directed staff to have CalPERS listed as a signatory on INCR's Call for Action (Attachment 1). The Call for Action is a ten-point action plan focusing on four targeted sectors to address the financial risks and investment opportunities posed by climate change. On August 15, 2005, staff provided the Investment Committee with information on how CalPERS would respond to each of the ten points, and while the signatories are encouraged to act on each action point, they are not required to do so.

With regard to Initiative 3 of the Corporate Governance Environmental Strategy, Staff presented a three part recommendation for a greenhouse gas (GHG) reporting project to the Investment Committee on September 19, 2005. The Investment Committee approved the recommendation and directed staff to proceed with the GHG reporting project.

Recent Supporting Events

In November 2005, Goldman Sachs released its environmental policy framework (Attachment 2) in which it identified the company's policy and explained how each of the company's major business areas will integrate it. Goldman Sachs not only committed to disclose the environmental impact of its operations and to reduce those impacts including reducing its indirect GHG emission but the company also stated that it will increase its commitment to systematically incorporate environmental, social and governance criteria into fundamental analysis of companies. Goldman Sachs also addressed the need for public policy and its belief that government can help capital markets by establishing a strong policy framework that creates long-term value for GHG emission reductions and consistently supports the development of new technologies that lead to less carbon-intensive economy. Based on its belief, Goldman Sachs identified a set of principles that should guide public policy development.

At the Montreal 2005 United Nations Climate Change Conference that took place over a two week period from November 29 to December 10, 2005, the delegates including the United States adopted more than 40 decisions. Among the decisions was the adoption of the Marrakech Accords, which is essentially the "Kyoto Rule Book," that will allow the countries under the Kyoto Protocol to begin formally implementing the Protocol. In addition, the delegates agreed to open a dialogue on long-term cooperative action to address climate change.

On January 18, 2006, six former administrators of the Environmental Protection Agency (EPA) participated in a roundtable discussion to celebrate EPA's 35th anniversary and they all maintained that there should be mandatory controls on GHG emissions including carbon dioxide. Lee M. Thomas, who headed the agency from 1985 to 1989, said that U.S. businesses would welcome federal regulation at this point because it would allow them to plan for the kind of investments that will be needed to cut carbon dioxide emission linked to climate change. However, the current administrator, Stephen L. Johnson stated that the current plan is to pursue voluntary emission reductions and technological innovation rather than requiring mandatory cuts.

On January 31, 2006 in the State of the Union address, President Bush announced the Advanced Energy Initiative at the Department of Energy calling for a 22% increase in clean-energy research including the investment in zero-emission coal-fired plants, revolutionary solar and wind technologies and clean, safe nuclear energy. President Bush also spoke of his plan to increase research in better batteries for hybrid and electric cars, pollution-free cars that run on hydrogen, and in cutting-edge methods of producing ethanol in an attempt to reach his goal of replacing more than 75% of our oil imports from the Middle East by 2025.

Update – Corporate Governance Environmental Initiatives

Initiative 1: Support – Carbon Disclosure Project (CDP)

The objective of Initiative 1 was to support the CDP by becoming a signatory on a reminder letter (Attachment 3) that was sent on April 1, 2005 to the Financial Times 500 (FT500) companies requesting they respond to CDP's 2005 questionnaire (CDP3). The CDP3 was originally mailed to the FT500 companies on February 1, 2005. CalPERS became a signatory along with 154 other institutional investors representing more than $21 trillion in assets under management. The FT500 companies had until May 31, 2005 to respond.

In September 2005, CDP issued its 2005 report summarizing the company responses. The executive summary of the 2005 report can be found in Attachment 4. CDP reported a response rate of 71%, up from 59% in CDP2 and 47% in CDP1. Beginning with CDP2 and based entirely on the responses, CDP created a Climate Leadership Index (CLI) using a defined selection process for CDP2 and CDP3 that contains the "best in class" responses. An example of a "best in class" response (BP) can be found in Attachment 5. BP has been selected for the CLI for both CDP2 and CDP3. The CLI consisted of 50 companies for CDP2 and 60 companies for CDP3 due to the increased response rate. Attachment 6 includes the 60 companies selected for the CLI in CDP3.

CalPERS continues to support CDP and provided input during the comment period for CDP's 2006 information request (CDP4), which was incorporated into CDP4 (Attachment 7). CalPERS was one of 211 institutional investor signatories representing $31 trillion in assets under management on CDP4. The additional signatories represent an increase of 38% and a 48% increase in assets under management over CDP3.

Not only has support for the CDP grown, but so has the project itself. On February 1, 2006, the CDP4 was mailed to 1,800 of the largest quoted companies in the world based on market capitalization. The 1,300 additional companies represent new partnerships with groups such as The Conference Board of Canada, German Investment and Asset Management Association, and CalPERS and the California State Teachers Retirement System (CalSTRS). As part of CalPERS' initiative to improve data transparency within the electric power / utilities (Utilities) industry, which is discussed below in Initiative 3, the CDP4 was mailed to 258 global Utilities companies, including CalPERS global Utilities portfolio companies, in collaboration with CalSTRS and CDP.

The responses to CDP4 are due on May 31, 2006 and CDP anticipates issuing its 2006 report in September 2006. The company responses will be made available to the public on the CDP website when the 2006 report is released.

Initiative 2: Improve Data Transparency – Auto Industry

The objective of Initiative 2 was to improve environmental data transparency and timely disclosure in the auto industry. Staff identified shareowner resolutions filed at Ford and General Motors (Attachment 8) that would facilitate the improvement of data transparency and timely disclosure without posing long-term harm to either company. In addition to voting "For" the shareowner resolutions, the Investment Committee also directed staff to hire a proxy solicitor to garner additional support.

On March 31, 2005, Ford announced its plans to issue a report on climate change and as a result the co-filers withdrew their proposal. Ford released its report, "Ford Report on the Business Impact of Climate Change" (Attachment 9), in December 2005. In addition to improving environmental data transparency and timely disclosure, Ford also demonstrated its responsiveness to shareowners by issuing a report addressing the merits of the shareowner resolution. Ford's response regarding its plans to comply with California's GHG standards can be found in Appendix 2 of the report. Ford also communicated its commitment to the issue of climate change and intention to "participate fully in the larger public dialogue on actions required by governments, businesses and individuals to address climate change concerns."

Ford and General Motors have both received all three CDP questionnaires and both have responded to each one. Ford has been selected for the CLI for both CDP2 and CDP3. The other auto companies selected for the CDP3 CLI are BMW, Daimler Chrysler, Honda, and Toyota.

General Motors was unable to come to a resolution with the co-filers of its shareowner proposal. Therefore, consistent with the Investment Committee's direction, CalPERS in a joint effort with CalSTRS submitted a letter to the company's Board of Directors communicating our strong support of the proposal and requesting the company comply with the proposal's request (Attachment 10). CalPERS also hired a proxy solicitor to solicit additional support for the shareowner resolution.

Initiative 3: Improve Data Transparency – Electric Power/Utilities Industry

The objective of Initiative 3 was to work together with CalSTRS to explore the viability and development of a GHG reporting project that focuses on improving adequate, accurate and timely data transparency within the Utilities industry.

On September 19, 2005, the Investment Committee approved staff's recommendation for 1) a greenhouse gas (GHG) reporting project to be done in coordination with CalSTRS and CDP with the objective to improve transparency

in the Utilities industry, 2) writing letters to CalPERS' Utilities portfolio companies to encourage cooperation with the GHG reporting project and consider other forms of disclosure in regard to GHG reporting, and 3) publicly recognizing the companies that cooperate with the GHG reporting project.

Staff has worked closely with CalSTRS and CDP to implement the project which included drafting a section specific to the Utilities industry that would be included in CDP4. The Utilities section is in addition to the other input staff provided to CDP for the CDP4. The Utilities section was included in the version that was sent to the 258 largest Utilities globally based on market capitalization, including CalPERS global portfolio Utilities holdings. As stated above, the CDP4 was mailed to the companies on February 1, 2006 and had the support of 211 institutional investors.

Consistent with Board approval, staff sent letters to CalPERS' Utilities portfolio companies expressing CalPERS' strong support for the CDP4 and encouraging the companies to respond to it as well as to consider other forms of disclosure. Attachment 11 contains a copy of the letter sent to those companies that are held in CalPERS' portfolio. Attachment 12 contains a list of CalPERS' Utilities companies that received the letter.

The companies have until May 31, 2006 to respond to the CDP4. CalPERS will continue to communicate with CalSTRS and CDP in order to track the progress of the GHG reporting project and monitor the responses that CDP receives. Once CDP posts the responses to its website and releases them to the public, CalPERS will publicly recognize on CalPERS' website those Utilities portfolio companies that responded to the CDP4. Additionally, CalPERS will provide a link to CDP's website where interested parties can go to view the companies' responses. Staff anticipates the responses to be publicly released in September 2006.

Update – Investor Network on Climate Risk (INCR)

Call To Action

In December, CalPERS was a signatory along with 19 other institutional investors representing over $800 Billion in assets under management on a letter that was sent to the 30 largest U.S.-based insurance companies. Climate risk disclosure in the insurance industry has been virtually non-existent. The letter asked those companies to undertake a comprehensive analysis of the business implications of climate change and report the findings of that analysis to shareowners. The letter supports Item 2 of INCR's Call for Action, which is

"Support for and success of appropriate shareholder resolutions and company engagement to improve corporate disclosure and governance on climate risk."

In addition to the letter to the insurance companies, staff will continue supporting shareowner resolutions that attempt to improve data transparency and timely disclosure of environmental data without posing any long-term harm to the company such as those filed at Ford and General Motors in 2005. Staff is currently aware of shareowner resolutions that have been filed at some Utilities companies and will support the resolutions by voting "For" them.

On April 5-6, 2006, Ceres will hold a conference on Accelerating Sustainable Governance in Oakland, California. The conference is expected to bring together corporate directors, CEOs, national environmental leaders, investors and corporate governance experts to discuss how sustainable governance builds shareholder value and promotes lasting prosperity. Staff will participate on a climate risk disclosure panel at the conference and will share CalPERS' work with INCR, how CalPERS is addressing the 10 Action Items of INCR's Call for Action, and CalPERS collaboration with CalSTRS and CDP on the Utilities GHG reporting project. The panel as well as the Ceres conference supports Item 4 of INCR's Call to Action, which is to promote information sharing among the growing number institutional investors and organizations around the world concerned about climate risk.

In July 2005, CalPERS was one of 15 signatories representing more than $550 Billion in assets under management on a letter that was sent to 43 of the country's 50 largest investor-owned GHG emitters in the industry. The letter requested that the companies report within a year how future GHG limits will affect their financial bottom lines and any steps they are taking to reduce those financial impacts and improve their competitive positioning. The letter supports Item 7 of INCR's Call for Action, which calls for Utilities companies to provide more disclosure of climate risk and its impact on the companies' competitiveness and investment returns. Among the responses received to date, five companies have indicated that they intend to issue reports and three companies have indicated that they plan to issue reports in response to shareowner resolutions. INCR is still in the process of contacting companies who have not yet responded to the investors' request.

Staff assisted INCR with the development of a "Corporate Governance Score Card on Climate Risk" (Scorecard) by reviewing both the methodology and checklist and providing feedback. The Scorecard is an annual corporate governance scorecard of 100 large emitters of GHGs and it is expected to be released by March 2006.

Council of Institutional Investors (CII) Breakfast

CalPERS, CalSTRS, the Office of the Connecticut State Treasurer, and the Office of the New York City Comptroller will be hosting a breakfast session on "Corporate Governance and Climate Risk: What Investors Can Do to Protect and Enhance Shareholder Value" at the Spring CII meeting. All CII members will be invited to the session which will take place on Thursday, March 30, from 7:30-8:45 a.m. A substantial portion of the breakfast session will be dedicated to recognizing INCR leaders who have taken action to protect and enhance shareowner value through environmental initiatives.

Next Steps – CalPERS Corporate Governance Environmental Strategy

Corporate Governance Core Principle & Guidelines Addition

In order to support the Corporate Governance Environmental Strategy's objective of improving environmental data transparency and timely disclosure, staff has proposed the addition of an environmentally focused principle to the CalPERS Corporate Governance Core Principle & Guidelines. The proposed principle addresses environmental disclosure and reads as follows:

> "To ensure sustainable long-term returns, companies should provide accurate and timely disclosure of environmental risks, such as those associated with climate change."

The proposed amendment will demonstrate CalPERS' commitment to the Corporate Governance Environmental Strategy while supporting staff's ability to vote in favor of future shareowner proposals supporting accurate and timely disclosure of environmental risks.

Company Engagement

Utilizing multiple sources, staff will identify a targeted number of companies in the transportation, utilities, and oil and gas sectors that are either not disclosing any environmental data or whose disclosure does not meet a pre-determined minimum standard. It is anticipated that the confidential engagement process would include written correspondence, engaging in dialogue and possibly filing shareowner resolutions. Should staff determine that filing a shareowner resolution at one or more of the companies is warranted, staff will consider various options in which to solicit support for the resolution including hiring a proxy solicitor.

Staff will work closely with CalPERS' proxy voting staff to identify companies with shareowner resolutions requesting improved environmental disclosure and the

frequency with which the resolution has appeared in the proxy to determine the company's responsiveness to shareowners. Staff may also be able to identify potential candidates for engagement via its participation in INCR. As a steering committee member, CalPERS participates in meetings during which the members often discuss various companies and their current disclosure practices. Furthermore, INCR's soon to be released Scorecard will provide staff with yet another source to identify two to three companies for possible engagement.

Staff's objective in this targeted engagement initiative will be to improve accurate and timely disclosure of environmental risks, such as those associated with climate change, at CalPERS' portfolio companies.

Transition Utilities GHG Reporting Project in to Company Engagement

Staff will transition the utilities GHG reporting project over to its company engagement initiative. Staff will identify those portfolio utilities companies that did not respond to the CDP4 and elevate them for consideration as candidates for engagement.

Carbon Disclosure Project

Staff will monitor CDP's progress with the CDP4 and the subsequent release of its 2006 report. Those portfolio companies in the transportation, utilities, and oil and gas sectors that do not respond to the CDP4 will be considered for possible engagement. In addition, staff will continue its support of the Carbon Disclosure Project and will evaluate the opportunity to have CalPERS be a signatory on CDP's 2007 questionnaire at the appropriate time.

Continue Leadership Position in INCR

Staff will continue to maintain its leadership position in INCR as a Steering Committee Member in order to meet CalPERS' objective of improved environmental data transparency and timely disclosure to assist shareowners in making more informed investment decisions.

Annual Update

Staff plans to update the Investment Committee again in the spring of 2007.

V. STRATEGIC PLAN:

This item is consistent with the Strategic Plan: Goal 1, exercise global leadership to ensure the sustainability of CalPERS' pension and health benefit systems. This item is a product of the 2005-2006 Global Equity Annual Plan.

VI. RESULTS/COSTS:

Costs associated with the Corporate Governance Environmental Strategy are absorbed by the current Investment Office budget.

Kelly Forrest
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Corporate Governance

Winston Hickox
Consultant on Environmental Initiatives

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A New Call for Action: Managing Climate Risk and Capturing the Opportunities to be announced by institutional investors on May 10, 2005

Background

In November 2003, in the midst of the first Institutional Investor Summit on Climate Risk, leading investors launched a new effort to address the financial risks and investment opportunities posed by climate change. The Investor Network on Climate Risk (INCR), inaugurated by ten institutional investors,[1] announced a ten-point action plan, and began to educate other investors about climate risk.

Today we are reporting on the status of the action items included in the first action plan and announcing the next steps we intend to take on this issue.

During the past 18 months, investors have advocated and achieved increased corporate disclosure of climate risk, encouraged investment company consideration of climate risk in investment decision-making, and witnessed new government policies to set global warming emission standards that create certainty and level the playing field among all companies.

While substantial progress has been made, too few investors are seriously addressing the risks and opportunities posed by climate change, and most investment managers lack expertise in climate change or the capacity to assess its risks to portfolios. While some companies have begun to treat climate change as a fundamental strategic issue, many more are not disclosing their climate risk or plans to address it, creating uncertainty for investors and difficulty assessing the true longer-term value of our portfolios.

We are more firmly convinced than ever that climate change presents a material risk to investment portfolios, especially as policies to limit emissions, such as the Kyoto Protocol and various state initiatives, take hold. Indeed, prudence, common sense, fiduciary responsibility, and legal duty compel us to examine the financial ramifications of climate risk with care, and where appropriate, to act.

As fiduciaries of hundreds of billions of dollars of fund assets, we are compelled to renew previous efforts and take additional steps to respond to the challenges and opportunities presented by climate risk. It is our intention to use the knowledge we have gained, in the absence of clear policy, to encourage disclosure that will better enable us to measure our risks as shareholders due to climate change.

Managing Climate Risk and Capturing the Opportunities: A Renewed Call for Action

Recognizing that climate change embodies risks and opportunities of a significant magnitude for investors and our economy, and represents one of the greatest challenges facing our planet, we are compelled to seek improved approaches in responding to the fiscal ramifications of climate risk for institutional investors, fund managers and financial advisors, companies, and others. Therefore, we call on each of these sectors to respond, affirmatively and definitively, and state our intention to move forward to implement this essential agenda.

1. Phil Angelides, Treasurer, State of California; Randall Edwards, Treasurer, State of Oregon; Dale McCormick, Treasurer, State of Maine; Denise Nappier, Treasurer, State of Connecticut; Jeb Spaulding, Treasurer, State of Vermont; Robert Vigil, Treasurer, State of New Mexico; Alan Hevesi, Comptroller, State of New York; William Thompson, Comptroller, New York City; Steve Abrecht, Executive Director, National Industry Pension Fund, Service Employees International Union (SEIU); and William J. Boarman, Chairman of the Board of Trustees, CWA/ITU Negotiated Pension Plan.

Institutional investors

1. **Call to Action:** Invest capital, individually or collectively, in companies developing and deploying clean technologies.
   Our Commitment: Our collective goal in the next year is to unlock $1 billion of capital to achieve attractive investment returns over the long term and help catalyze adoption of clean technology in the broader marketplace.
2. **Call to Action:** Support for and success of appropriate shareholder resolutions and company engagement to improve corporate disclosure and governance on climate risk.
   Our Commitment: We will develop through the Investor Network on Climate Risk (INCR) a model climate risk policy for institutional investors. This policy will specifically address shareholder resolutions, proxy voting, and corporate dialogue on climate risk. We will share the policy with other institutional investors and with fund managers.
3. **Call to Action:** Adopt a reliable and generally accepted global standard for disclosure of climate risk.
   Our Commitment: We pledge to work with investors around the world to develop such a standard.
4. **Call to Action:** Promote information sharing among the growing number of institutional investors and organizations around the world concerned about climate risk.
   Our Commitment: We will build a new forum for international investor collaboration on climate risk.

Fund managers and financial advisors

5. **Call to Action:** Improve capacity to assess climate risk.
   Our Commitment: We will require and validate that relevant investment managers, seeking to manage our fund assets, describe the resources, expertise and process that they use to assess the risks associated with climate change.
6. **Call to Action:** Improve mutual fund engagement in addressing climate risk.
   Our Commitment: INCR will publish an annual scorecard showcasing how mutual funds vote on climate change shareholder resolutions.

Companies

7. **Call to Action:** All publicly-held companies in the auto, electric power, and oil and gas sectors should follow the lead of some companies and report within a year how likely scenarios for climate change, future greenhouse gas limits, and dwindling access to inexpensive energy will affect their businesses and competitiveness, and to identify steps they are taking to reduce those financial impacts and seize new emerging market opportunities.
   Our Commitment: We will engage with these companies to consider and address climate risk.
8. **Call to Action:** Renew dialogue between investors and all companies that have already disclosed their climate risk to focus on steps that investors and companies can take to address this risk.
   Our Commitment: We will engage with companies, recognize leaders, and promote best practices.
9. **Call to Action:** Help investors assess climate risk.
   Our Commitment: Through INCR, we will produce the "Corporate Governance Score Card on Climate Risk", an annual corporate governance scorecard of 100 large emitters of greenhouse gases. We will distribute this scorecard throughout the investor community by the end of 2005. This report will inform them of the efforts that companies and their boards of directors are taking to consider and address climate risk.

Government

10. **Call to Action:** The Securities and Exchange Commission (SEC) to require that companies disclose the risk associated with climate change as part of their securities filings.
    Our Commitment: We will work with the SEC to disclose climate risk.

Attachment 2

Goldman Sachs Environmental Policy Framework

Goldman Sachs believes 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.

Goldman Sachs recognizes that diverse, healthy natural resources - fresh water, oceans, air, forests, grasslands, and agro-systems - are a critical component of social and sustainable economic development. Forests are particularly important for the environment and biodiversity. They are vital to water and air quality, and help regulate climates. Forests are home to thousands of wildlife species, and, at the same time, represent a natural source of timber. The key challenge for society is to manage the competing human demands on land, soil and vegetation without undermining crucial ecosystem functions.

We take seriously our responsibility for environmental stewardship and believe that as a leading global financial institution we should play a constructive role in helping to address the challenges facing the environment. To that end, we will work to ensure that our people, capital and ideas are used to help find effective market-based solutions to address climate change, ecosystem degradation and other critical environmental issues, and we will seek to create new business opportunities that benefit the environment. We will work to identify policy measures that are creative, meaningful and provide real solutions to environmental problems while recognizing the importance of economic growth in contributing to the alleviation of poverty. In pursuing these objectives we will not stray from our central business objective of creating long-term value for our shareholders and serving the long-term interests of our clients.

Climate Change

Goldman Sachs acknowledges the scientific consensus, led by the Intergovernmental Panel on Climate Change, that climate change is a reality and that human activities are largely responsible for increasing concentrations of greenhouse gases in the earth's atmosphere. We believe that climate change is one of the most significant environmental challenges of the 21st century and is linked to other important issues such as economic growth and development, poverty alleviation, access to clean water, and adequate energy supplies. How governments and societies choose to address climate change will fundamentally affect the way present and future generations live their lives. Goldman Sachs is very concerned by the threat to our natural environment, to humans and to the economy presented by climate change and believes that it requires the urgent attention of and action by governments, business, consumers and civil society to curb greenhouse gas emissions.

We recognize that as a global company we have an impact on the environment through the goods we purchase, the manufacturing and production we finance, and the investments we make. As an institution that brings providers and users of capital

together, we believe that capital markets can and should play an important role in creating opportunities to address today's environmental challenges. Markets are particularly efficient at allocating capital and determining the appropriate prices for goods and services we purchase. The government can help the markets in this regard by establishing a strong policy framework that creates long-term value for greenhouse gas emissions reductions and consistently supports and incentivizes the development of new technologies that lead to a less carbon-intensive economy. Working with governments, the private sector can then take the lead in further developing these markets, establishing better price transparency, creating incentives for innovation, and finding cost-effective alternatives. To that extent, we believe the following principles should guide public policy development:

- Policies and actions should be based firmly on science and rational economics.
- Policy frameworks should be based on market-based mechanisms to set clear, transparent and consistent price signals.
- Voluntary action alone cannot solve the climate change problem.
- Policies should encourage conservation and efficient use of energy as an important part of a comprehensive solution.
- Solutions must be global in scope.
- Climate change should be viewed in conjunction with other major challenges, e.g. conservation of ecosystems, access to water, poverty alleviation and economic growth.
- Implementation requires an integrated approach to identify where there is the greatest leverage to help mitigate potential problems.

Our Business and the Environment

Each of our major business areas has an important role to play in integrating this policy into our operations. For example, our investing businesses will take the lead in identifying investment opportunities in renewable energy. As market makers, we will continue to look for opportunities to create more efficient markets for environmental products and services, and to participate in them as active market makers and liquidity providers. Through our research function, we will continue to measure the impact of environmental risk and business opportunities relating to the mitigation of such risk on individual companies and sectors. For our financial advisory function, a better understanding of environmental impacts and capabilities will make us a more effective adviser to and partner with our clients. Finally, where appropriate, we will continue to support conservation efforts to preserve the value of highly fragile ecosystems and protected areas which are particularly threatened, as we have done with respect to Tierra del Fuego and our partnership with the Wildlife Conservation Society.

Direct Impact on Operations: Goldman Sachs recognizes that an effective environmental policy must first begin with a focus on minimizing the impact of our own operations. Accordingly, we will make efforts to ensure that our facilities and business practices adopt leading-edge environmental safeguards. We will disclose the environmental impact of our operations, and reduce those impacts, wherever practical. We plan to report on a number of factors, including greenhouse gas emissions and electricity use.

- We plan to reduce our indirect greenhouse gas emissions by 7% from our leased and owned offices by 2012, using a 2005 baseline.
- We will increase our use of recycled and environmentally certified wood, paper and print products, use energy efficient equipment, and purchase more organic and sustainably harvested products and supplies.
- We will purchase more products locally, to reduce the environmental impact related to shipping, where practical.
- We will develop uniform green building standards for use in the construction and major renovation of our facilities, with LEED Gold certification or other whole building standards as the ultimate goal.
- We will develop environmentally sound procurement practices and incorporate environmental criteria into our supplier selection and review processes.
- Goldman Sachs is the owner of Cogentrix, a company which operates power plants in the United States. We will report the annual greenhouse gas emissions from these plants, and will continue to work to reduce direct carbon emissions from them whenever practical. We support the need for a national policy to limit greenhouse gas emissions and where economically feasible will offer our plants as a demonstration site for innovative technology. We will continue to analyze reduction opportunities and consider potential off-sets.

Market Making and Investments: Goldman Sachs' core competencies include identifying market opportunities, creating efficient market structures, providing liquidity, and investing capital. We believe that we can make a significant positive contribution to climate change, sustainable forestry and ecosystem services through market-based solutions. As such, Goldman Sachs will aggressively seek market making and investment opportunities in the environmental markets described below.

- We will continue to act as a market maker in emissions trading (CO_2, SO_2), weather derivatives, renewable energy credits, and other climate related commodities, and look for ways to play a constructive role in promoting the development of these markets.
- Goldman Sachs intends to be a leading U.S. wind energy developer and generator through our recently acquired subsidiary, Horizon Wind Energy (f.k.a. Zilkha Renewable Energy).
- We will make available up to $1 billion to invest in renewable energy and energy efficiency projects.
- We will evaluate opportunities and, where appropriate, encourage the development of and participate in markets for water, biodiversity, forest management, forest-based ecosystems, and other ecosystem features and services.
- We will continue to devise investment structures for renewable energy and invest alongside our energy clients, such as our wind energy partnership with Shell Wind Energy and our solar energy fund with BP Solar.
- We will explore investment opportunities in renewable and/or cleaner burning alternative fuels such as renewable diesel (such as our investment in Changing World Technologies), ethanol and biomass.
- We will seek to make investments in, and create financing structures to assist in the development and commercialization of, other environmentally friendly technologies.

Research: Goldman Sachs will increase our commitment to systematically incorporate environmental, social and governance criteria into fundamental analysis of companies. We believe that companies' management of environmental and related social risks and opportunities may affect corporate performance. We further believe that the management of risks and opportunities arising from climate change and its regulation will be particularly significant and will garner increasing attention from capital market participants.

We have already produced research on the environmental and social value drivers in the oil and gas industry. We intend to continue this work, and expand it to other sectors. In order to highlight the importance of these issues to investors generally, we have also produced research at the portfolio strategy level.

It is likely that credible research can influence investors, which in turn can help focus more management attention on these issues. To better inform investors about the impact of climate change on long-term growth, we will:

- Broaden our assessment of the impact of environmental and social issues to cover several more sectors, which we anticipate will help to establish the business case for sustainable development.
- Work to make environmental, social and governance criteria a part of best-in-class investment research.
- Meet with clients to discuss issues and trends, based on our research.
- Participate in and convene meetings/seminars with clients, investors, and other experts to discuss strategic issues and identify market trends within industries and sectors.

Policy: We will establish and fund a Center for Environmental Markets to undertake independent research with partners in the academic and NGO community to explore/develop public policy options for establishing effective markets around climate change, biodiversity conservation and ecosystem services. Our public policy views will be informed by this research. At the same time, we recognize that the climate change problem cannot be solved through voluntary action alone and will work to develop partnerships with other organizations to help identify and promote effective and efficient regulatory/policy approaches to reducing greenhouse gas emissions. Goldman Sachs will disseminate this information through a combination of website postings, strategic communications and targeted outreach to engage and educate policy makers and clients on key issues.

- We will develop a research agenda focusing on how markets can contribute to helping solve environmental and related social problems.
- We will convene policy makers, investors, and experts on issues related to climate change, ecosystem services, and economic development.
- We will design an outreach strategy tailored to various audiences, including clients and policy makers in the US, Europe and emerging markets.
- We will develop and disseminate policy papers.

Business Selection and Risk Management:
General**:** We believe it is important to take the environmental impacts and practices of our clients and potential clients into consideration as we make business selection decisions. We will encourage clients conducting industrial and agricultural activity in environmentally sensitive areas to do so with the appropriate safeguards. We also believe that it is in the interest of our issuer clients to make appropriate disclosure with respect to the environmental impacts of their businesses, including greenhouse gas emissions, and the potential consequences to their businesses of changes in environmental regulation, and we will strongly encourage them to further develop this disclosure.

We will follow the general guidelines developed by the Equator Principles as they apply to our business as described below. The Equator Principles serve as a framework for determining, assessing, and managing environmental and social risk in project financing, based on the policies of the World Bank and its private sector arm, the International Finance Corporation. We will seek to apply the general guidelines to debt and equity underwriting transactions, to the initiation of loans and to investment banking advisory assignments where the use of proceeds is specified to be used for potentially

environmentally damaging projects and where Goldman Sachs is the lead book runner or arranger. In connection with and subject to the foregoing:

- We will adopt explicit prohibitions against financing or investing in industrial activity in certain limited areas which are so environmentally sensitive that they must be preserved in their present condition. Goldman Sachs will not finance any project or initiate loans where the specified use of proceeds would significantly convert or degrade a critical natural habitat.[i] In addition, we will not knowingly finance extractive projects or commercial logging in World Heritage sites.[ii]
- Goldman Sachs prefers to only finance preservation and light, nonextractive use of forest resources for projects in forests whose high conservation values are endangered.[iii]
- We will develop due diligence procedures around key environmental issues for use in evaluating potential financings.
- Goldman Sachs will strive to protect the highest conservation values in forests with respect to its execution of financings in the logging and forest products industries. We prefer Forest Stewardship Council or a comparable certification when we finance forestry projects that impact high conservation value forests. In this regard, for operations that are not already certified, we will introduce or refer our clients to credible experts who can help establish a rigorous, time-bound, step-wise approach to achieve certification.
- We will not knowingly finance companies or projects that collude with or are knowingly engaged in illegal logging[iv]. As part of our due diligence where we are in a position to direct or influence such process, we will examine whether clients that process, purchase, or trade wood products from high risk countries[v] (and we will encourage such clients to) have certifiable systems in place to ensure that the wood they process, purchase or trade comes from legal sources. Due diligence will include discussions with client representatives as to its practices and monitoring and whether it uses chain of custody certification (e.g. FSC controlled wood standard) for illegal logging. The results of such due diligence will be an important factor in our determination whether or not to engage in financings for such client.
- We will not finance projects that contravene any relevant international environmental agreement which has been enacted into the law of, or otherwise has the force of law in, the country in which the project is located.
- We will provide training, as appropriate, to our employees on environmental issues and practices. We will develop training sessions and provide the tools necessary to make informed decisions.

<u>Indigenous People</u>: Goldman Sachs recognizes that the identities and cultures of indigenous peoples are inextricably linked to the lands on which they live and the natural resources on which they depend. We recognize the rights of these communities regarding issues affecting their lands and territories, traditionally owned or otherwise occupied and used. We prefer to only finance projects in indigenous areas where free, prior informed consultation results in support of the project by the affected indigenous peoples. We will aim to ensure that the project sponsor or borrower, as appropriate, will have demonstrated

that i) consultation approaches that rely on existing customary institutions have been utilized, ii) governmental authorities at the local, regional or national level have provided mechanisms for the affected communities to be represented, consulted or to air grievances, and iii) applicable laws have been upheld.

Private Equity Investments Undertaken by the Firm's Merchant Banking Division: Our private equity investment groups will continue to conduct an environmental review as part of their investment decision process for direct investments in companies in environmentally sensitive industries. The review process analyzes our prospective portfolio companies' compliance with applicable environmental laws and regulations. The environmental review process is an integral part of our private equity investment groups' due diligence review of companies and their management.

Once an investment is made, through their membership on a portfolio company's board of directors (where applicable), our private equity groups monitor their portfolio company's operations with respect to environmental compliance issues.

Implementation: Our environmental policy, which will apply to The Goldman Sachs Group, Inc. and its majority-owned subsidiaries, will be coordinated and overseen by the Office of Corporate Citizenship, reporting directly to the Executive Office. The Office will provide guidance to our various businesses about environmental issues, develop training, and engage with a variety of stakeholders to help Goldman Sachs better manage and understand environmental issues. Implementation of the policies will be the direct responsibility of each of our applicable business units. We will report on our progress annually through our annual report and website.

The policy and its implementation will be reviewed annually with the Board of Directors.

We have consulted many organizations and experts in developing our policy. We will continue to build upon these relationships and consult our stakeholders on a regular basis to help us better understand environmental issues and their impact, and help identify potential opportunities to make a positive contribution in addressing such issues.

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[i] Critical natural habitats are:
i) existing protected areas and areas officially proposed by governments as protected areas (e.g., reserves that meet the criteria of the World Conservation Union [IUCN] classifications), areas initially recognized as protected by traditional local communities (e.g., sacred groves), and sites that maintain conditions vital for the viability of these protected areas (as determined by the environmental assessment process); or
ii) sites identified on supplementary lists prepared by the World Bank or an authoritative source determined by IFC's Environment Division. Such sites may include areas recognized by traditional local communities (e.g., sacred groves); areas with known high suitability for biodiversity conservation; and sites that are critical for rare, vulnerable, migratory, or endangered species. Listings are based on systematic evaluations of such factors as species richness; the degree of endemism, rarity, and vulnerability of component species; representativeness; and integrity of ecosystem processes.

[ii] There are currently 788 World Heritage sites that were nominated by the member countries and selected by independent review panels for their natural and cultural values.

[iii]In implementing this policy, we will take guidance from the major conservation groups, the Wye River Process and the World Bank's Critical Forest Areas. Our policy will include the following conservation values: rare, endemic, threatened and endangered species, legally protected areas and forests that house vulnerable or threatened cultural sites.

[iv] Illegal logging takes place where timber is harvested in violation of local and national laws intended to stop illegal logging. Illegal logging includes: a) using corrupt means to gain access to forests, b) extraction without permission or from a legally unauthorized area, and c) the cutting of protected species or the extraction of timber in excess of legal limits or in violation of legally approved forest management plans. Illegal logging has not yet been written into international law although issues relating to illegal logging have been addressed in some fashion by international treaties such as the Convention on Biological Diversity.

[v] The World Bank, World Wildlife Fund and others have published data on illegal logging. For Goldman Sachs, a high risk country is one where greater than 50% of annual harvest is illegal.

Attachment 3

1st April 2005

CARBON DISCLOSURE PROJECT

57A Farringdon Road
London, EC1M 3JB
United Kingdom
Email: info@cdproject.net
www.cdproject.net

Name
Title
Company
Address1
Address2
Address3
Address4
Addresss5

Shareholder Request for data on your Companies Greenhouse Gas Emissions

Dear X,

On 1 February 2005 the Carbon Disclosure Project (CDP) sent you a formal request for disclosure of information from 143 shareholders with more than $20 trillion assets under management, see attached documentation. Since then, 9 more investors including CalPERS, Sumitomo Mitsui Financial Group and the Bank of Brazil have joined this request. These shareholders own a significant proportion of your company and requested this information because they require it. It is our responsibility to obtain this information for them and we would appreciate your assistance in complying with their instructions. The combined request is designed to reduce the effort required by your company.

The disclosure request consists of only nine questions. We very much hope your company will be able to deliver this information to your investors. The closing date for completed responses is 31st May 2005. If you are unable to answer all of the questions, the investors are still interested to hear what you have to say: Alex Popplewell, at Merrill Lynch Investment Managers was recently quoted in the press commenting on CDP: "There's no excuse for failing to participate in the project. If you're a company that emits very little, just say that."

60% of the FT500 corporations answered the questions in 2004 and this figure is set to rise considerably this year, so any companies not responding to this third iteration of CDP may be perceived as poorly managed.

I have attached some recent press coverage to show the high profile of this request. We hope and believe your company has the capability to respond to these nine questions. Please confirm that you have received this communication and that you will be responding by sending an email to info@cdproject.net

Yours sincerely

Paul Dickinson
Project Coordinator

Carbon Disclosure Project Advisory Board:
Doug Bauer, Andrew Dlugolecki, Colin Maltby, Bob Monks, Robert Napier,
Martin Whittaker, Eckart Wintzen. Chair: James Cameron

The responses from corporations are available to download at www.cdproject.net

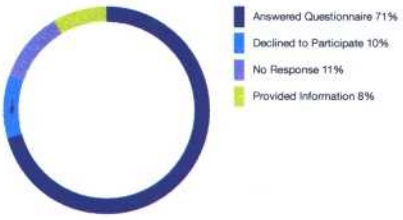
Executive Summary

71% of Corporations Disclosed to CDP3

Key Climate Change Developments Affecting Investors Since CDP2

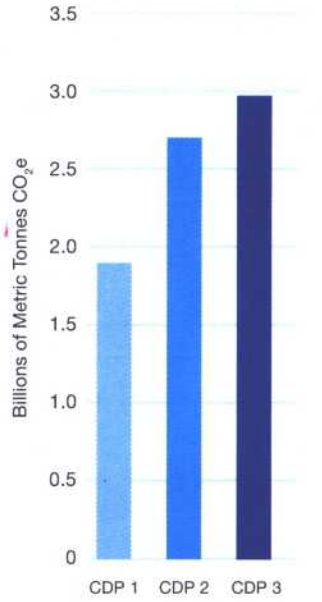
- **The Kyoto Protocol has been ratified and the EU Emissions Trading Scheme (EU ETS) is now in effect.** Many companies have wasted no time positioning themselves to be winners under the new carbon regulations. There is now a defined market price for a tonne of carbon through the EU ETS. Investors now have new, identifiable regulatory risks embedded in their investment portfolios. These developments also stand to affect the magnitude and direction of the capital commitments on the part of industry.
- **Parallel regulations and policies are emerging** in multiple non-Kyoto countries, portending a shift towards a carbon-constrained global economy. The Asia-Pacific Partnership for Clean Development and Climate (Asia Pacific Pact), signed in July 2005 by the world's four largest coal consuming states (the United States, China, India and Australia) plus Japan and South Korea, calls on member countries to set individual targets for reductions in GHG emissions and has set the stage for increased collaboration in clean technology projects at the international level.
- **Investment in "clean technology" continues to rise** as investors seek to hedge their exposure to anticipated increases in carbon costs. According to Cleantech Venture Network, global clean tech investment in 2004 totaled $1.209 billion, up 3.4% from the $1.169 billion recorded in 2003 and up 11.4% from the 2002 total of $1.085 billion.
- **A sea-change in corporate positioning on climate change is discernible** over the past 18-months. Perceptions are changing most noticeably among U.S. based companies, many of which have publicly asked for greater regulatory certainty on greenhouse gas emissions (GHGs). Companies such as **Duke Energy**, **GE** and **JP Morgan Chase** have made notable strategic leaps.
- **35% of the FT500 now report taking early action in emissions trading.** Trading at just under €22 per tonne at the time of writing, CO_2e prices have soared over 300% since January 2005. "Carbon funds" that invest in emission reduction credits have grown substantially: over $1.5 billion is currently committed in 15 carbon funds worldwide. Further, several FT500 financial services companies report offering innovative new climate-linked financial and insurance products to corporate clients. "Carbon commerce" continues to gain mainstream momentum, as a number of U.S. hedge funds have entered the carbon market. In Europe, IPOs were recently launched for emission trading firms AgCert and Trading Emissions Plc., both of which gained robust valuations.
- **Climate change litigation continues to loom as a threat to big emitters.** The threat of lawsuits similar to that of asbestos and tobacco litigation has not receded. The U.S., Europe, Australia and even Africa have witnessed important litigation developments over the past 12 months.
- **Clarity on the science of climate change has never been stronger,** and the overwhelming majority of evidence indicates that human influences will increasingly alter the Earth's climate through the 21st century and beyond. According to the Association of British Insurers, the costs from hurricanes, typhoons and windstorms will rise from $16 billion today to an average of $27 billion per year by 2080.
- **Accounting organizations move to codify carbon accounting and disclosure rules.** With Kyoto in place and the EU Emissions Trading Scheme, accounting bodies are beginning to provide guidance regarding the proper accounting for emissions allowances in financial statements and the disclosure of climate risk in the Management Discussion and Analysis.

CDP3 Response Rates



As the chart indicates, the disclosure rate now stands at 71%, up from 59% in CDP2, and 47% in CDP1.

Total Emissions Reported Through CDP



The cost of carbon may erode annual net income by as much as 45%.

- **Investors collaborate to request more transparency on climate exposures.** Through the CDP, investors are collaborating to push for greater disclosure on climate risks and the extent of company preparedness. The London-based Institutional Investors Group on Climate Change (IIGCC) now has 28 members with significant assets. The last UN-hosted Investor Network on Climate Risk (INCR) meeting in May 2005 featured 9 U.S. State Treasurers and a veritable who's who of Wall Street. Shareholder resolutions on climate change have also gained popularity as a means for shareholders to voice their concerns over a lack of management response to climate risks. A total of 30 climate change resolutions were filed in 2005, an increase of 36% from the 22 resolutions filed in 2004.

Analysis of CDP3 Responses

- **71% of companies completed the information request,** a jump from 59% in CDP2 and 47% in CDP1. 89% of the FT500 companies responded to the CDP3 information request, an increase from 86% in CDP2 and 78% in CDP1. The rise is likely attributable to a combination of the increase in investor assets supporting the CDP and the mounting awareness of climate change risks from the FT500 companies themselves.
- **The cost of carbon may erode annual net income by as much as 45%,** depending on carbon prices, compliance periods and individual company circumstances. Conversely, carbon costs will have a net positive effect on firms with a surplus of allowances. This report models the potential impact of carbon costs across a range of prices on a sector-by-sector basis.
- **Awareness of climate change risks and opportunities rises, but gaps in action remain.** Over 90% of responding companies flagged climate change as posing commercial risks and/or opportunities to their business. However, only 51% have implemented emission reduction programs; only 45% have established emission reduction targets; and only 35% report having taken early action in emissions trading.
- **Most companies in the FT500 are not reducing their emissions.** While only the performance of companies that provided emissions data is known, in the period between CDP2 and CDP3, only 13% of these firms reported a reduction, while 17% reported an increase. For comparison purposes, in the period between CDP1 and CDP2, only 11% of the FT500 reported that they had reduced their absolute emissions, while about the same number reported an increase.
- **Differences of opinion remain among same-sector companies** on the relevance of climate change as a material risk issue. Examples were found where companies with very similar business models had radically different perspectives on what climate change could mean for their shareholders. Not surprisingly, these differences of opinion were also reflected in the level of sophistication of their climate change strategies.
- **Company "Carbon Beta©" varies widely but not all companies are equally prepared.** In analyzing the company responses it was clear that each sector contains a vanguard of leading firms. Also, most sectors have companies that appear to have no strategic direction on climate. Our analysis of carbon beta – the carbon risk of a particular company relative to its sector – shows that large carbon risk differentials exist, both between and within sectors.
- **Some companies simply did not respond to the CDP questionnaire, despite CDP signatories holding more than 20% of their outstanding shares.** In an era when the capital markets increasingly value disclosure and climate change is quickly rising up the agendas of major pension funds, asset managers, bankers, insurers and analysts, the lack of responsiveness to the CDP information request does not reflect well on these firms and may indicate that these companies are unprepared.

Summary of Sector Risks	
Automobiles	Among top auto manufacturers, there is a 25% difference in average fuel efficiency for the line of passenger cars sold in 2004.
Banks	Certain banks have upwards of 50% of their commercial loan portfolio directed towards "high risk" sectors with exposure to both the regulatory and weather risks of climate change.
Chemicals	Assuming a price of $50 per tonne of carbon, a 20% emissions constraint and a 7 year compliance period, the most exposed company in the Chemicals sector could face annual compliance costs of nearly 4% of net income. Conversely, given the same assumptions, the least exposed firm faces less than 1.5%.
Electric Utilities – International	Assuming a price of €40 ($50) per tonne of carbon, a 20% emissions constraint and a 7 year compliance period, the most exposed company in the Electric Utilities – International sector could face annual compliance costs of nearly 8% of net income. Conversely, given the same assumptions, the least exposed firm faces less than 1%. Some large emitters could see financial windfalls from carbon pricing scenarios.
Electric Utilities – North America	Assuming a price of $50 per tonne of carbon, a 20% emissions constraint and a 7 year compliance period, the most exposed company in the Electric Utilities – North America sector could face annual compliance costs of over 20% of net income. Conversely, given the same assumptions, the least exposed firm faces less than 1%.
Metals & Mining	Assuming a price of $50 per tonne of carbon, a 20% emissions constraint and a 7 year compliance period, the most exposed Metals & Mining company could face annual compliance costs of nearly 22% of net income. Conversely, given the same assumptions, the least exposed firm faces approximately 2%.
Oil & Gas	Assuming a price of $50 per tonne of carbon, a 20% emissions constraint and a 7 year compliance period, the most exposed Oil & Gas company could face annual compliance costs in excess of 2% of net income. Conversely, given the same assumptions, the least exposed firm faces less than 0.5%.

- **Only 54% of FT500 companies disclosed emissions data in CDP3,** despite being asked specifically to do so. Disclosure fluctuates significantly both among companies and among sectors. Some high-impact sectors including Aerospace & Defense, Oil & Gas Exploration and Production, Industrial Conglomerates and Surface Transport have conspicuously poor disclosure rates of less than 50 percent.
- **Total emissions reported to CDP equaled 2,994,834,887 metric tonnes of CO_2e** (up from 2,791,725,485 in CDP2). This sum represents roughly 13% of total anthropogenic GHG emissions worldwide.
- **The online version of this report, available at www.cdproject.net,** offers a more comprehensive discussion of recent climate change developments as well as an in-depth look at various industry-level responses to climate change. Also available are the individual responses from corporations. The icons provided in the margin of this report direct readers to key sections of the online document.

"European cars are far more fuel efficient than American cars, because fuel in Europe is around four or five times the price of fuel in the US. Market price mechanisms work. This is far more radical than Kyoto, and people notice."

Alan Brown,
the then CIO of State Street Global Advisers
speaking at the CDP2 report launch in
New York 21 May 2004.

BP plc 2005 Submission to the Carbon Disclosure Project

1. *General*

Do you believe climate change, the policy responses to climate change and/or adaptation to climate change represent commercial risks and/or opportunities for your company?
If yes, specify the implications, detail the strategies adopted and actions taken to date. If no, please indicate why.

Our work as a global energy company brings us into contact with some of the most challenging issues facing society today. We recognise the paradox whereby the energy which provides society with heat, light and mobility - fuelling economic growth and development - simultaneously presents us with serious environmental and social challenges. The prospect of climate change is a challenge that we must address if we are to fulfil our aspiration to be a sustainable company in a sustainable world. Thus BP sees climate change as both posing potential risks and opportunities.

In 1997 in a speech at Stanford University, California, Group Chief Executive Lord Browne, stated that BP accepted that the risks from climate change were potentially serious and that precautionary action was justified. BP later announced a target for 2010: that greenhouse gas (GHG) emissions from its own operations would be 10 per cent lower than emissions in 1990 – a tougher target than those set for many industrialized countries by the Kyoto summit in 1997. This target was only one element of a strategy to tackle the issue. Other elements included promotion of flexible mechanisms, accelerated development of new energy technologies, participation in public policy processes and investment in research both for energy efficiency (e.g. efficient fuels and engines) and to combat fossil fuel combustion impacts (e.g. capture and storage of CO2). BP also engaged in a number of experimental forestry projects (e.g. Noel Kempf, Scotland Forestry Alliance).

BP achieved its target at the end of 2001, 9 years ahead of schedule, and gained around $650 million in net present value due to many projects to increase operational efficiency, apply technological innovation and improve energy management.

After achieving its target, in March 2002 BP set a new target for the year 2012. While in some years our GHG emissions may increase, our objective is that our net emissions will show no increase by 2012. We expect our continued work on energy efficiency and flaring reductions to eliminate around half of any emissions growth we would otherwise create; and we intend to account for the other half by demonstrating how our actions are reducing emissions through the products we sell. The new target is again only one part of our overall strategy, which includes promoting market-based solutions, participating in policy dialogues, working with others on new energy technologies and investing in research.

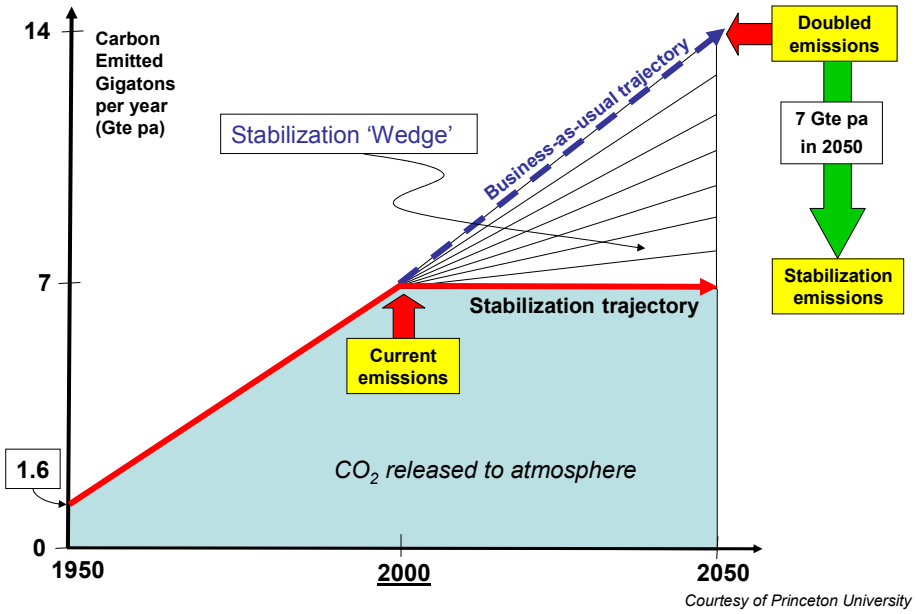
Looking beyond 2012, in November 2003, BP outlined its latest thinking on global climate change and CO_2stabilization. We also outlined a model, developed jointly with Princeton University, explaining how the world could achieve this objective through a combination of actions, each with the potential to remove a 1 billion tonne slice of carbon emissions by 2050.

> *"On the basis of practical steps, using technology which is either available now and which may be within reach, stabilization (by 2050) does seem to be an attainable goal."* Lord Browne, November 2003

Over the past 2 years, we have continued to analyse these issues and in July 2004, Lord Browne, BP's CEO, set out our latest position on the issue of climate change in an article called "Beyond Kyoto" published in Foreign Affairs (Vol. 83, Issue 4). Whilst many uncertainties remain, we believe that business planning and long-term strategy should be based on stabilising atmospheric concentrations of greenhouse gases in the range of 500 to 550 ppm, consistent with limiting global temperature rise to around 2C. This would provide a focus for

action to bring emissions to a level at which scientists believe serious damage to the environment could be avoided whilst providing society with the energy it needs. This position may change as scientific understanding evolves.

This requires the world to address the potential trade-off between growth in energy demand and the substantial environmental impact this could cause. It is estimated that the world's annual emissions from hydrocarbon consumption, currently equivalent to 24.5 billon tonnes of carbon dioxide (from International Energy Annual 2002, US Energy Information Administration), could double over the next 50 years. An important step to achieve atmospheric stabilisation would be to reduce annual emissions to today's levels by 2050.



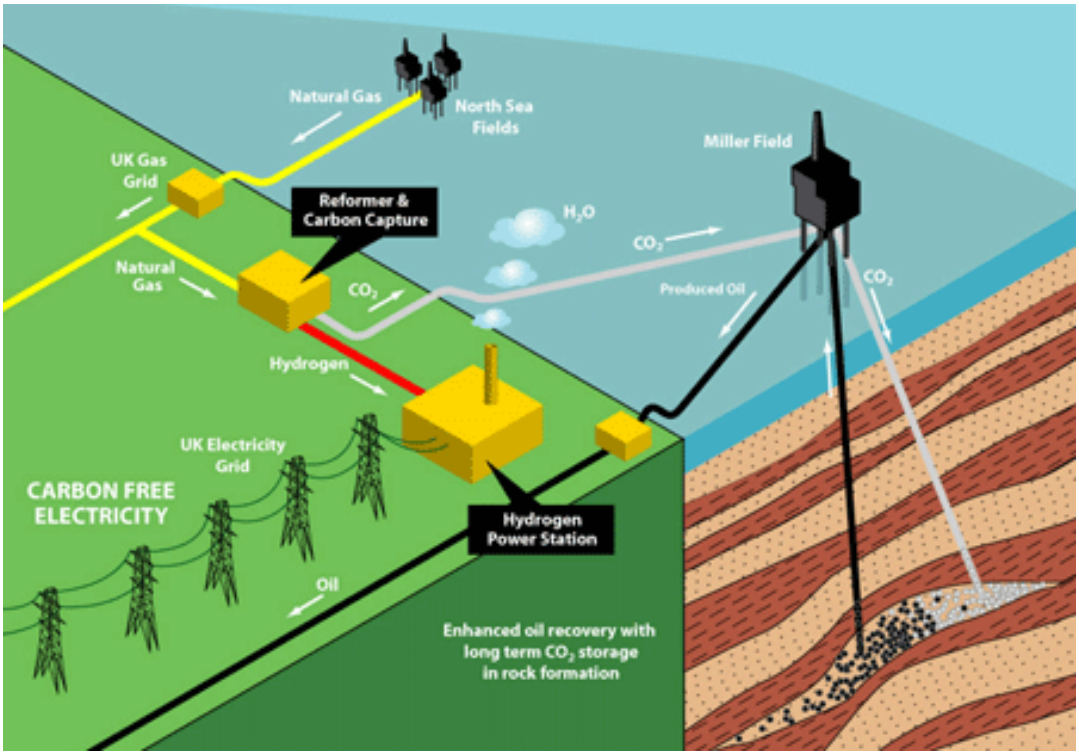
(1 Gte of carbon is equivalent to approximately 3.5 Gte of carbon dioxide.)

To achieve this Princeton University described a series of options or 'wedges', each of which has the potential to lower emissions by around one billion tonnes per annum by 2050. These actions could be started now and could combine to tackle the emissions growth. They include:

- Increasing fuel economy in cars so that two billion cars run at 60 miles a gallon rather than today's average of 30. •
- Replacing coal with natural gas as feedstock at 1,400 one-gigawatt power stations. •
- Capturing and storing the carbon generated at 1,600 gas power stations. •
- A 50-fold increase in wind power. •
- A 700-fold increase in solar panels. •
- Producing 34 million barrels a day of bio-fuels, requiring 250 million hectares of crops, or one-sixth of the world's cropland. •
- Cutting carbon emissions from buildings by a quarter by applying known approaches to energy efficiency.

Several of these options are clearly aligned with BP's business strategy. To take one specific example of this strategy in action, BP have recently announced plans for the world's first industrial scale 'Decarbonised Fuels' project. The project, in conjunction with Shell, Conoco-Phillips and Scottish & Southern Electricity, will take natural gas from the North Sea and convert it to hydrogen and carbon dioxide. The hydrogen will then be used as fuel in Scotland's Peterhead power station to provide around 350MW of clean electricity – enough to power, for example, 250,000 homes. BP will transport the separated carbon dioxide to the Miller oilfield in the North Sea where it will be safely stored in the reservoir formation at a

depth of over 3 km. In doing so, the project will also increase the amount of oil that can be produced, thereby extending the life of both oil production from the field and the benefits this brings to the UK in terms of revenue and jobs.
See : http://www.bp.com/genericarticle.do?categoryId=97&contentId=7006978



If applied to just five per cent of the new electricity generating capacity that the world is projected to require by 2050, such schemes would have the potential to reduce global CO2 emissions by around one billion tonnes a year – contributing materially to the capture and storage 'wedge' in the list of stabilisation options listed above.

Of course, all of the options proposed by Princeton would require concerted effort by governments and other industries if they are to be realised on a sufficient scale to counter the emissions growth trend. In addition, different industry sectors can work in partnership to bring new lower carbon solutions to the market.

We believe governments and international bodies can also contribute, through devising mechanisms that promote access to increasing clean energy in developing countries and achieve cost-effective emission reductions within developed economies. For example, emissions of greenhouse gases are particularly suitable for national or international trading because the goal is to reduce global emissions. If a 'common currency' in emissions can be developed, this will enable different efforts to reduce emissions around the globe to be valued on a common basis. BP has actively promoted the use of market mechanisms, including Emissions Trading and the Clean Development Mechanism, which were both formally recognized in the Kyoto Protocol. BP helped to develop the existing UK emissions trading scheme, in which it is now a participant, and is following the same course of involvement within the European Union trading scheme, which started in 2005.

Thus since 1998, BP have continued to contribute to the debate, made corporate commitments and taken substantive measures to address the issue of climate change. BP Management believe that the strategic actions it is taking on climate change are completely aligned with its business objectives and values.

See www.bp.com/climatechange , and www.bp.com/speeches

2. Responsibility

Do you allocate specific responsibility to executive and independent directors for climate change related issues?
If yes, what is the title of the person/department/board committee with this responsibility?
If no, are you planning on doing so, and if so when?

BP believes that its approach to managing climate change should be the same as that used to manage any other important aspect of its business. This approach is detailed in the BP Management Framework which clarifies how accountability is delegated to senior management within the organisation. The Group Chief Executive is accountable to the BP Board for ensuring that appropriate actions and activities are taken to manage climate change issues. Accountability for specific aspects is delegated by the Group Chief Executive to executives with authority to manage resources within BP, who in turn delegate further accountability to other authorised senior managers within the organisation.
The BP board, which is accountable to the company's shareholders, reviews BP's progress in addressing climate change at its meetings. The board separately monitors business conduct and performance management related to climate change through the work of the board's Environment and Ethics Assurance Committee, which is composed entirely of independently non-executive directors. Executive and senior management accountabilities as of April 2005 are summarised below.

Lord Browne **Group Chief Executive**
Has management control over BP's strategy for climate change. He is actively involved with climate change issues; for instance, makes speeches on climate change and BP's position and meets directly with climate change leaders e.g. Pew Center on Global Climate Change

Iain Conn **Group Executive Officer, Strategic Resources**
An executive director on the BP board, reporting to Lord Browne, who has responsibility for Health, Safety, Security and Environment, including climate change.

Greg Coleman **Group Vice President Health Safety, Security & Environment**
Reports to Iain Conn and has line management accountability for BP climate change policy and monitoring performance across the BP Group.

Additionally there are a number of people reporting to Greg Coleman who have responsibility at the corporate level for specific aspects of managing environmental and climate change issues:

John Wells	Vice President Environment
Chris Mottershead	Distinguished Advisor, Energy and the Environment
Mike McMahon	Senior Advisor, Climate Change
Kevin Ball	Director Energy Efficiency
Mark Akhurst	Manager, Product Emissions
Mark Proegler	Director, Emissions Markets Group
Gardiner Hill	Manager Group Environmental Technology

Parts of each BP business segment, including Integrated Supply and Trading, also have nominated specialists who have specific climate change responsibilities.

3. *Innovation*

What are the relevant technologies and/or processes that can be employed in your company/sector to achieve emission reductions? Have you taken any steps to develop/implement these technologies and do you anticipate being able to profit from their commercialisation?

Innovation is one of BP's four brand values and is key to BP's strategy on tackling climate change. BP believes that research and development is enabled through partnerships - with companies within and outside the petroleum sector, with academic institutions, think-tanks and NGOs; and importantly also with governments. We also believe that, although commercialisation of new technologies takes time and accrual of the full environmental benefits will taker generations, early action is necessary. For this reason BP will provide leadership often by acting as a first mover, working with others, to introduce emission reducing products and services which allow early steps to be taken on the path towards stabilisation.

The following is a selection of some of the actions we are taking:

Academic research We continue to sponsor a range of research activities at leading universities worldwide.

- **Stanford University, US:** We support a three-year, $2-million research programme on public policy aspects of modern energy markets.
- **Princeton University, US:** With Ford Motor Company we support the Carbon Mitigation Initiative, a 10-year, $20-million project that aims to find safe, effective and affordable strategies to reduce global CO2 emissions.
- **Cambridge University - Massachusetts Institute of Technology:** In addition to support of their program on Science and Policy of Climate Change, we fund a $4.5 million Cambridge – MIT project to design more energy efficient buildings.
- **Imperial College, London, UK:** We support a five-year programme investigating the use and storage of energy by buildings.
- **The Chinese Academy of Sciences and Tsinghua University:** We support 'Clean Energy: Facing the Future' . a 10-year, $10-million programme to develop and deploy new clean energy technologies for China and the rest of the world.
- **The Tsinghua BP Clean Energy Research and Education Centre**: An energy and environmental policy studies centre established through a $500,000 grant from BP.

CO2 capture and storage During 2004, we made significant progress in our work on CO2 capture and storage (CCS), which is emerging as a process with major potential to reduce GHG emissions. Using CCS, CO2 is prevented from reaching the atmosphere and instead stored in geological formations thousands of metres below the earth's surface. CCS can be carried out at power stations, oil and gas production sites or hydrogen production facilities. Before CCS can be used widely, two key issues must be resolved - costs and public acceptance. Costs have to be reduced and the public have to be assured that the technique is secure.

During 2004, the $25-million CO2 capture project that BP leads on behalf of a large public-private collaboration, including energy companies and governments, reported on its research into cost reduction and safety. Over the past five years, the project has sponsored research in a range of companies, universities and institutes, focusing on ways to reduce the cost of capture and maximize security of storage. During 2004, the project published data showing how some of these new technologies could reduce the costs of capture by up to 60% in a gas-fired power station and 48% in a refinery. The next phase of work will focus on further cost reductions and on developing standards that can be applied around the world.

In 2004, we also launched the CO2 capture and storage project at the In Salah gas field in the Algerian desert. This project is believed to be one of the largest of its type yet undertaken. In Salah is a joint venture between Sonatrach, Algeria's national energy company, BP and Statoil.

Approximately 10% of the gas in the reservoir is made up of CO2. Rather than venting the CO2, which is the accepted practice on other projects of this type, the project is compressing it and injecting it in wells 1,800 metres deep into a lower level of the gas reservoir where the reservoir is filled with water. At present production rates, we estimate that around one million tonnes of CO2 will be injected into the reservoir every year, which reduces GHGs by the equivalent of taking 200,000 cars off the road.
In 2005 we have announced plans for the world's first industrial scale 'Decarbonised Fuels' project which will supply 350MW of clean electricity (further details are provided in the response to question 1 above).

Bio-fuels We believe the next major breakthrough for fuels will be to create advanced bio-fuels from energy crops, trees or wastes. Today's conventional bio-fuels, such as ethanol or bio-diesel, are made from crops such as wheat or maize and oilseed rape. They can be blended with gasoline or diesel in small proportions, typically 5-10%, providing useful but limited reductions in GHGs. In 2004, BP became the first major oil company in Germany to blend a bio-component into diesel fuel, adding up to 5% of rapeseed methyl ester to diesel at four refineries. This is in line with EU policy to increase bio-components. The advanced bio-fuels now being researched would be made from materials that do not require intensive farming - trees such as willow and residues such as straw or organic municipal solid waste. Biomass materials absorb carbon dioxide as they are grown, reducing atmospheric GHG concentrations, before being turned into fuel. Our research suggests that such fuels could be blended with conventional fuels to offer a possible reduction of GHGs of around 25%. If used in conjunction with vehicle technologies such as diesel hybrid vehicles, such fuels might at least halve GHG emissions from the level of a typical gasoline-powered car today.
In 2004, we carried out a programme of research into biomass availability on a worldwide scale, including dedicated energy crops, agricultural and forestry waste and municipal solid waste. This work told us that biomass could make a material contribution as a primary energy resource for the road transport fuel pool and that, although extensive planting would be needed, the land requirements could be accommodated without using land needed to meet projected food production.

Hydrogen The most radical transport options currently being tested are fuel cell vehicles (FCVs) that use hydrogen. A fuel cell creates electricity to power a motor but requires its own fuel, hydrogen, to be available on board the vehicle. Hydrogen also requires infrastructure - a network of new refuelling stations. Hydrogen offers the potential to improve local air quality dramatically as its only emission is water vapour. But, while FCV cars and buses are running today as demonstration models, there are several major challenges to overcome before they can become a mass-market product. These include a reduction in the cost and functionality of FCVs, and the means of producing hydrogen without generating GHGs. Today, the lowest-cost method of manufacture is from natural gas which still emits some GHGs, although up to 40% less on a life-cycle basis than from current gasoline engines. It is possible to make very-low-GHG hydrogen using electrolysis from renewable sources, or by burning coal or gas and capturing the carbon, but these methods remain at the experimental stage.

Because hydrogen offers the possibility of transforming fuel supply, we participate in many projects worldwide to investigate its potential and to test different methods of manufacture, distribution and storage. Our aim is to test different pathways practically within a real-life environment. We are an infrastructure partner, working alongside governments and auto makers, in both the US government's programme to road test fuel cell automobiles and the nine-city Clean Urban Transport for Europe fuel cell bus programme.

In addition to the European and US programmes, our partnerships in Asia continue to grow. In China, we signed a Memorandum of Understanding to supply refuelling facilities for a demonstration of fuel-cell-powered buses in time for the 2008 Olympic Games. The project will be established by the Ministry of Science and Technology in Beijing and Shanghai.

Globally, we learned more about the importance of public acceptance of hydrogen demonstration projects with the launch of two refuelling facilities sited at conventional service stations in Singapore and Germany and the successful approval of our London hydrogen facility, following a public inquiry. Our partnerships have helped us learn an enormous amount

about the development of hydrogen as a fuel source - learning we are keen to share in order to promote greater understanding, awareness and use of hydrogen.

Solar BP is one of the world's largest solar panel manufacturing companies with global market share of nearly 20%. BP Solar has manufacturing facilities in the US, Spain, India, and Australia. The 2004 profitability of BP Solar and the solar industry was an exciting milestone in history of renewable energy.
While much has been accomplished, many challenges remain. In 2005, the solar industry appetite for silicon will begin to outpace that of the semiconductor industry. Silicon shortages are now leading to significant price increases is this vital material. Accordingly, BP Solar's technology initiatives have been focusing on the development of new silicon sources and alternative wafer fabrication techniques. These advances coupled with BP Solar's significant improvements in device efficiency provide a sound footing in the march toward grid parity in the face of rising material costs. Moreover, the current scale of the solar industry and sustained government support, will allow the economic introduction of these advances in coming years.
BP Solar is also working with key institutions, such as the Fraunhofer Institute Solare Energiesysteme in Germany and the Northwestern University in the USA to research potential solar technologies for the future. For example, in 2003 BP Solar announced it has achieved a world record in solar cell efficiency for a 125mm size cell. The 18.3% efficiency was verified by the Fraunhofer Institut and represents an 11% improvement over the 16.5% efficiency currently available with BP Solar Saturn crystalline silicon solar cells. Improved efficiency remains the underlying foundation for future BP Solar production of premium solar cells. This new technology will form the basis for the new 60+MW BP Solar Tres Cantos facility in Madrid, Spain, as well as underpinning efficiency improvements at the existing Alcobendas facility near Madrid.
See www.bpsolar.com

4. Emissions Trading

Do you have a strategy regarding emerging greenhouse gas emissions regulation and trading initiatives such as the EU Emissions Trading Scheme and the Chicago Climate Exchange?
If yes, specify the implications, detail the strategies adopted and actions taken to date.
If no, are you planning on doing so, and if so when?

BP has actively promoted the use of market mechanisms, including Emissions Trading and the Clean Development Mechanism, which were both formally recognized in the Kyoto Protocol. BP helped to develop the existing UK Emissions Trading Scheme (ETS), in which it is now a participant, and is following the same course of involvement within the European Union (EU) scheme, which was launched in January 2005. We believe the EU ETS, effectively the world's largest 'cap and trade' programme for GHG emissions, provides the launch pad for development of a global carbon market. The focus should be to support the use of credits resulting from mechanisms that encourage development of energy efficient infrastructure, in both the developing and developed world, and thereby reduce emissions.

BP have created an Emissions Markets Group to manage all our emissions trading activities, and established a trading desk within our Integrated Supply and Trading business – bringing together environmental, technical and business professionals with experience in the oil, gas and power markets. Processes have been devised to ensure our sites comply with the EU ETS and the system provides added incentives for them to reduce emissions. 27 BP sites are included in the system, which collectively emitted about 28% of BP's global equity share direct GHGs during 2004.
BP's also participates within the voluntary UK Emissions Trading Scheme (UK ETS):

- BP Exploration and Production (E&P) business participates within the Direct Participant section of the UK ETS. BP E&P promised to reduce emissions by 353,500 $teCO_{2e}$ over the lifetime of the scheme (2002-6), nearly 10% of the commitment made by UK industry, and has successfully achieved the agreed reductions in the period 2002-2004. BP E&P elected to remain in the UK scheme until the end of 2006 and will then transfer to the EU Emissions Trading Scheme.

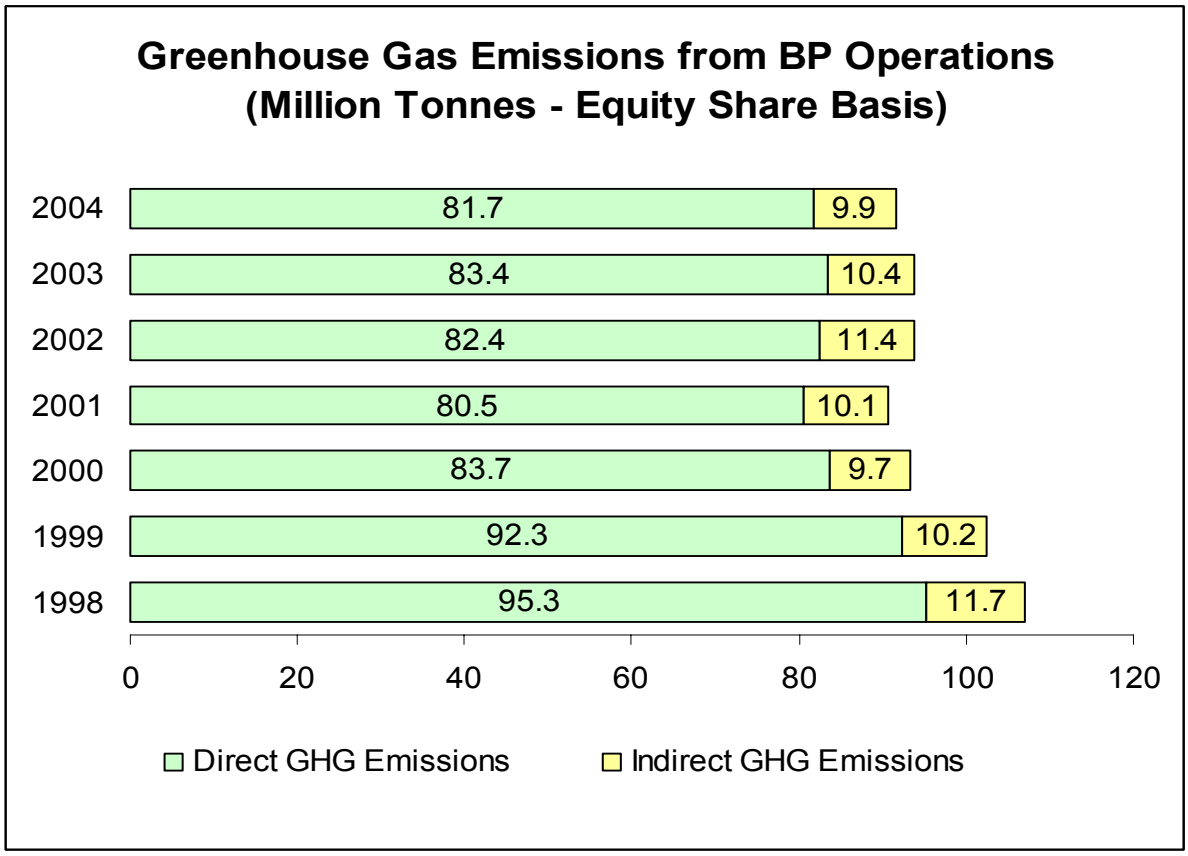
- BP Chemicals installations also participate in the Climate Change Agreement section of the UK ETS. BP Chemicals exceeded its targets in 2002 and 2004, and have agreed more stringent targets for the period beyond 2006, when the facilities have opted to participate in both the UK ETS and EU ETS.

Although we input into its development, BP are not currently participating in the Chicago Climate Exchange however we are involved in a number of other US voluntary climate change initiatives which promote the quantification and registration of GHG emissions. Examples include the US Department of Energy 1605b program and its reform to include entity-wide and project reporting of actual GHG emissions and emission reductions. We are also involved in shaping and participating in state and regional initiatives such as the California Climate Action Registry and the regional Greenhouse Gas Registry (RGGR) focused on the Northeast States, which provides the infrastructure for a GHG emission cap and trade program, the Regional Greenhouse Gas Initiative (RGGI). We also support the American Petroleum Institute (API) Climate Challenge and the American Chemical Council Climate Action programs, which are industry association public-private partnership initiatives with the US Department of Energy and other federal agencies, which aim to contribute to the US Presidential goal of reducing GHG intensity by 18 percent from 2002 levels by 2012 (Climate VISION). BP also supports the EPA Climate Leaders public-private partnership that encourages development of long-term climate change strategies and GHG reduction goals.

5. Operations

What is the quantity in tonnes CO2e of annual emissions of the six main GHGs produced by your owned and controlled facilities in the following areas?

- **Globally.**
- **Annex B countries of the Kyoto Protocol.**
- **EU Emissions Trading Directive.**



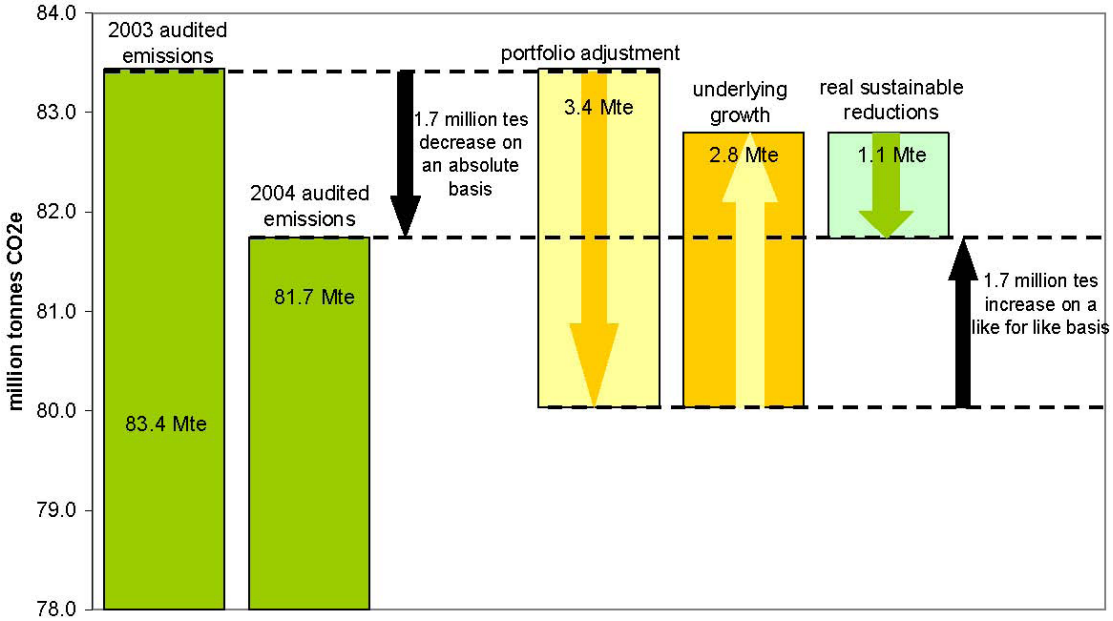
Equity Share GHG Emissions from BP Operations Globally	Units	1998	1999	2000	2001	2002	2003	2004
Direct Carbon Dioxide	Mte	84.8	82.8	76.6	73.4	76.7	78.5	76.8
Direct Methane	Mte	0.50	0.45	0.34	0.34	0.27	0.24	0.23
Direct GHG	Mte	95.3	92.3	83.7	80.5	82.4	83.4	81.7
Indirect Carbon Dioxide	Mte	11.7	10.2	9.7	10.1	11.4	10.4	9.9

See www.bp.com/hsechartingtool

BP's operational emissions are publicly reported on an equity share direct basis. The equity basis includes BP's share of emissions from all facilities wholly or partly owned by BP subsidiaries or by a joint venture entity in which BP has an interest. For 2004 our annual CO_2 emissions were 76.8 million tonnes and our annual CH_4 emissions were 0.23 million tonnes. We reported our global operational direct GHG emissions as 81.7 $MteCO_{2e}$ (million tonnes of GHG emissions as CO_2 equivalent). The rest of the six main GHGs produced in our operations have been estimated and add up to less than 1% of our total emissions, and therefore we currently consider these to be not material in terms of emission management. In addition to reporting our direct operational emissions we also track our indirect CO_2 emissions, which were 9.9 million tonnes in 2004, on an equity share basis. Indirect CO_2 emissions result from fossil

fuel combustion in power plants from which BP purchases energy supplied as either electricity or heat.

Our direct equity-share emissions in 2004 were lower than 2003 due to acquisitions, divestments, methodology improvements and also achievement of an internal target to achieve 1Mte of sustainable reductions (see response 7 below).



Full disclosure is made of BP's equity share direct and indirect emissions for the years 1998 to 2004 on our bp.com website. This includes disclosure of changes in direct emissions due to actions such as acquisitions or divestments or methodology changes, which do not impact global emissions. Year-to-year performance differences are explained in terms of decreases due to projects which result in sustainable reductions, which permanent eliminate emissions, and we report increases in emissions due to organic growth in our business.

After baseline audits of 1990 and 1998 emissions, BP's 2000, 2001, 2002 and 2003 inventories were subject to comprehensive audit by KPMG and DNV who verified that there was no material mis-statement of annual operational direct GHG emissions as assessed against the reporting requirements stated in BP's Group Environmental Reporting Guidelines. This process for the 2004 inventory is now complete, and once again the audit opinion is consistent with previous years.

BP specialists have been actively involved in the creation of international guidance on accounting and reporting of GHG emissions. We are active participants on WRI / WBSCD GHG Protocol working groups and played a leading role in the development of the recently published IPIECA / OGP/ API Petroleum Industry Guidelines for Reporting Greenhouse Gas Emissions (December 2003). BP's Reporting Guidelines are in good agreement with the WRI / WBSCD Protocol and IPIECA Guidelines.

As recommended by the IPIECA Guidelines, BP also estimates total emissions from all facilities under BP's operation control, irrespective of ownership. We use the terminology "100% operated" to distinguish emissions reported on this basis from the equity share basis reported above. BP's direct GHG emissions on a 100% operated basis were 98.1 Mte in 2004, compared to 81.7 Mte on an equity share basis. The 100% operated basis emissions reflects the scale of emissions over which BP has management responsibility / operational control, while the equity share basis reflects the potential exposure of the company's investors to GHG emission markets.

For 2004, BP's direct equity emissions for Annex B of the Kyoto Protocol were 59.5 million tonnes CO_2 and 0.18 million tonnes CH_4.

Kyoto Annex B	2002	2003	2004
CO2 Mte	63.5	64.0	59.5
CH4 Mte	0.21	0.18	0.18
GHG MteCO_{2e}	68.0	67.8	63.2

For consistency with BP's reporting basis, the EU Emissions Trading Directive data is presented on an equity share direct basis, for the BP facilities within EU member state participating in the scheme. For 2004, $C0_2$ is 22.8 million tonnes and CH_4 is 0.01 million tonnes.

EU Trading Scheme	2002	2003	2004
CO2 Mte	24.5	25.8	22.8
CH4 Mte	0.01	0.01	0.01
GHG MteCO_{2e}	24.8	26.1	23.0

6. Products and services: Do you estimate the emissions associated with:
- **Use and disposal of your products and services[1]?**
- **Your supply chain.**
- **Other indirect emissions (e.g. business travel)**
  - **If yes, for each of the above, please provide further information.**
  - **If no, are you planning on doing so and if so when?**

We have been working to quantify the GHG emissions created by the use of our products and to test processes for measuring the contribution of cleaner products to lowering emissions. We estimate that CO2 emissions in 2004 from use of hydrocarbon products sold by BP totalled 1,376 million tonnes. This has remained virtually constant since 2003, when product-related emissions were estimated to have been 1,354 million tonnes. We previously reported these 2003 emissions as 1,298 million tonnes, but during 2004 we have refined our analysis to include some additional items, resulting in this restatement. Achieving a proper representation of product-related emissions is a complex area and we continue to work on improving our methods. For 2003 and 2004, product-related emissions and energy sales (reported below) are estimated from BP's total reported product sales volumes as published in BP Financial and Operating Information 2000-2004 by applying IPCC energy and CO2 conversion factors.

	Emissions from end-use of BP Products (Million tonnes CO2)
Fuels and lubricants	586
Gas	732
Chemicals (assumes combustion)	58
TOTAL	**1,376**

The emissions from products sold are considerably greater than the emissions equivalent to the oil and gas that BP extracts from the earth (which were approximately equivalent to 560 million tonnes CO_2) because BP purchases substantial quantities of oil and gas to refine, process and sell.

We believe the stabilization of GHG concentrations in the earth's atmosphere can only be achieved by using lower carbon-intensity energy products and by using them more efficiently. We contribute towards both products and services: producing more gas than ever before – our gas production has more than doubled since 1998 and now accounts for about 40% of our total production; BP's capacity to produce clean fuels exceeds legislative requirements in all markets where BP has a refinery; and our solar business is growing at about 30% per annum with sales increasing from 32 megawatts (MW) of generated capacity to 71 MW over the past 4 years.

In terms of materials used in the manufacture of our products, BP is effectively at the beginning of the supply chain in terms of fossil fuel production. Thus the vast majority of the emissions related to BP activities are downstream of the supply chain to BP. In the case of our refined products and chemicals products, the carbon in the feedstock represents the majority of the material climate impact. BP is also a consumer of fossil fuels it produces, with most of our primary energy for operations generated from hydrocarbons we extract.

We report supply chain climate change impacts in relation to indirect GHG emissions, which are reported on an equity share basis. Our reporting scope is restricted to indirect emissions resulting from fossil fuel combustion in power plants from which BP purchase energy supplied as either electricity or heat. As noted previously, our total indirect emissions for 2004 were 9.9 million tonnes of CO_2.

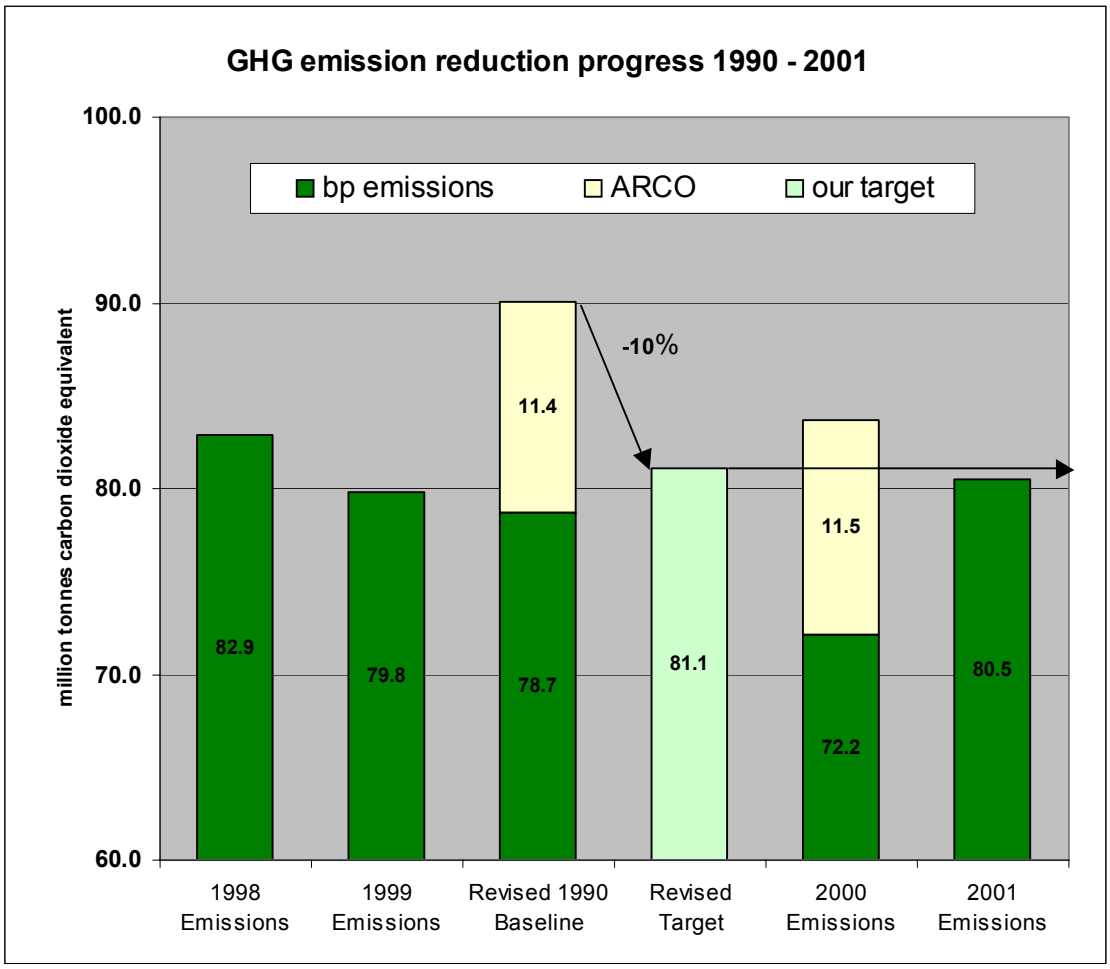
In addition to indirect emissions from operations, our largest offices around the globe participate in our Green Office initiative, which focuses on waste minimisation and energy efficiency. The initiative typically involves evaluation of indirect GHG from building electricity demand and road or air transport.

BP has over 135,000 different suppliers of materials, products and services across more than 100 countries providing a huge range of engineering, technical, construction, retail, financial, computing and legal services, among many others. Many of BP's suppliers already report their emissions publicly. While in some areas, we are beginning to evaluate supply chain emissions and identify ways to effect reductions, a complete inventory of BP's supply chain emissions is not viewed as either practical or material, relative to BP's operational or product related emissions.

7. Emissions reduction: Do you have emission reduction programmes in place?

- **If yes, when were they established and what are the targets? What have been the reductions achieved, the investment involved and the associated costs or savings? Please also detail any targets relating to Questions 6 and anticipated costs or savings.**
- **If no, are you planning on doing so, and if so when?**

BP has had GHG targets in place since 1998 which have brought about reductions in emissions. In 1997 in a speech at Stanford University, California, Group Chief Executive Lord Browne, stated that BP accepted that the risks from GHGs were serious and that precautionary action was justified. BP then announced a target for 2010: that greenhouse gas emissions from its own operations would be 10 per cent lower than emissions in 1990 – a tougher target than those set for many industrialized countries by the Kyoto summit in 1997.



BP achieved that target at the end of 2001, 9 years ahead of schedule, and gained around $650 million in net present value due to many projects to increase operational efficiency, apply technological innovation and improve energy management. For example, BP has achieved one of the energy industry's lowest unit rates of gas flaring – the burning of surplus gas produced at the same time as oil, either for safety reasons or no apparent market.

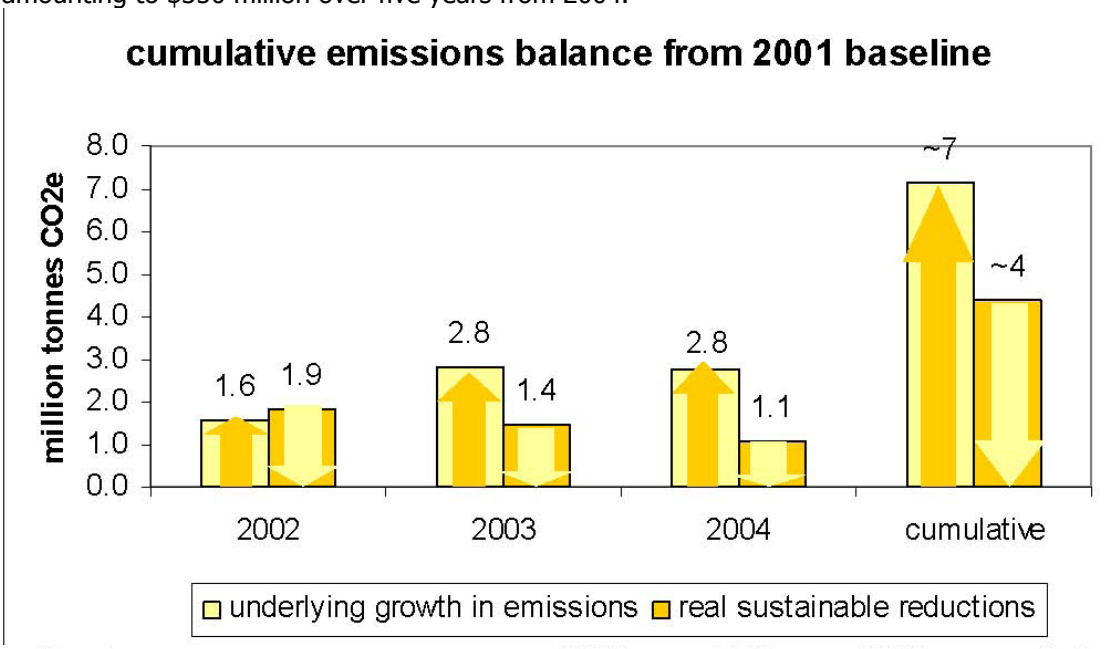
Because of the inherent uncertainty in our 1990 baseline, it was felt that fixing a clear baseline was more transparent and adjustments to the baseline could only be made for acquisitions or divestment which were material. The only material change was the acquisition of ARCO in 2000. Having set a new baseline with much lower uncertainty, from 2001 onwards we developed our reporting with an improved process to track performance by accounting annually for all acquisition and divestment changes irrespective of size.

After achieving our first target, in March 2002 BP set a new objective for the year 2012. Our aim is to offset growth in our emissions with reductions achieved partly from operational efficiency projects and partly from the supply of products that are cleaner or offer improved fuel efficiency. Thus in assessing our future performance, we aim to manage two principal kinds of emissions:

- Emissions generated from our operations such as refineries, chemicals plants and production facilities, **operational emissions**.
- Emissions generated by our customers when they use the fuels that we sell, **product emissions**.

The two forms of emissions need to be taken together to provide a meaningful picture of the nature of emissions through the life cycle of energy. For example, production of LNG is energy-intensive and results in high operational emissions, but the overall life-cycle emissions are lower than some other fossil fuels, because of the lower carbon content of LNG.

While in some years our operational emissions may increase, we expect our continued work on energy efficiency and flaring reductions to eliminate around half of any emissions growth we would otherwise create; and we intend to account for the other half by demonstrating how our actions are reducing emissions through the products we sell. We plan to achieve the planned reductions in operational emissions through capital investments in energy efficiency projects, amounting to $350 million over five years from 2004.



million tonnes	2002	2003	2004	cumulativ
underlying growth in emissions	1.55	2.81	2.76	7.12
real sustainable reductions	1.86	1.45	1.05	4.36

In line with our 2012 objective, more than half our emissions growth since 2001 of about 7 million tonnes has been offset by about 4 million tonnes of sustainable reductions (on a like-for-like basis after accounting for all divestments, acquisitions and methodology changes). This included over 1Mte of sustainable reductions in 2004 from projects to reduce flaring and venting or improve energy efficiency at our operating sites. Significant GHG reductions in 2004 included:

- 400,000 tonnes from reduced flaring and venting of gas and improved combustion efficiency in Canada, Abu Dhabi and Trinidad and Tobago.

- 250,000 tonnes from energy efficiency measures at the Whiting refinery and Texas City plant, US.
- 100,000 tonnes from energy efficiency measures taken across the Petrochemicals segment.

These reductions partly offset emissions increases during 2004 resulting from organic growth of our business; the largest of which were:

- 700,000 tonnes from new power generation facilities at Texas City, US, and in Vietnam.
- 500,000 tonnes from new LNG and methanol processing facilities in Trinidad and Tobago.
- 400,000 tonnes from additional production of oil and gas in Angola and Algeria.

Our aim for 2005 is to achieve a further 1Mte of sustainable reductions.

For the second part of our 2012 objective, our challenge is to meet the increasing demand for energy by providing products with lower impacts on the earth's climate. We believe that there are two parts to this; providing energy products with a lower carbon density per unit of energy supplied and using energy more efficiently. BP believes that contributing in both of these areas will help us build a successful business in the lower-carbon world of the future. To help us do this, we have been seeking to improve our understanding of how our products can contribute to lowering customers' emissions. This happens in two main ways:

Providing the energy customers need through fuels that contain progressively less carbon. Since 2001, we have grown our energy sales by 47% in clean natural gas and 5% in oil-based products, which are mainly transport fuels. As a result, natural gas now accounts for 61% of the energy we supply, up from 52% in 2001. At the same time, our sales of solar panels have grown by 78%.

Providing products that help customers use energy more efficiently. The methodology we have developed for this forms part of our Product-Enabled Emissions Reductions programme (PEERs). As part of the programme, we have studied how some of our formulated products, such as transport fuels and lubricants, enable customers to use energy more efficiently. On a case-by-case basis, we have estimated the emissions avoided by the products. More importantly, we have explored what it would take to increase market share of each product, or to create other energy-saving products. For example, in India we recently began marketing multigrade vehicle lubricants in a market dominated by monograde s, enabling vehicle engines to operate more efficiently. We are currently working to evaluate the impact this is having on CO2 emissions. Initial estimates suggest the product is acting to reduce customer emissions by around 0.8 million tonnes a year (for 2004 and 2003). Work is ongoing with external auditors to verify this figure. In 2005, our goal is to increase the number of such case studies, exploring how we can market emissions-saving products on a wider basis.

8. ***Emissions intensity***

Do you measure emissions intensity against production, sales or other output measures?

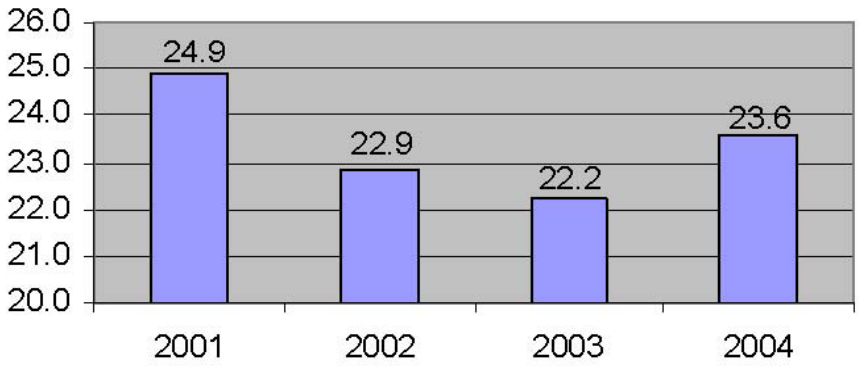
- **If yes, what is your historical and current intensity data? What are your emissions intensity targets?**
- **If no, are you planning on doing so and if so when?**

Since 2001, we have steadily increased oil & gas production, as well as increasing volumes of fuel processed in our refineries and volumes of manufacturing in our chemicals business. We can compare this business growth with our emissions growth to calculate our direct greenhouse gas emissions per unit of production, measured in tonnes of CO2e per barrel of production, refinery efficiency factors (uEDC), or manufactured volumes as appropriate (te/kte).

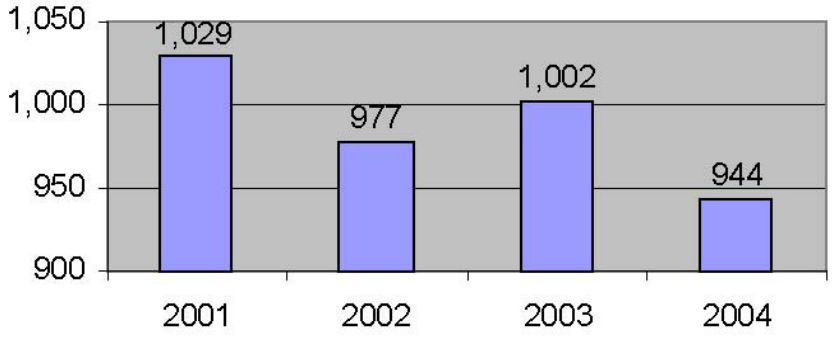
In 2004, compared with 2001, these showed:

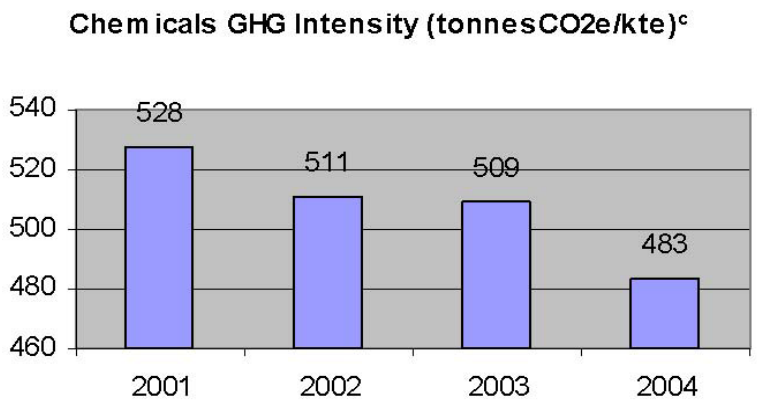
- 5% improvement in Exploration and Production to 23.6 teCO2e/mboe.
- 8% improvement in Refining to 944 teCO2e/kbduEDC.
- 8% improvement in Petrochemicals to 483 teCO2e/kte.

E&P GHG Intensity (tonnesCO2e/m boe[a])[c]



Refining GHG Intensity (tonnesCO2e/kbdUEDC[b])[c]





Notes

a Direct GHG emissions per unit of production are measured in tonnes of CO_2 equivalent (CO_2e) per thousand barrels of oil equivalent (mboe) for E&P, per thousand barrels per day (kbd) for Refining and per thousand tonnes (kte) for Chemicals

b uEDC – Utilized Equivalent Distillation Capacity is used globally in the refining industry as a normalized measure of production

c The Refining 2001 baseline reported in the *BP Sustainability Report 2003* has been corrected and restated from 1,064 to 1,029 $teCO_2$/uEDC.

d The emissions from our Gelsenkirchen site have now been re-apportioned between our petrochemicals and refining businesses, thus adjusting the GHG per unit performance of both in 2003.

Although Exploration and Production performance shows an overall improvement since 2001, our emissions per unit of production in 2004 were higher than in either 2003 or 2002. This was because, in some mature assets, oil and gas production declined at a faster rate than emissions, an effect which will be offset by new energy efficient production planned in our new profit centres by 2006. For Refining and Petrochemicals, the improvement reflects the continuing impact of energy efficiency measures in our manufacturing operations. Our Gas, Power and Renewables business is not included in this analysis because its emissions are relatively small.

In March 2002, when we announced our current public objectives on how we would manage GHG emissions until 2012, we stated that our continued work on energy efficiency and flaring reductions should eliminate around half of any emissions growth we would otherwise create. We also stated that this would involve a 10-15% improvement in our energy efficiency. Each of our main business targets has therefore taken on a share of this improvement, typically by undertaking to achieve a 15% efficiency improvement over the period in their operations.

To encourage this planned level of improvement, we launched a five-year, $350-million programme in 2004 to develop energy efficient technologies and processes that will reduce GHG emissions, with a goal of avoiding one million tonnes each year. All our businesses are invited to put forward ideas, and we fund those which have the best commercial and environmental prospects. In 2004, $50 million was allocated to such projects, with the remaining $300 million to be spent over the next four years. The $50 million spent in 2004 funded more than 100 new projects above and beyond the business-as-usual activities already under way at our sites. Many of these projects continue into 2005, and will be joined by 80 new projects, all contributing to future emission reductions. Outstanding efficiency performance has been achieved at several sites: for example, Grangemouth in Scotland has seen a 13% improvement in its energy intensity index over the last three years, along with a saving of $3 million in the last 18 months. One innovative intervention allowed the refinery to reduce CO2 emissions by switching from fuel oil to gas in large fired heaters, through the application of a ceramic coating technology.

9. Energy costs: What percentage of your total revenue is represented by the costs of fossil fuels and electric power?

BP, in common with other petroleum companies, uses part of the oil and gas it extracts to generate power and heat for its operations, and as such does not pay directly for fossil fuels or electric power, generated directly by the facility. Some of BP facilities do purchase steam of electricity from power stations owned by others. Annually we calculate how much primary energy we use in our operations (i.e. based on the energy content of fuel used, whether directly generated or purchased). For 2004, we estimate our primary energy use was 1.34 billion GJ, compared to 1.37 billion GJ in 2003 and 1.43 billion GJ in 2002. The cost of fossil fuel varies considerably but at typical fuel prices, we estimate that this energy has an equivalent cost of about $5 billion. Thus it can be concluded that less than 2% of BP's revenue would be represented by an equivalent cost of the primary energy used by our operations for power and heat.

For further information on this submission please contact bill.boyle@bp.uk.com

Climate Leadership Index 2005

Fifteen high-impact sectors were selected, based on their relative carbon intensity and financial sensitivity to climate-related impacts. In addition to the twelve sectors from last year's CLI, we have expanded this year's index to include the Industrial Conglomerates, Pharmaceuticals and Telecommunications sectors. Moreover, given the growth in the disclosure rate (up from 59% in CDP2 to 71% in CDP3), we expanded the CLI to 60 firms (up from 50 in CDP2).

From the fifteen high-impact sectors, companies deemed to have above-average responses were chosen as potential candidates for inclusion in the CLI. From this pool of above-average candidates, a shortlist of companies that provided the best responses was chosen. The companies in the CLI were selected on the basis of:

- Breadth of climate-change issues addressed (see the 6-factors below)[1]
- Depth, completeness, and sophistication of the responses
- Innovest's assessment of the companies' climate-change strategies, demonstrated risk-management capability, and strategic positioning vis-à-vis "next-generation" opportunities.

How have the responses been evaluated?

The 6 factors used to evaluate company CDP responses are based on the CDP questionnaire submitted to the FT500 on behalf of the signatories.[1] These are:

1. Strategic Awareness: the extent to which a firm considers climate risks and opportunities to be relevant to its business.
2. Management Accountability/Responsibility: whether and how a company has allocated responsibility for the management of climate-related issues.
3. Emissions Management and Reporting: the progress a company has made in quantifying and disclosing/reporting its emissions profile, including the use of third-party verification.
4. Emissions Trading: the extent to which a firm has considered emissions trading in its risk management response.
5. Programs in Place: quality and nature of any emissions reduction programs, including energy efficiency, which a firm has implemented.
6. Establishment of Targets: have formal GHG emissions/reduction targets been set with a timeline?

1 The full 9-point questionnaire sent to the FT500 companies can be found in the back of this report in Appendix B.

Relative to their FT500 sector peers, the companies listed are comparatively well-positioned to respond to the financial implications of global climate change.

To determine the number of CLI companies included in each sector, the responses were analyzed to establish a best-in-class level of response quality for each sector based on the criteria articulated in the report. Those that equaled the best-in-class quality were included in the index, while those that fell below were excluded. Some industry sectors have more "best in class" respondents than others. Several caveats are, inevitably, in order:

1. The analysis is based on self-reported, non-verified responses.
2. The analysis is focused more heavily on carbon management structures and capabilities than on either company-specific levels of risk exposure, marginal abatement costs or actual emissions reductions.
3. The choice of 60 as the cut-off point for inclusion in the Climate Leadership Index was an arbitrary one. As with any effort made to "draw the line" at a particular point, a number of well-qualified firms have been excluded.

The 60 companies selected comprise the 2005 Climate Leadership Index (CLI) New entrants to this year's CLI are highlighted in light blue.

Relative to their FT500 sector peers, the companies listed are comparatively well-positioned to respond to the financial implications of global climate change. Readers with an interest in examining Innovest's portfolio analysis of these firms are directed to the CDP website.

Climate Leadership Index 2005

Sector	Companies
Automobiles	BMW Daimler Chrysler Ford Honda Toyota
Banks	ABN AMRO Barclays Dexia HBOS HSBC HVB RBC UBS Westpac
Chemicals	Air Products & Chemicals BASF Bayer Dow Chemical DuPont
Diversified Financials	Citigroup Fortis ING
Electric Power – International	Endesa Enel Iberdrola Kansai Electric Power Scottish Power
Electric Power – N. America	American Electric Power Duke Energy Entergy Exelon FPL Group
Food Products, Beverages & Tobacco, Food & Drug Retailing	Cadbury Schweppes Tesco Unilever
Industrial Conglomerates	General Electric Siemens
Insurance & Reinsurance	Allianz Munich Re Swiss Re
Integrated Oil & Gas	BP ChevronTexaco Norsk Hydro RD/Shell Suncor
Metals & Mining	Alcan Alcoa Anglo American BHP Billiton Rio Tinto
Paper and Forest Products	International Paper Stora Enso
Pharmaceuticals	BristolMeyersSquibb GlaxoSmithKline Novo Nordisk
Telecommunications	BT Group Deutsche Telekom Telstra
Transportation	Mitsui UPS

Below are some comments from the Climate Leaders responses to CDP3

Air Products

Air Products is involved in gas-to-liquids (GTL) and liquefied natural gas (LNG) technologies that enable economic recovery and use of natural gas reserves located in remote areas not accessible to pipelines. This is an expected growth area because natural gas is being viewed as a "bridge" fuel, playing a significant role in the 21st century transition to a post-fossil fuel economy.

BASF

BASF produces a range of products that allow CO_2 emissions to be reduced. Examples are our heat insulation materials, our fuel additives, and our plastics for automotive engineering. Our plastic EPS alone reduced CO_2 emissions by 138 million tons in 2003 through improved heat insulation. Our fuel additives reduced CO_2 emissions by 22 million tons in 2003.

Between 1990 and 2002 we reduced GHG emissions by 38 percent in absolute terms. Between 2002 and 2004 we reduced emissions per metric ton of sales product by 1.4 percent. In June we inaugurated our second combined heat and power plant at our Ludwigshafen site in Germany. We invested €240 million in the construction of this plant. It will reduce CO_2 emissions by more than 500,000 metric tons annually.

Bristol-Myers Squibb

..accept our responsibility to reduce emissions of greenhouse gases and have established long-range goals for the company in this regard... Our strategies and actions taken include managing and reducing energy demand/consumption, working with our energy suppliers to evaluate green energy options, increasing equipment efficiencies, site operations to conserve natural resources, and applying new/emerging and more energy efficient technologies throughout our operations.

Cadbury Schweppes

In the event of severe climate change, it is possible that water will become an increasingly scarce resource in many parts of the World. As water is an essential ingredient for beverages and is also required for cleaning/hygiene purposes for all food manufacturing processes, this could well turn out to be the biggest potential impact for us. We have therefore implemented programmes to reduce our consumption and use of water so that we can minimise any such future potential impact on our business.

Deutsche Telekom

Views climate protection as one of the greatest challenges facing society in the 21st century. We are convinced that the global consumption of resources will continue to escalate in the future, and the resultant emissions will lead to an exacerbation of environmental problems. With this in mind, for many years we have been firmly committed to reducing CO_2 emissions, and continue to play an active and formative pioneering role in this field.

Dow Chemical

In 1995, Dow set an energy-intensity goal to reduce energy use per pound of production by 20% by 2005. In 2004 we achieved that goal a year early, having reduced our energy intensity by 21% since 1994. Just in 2004 alone, energy intensity was down 5%. Cumulatively through that period, Dow saved approximately $3 billion in energy costs.

Duke Energy

Duke Energy now supports the enactment of U.S. federal legislation that will result in a gradual transition to a lower-carbon-intensive economy – preferably in the form of a federal-level carbon tax that would apply to all sectors of the economy. Duke Energy believes that this kind of federal policy response is preferable to a patchwork of different state requirements, and it would be less costly to society and more effective in managing greenhouse gas emissions. An economy-wide approach would also be easier to integrate into a comprehensive global response.

Ford

Ford is the only automaker actively engaged in the development of four promising future alternatives to today's gasoline engines including, clean diesels, gasoline-electric hybrids, hydrogen internal combustion engines (H2ICE) and hydrogen fuel cell vehicles (FCV).

Ford, along with 11 other companies and the City of Chicago, founded the Chicago Climate Exchange.

In April 2002, Ford Motor Company Ltd completed its first CO_2 transaction.

General Electric

GE does believe that its lower emitting and more energy efficient products and services provide solutions to our customers in a carbon-constrained world. The ecomagination products... and more to come will certainly provide a net benefit to society. In fact, through the use of just two of GE's products, compact fluorescent light bulbs and wind turbines, more GHG emissions were reduced than were produced by all of GE's operations.

Toyota

Toyota has developed a medium-/long-term CO_2 emissions reduction scenario on a global basis and is steadily implementing action. Specifically, by aiming to achieve the highest production-environment efficiency in each country/region in the production area, Toyota plans by 2010 to have reduced its global production-related CO_2 emissions per unit of sales by 20% compared to the 2001 level.

UPS

Managing fuel consumption and greenhouse gas emissions is a business opportunity – one that can improve the bottom line, reduce our impact and our customers' impact on the environment and increase the long-term viability of our company. Reducing emissions is a constant priority and challenge.

Westpac

Within Australia, there is no doubt that continuing uncertainty over future emissions policy is hindering investment in necessary energy infrastructure. Climate change policy in Australia must address the challenge of maintaining energy supplies at globally competitive costs once additional costs are placed on greenhouse gas emissions. The difficulties of this are exacerbated by Australia's high dependence on fossil fuels for energy and the fact that the vast majority of Australia's emissions come from the energy sector.

1 February 2006

Attachment 7

CARBON DISCLOSURE PROJECT

57A Farringdon Road
London, EC1M 3JB
United Kingdom
Email: info@cdproject.net
www.cdproject.net

Name
Title
Company Name
Address 1
Town / City
Postcode
Country

Greenhouse Gas (GHG) Emissions and Climate Change

Dear Salutation,

As institutional investors representing $31 trillion funds under management, we are continuously examining the companies in our portfolios to assess the potential risks and opportunities relating to climate change. We are seeking to improve our understanding of possible material impacts on the value of our investments driven by the following factors connected with climate change:

- Taxation and regulation
- Changes in weather patterns
- Technological innovations
- Shifts in consumer attitude and demand

As current and prospective investors in your company, we would be grateful if you could complete the enclosed questionnaire. This has been sent to more than 1,800 of the world's largest quoted companies and is the fourth such request (CDP4). On previous occasions we surveyed the FT500 companies, 45% of which completed the questionnaire in 2003; 60% in 2004 and 71% in 2005. This year we have decided to expand the request to more companies in collaboration with the partners listed in the attached further information.

NOTE: WE WILL USE 'A' OR 'B' OR 'C' BELOW WHERE RELEVANT:

A. We would also like to take this opportunity to thank you for your response last year and look forward to receiving updated information this year.

B. As you may be aware, your company did not complete our previous request for information. We would be very grateful for a response this year, or information explaining why it is not appropriate for your company to inform your investors by completing this request.

C. This is the first time we have written to your company. To aid comparability, we would be very grateful if you could provide data for the last four measurement cycles, where available.

We recognise it can be time-consuming to answer a questionnaire in addition to your current environmental reporting. However, these questions, which have been updated to reflect recent developments, are specifically focused on climate change. Your answers will provide valuable, investment-relevant information that is not always easy to obtain from other sources.

Your co-operation would be greatly appreciated.

Yours sincerely

Paul Dickinson
Coordinator writing on behalf of the institutional shareholders listed overleaf.

Carbon Disclosure Project Advisory Board:
Doug Bauer, Andrew Dlugolecki, Colin Maltby, Bob Monks, Robert Napier,
Martin Whittaker, Caroline Williams, Eckart Wintzen. Chair: James Cameron

1 February 2006

Aberdeen Asset Managers
ABN AMRO Bank N.V.
ABP Investments
ABRAPP - Associação Brasileira das Entidades Fechadas de Previdência Complementar
Activest Investmentgesellschaft mbH
Acuity Investment Management Inc
Allianz Group
AMB Generali Asset Managers Kapitalanlagegesellschaft mbH
AMP Capital Investors
ANBID - Brazilian Association of Investment Banks
ASN Bank
Australia and New Zealand Banking Group Limited
Australian Ethical Investment Ltd
AXA Group
Baillie Gifford & Co
Banco do Brazil S.A.
Bank Sarasin & Co, Ltd
BBC Pension Trust Ltd
BMO Financial Group
BNP Paribas Asset Management (BNP PAM)
Boston Common Asset Management, LLC
BP Investment Management Limited
Brasilprev Seguros e Previdência S.A.
British Columbia Investment Management Corporation (bcIMC)
BT Financial Group
BVI Bundesverband Investment und Asset Management e.V.
Caisse des Dépôts
California Public Employees' Retirement System
California State Teachers' Retirement System
Calvert Group, Ltd.
CAM North America LLC (a subsidiary of Legg Mason, Inc), Social Awareness Investment Program
Canada Pension Plan Investment Board
Carlson Investment Management
Carmignac Gestion
Catholic Superannuation Fund (CSF)
CCLA Investment Management Ltd
Central Finance Board of the Methodist Church
CI Mutual Funds Signature Funds Group
CIBC
Citizens Advisers Inc
Close Brothers Group plc
Comité syndical national de retraite Bâtirente
Connecticut Retirement Plans and Trust Funds
Co-operative Insurance Society
Credit Suisse Group
Daiwa Securities Group Inc.
Delta Lloyd Investment Managers GmbH
Deutsche Bank
Deutsche Postbank Privat Investment Kapitalanlagegesellschaft mbH
Development Bank of Japan
Development Bank of the Philippines
Dexia Asset Management
DnB NOR
Domini Social Investments LLC
DWS Investment GmbH
Environment Agency Active Pension Fund
Ethos Foundation
F&C Asset Management
Fédéris Gestion d'Actifs
First Swedish National Pension Fund (AP1)

Five Oceans Asset Management Pty Limited
Folksam Asset Management
Fonds de réserve pour les retraites – FRR
Fortis Investments
Franklin Templeton Investment Services Gmbh
Frater Asset Management
Fukoku Capital Management Inc
Gartmore Investment Management plc
Gen Re Capital GmbH
Generation Investment Management
Gerling Investment Kapitalanlagegesellschaft mbH
Hastings Funds Management Limitied
Henderson Global Investors
Hermes Investment Management
Hospitals of Ontario Pension Plan (HOOPP)
HSBC Holdings plc
Hyundai Marine & Fire Insurance Co, Ltd
I.DE.A.M Integral Dévelopment Asset Management
Indexchange Investment AG
ING Investment Management Europe
Insight Investment Management (Global) Ltd
Interfaith Center on Corporate Responsibility
Ixis Asset Management
Jupiter Asset Management
KLP Insurance
LBBW - Landesbank Baden-Württemberg
Legal & General Group plc
Light Green Advisors, LLC
Local Authority Pension Fund Forum
Lombard Odier Darier Hentsch & Cie
Maine State Treasurer
Meag Munich Ergo Kapitalanlagegesellschaft mbH
Meeschaert Asset Management
Meiji Yasuda Life Insurance Company
Meritas Mutual Funds
Merrill Lynch Investment Managers
Mitsubishi UFJ Financial Group (MUFG)
Mitsui Sumitomo Insurance Co., Ltd.
Mizuho Financial Group, Inc
Monte Paschi Asset Management S.G.R. – S.p.A
Morley Fund Management
Munich Re
Natexis Banques Populaires
National Australia Bank Limited
Nedbank
New York City Employees Retirement System
Neuberger Berman
New York City Teachers Retirement System
New York State Common Retirement Fund
Newton Investment Management
NFU Mutual Insurance Society
Nikko Asset Management Co., Ltd.
Ontario Municipal Employees Retirement System (OMERS)
Ontario Teachers Pension Plan
Oregon State Treasurer
Pax World Funds
PETROS - The Fundação Petrobras de Seguridade Social
PGGM
PhiTrust Finance
Pictet & Cie (Europe) SA

Portfolio Partners
Prado Epargne
PREVI - Caixa de Previdência dos Funcionários do Banco do Brasil
Public Sector Superannuation Scheme and Commonwealth Superannuation Scheme (PSS/CSS)
Rabobank
Railpen Investments
Rathbone Investment Management / Rathbone Greenbank Investments
Real Assets Investment Management Inc.
RLAM
Robeco
Rockefeller & Co Socially Responsive Group
SAM Sustainable Asset Management
Sanlam Investment Management
Sanpaolo Imi Asset Management Sgr
Sauren Finanzdienstleistungen
Schroders
Scotiabank
Scottish Widows Investment Partnership
Second Swedish National Pension Fund (AP2)
Shinkin Asset Management Co., Ltd
Siemens Kapitalanlagegesellschaft mbH
SNS Asset Management
Societe Generale Asset Management UK Limited
Societe Generale Group
Sogeposte
Sompo Japan Insurance Inc.
Standard Life Investments
State Street Global Advisors
State Treasurer of California
Storebrand Investments
Sumitomo Mitsui Financial Group
Superfund Asset Management GmbH
Swiss Reinsurance Company
TfL Pension Fund
The Co-operative Bank
The Dreyfus Corporation
The Ethical Funds Company
The Shiga Bank Ltd. (Japan)
The Wellcome Trust
Third Swedish National Pension Fund (AP3)
Threadneedle Asset Management
Tokio Marine & Nichido Fire Insurance Co., Ltd
Trillium Asset Management Corporation
Triodos Bank
Tri-state Coalition for Responsible Investing
UBS AG
Union Investment
United Methodist Church General Board of Pension and Health Benefits
Universal-Investment-Gesellschaft mbH
Universities Superannuation Scheme (USS)
Vancity Group of Companies
Vermont State Treasurer
VicSuper Proprietary Limited
Walden Asset Management, a division of Boston Trust and Investment Management Company
Warburg-Henderson Kapitalanlagegesellschaft mbH
WestLB Asset Management (WestAM)
Zurich Cantonal Bank

Carbon Disclosure Project (CDP4) Greenhouse Gas Emissions Questionnaire

We request as full a reply as possible to the following questions by no later than 31st May 2006. Please send your response electronically, in English, to the Project Coordinator at info@cdproject.net or use our web site for direct data entry www.cdproject.net/cdp4. If you already publish the relevant information, please indicate for each question how this can be accessed. If at this stage you can only provide indicative information we would still welcome this; "a best guess" is more valuable to us than no response. If you are unable to answer any of these questions please state the reasons why.

This is the fourth CDP information request (CDP4). Please state the dates of reporting periods, and if reporting emissions for the first time, please provide data for the last four measurement periods, where available. For previous respondents, please highlight developments and trends since CDP3. The following pages provide guidance on answering the questionnaire and further information about CDP4.

1. *General*: How does climate change represent commercial risks and/or opportunities for your company?

2. *Regulation*: What are the financial and strategic impacts on your company of existing regulation of GHG emissions, and what do you estimate to be the impact of proposed future regulation?

3. *Physical risks*: How are your operations affected by extreme weather events, changes in weather patterns, rising temperatures, sea level rise and other related phenomena both now and in the future? What actions are you taking to adapt to these risks, and what are the associated financial implications?

4. *Innovation*: What technologies, products, processes or services has your company developed, or is developing, in response to climate change?

5. *Responsibility*: Who at board level has specific responsibility for climate change related issues and who manages your company's climate change strategies? How do you communicate the risks and opportunities from GHG emissions and climate change in your annual report and other communications channels?

6. *Emissions*: What is the quantity in tonnes CO_2e of annual emissions of the six main GHG's produced by your owned and controlled facilities in the following areas, listing data by country?
   - Globally.
   - Annex B countries of the Kyoto Protocol.
   - EU Emissions Trading Scheme.

   To assist in comparing responses please state which methodology you are using for calculating emissions and the boundaries selected for emissions reporting. Please standardise your response data to be consistent with the accounting approach employed by the GHG Protocol (www.ghgprotocol.org). Please list GHG Protocol scope 1, 2 and 3 emissions equivalent showing full details of the sources. How has this data been audited and/or externally verified?

7. *Products and services*: What are your estimated emissions in tonnes CO_2e associated with the following areas and please explain the calculation methodology employed.
   - Use and disposal of your products and services?
   - Your supply chain?

8. *Emissions reduction*: What is your firm's current emissions reduction strategy? How much investment have you committed to its implementation, what are the costs/profits, what are your emissions reduction targets and time-frames to achieve them?

9. *Emissions trading*: What is your firm's strategy for, and expected cost/profit from trading in the EU Emissions Trading Scheme, CDM/JI projects and other trading systems, where relevant?

10. *Energy costs*: What are the total costs of your energy consumption, e.g. fossil fuels and electric power? Please quantify the potential impact on profitability from changes in energy prices and consumption.

NOTE: WE WILL INCLUDE THE FOLLOWING TEXT IN THE QUESTIONNAIRE WHEN WRITING TO ELECTRIC UTILITIES:

For electric utilities
Explain to what extent current and future emissions reductions involve a change of use in existing assets (i.e. fuel switching at existing facilities) or a need for new investment? What percentage of your revenue is derived from renewable generation in a government sponsored price support mechanism?

CDP4 Greenhouse Gas (GHG) Emissions and Climate Change Questionnaire Guidelines:

To help improve consistency and comparability of responses, below are some guidance notes to the CDP4 questionnaire.

General
When answering this question on commercial risks and opportunities please also consider your corporate reputation and changes in consumer attitude and demand.

Regulation
With regard to the financial and strategic impacts of regulation, please specify both risks and opportunities, detail the strategies adopted and actions taken to date.

Physical risks
Please detail your strategies to adapt to, or benefit from, these phenomena and any actions taken to date. The Second Working Group of the Intergovernmental Panel on Climate Change in their Third Assessment Report of February 2001 stated: "Adaptation is a Necessary Strategy at All Scales to Complement Climate Change Mitigation Efforts".

Innovation
Please explain the estimated quantity of reduced GHG emissions from your innovations and the estimated costs/profits from each technology, process or service.

Responsibility
When answering this question the following information would be useful to us: details of any board and/or management committee responsible for your company's climate change strategy such as composition, frequency of meetings and reporting structure. Do you link executive officers' compensation to attainment of GHG reduction targets?

Emissions
This questionnaire aims to improve the quality of information disclosed in relation to GHG emissions. The signatories recognise that at present there exists no single commonly accepted methodology for measuring and reporting these emissions, which makes it difficult to compare data. Please state which methodology you used. Please standardise your responses to accord with the boundaries in www.ghgprotocol.org and provide detail on how these were selected and defined. Please show calculations used. If reporting emissions for the first time, please provide data for the last four measurement periods, where available.

Six main Greenhouse Gasses (GHG's): Carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), Hydroflurocarbons (HFCs), Perfluorcarbons (PFCs) and Sulphur Hexafluoride (SF_6).

For the EU Emissions Trading Scheme, please include audited results from all your facilities covered by the scheme. For these facilities please also indicate the number of allowances issued under the applicable National Allocation Plans, and list data by country.

Products and Services
Please explain your strategies for reducing emissions from your products, services and your supply chain. If you are a financial services company, do you take into account the emissions related risks and/or opportunities of the companies you invest in, lend to, or insure?

Emissions Reduction
When detailing your emissions reduction targets, please provide information on emissions reductions from your own operations, products and services and your supply chain. If you do not currently have a target, please explain when you plan to introduce one. Please make clear the difference between mandatory and voluntary emissions reductions. Please describe the expected costs/profits of your emissions reduction programme(s); the technologies and/or processes your company will use to achieve its target and the extent to which you will be able to pass on the costs of reducing emissions to your customers.

Emissions Trading
When answering this question the following information would be useful to us:
- The percentage of your annual group-wide revenue coming from operations covered by the EU ETS.
- The amount in non-compliance fines and of credits purchases your firm has paid out over the last reporting period.
- The extent to which your company expects to benefit financially from the regime (i.e. through the sale of surplus credits).
- The total amount invested by your firm in Clean Development Mechanism (CDM) and Joint Implementation (JI) projects.
- The percentage of your reduction obligations that you expect to meet through credits from these projects.

Further information about the Carbon Disclosure Project
This is the fourth time the Carbon Disclosure Project has made an information request. Your company may be receiving this for the first time because in 2006 we have expanded the number of companies receiving the request beyond the initial sample of the FT500 to include those listed below. To find out more about the previous responses from other major companies, see our web site at www.cdproject.net where you can also find full details on the background and structure of CDP.

Why is this request from a group of shareholders to a group of companies rather than from an individual shareholder to an individual company?
a) To facilitate ease of response for investee companies by being able to provide one response to numerous investors.
b) To receive data in a common format from the largest companies in the world.

Which companies have been written to and who are the CDP4 partners?
This information request has been sent to:
- 500 of the largest companies globally based on market capitalisation (FT500).
- 500 of the largest companies in the USA based on market capitalisation (S&P 500), in partnership with the Investor Network on Climate Risk (INCR).
- 300 of the largest electric utilities globally based on market capitalisation, in partnership with CalPERS and CalSTRS.
- 300 of the largest emitters in Canada, in partnership with the Conference Board of Canada.
- 200 of the largest companies in Germany based on market capitalization, in partnership with BVI Bundesverband Investment und Asset Management e.V. (German Investment and Asset Management Association)
- 150 of the largest companies in Japan, selected by and in partnership with the Association for Sustainable and Responsible Investment in Asia (ASrIA) and the CDP Secretariat Japan.
- 150 of the largest companies in Australia and New Zealand based on market capitalisation (ASX100 & NZ50), in partnership with the Investor Group on Climate Change.
- 120 of the largest companies in France based on market capitalisation (SBF 120), in partnership with AXA and Agence de l'Environnement et de la Maîtrise de l'Energie (ADEME), the French Governmental Agency for Environment and Energy Efficiency.
- 100 of the largest companies in the UK based on market capitalisation (FTSE 100), in partnership with the UK Climate Impacts Program.

- 50 of the largest companies in Brazil, listed on the BOVESPA Sao Paulo Stock Exchange, in partnership with the Brazilian Association of Pension Funds (ABRAPP) and BANCO ABN AMRO REAL.
- 40 of the largest companies in Asia outside of Japan, selected by and in partnership with the Association for Sustainable and Responsible Investment in Asia (ASrIA).

What are the legal and financial obligations for participating investment institutions?
There are no legally binding obligations and no fee involved in supporting the initiative.

What are the legal / financial implications for responding corporations?
The legal implications are the same as those associated with standard disclosure. There may be some internal costs associated with answering the questionnaire.

What will happen to the data received?
The submitted data will be made available to the signatory investors, the CDP4 partners and their report writers. The FT500 report will be written by Innovest Strategic Value Advisors who have been retained to analyse the data and produce a thematic investment-relevant document. See www.innovestgroup.com for information on their work. The CDP4 partners may also publish reports based on the data received and will share these data with their consultants.

From September 2006, CDP4 Reports will be sent to participating investors, responding companies and made publicly available at www.cdproject.net. In addition, all submitted and authorised data will be accessible at the same address. **When sending your response, please indicate if you authorise CDP to make your submitted data publicly available from September 2006**. ***If you wish to provide us with data that you do not want to be directly disclosed in these reports, please state this when responding. We will instruct report writers to respect such requests.***

What if a company wishes to change or update a response?
For responses and any revisions to be included in the report, they must be received by 31 May 2006. For the web site, CDP can accept responses or revisions to responses at any time and will aim to make these available from www.cdproject.net within five days of receipt.

How can a company confirm its participation?
On receipt of these documents, please e-mail info@cdproject.net to confirm your participation in the Carbon Disclosure Project.

What is the legal status of the co-ordinating body?
It is a Special Project of the Philanthropic Collaborative at Rockefeller Philanthropy Advisors, with United States IRS 501(c)3 charitable status, with the sole purpose of providing a co-ordinating secretariat for the participating investors.

Will there be publicity?
The co-ordinating body issued the attached press release agreed by the participating investors on 1 February 2006. The project team does not have authority to make other statements on behalf of this group.

Who funded the co-ordinating body?
In the interests of providing an independent service to the signatories, the Carbon Disclosure Project has been funded by: Climate Initiatives Fund UK, Esmée Fairbairn Foundation UK, Home Foundation Holland, Lens Foundation for Corporate Excellence USA, Network for Social Change UK, Polden Puckham Charitable Foundation UK, Rockefeller Brothers Fund USA, Rufus Leonard UK, The Carbon Trust UK, The Funding Network UK, The Nathan Cummings Foundation USA, Turner Foundation USA, W. Alton Jones Foundation USA, WWF UK.

Are there other similar initiatives?
The CDP Secretariat works with the Global Reporting Initiative (GRI) to ensure that this request and the GRI indicators are closely aligned and complementary. The CDP Secretariat also works with the World Economic Forum GHG Registry, which benefits from an auditing standard, and we recommend the registry to all responding corporations (ww.weforum.org/ghg).

Report on Emissions Reduction and Competitive Positioning Strategy 2005 – Ford Motor Company

Whereas:

In the U.S., passenger cars and light trucks account for one-fifth of all annual U.S. carbon dioxide emissions linked to climate change.

Ford Motor Company bears the auto industry's second-highest "carbon burden" – or total carbon dioxide emissions associated with its fleet, due in part to the poor fuel efficiency of its products, not the size of its fleet.

Worldwide consensus that greenhouse gas (GHG) emissions need to be reduced continues to grow, with ratification of the Kyoto Protocol causing many countries to enact limits on these emissions. Already, the European Union and some U.S. states have enacted similar limits, and Canada's reduction target of 25% is due by the end of the decade.

In September 2004, the California Air Resources Board adopted regulations requiring vehicle emissions reduction in California; other states will follow. Roughly one-quarter of the US vehicle market is currently required to meet California's standards, to which the greenhouse gas regulations will eventually be added.

Fuel-efficiency standards more stringent than U.S. standards have recently been approved in China, the fastest-growing passenger car market in the world. Most of Ford's SUVs sold today in the U.S. would be illegal for sale in China by 2008.

These standards are creating markets favorable to automakers with lower carbon burdens and agility in introducing clean technology vehicles.

Competitors Honda and Toyota, already offering vehicles with better than average fuel economy, have been moving quickly to introduce lower-emission advanced technology vehicles to consumers. Toyota successfully introduced hybrid vehicles to the U.S. market three model years ago, and has already moved to the second generation of hybrid technology. Toyota has outsold Ford worldwide for the first time in history (USA Today 11/11/03).

In January, 2004, Ford announced that it would be forced to purchase patent rights from Toyota in order to launch its first hybrid-technology vehicle, a hybrid version of the Escape SUV.

While Ford is investing in advanced technologies such as hybrids and hydrogen fuel cells and plans to bring some advanced technologies and some improved conventional technologies to market in select products, our Company has not reported to investors its expectations for reductions in Ford's overall carbon burden or its ability to meet near-and long-term emerging global competitive and regulatory scenarios.

Resolved: The shareholders request that a committee of independent directors of the Board assess (a) how the Company will ensure competitive positioning based on emerging near and long-term GHG regulatory scenarios at the state, regional, national and international levels, (b) how the Company plans to comply with California's greenhouse gas standards, and (c) how the Company can significantly reduce greenhouse gas emissions from its national fleet of vehicle product (using a 2004 baseline) by 2014 and 2024, and report to shareholders (at reasonable cost and omitting proprietary information) by September 1, 2005.

SUPPORTING STATEMENT

We believe management has a fiduciary duty to carefully assess and disclose to shareholders all pertinent information on its response associated with climate change, particularly as it relates to an emerging business reality.

Report on Emissions Reduction and Competitive Positioning Strategy 2005 – General Motors

Whereas:

In the U.S., passenger cars and light trucks account for one-fifth of all annual U.S. carbon dioxide emissions linked to climate change.

General Motors bears the auto industry's highest "carbon burden" – or total carbon dioxide emissions associated with its fleet, due in part to the poor fuel efficiency of its products, not the size of its fleet.

Worldwide consensus that greenhouse gas (GHG) emissions need to be reduced continues to grow, with ratification of the Kyoto Protocol causing many countries to enact limits on these emissions. Already, the European Union and some U.S. states have enacted similar limits, and Canada's reduction target of 25% is due by the end of the decade.

In September 2004, the California Air Resources Board adopted regulations requiring vehicle emissions reduction in California; other states will follow. Roughly one-quarter of the US vehicle market is currently required to meet California's standards, to which the greenhouse gas regulations will eventually be added.

Fuel-efficiency standards more stringent than U.S. standards have recently been approved in China, the fastest-growing passenger car market in the world. Most of GM's SUVs sold today in the U.S. would be illegal for sale in China by 2008.

These standards are creating markets favorable to automakers with lower carbon burdens and agility in introducing clean technology vehicles.

Competitors Honda and Toyota, already offering vehicles with better than average fuel economy, have been moving quickly to introduce lower-emission advanced technology vehicles to consumers. Toyota successfully introduced hybrid vehicles to the U.S. market three model years ago, and has already moved to the second generation of hybrid technology. Toyota is now poised to sell more cars in the U.S. than Chevrolet and Ford combined (Associated Press 9/5/03).

In January, 2004, General Motors delayed the production of its first full hybrid vehicle, the Saturn Vue SUV, in order to develop new technologies not already patented by Toyota.

While GM is investing in advanced technologies such as hybrids and hydrogen fuel cells and plans to bring some advanced technologies and some improved conventional technologies to market in select products, our Company has not reported to investors its expectations for reductions in GM's overall carbon burden or its ability to meet near-and long-term emerging global competitive and regulatory scenarios.

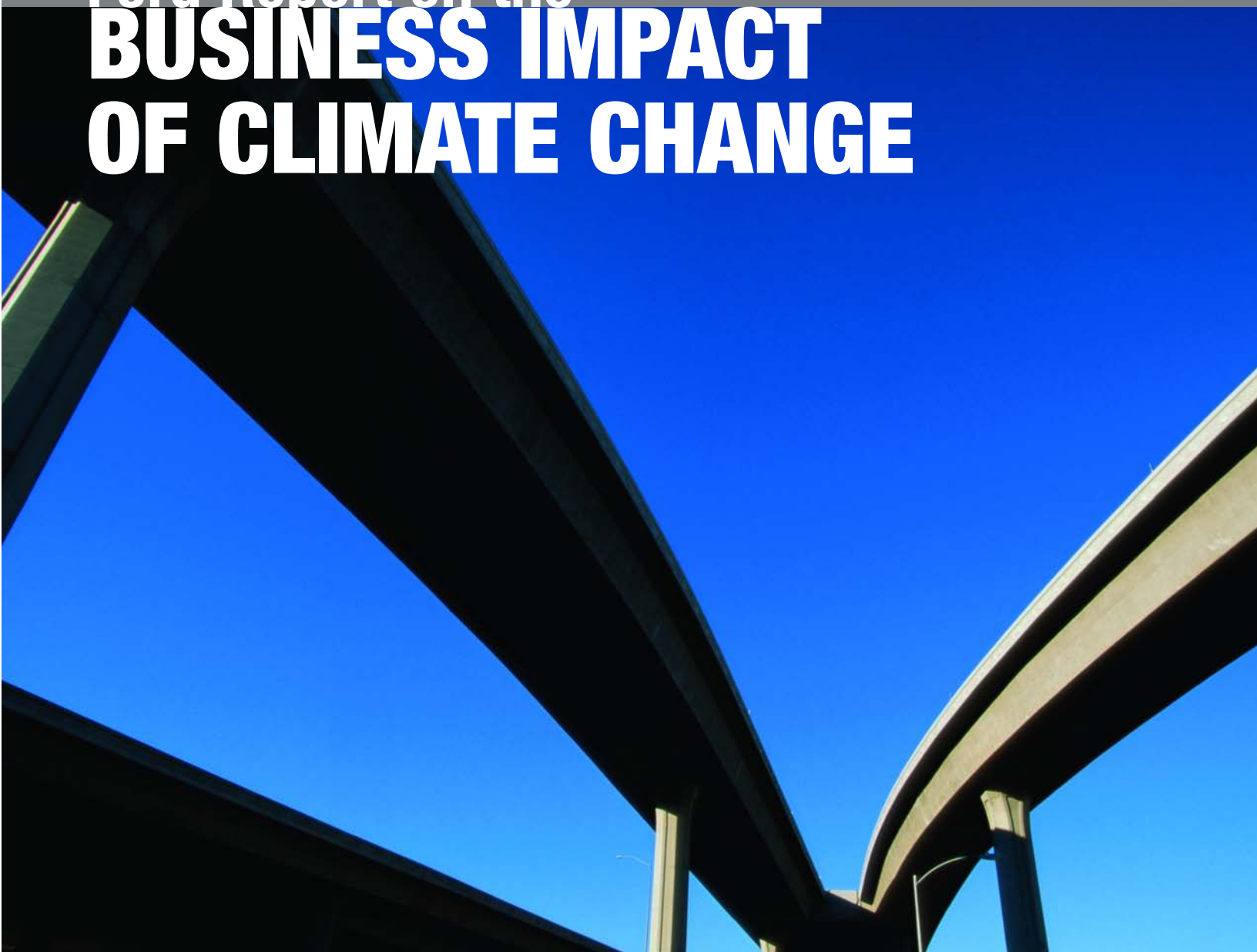
Resolved: The shareholders request that a committee of independent directors of the Board assess (a) how the Company will ensure competitive positioning based on emerging near and long-term GHG regulatory scenarios at the state, regional, national and international levels, (b) how the Company plans to comply with California's greenhouse gas standards, and (c) how the Company can significantly reduce greenhouse gas emissions from its national fleet of vehicle product (using a 2004 baseline) by 2014 and 2024, and report to shareholders (at reasonable cost and omitting proprietary information) by September 1, 2005.

SUPPORTING STATEMENT

We believe management has a fiduciary duty to carefully assess and disclose to shareholders all pertinent information on its response associated with climate change, particularly as it relates to an emerging business reality.

Attachment 9

Ford Report on the BUSINESS IMPACT OF CLIMATE CHANGE



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Foreword

In November 2004, Ford Motor Company received a shareholder resolution from the Interfaith Center on Corporate Responsibility (ICCR) and the Coalition for Environmentally Responsible Economies (Ceres) and others requesting we release information specific to our greenhouse gas emissions strategy. Much of the information requested is reported annually in our Sustainability Report (formerly called the Corporate Citizenship Report), and we have excerpted the most recent Sustainability Report as an appendix to this report. However, we agreed to publish the industry's first report dedicated to the issue of climate change and its effect on our business as well as the automotive industry as a whole. While we have worked closely with ICCR, Ceres and other stakeholders throughout the writing of this report, the material contained here is is our view of this important global issue.

This report has been reviewed and approved by senior management, the Office of the Chairman and Chief Executive (OCCE) as well as the Environmental and Public Policy Committee of the Board of Directors.

What you will read in the following pages is a snapshot of work in progress. We will continue to work on technology, policy, marketing and product initiatives that we expect will move the issue – and our business – forward over the near to medium term. We hope that this report will encourage other companies and other industries to join us in an effort to develop an industry wide, long-term strategy for reducing greenhouse gas emissions (GHG) – a strategy that is truly global in its reach, involving all automakers, fuel providers, consumers and policy makers.

Introduction

Global climate change caused by human combustion of fossil fuels and the resulting emission of greenhouse gases (GHGs) is – along with energy security – widely viewed as a critical global issue with a range of potential effects on human health, community infrastructure, ecosystems, agriculture and economic activity.

This report describes how Ford Motor Company views the business challenge associated with climate change; how concerns about GHGs are linked to other factors affecting our business; the steps we are taking to manage the risks and capture opportunities associated with the issue; and the market, policy, social and technological enablers required to achieve significant changes in our industry's carbon footprint.

We offer this report to help investors, policy-makers and consumers better understand the business implications of climate change for automotive companies. It is in the interest of society and business to reduce the uncertainty and increase the predictability of policy frameworks and market conditions around the issue of climate change. Therefore we intend to participate fully in the larger public dialogue on actions required by governments, businesses and individuals to address climate change concerns.

IMPLICATIONS

At Ford, the issue is not abstract. We are the third largest automobile manufacturer in the world. We manufacture and distribute automobiles in 200 markets across six continents. We employ about 325,000 people worldwide and produce passenger cars, trucks, engines, transmissions, castings and forgings and metal stampings of all kinds at 111 wholly owned, equity-owned and joint venture plants around the world. The energy we use to produce our vehicles and power Ford facilities resulted in 8.4 million metric tonnes of CO_2 emissions (CO_2 is the most significant of the greenhouse gases) in 2004. About 12 percent of all man-made GHG emissions worldwide come from burning fossil fuels in the cars and trucks of all makes on the road today.

Concerns about climate change – along with growing constraints on the use and availability of carbon-based fuels – affect our operations, our customers, our investors and our communities. The issue warrants precautionary, prudent and early actions to enhance our competitiveness and protect our profitability in an increasingly carbon-constrained economy.

The relevant long-term challenge facing society today and in the future is to stabilize the concentration of GHGs in the atmosphere at a level that prevents dangerous human-induced interference with the climate system. In the words of the G8 leaders at Gleneagles earlier this year, “While uncertainties remain in our understanding of climate science, we know enough to act now to put ourselves on a path to slow and, as the science justifies, stop and then reverse the growth of greenhouse gases.”

ACTIONS

To that end, since 2000 we have cut the emissions of CO_2 from our plants and facilities by 15 percent, and we have targeted even further reductions. We participate in CO_2 trading mechanisms in Europe and North America; we have increased the percentage of energy we obtain from renewable sources; we have announced the first large-scale "Fumes to Fuel" fuel cell project that will convert captured VOCs from paint shop emissions into electricity to power operations and reduce overall emissions; and we have announced plans to offset the CO_2 emitted in the production of our Ford and Mercury hybrid vehicles.

But while we are proud of our accomplishment in reducing CO_2 from our operations and have benefited from the energy cost savings that go with it, we recognize that only about 10 percent of the lifetime GHG emissions from a vehicle occur during its production. The remaining 90 percent attributed to each vehicle is emitted when the customer is using it – when it burns gasoline or diesel fuel from fossil sources.

We are taking a wide range of actions that help reduce the in-use GHG emissions of our vehicle fleet -- from expanding our hybrid lineup, to encouraging more use of ethanol fuel, to shifting our mix of products to more fuel efficient cars, to improving the efficiency of conventional gasoline and diesel engines, to raising the awareness of consumers.

We know that many of our stakeholders expect this report to spell out specific targets and milestones for improvements in the fleet fuel efficiency of our products. It will not do that. In our highly competitive industry, there continue to be too wide a range of possible futures for technologies, markets, and regulatory frameworks for our company to set unilateral targets on the in-use performance of our products. Nevertheless, Ford Motor Company is committed to doing its part to stabilize atmospheric GHGs, and we will describe in the following pages the range of actions we are pursuing.

CHALLENGES

Of course, no single company, industry, or even nation can address this issue alone. Our industry is part of a complex, energy-intensive global system. This system is growing even larger and more complex as new markets like China and India come on line with dramatic increases in energy demands overall -- as well as significant growth in the number of vehicles on the road and miles traveled. Stabilization will therefore require strategies that make financial sense, engage consumers, encourage technological innovation and provide stable, market-based mechanisms across the entire economy.

Within the road transport sector, we see the opportunities to reduce in-use GHG emissions defined by three inter-related factors:

- The embedded carbon content of the fuel available to consumers.
- The carbon efficiency of vehicles.
- The purchase decisions and driving behavior of customers, including vehicle miles traveled

This "fuel + vehicle + driver" formula underpins our engagement with both fuel companies and consumers in addressing the GHG challenge.

CONVERGENT ISSUES

Importantly, the issue of climate change is closely related to the equally pressing issues of energy security (which tends to be reflected primarily in regulations) and fuel prices (which drive market behavior). GHG emissions are a common currency for all of these issues. But we recognize that customer and policy priorities differ around the world, and our approaches vary accordingly; for example, our voluntary agreement as part of ACEA in Europe has been focused directly on CO_2 reduction. Our aggressive investment in hybrid production in the U.S. has been driven in part by consumer demand for more fuel efficient vehicle choices and innovative technologies. And our support for an expanded bio-ethanol infrastructure in the U.S. is underpinned by the call for less dependence on imported oil. Each of these initiatives results in lower CO_2 emissions, but emerges from different market and policy priorities.

In this climate change report we will focus on GHG emissions and stabilization of atmospheric CO_2. However, it's important to note that our climate change strategy fits within a much more comprehensive approach to sustainability that includes overall environmental management, safety, and our leadership in human rights. For further information on our broader sustainability framework, we invite you to refer to our recently released Sustainability Report, available at www.ford.com/go/sustainability.

COMMITMENTS

Against this background, we are committed to playing a leadership role in the reduction and stabilization of GHG emissions. Specifically:

- We are continuously reducing the GHG emissions and energy usage of our operations.

- We are developing the flexibility and capability to market lower-GHG-emissions products that will attract consumers.

- We are working with industry partners, oil companies and policy makers to establish an effective and more certain market, policy and technological framework for reducing road transport GHG emissions.

Background

THE CLIMATE ISSUE

The evidence for environmental and social impacts of climate change is discussed in detail and greater authority in numerous sources and will not be addressed here. However, we recognize that some key conclusions have earned widespread support by scientists, policy makers and business leaders and therefore define the assumptions underpinning our approach to climate change. We find these conclusions compelling enough to serve as a framework for our analysis and planning.

For example, the growing weight of evidence holds that man-made greenhouse gas emissions are starting to influence significantly the world's climate in ways that affect all parts of the globe.

And many scientists, businesses and governmental agencies have concluded that stabilizing the atmospheric CO_2 concentration at around 550 parts per million (ppm) (compared with the current 380 ppm and the pre-industrial level of approximately 270 ppm), may help forestall or substantially delay the most disruptive aspects of global climate change.

BUSINESS DRIVERS

The related issues of climate change and energy security have become a market force that is changing the operating environment in the automobile industry and putting business value at stake. That value can be measured in at least four dimensions.

Market share

We develop, produce and market vehicles for retail customers. Our viability as a business depends above all on offering products and services that customers will buy.

Over the past decade, the U.S. market shows that few customers choose cars based on specific concerns about climate change and GHG emissions. Even fewer are willing to pay the incremental cost of "green" automotive technologies or accept trade offs of other attributes (safety, performance, features, styling). Our experience with retail marketing campaigns based on environmental attributes tend to have very little effect on sales.

However recent research indicates that this might be changing. According to research conducted for Ford in the U.S. by DYG, Inc., fuel economy is now equal with safety and more important than price in vehicle purchase decisions; up four points from the previous report. This suggests that consumer concerns about the environmental impact of cars are increasing at a dramatically higher rate than concerns about vehicle safety, reliability or affordability.

Importance of Automotive Priorities (Top three Box)

	2005 Rating %	Pt. Change 2004	Pt. Change 2003
Improved mpg	86	+4	+4
Increased reliability & Dependability	85	-2	-4
Improved safety	82	-3	-4
Alternative fuel vehicles	82	+4	+7
Hybrid vehicles	80	0	+3
More affordable	73	+2	-2

We have seen sales of truck-based SUVs across the industry decline during 2005, while sales of lighter weight cars and car-based utility vehicles have increased. There are many reasons for this, but we assume that at least part of this shift is based on growing consumer interest in cars and trucks that deliver higher fuel economy figures.

The picture looks somewhat different in markets outside the U.S. In Europe and Japan, for example, CO_2, the primary greenhouse gas, is already part of the consumer's lexicon. High fuel taxes, CO_2 linked vehicle taxation, CO_2 linked personal taxation, specific CO_2 vehicle labeling and more widespread environmental awareness have already begun to shape consumer preferences towards more CO_2 friendly vehicles.

Regulatory compliance

We are a closely regulated industry. Fuel economy standards have long been a staple of regulation in the auto industry, especially in the U.S. But climate change and GHG concerns are already beginning to drive the regulatory agenda in many countries and even some U.S. states

In some cases voluntary agreements are taking the place of regulation. In Europe, for example, the European Automobile Manufacturers Association (ACEA) set a goal of achieving average CO_2 emission reductions of 25 percent by 2008 compared with 1995. And in Canada the auto industry agreed with the Canadian government to reduce GHG emissions from Canada's fleet of cars and trucks by 5.3 megatonnes by 2010.

Whether legislated, voluntary or market driven we continue to anticipate the need for additional GHG emissions reductions and to pursue innovative ways to cost-effectively introduce required product and advanced technology solutions.

Shareholder Value

We see early signs that investors and analysts are paying increasing attention to the impact of climate change on the companies and industries they cover. For example, in May 2005, a group of 28 institutional investors with assets in excess of US$3 trillion released an action plan that calls on companies, regulators and the investment industry to provide greater disclosure and comprehensive analysis on the investment risks associated with climate change. Since then, we have seen investment research reports by Merrill Lynch and JP Morgan Chase that explore these investment risks in the automobile industry. And Goldman Sachs recently declared that "diverse, healthy natural resources… are a critical component of social and sustainable economic development" and committed to "help find effective market-based solutions to address climate change, ecosystem degradation and other critical environmental issues." The quality of corporate strategies for managing the risks and capturing the opportunities associated with a carbon constrained economy will likely become more important in investor decisions.

INDUSTRY CONSIDERATIONS

There are several characteristics of the global automotive industry that bear significantly on how we are able to respond to the challenge of climate change. The U.S. industry, in particular, is addressing significant and well-publicized structural challenges, from legacy and health care costs, to excess manufacturing capacity, to high costs in our supply chain.

First, our business involves a ***long product lifecycle*** with greenhouse gas emissions that vary at each stage. Only approximately 10 percent of the GHG emissions associated with any given car or truck we make are emitted directly by our plants and facilities. Most of the remaining 90 percent of the emissions attributed to any vehicle over the course of its lifetime is emitted during its use by the consumer. This means that addressing lifecycle GHG emissions depends on engaging consumers on their purchase decisions, driving behavior and their choice of fuels.

Second, we face at times ***conflicting regulatory, market and technological signals***. The picture varies by geography, market segment, and demographic profile. For example, governments are often tempted locally to encourage specific technology solutions, but there is considerable uncertainty about which technologies, combinations of technologies and technology pathways will prevail and over what time frames, and governments are rarely best equipped to pick technology winners and losers.

Also, some policy makers favor demand-side measures such as fuel taxes and Green Public Procurement policies, while others prefer supply-side controls such as fuel-economy or GHG emissions standards, creating significantly different market dynamics and product strategies from one region to another.

And often regulations designed to promote different public goods directly compete with one another; for example the addition of new safety technology to vehicles often drives up weight which in turn has a negative effect on fuel economy. And all these conflicting signals drive costs into our products which cannot always be recovered in the sales price.

Third, the GHG footprint of the in-use phase of light duty vehicles must be measured on a ***well-to-wheels*** basis, that is, the total emissions from the production of the original source of energy (e.g. crude oil, bio-fuels, etc) into a usable fuel, the amount of energy consumed to produce the vehicle, to the fuel consumed by the vehicle during its in-use lifetime.

Fourth, the automotive industry operates on ***long product development times and major capital investments***. It can take four or more years and billions of dollars to bring a totally new vehicle and powertrain from the drawing board to the show room floor. The long time frame and heavy financial commitment underscore our fiduciary responsibility to carefully weigh the risks of investing our shareholders' capital on products with uncertain prospects. They also highlight the need for more certainty -- stable and predictable pricing signals and policy frameworks.

Strategic Roadmap

STRATEGIC PRINCIPLES

Going forward, our approach to GHG stabilization will be based on some key principles.

First, technical, economic and policy approaches to climate change need to recognize that all CO_2 molecules (or GHG equivalents) produced by human activity make the same contribution to the atmosphere's concentration of greenhouse gases. The cost of mitigating those emissions, however, varies significantly depending on their source, and ***economically efficient decisions about how to reduce emissions depends on transparent cost signals***.

The road transport sector is commonly perceived as a low-cost target for emissions reduction. The light duty vehicles fleet in particular is characterized by a low consumer elasticity of demand for mobility, long lags in vehicle design and slow turnover in the vehicle stock (e.g., 15-20 years), and lack of a practical large-volume substitute for petroleum-based fuel. It also lacks easy access to emissions-reducing mechanisms available in other sectors such as fuel-switching to less carbon intensive sources and carbon capture and storage. The relatively high costs of emission reduction make it important that control policies be as efficient as possible, which implies that the marginal costs of compliance be equalized across sectors.

Among other things, this means that while reducing GHG emissions from the road transport sector will be an important element in addressing long term climate change concerns, care should also be taken to achieve the most economically cost-efficient reductions. A pure pro-rata assignment of burden for reducing GHG emissions across individual sectors without the ability to trade-off costs and benefits may not be the most appropriate response.

Second, relative to in-use GHG emissions, the auto industry represents a closely interdependent system, characterized best by the equation: ***fuel + vehicle + driver = GHG emissions***. That means, simply, that the total in-use GHG emissions of any given vehicle depends on the carbon content of the fuels that fuel companies bring to market, combined with fossil fuel efficiency of the vehicle itself, combined with the fuel choices, vehicle choices, miles driven and driving behaviors made by the consumer. This point of view that fuel, vehicle and driver are all critical stands in contrast to policy prescriptions that focus solely on vehicle technology and design.

Each link in this chain depends on the others. For example, fuel companies can produce a range of fuels with varying carbon content, but successfully bringing those fuels to market depends on consumer demand and a critical mass of vehicles equipped to use alternative fuels.

Similarly, auto companies can (and do) provide a wide range of products with varying fuel economy performance. The deployment on the road of more fuel-efficient vehicles depends on consumer preference and willingness to pay and – in the case of alternative fuel powertrains – the availability of low-carbon alternative fuels.

And consumers can affect thier own GHG emissions by making decisions about how they drive, how many miles they drive, what modes of transportation they choose to use, which cars or trucks they purchase, and which fuels they buy.

Importantly, in a system in which no single player controls all inputs, changes in output – in this case GHG emissions – will require unprecedented coordination across all sectors.

Third, the future developments of technologies, markets, political expectations and even the natural manifestations of climate change are all uncertain. That means that the business strategies we implement – and the public policies that we encourage – will be based on the ***flexibility to meet a range of potential scenarios***. For us that means developing and maintaining the flexibility and capability to respond to changes in consumer demand, new technological breakthroughs, competitive actions and regulations. It also means that it is in our business interest to work to reduce uncertainty and increase the predictability of policy frameworks and market conditions.

We know that almost any scenario will call for reduced fossil GHG emissions, but inside that broad directional expectation lie a host of conflicting possibilities. Will GHG reductions be driven by fuel efficiency, energy security, or pocketbook concerns? Will hydrogen, bio-fuels, battery electricity, diesel or some combination emerge as the powertrain technology of choice? Will the emerging markets of China and India pursue a unique path toward low GHG emissions in their road transport sectors?

Finally, ***early, affordable steps to reduce GHG emissions and improve fuel efficiency*** may delay the need for drastic and costly reductions later. Lack of agreement on long term solutions cannot be used as an excuse to avoid near term actions.

STRATEGIC ACTIONS

Our long-term strategy is to contribute to climate stabilization by

- continuously reducing the GHG emissions and energy usage of our operations.
- developing the flexibility and capability to market more lower-GHG-emissions products in line with evolving market conditions.
- working with industry partners, energy companies, consumer groups and policy makers to establish an effective and predictable market, policy and technological framework for reducing road transport GHG emissions.

Product

Our evolving product portfolio is by far the most important element of our strategy for (and contribution to) a climate stabilization goal.

Our product GHG strategy is unfolding in a series of overlapping phases:

Technology pilots in which we are accelerating our steps toward integrating innovative fuels, efficiencies and GHG reductions into our product cycle plan and building the capability to innovate further.

Scaling Up in which we take innovative technologies across a range of platforms and develop the full capability to move forward with the most promising technologies in packages that are competitive on performance and convenience;

Mass Marketing in which low GHG vehicles achieve penetration across vehicle categories and represent significant market share; and

Drive to Stabilization in which low GHG vehicles reach dominant market share and fleet CO_2 emissions converge with a target global stabilization curve.

We have announced publicly several product actions that will increase the number of higher fuel economy, lower GHG emissions vehicles available to our customers, and others we have not announced for competitive reasons. For example, we have already announced plans to expand our capacity to build hybrid electric vehicles to 250,000 units per year by 2010. We are also expanding the application of existing technologies that deliver fuel economy benefits including variable valve timing, fuel shut off, direct injection gasoline engines, clean diesel, and six-speed transmissions.

In addition, we will increase our investment in a portfolio of technologies that deliver improved fuel economy and lower GHG emissions, including:

- Weight stabilization and reduction
- Expanded FFV vehicles and partnerships with fuel providers to increase infrastructure
- Gasoline engine downsizing, combined with Direct Injection Spark Ignition (DISI) and pressure charging
- Hybrid gasoline powerpacks, shared among the brands
- Clean diesels and the technology to allow them to run on biodiesel above 5% blends
- In Europe, diesels with partial hybrid technologies such as engine stop start, regenerative braking, parallel lithium-ion batteries or super-capacitors
- Hydrogen Internal Combustion Engine (ICE) demonstration fleets
- Hydrogen fuel cell research and demonstration fleets

At the portfolio level, the mix of vehicles we sell will continue to be dictated by the marketplace, but we believe that the trend towards more fuel efficient vehicles, such as cross-over vehicles and smaller SUVs will continue. In addition, by utilizing common platforms, we will be able to offer greater fuel economy across a wide range of product designs. Specifically, we will be better able to apply weight reductions achieved in one model to other models without compromising safety, quality or performance.

We are also moving to a system that makes greater use of set combinations of engines and transmissions or Powepacks. An increasing portion of our products will employ these powerpack drivetrains which are optimized for fuel efficiency.

Our plan also includes innovations aimed at the fuel part of the equation. In the last decade we have produced over 1.5 million flexible fuel vehicles and beginning in 2006, we will offer an expanded line up of flexible fuel vehicles (FFV) capable of using fuel blends with up to 85 percent bio-ethanol. While current bio-ethanol production in the US does not provide a substantial reduction in GHG emissions on a well-to-wheels basis, having a substantial fleet of FFVs in operation is a bridge to widespread use of lower carbon bio-fuels in the future.

The potential exists for expanding production of bio-ethanol from cellulosic sources that would lead to further significant reduction in lifecycle GHG emissions, but only if we pursue a policy agenda designed to do so. If the five million FFVs (industrywide) on the roads today were operated solely on fuel blends of 85 percent bio-ethanol based on celluslosic feedstocks, this could displace as much gasoline and provide nearly the same GHG benefits as about 10 million new hybrid vehicles.

We already have begun positioning our fleet for a future in which bio-fuels play a more significant role. In September 2005 we announced we would introduce a new line of flexible fuel vehicles (FFVs) in the U.S. including the world's best selling vehicle – the Ford F-150 – which can use blends up to 85 percent ethano, as well as take proactive steps to support expanded availability of bio-ethanol and customer awareness of the advantages of FFVs.

In Europe, Ford was the first manufacturer to introduce FFV technology when it launched the product in Sweden. In 2005 Ford took the step of making the Focus FFV available across Europe and is presently looking at a number of potential partners to explore the possibilities and feasibility of developing a bio-ethanol fuel infrastructure.

Policy

From a global business perspective, we see a significant amount of political activity around energy security, energy diversity and climate change.

Going forward, we are committed to participating in – and leading, if necessary – a dialogue on energy policy and greenhouse gas emissions that promotes more energy security and lower GHG emissions across the entire economy, while ensuring stable economic growth and the viability of our business.

At Ford we believe policies that put constraints on carbon need to focus on all sectors of the economy. They should encourage conservation and the introduction of lower-carbon fuels and energy sources, while increasing the demand for more energy efficient products across all sectors at the lowest possible social cost and at a pace consistent with consumer demand and economic viability. These policies need to be implemented in ways that mitigate any related transitions to avoid economic disruptions and unnecessary costs, with incentives playing a key role.

We also believe that in the transportation sector, vehicle, fuels and fuel-use must be addressed as a system. Also, broad GHG policies in the U.S., Europe or other markets need to focus on pursuing the most-efficient and cost-effective ways to reducing fossil energy use and GHG emissions. Future reduction programs should be based on upstream, carbon trading systems that establish reasonable, gradually reducing the limits on carbon introduced into the economy. In addition, they must include a safety valve that is based on economic/energy indicators that would allow for the release of additional emission allowances at reasonable prices to avoid unintended constraints on economic growth, maintain price stability and protect vital economic growth and social development needed to help spur demand for more efficient products and support long-term investment, research and an innovation.

Future policies need to encourage the use of lower-carbon fuels and energy (e.g., bio-ethanol fuels and blends) through favorable market signals and incentives, as well as encourage energy efficiency, carbon sequestration initiatives, offsets, and credits across all phases of the energy value chain. We believe that a properly structured, upstream system would allow all sectors of the economy to respond to the market signals and pursue the most cost-effective solutions to improve energy conservation and energy efficiency. From a transportation point of view, an effective system would require gradual but dramatic changes in our product and technology mix to remain consistent with shifting consumer demand for more efficient products.

There are no simple solutions and open debate among all the diverse stakeholders is necessary. A long-term solution will take time to evolve, but we also believe that early, foundational policies can help reduce GHGs. For example, educating consumers on their role – through programs like eco-driving training – will be a very important part of a comprehensive and consistent market-based solution. We also must focus on vehicle performance through advanced technology research and development as well as manufacturing incentives that reach through to suppliers and OEMs. And we must continue to pursue policies that improve road transport and infrastructure (e.g. mass transit) by reducing congestion and fuel consumption through improved traffic flow.

Plants

GHG emissions in manufacturing account for about 10 percent of the total emissions over the lifecyle of a vehicle. Since 2000, we have cut the GHG emissions from our facilities worldwide by more than 15 percent. We're also on track to meet a five year goal of improving the energy efficiency of our plants by 14 percent, normalized for changes in production.

We continue to make and meet new commitments to reducing our energy use and GHG emissions. Through our participation in the Chicago Climate Exchange, we've made a commitment to reduce the GHG emissions from our North American operations by six percent by 2010. Likewise, our plants subject to the UK Emissions Trading Scheme must reduce their GHG emissions by five percent over five years. We are the only auto manufacturer participating in these voluntary programs and Ford has successfully received the required third-party verification of our emissions reductions annually. Our involvement in these trading initiatives builds our capability to manage our overall emission profile while advancing these important efforts to integrate a value for GHG emission reductions into the day-to-day world of financial management.

In addition to reducing our energy use, we've also led efforts to make more electric power available from renewable energy sources with lower GHG emissions and that contribute to energy security. We have the world's only automotive plant powered entirely by on-site wind turbines at Dagenham in the UK. We also use methane gas from landfills at our Wayne Assembly Plant.

People

Communications and education of consumers and employees is an important key to reducing energy use and GHG emissions. We can provide employees and customers with both information and the proper tools to enable them to be a part of the solution.

Our emission offset program is one way to begin educating customers about climate change and GHG emissions. In September 2005, we announced that we would pilot a program to offset the CO_2 emitted from the production of our hybrid vehicles in the U.S. The purchase price of the offset is applied to a project that reduces or sequesters the emission of CO_2 elsewhere.

We also will be developing materials designed to help consumers' understanding of what an offset is and how they can act on further opportunities – by offsetting the CO_2 emitted when they drive their vehicles.

We also have been piloting Eco-driving programs in Europe, Canada and in the U.S. to educate consumers about how their specific actions affect the GHG emissions of their vehicles. By driving in a more careful and environmentally responsible way, individuals can cut exhaust emissions, save fuel and money at the pump. Research has shown that many individuals can reduce their fuel consumption by approximately 20-25% by just following a few simple steps.

And we're bringing that initiative to our own employees. An employee Eco-Driving program will be rolled out to all US salaried employees during the first half of 2006. We hope to expand the program globally, including a rollout to suppliers and consumers, as well. This web-based training is designed to heighten employee awareness of driving behaviors and their relationship with emissions and fuel economy.

We also are supporting efforts to educate fuel consumers about the importance of which fuels they use. Ford recently announced an initiative with VeraSun, a provider of bio-ethanol blends. Critical to acceptance of bio-ethanol fuel is consumer awareness. Ford and VeraSun will launch an informational campaign to educate consumers on the benefits of bio-ethanol as an alternative fuel.

Partnerships

The systems approach to reducing GHG emissions confirms the importance of strong and diverse partnerships. Our existing partnership with Ballard Power Systems on fuel cell vehicles is an example of a partnership focused on technology development. We also have partnerships with BP on developing special lubricants and fuels that will reduce GHG emissions.

Within our supply chain, we will build significant capacity to deliver low GHG emission vehicles. We need to expand the focus of our supplier relationship to include the value that suppliers will need to bring to our expanded capabilities. Cost will always remain a key criterion, but overall system performance will increase in importance.

We've mentioned our current and future efforts on FFVs in several sections. Our partnership with VeraSun, a provider of bio-ethanol fuels, will both expand the infrastructure needed to bring bio-ethanol to customers and engage those customers on the merits of bio-ethanol and FFVs.

We are involved in several important research partnerships with implications for climate change. In some cases, Ford is leading the research. Examples include research on the inter-relationships between air quality and climate change as well as on the potential emission issues associated with a hydrogen fuel system. In other instances, Ford supports research related to climate change. Examples include our partnership with the Princeton Center for Energy and Environmental Studies and the MIT/AGS project.

Conclusions

Ford Motor Company views stabilization of greenhouse gases in the atmosphere and energy security as critical and related business issues that warrant precautionary, prudent and early action. It is our hope that this report will lead to a better understanding of the business implications for the automotive industry and to more predictable policy frameworks and market conditions.

This report is not the last word you will hear from Ford on the subject of climate change. We continue to work on technology, policy, marketing and product initiatives that we expect will move the issue – and our business – forward over the near to medium term.

In the meantime, we are acting on the principle that a sustainable approach to the reduction and stabilization of GHG emissions in the road transport sector needs to be approached as a system and be introduced at a pace consistent with consumer acceptance and the financially viability of the industry. We believe that there is need for a strategic approach to stabilization that makes appropriate cost-benefit tradeoffs. We need to focus on the most environmentally and economically efficient and effective way to reduce emissions with a goal of stabilization. And we are convinced that our long-term business competitiveness will benefit by leading the development of market-based solutions to the climate change issue, both on our own and with partners.

APPENDIX 1

Excerpt from 2004-2005 Sustainability Report.

1 Ford climate change commitments and requirements	
COMMITMENT – PRODUCTS	**TARGET**
European Automobile Manufacturers Association CO_2 commitment	EU new car fleet average of 140 g/km by 2008; equivalent to 25% average CO_2 reduction compared with 1995.
Australia fuel economy commitment	Fuel economy of 6.8 l/100 km by 2010 from 2001 level of 8.28 l/100 km
Canadian Greenhouse Gas Memorandum of Understanding	Industrywide voluntary agreement to reduce greenhouse gas emissions from the Canadian car and truck fleet by 5.3 megatonnes by 2010
COMMITMENT – OPERATIONS	**TARGET**
Global manufacturing energy efficiency	Improve manufacturing energy efficiency by 1% year over year, following an improvement of more than 12% from 2000 to 2004
UK Emissions Trading Scheme	UK operations to achieve 5% absolute reduction target over 2002-2006 timeframe based upon an average 1998-2000 baseline
Chicago Climate Exchange	Reduce U.S. facility emissions by 6% over a 2003-2006 timeframe based upon an average 1998-2001 baseline
Alliance of Automotive Manufacturers	Reduce U.S. facility emissions by 10% per vehicle produced between 2002 and 2012
REGULATORY REQUIREMENTS	
United States	The United States has set fleet average motor vehicle fuel economy for over 25 years. To date Ford has always met the prescribed standards.
China	The federal government has introduced weight-based fuel consumption standards for passenger cars and trucks. The standards began with new 2005 model year (MY) passenger vehicles and increase in stringency for new 2008 MY vehicles. Proposed standards for commercial trucks start in 2008. All of Ford's product offerings comply with the appropriate 2005 MY standards and are fully expected to comply with the 2008 MY standards as well.

THE CLIMATE CHANGE CHALLENGE

The cars of the 21st century will need to be ever more stylish, safe, spacious, powerful and fuel efficient. The auto companies best able to deliver vehicles that meet these tremendous challenges are likely to increase market share and reap the financial rewards of technological leadership.

Many factors influence greenhouse gas emissions from vehicles, and many institutions and individuals influence those factors (see *Figures 2 and 3)*. Reducing greenhouse gases is a global concern that can only be addressed through coordinated international efforts. For these efforts to have meaningful, long-term impacts, global patterns of consumption of fossil fuels must be changed. For the transportation sector, this will require not only improvements in fuel economy, but also changes in fuels, infrastructure, mass transportation and driver behavior, as well as a reduction of the overall number of vehicle miles traveled.

Addressing climate change is a significant undertaking involving numerous actors, but it also represents an opportunity for companies that can bring fresh thinking and technological and social innovation to the challenge. We are working internally and externally to understand the business implications of climate change and generate business value by contributing to solutions. For example, we are investing in a broad range of product technologies (see Mobility section), we are making progress on a series of commitments to reduce manufacturing and product greenhouse gas emissions (see *Figure 1)*, and we are forming partnerships and collaborative efforts to address the full range of factors influencing climate change.

Ford is affected by fuel economy regulatory requirements and commitments in all of our major markets around the world. We cannot predict the future, but it is unlikely that energy security and climate change concerns will be resolved in the near term. It is more likely that regulations and commitments to improve fuel economy will increase in stringency as policy makers react to these challenges. Ford is in compliance with all fuel economy regulations and is on track to meet all of our voluntary commitments. A summary of many of these commitments can be found in *Figure 1.*

FORD GOVERNANCE AND ACTIONS

A vice president-level task force appointed by Bill Ford has responsibility for identifying the business implications of the climate change issue and directing the development and implementation of our climate change strategy. During 2004, the task force completed a review of the scientific evidence and implications of climate change. The review concluded that consensus is forming around the appropriateness of a broad societal goal to stabilize atmospheric CO_2 concentrations and explored the implications of this goal for Ford's business. (For a more detailed discussion of stabilization see *Figure 3* on Page 18.)

During 2004 and early 2005, the task force worked in three major areas: establishing an organization and governance process to develop Ford's strategic approach to sustainable mobility (see *Figure 4)*; overseeing preparation of a stand-alone climate change report to be issued in late 2005; and planning fuel economy improvements through technological solutions. Also discussed in this section are our efforts to reduce greenhouse gas emissions from our facilities and our participation in a variety of collaborative initiatives to meet the climate change challenge.

2 The role of Ford and the need for collaboration

The vehicles we produce have significant impact on society and the environment, including the issue of climate change. We are committed to doing our part to address the climate change challenge. But for all our influence, we can only succeed if we work on the factors influencing greenhouse gas emissions from vehicles in partnership and collaboration with other actors including:

Energy companies. Provide different types of fuel and influence public policy

Factors: *fuel cost and availability; fossil carbon content of fuels*

Suppliers. Offer innovative materials, technologies and components

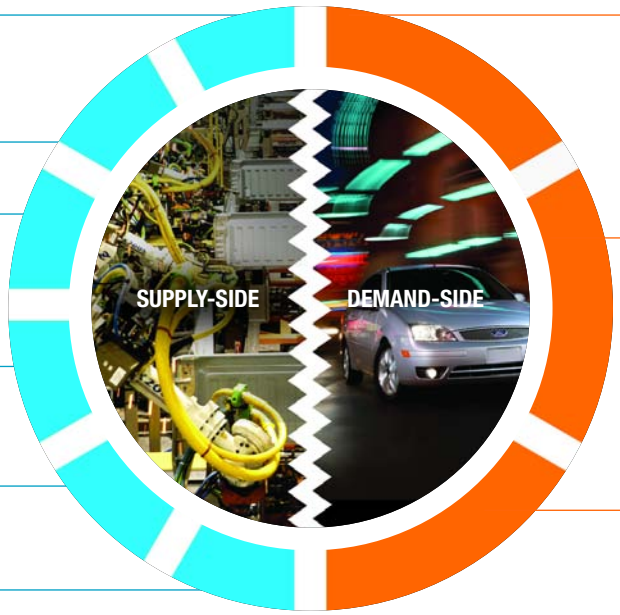
Fellow automakers. Share learning and technologies and influence consumers and public policy. Provide vehicles/mix of vehicles

Factors: *marketing; vehicle fuel efficiency (CAFE)*

Capital markets. Account for risks and influence actions of companies and investors

Labor. Shape and implement solutions and influence public policy

Dealers. Inform consumers and service new generations of vehicles



Governments and policy makers. Create regulatory environments governing markets and behaviors, and establish infrastructure for new fuels and technologies

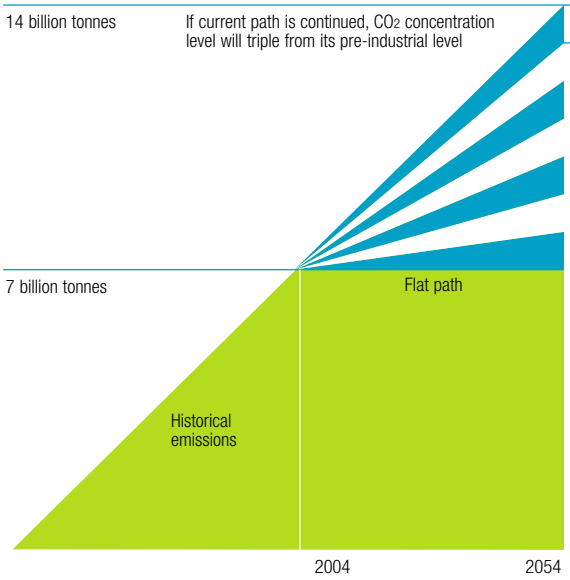
Factors: *price signals/fuel taxes; infrastructure development*

Customers. Choices about types of vehicle purchased and driving behavior

Factors: *number of vehicles; choice of transportation mode; vehicle usage patterns; vehicle miles traveled*

Nongovernmental organizations. Affect public opinion and policy and influence consumers. Collaborate with companies

3 Climate stabilization



1 wedge = 1 billion tonnes of carbon emissions

Each of the following strategies has the potential to reduce carbon emissions by one wedge.

Efficiency
- Double the fuel efficiency of 2 billion vehicles
- Decrease the number of vehicle miles traveled by half
- Use best efficiency practices in all residential and commercial buildings
- Produce current coal-based electricity with twice today's efficiency

Biomass fuels
- Increase ethanol production 50 times by creating biomass plantations with an area equal to one-sixth of world cropland

Carbon capture and storage
- Capture AND store emissions from 800 coal electric plants
- Produce hydrogen from coal at six times today's rate and store the captured CO_2
- Capture carbon from 180 coal-to-synfuels plants and store the CO_2

Nuclear
- Add double the current global nuclear capacity to replace coal-based electricity

Wind
- Increase wind electricity capacity by 50 times present value, for a total of 2 million large windmills

Solar
- Install 700 times the current capacity of solar electricity
- Use 40,000 square kilometers of solar panels (or 4 million windmills) to produce hydrogen for fuel cell vehicles

Fuel switching
- Replace 1,400 coal electric plants with natural gas-powered facilities

Natural sinks
- Eliminate tropical deforestation and create new plantations on non-forested land to quintuple current plantation area
- Adopt conservation tillage in all agricultural soils worldwide

We have been a leader in our industry in acknowledging and speaking out on the significance of climate change. Since we began to address the issue, we have continuously tracked the evolving views of the scientific and policy-making communities on the subject. For example, many scientists, businesses and governmental agencies have concluded that stabilizing the atmospheric CO_2 concentration at 550 parts per million (ppm) (compared with the current 380 ppm and the historical level of approximately 270 ppm), may help forestall or substantially delay the occurrence of climate change without also incurring tremendous costs and economic hardships on the path to stabilization.[1,2,3]

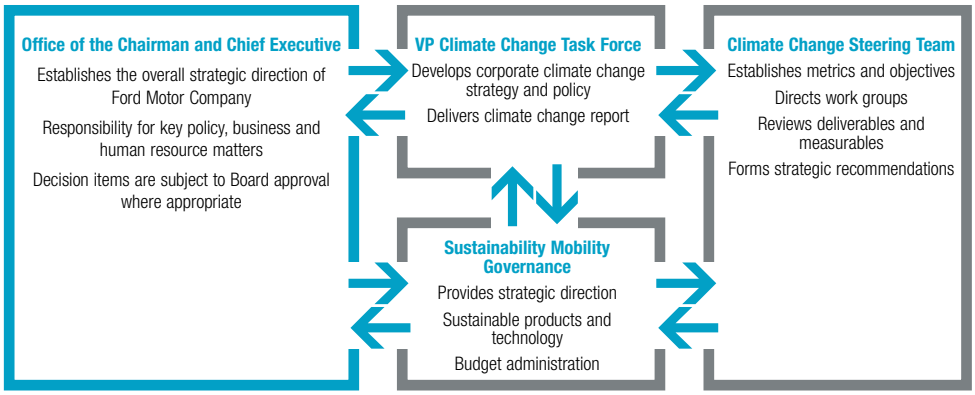
The Carbon Mitigation Initiative, a research partnership based at Princeton University and supported by BP and Ford, has examined what it would take to stabilize atmospheric CO_2. Researchers identified a set of stabilization strategies they call "wedges." Each wedge represents the implementation of a strategy that could cut global annual carbon emissions by 1 billion tonnes by 2054. Fifteen different strategies were identified. *Figure 3* above shows that stabilization would require the successful implementation of at least seven of these 15 approaches to achieve the annual reduction of 7 billion tonnes of carbon emissions from business-as-usual forecasts.[4]

While the wedges may be theoretically achievable, they were not evaluated for their economic, market or political feasibility. Many would require rapid scaling-up of emerging technologies. Achieving the reductions represented by any one wedge would require economic, political and technical commitment and cooperation. All sectors of society and industry would need to be involved in the complex process of reconciling the actions required to implement the wedges. No one industry or sector could do it alone.

[1] Intergovernmental Panel on Climate Change, "Climate Change 2001: The Scientific Basis," Cambridge University Press (2001)
[2] The Arctic Council, Arctic Climate Impact Assessment, www.acia.uaf.edu (2005)
[3] Pew Center on Global Climate Change, "Beyond Kyoto: Advancing the international effort against climate change," (December 2003)
[4] Carbon Mitigation Initiative, "Building the Stabilization Triangle," www.princeton.edu/~cmi, (2004).

4 Climate change and sustainable mobility governance

We have established a new cross-functional high-level governance structure to explore the implications of sustainable mobility and plan Ford's future offerings of products and services. The sustainable mobility governance structure is integrated with the climate change task force and steering teams, and both report to the Office of the Chairman and Chief Executive.



Climate change report

Since the 2000 stakeholder dialogue, we have engaged with a variety of groups interested in our climate change strategy. During 2004 and early 2005, we worked with a coalition of shareholders asking Ford to report on the climate change issue. In March 2005 we announced that we would publish a comprehensive report on climate change. The report will examine the business implications of greenhouse gas emissions, with reference to government policies and regulations, Ford's product and manufacturing facilities actions and advanced technology development. We are consulting with stakeholders in the development of this report including Ceres, the Interfaith Center on Corporate Responsibility, the Union of Concerned Scientists and the Natural Resources Defense Council.

Fuel economy improvement

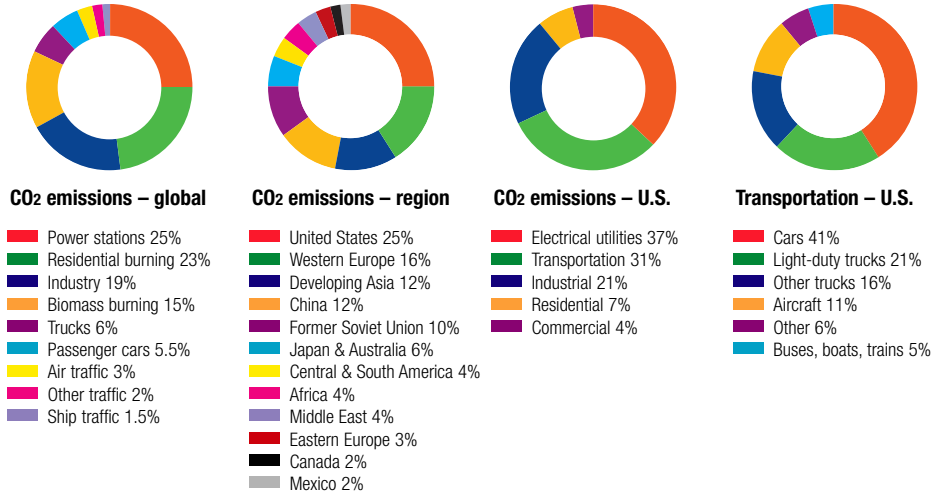
Ford is committed to improving the fuel economy of all of our vehicles. It is also one of our greatest challenges. We are taking near-term actions and aggressively pursuing advanced vehicle technologies to improve the fuel economy of our offerings. Globally, we are incorporating fuel-saving technologies such as five- and six-speed transmissions, electric power-assisted steering, variable cam timing, greater use of lightweight materials and improvements in vehicle aerodynamics. We introduced our first hybrid vehicle, the Escape Hybrid, in 2004 (see *Box 7*). We are also working to develop a new generation of advanced technologies with lower greenhouse gas emissions, discussed in the Mobility section of this report. Current and near-term actions are described below.

Economy vs. efficiency. When describing fuel use in vehicles, there are two important terms to understand. Fuel efficiency measures the amount of fuel (in ton-miles-per-gallon) needed to move a vehicle of a certain weight a certain distance. Fuel economy (in miles per gallon), a much more recognized term, indicates how far a vehicle travels on a unit of fuel. We have made significant improvements in the fuel efficiency of our fleet. The fuel efficiency of our vehicles in the United States improved from 41.6 ton-mpg in 1987 to 49 ton-mpg in 2005. However, the fuel economy of our fleet has not improved as regulations and the competitive market have demanded safer, cleaner and more powerful feature-laden vehicles.

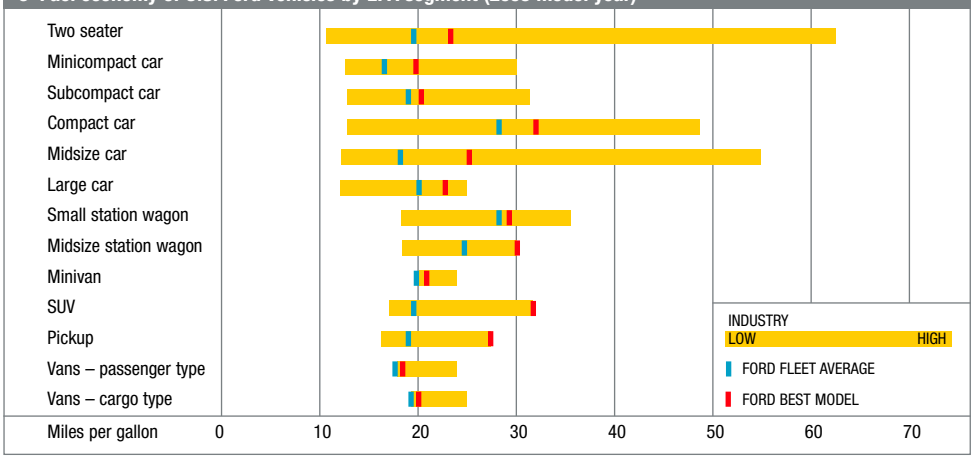
EPA data for the industry show that the fuel efficiency of vehicles sold in the United States improved 24 percent between 1987 and 2005. As a point of comparison, 1987 is cited because the industry achieved an average peak fuel economy value that year.[5] During the same period, the

5 Climate change and industry

Climate change is the result of an increase in heat-trapping (greenhouse) gases in the atmosphere. Carbon dioxide (CO_2) is the major greenhouse gas, resulting from the combustion of fossil fuels in human activities including manufacturing; power generation; residential burning; and transportation of people and goods. Ford uses energy to produce our vehicles and power our global facilities, resulting in CO_2 emissions that we measure, report and strive to reduce. However, the vast majority (approximately 90 percent) of a vehicle's lifecycle greenhouse gas emissions occur during the use of the vehicle, when it burns gasoline or diesel fuel from fossil sources. Other important greenhouse gases include nitrous oxide, methane, halocarbon and ozone. Emissions from cars and trucks comprise about 12 percent of man-made CO_2 emissions globally. Cars and light trucks account for 19 percent of man-made CO_2 emissions in the United States.



6 Fuel economy of U.S. Ford vehicles by EPA segment (2005 model year)



[5] Light-Duty Automotive Technology and Fuel Economy Trends: 1975 through 2005, www.epa.gov/otaq/fetrends.htm

average weight of vehicles rose by 27 percent as consumers chose vehicles with additional performance, safety and utility features, and automakers added emission control and other required equipment. Average horsepower almost doubled to 212 hp (from 118 hp in 1987) and the share of light trucks increased to 50 percent (from 28 percent in 1987). The result is that industrywide fuel economy has remained flat since 1987. A list of fuel economy rankings for U.S. vehicles can be found at www.fueleconomy.gov.

Current performance – U.S. We are making incremental improvements to the fuel efficiency of the vehicles we currently offer. Our new Ford Five Hundred and Mercury Montego sedans, for example, offer a six-speed transmission. The 2005 Lincoln Navigator SUV and Jaguar XJ sedan use our first rear-wheel-drive six-speed transmission, and the Escape Hybrid offers electric power-assisted steering.

The extent to which some of these fuel-saving technologies have been incorporated into our vehicles sold in the United States is summarized in *Figure 8*. We are also investing in new vehicle segments as a strategy to improve fuel efficiency. We continue to expand our offerings of cars and "crossovers" in North America – vehicles that combine the features of cars and SUVs while generally achieving better fuel economy than traditional SUVs.

Although our long-term fuel economy performance in the United States has trended down since 1987 (from 24.2 mpg to 22.8 mpg in 2005), our projected 2005 model year corporate average fuel economy

improved by 4.8 percent compared with the 2004 model year (see data on Page 40).

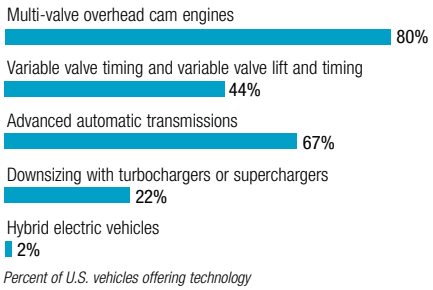
Our current product offerings vary in their competitive positioning on fuel economy. Some, including the Escape Hybrid, Ford Ranger and Mazda B2300, are best-in-class. The Ford Five Hundred, Mercury Montego and Ford Freestyle are all near the top of their respective segments in fuel economy. Others are in the middle or lower range compared to the competition (see *Figure 6* on Page 19).

Current performance – Europe. In Europe, we have reduced the average CO_2 emissions of the vehicles we sell by 11 to 37 percent depending on the brand, compared with a 1995 base (see data on Page 40). We have achieved these reductions by introducing a variety of innovations, from the advanced common-rail diesel engines available on many of our vehicles to the lightweight materials in the all-aluminum body of the Jaguar XJ.

These reductions reflect progress toward the goal of a voluntary agreement between the European automotive industry (represented by its association, ACEA) and the EU Commission. The agreement committed ACEA members to voluntarily reduce the average fleet CO_2 emissions of its new cars sold in the EU. The target is 140 grams of CO_2 per kilometer by 2008, down from 186 grams per kilometer in 1995, which translates to an average CO_2 reduction of 25 percent.

Achieving the 2008 target will be challenging. The agreement is extremely ambitious, both technically and economically. ACEA members are functioning in an uncertain operating environment and must respond to competing demands, such as technological developments and their market acceptance; the EU macroeconomy; geopolitics; customer demands; fuel supplies; new and partly contradicting regulations; and other public policy measures. Despite these challenges, Ford and the industry remain committed to further reduce fuel consumption and the average level of CO_2 emissions of the new car fleet.

8 Fuel-saving technologies available in 2005 model year Ford light-duty vehicles



Percent of U.S. vehicles offering technology

Technologies identified in National Academy of Sciences report, "Effectiveness of Corporate Average Fuel Economy (CAFE) Standards 2002."

Ford Five Hundred

Mercury Montego

Jaguar XJ

Ford Ranger

Lincoln Navigator

Cutting greenhouse gas emissions from our facilities

Since 2000, our facilities worldwide have cut their energy use by more than 18 percent and reduced CO_2 emissions by more than 15 percent as a result of steps large and small, from replacing heating and air-conditioning systems to turning out the lights.

We also have increased our use of renewable and other "green" power. During 2004, construction was completed on the London area's first large-scale wind power project, located at Ford's Dagenham Diesel Centre, which produces a high-performance 2.7-liter V6 diesel engine. The two 120-meter-tall turbines meet all the electricity requirements for the Centre (equivalent to 3,000 homes).

Globally, renewable, or "green," power supplies 3 percent of Ford's energy needs. In the United States, we use hydropower, landfill gas, waste gases and other sources to supply 5 percent of our energy needs.

In our paint shops, drying processes and pollution control devices that reduce the release of paint fumes are a significant source of CO_2 emissions. In partnership with Detroit Edison, Ford developed an innovative "Fumes-to-Fuel" system that is moving into its final pilot phase in the fall of 2005, when a portion of the paint booth fumes at the Michigan Truck Plant will be converted into electrical energy to help power the facility.

The fumes, containing volatile organic compound (VOC) emissions from solvent-based paint, are captured, highly concentrated and then burned in a specially designed Stirling Cycle Engine. The engine will produce about 50 kilowatts of electricity. The only byproducts of Ford's Fumes-to-Fuel system, which cuts electrical usage by one-third to one-half, are small amounts of water vapor, carbon dioxide (CO_2) and nitrogen oxides. The Stirling Engine also produces heat during combustion, which may be another useful source of energy in the future.

The production-scale pilot at Michigan Truck represents the final test of the system before full-scale implementation by the end of the decade as part of Ford's program to deploy new paint shops that are cleaner, smaller and more efficient.

As a registered partner of the EPA's Energy Star Program, Ford has implemented industry best practices and new tools to reduce energy consumption.

Looking at logistics

Over the past five years, Ford's North American operations cut fuel use and CO_2 emissions from truck transportation by 15 percent. During 2004 we studied logistics energy use and greenhouse gas emissions as part of the climate change task force deliberations. The purpose was to inform the task force about the contribution of transportation emissions to Ford's environmental footprint and how it might be reduced. Along with lower emissions, the reduction in truck miles has helped Ford achieve freight savings as part of its revitalization plan that began in 2000.

Similar work is taking place in Europe. We are gathering data from major plants to document fuel use and CO_2 emissions attributable to incoming and outgoing logistics. We have made improvements in our European operations by using lower-emission modes of transport. For example, we use river barges instead of trucks for vehicle transportation and trains rather than trucks to take material to our assembly plant in Turkey. We also use the latest diesel engines and instruct truck fleet drivers in economical driving to reduce fuel consumption.

COLLABORATION AND COOPERATION: A SYSTEMS APPROACH

Energy security concerns, growing scientific evidence on climate change and sustained high fuel prices are adding to the urgency of action on climate change. Climate change is linked to social concerns including population growth, access to mobility and poverty alleviation. We think it is good business to seek out and offer ways to reduce vehicle emissions while extending the benefits of mobility to the billions of people who currently lack it. However, comprehensive solutions require cooperation between the many stakeholders influencing greenhouse gas emissions, including consumers, policy makers, fuel providers and others. We are working with these and others on coordinated approaches.

At Ford's Dagenham Diesel Centre outside London, a worker assembles a fuel-efficient diesel engine. The facility meets 100 percent of its power needs using wind turbines.

Public policy

Thirty-two percent of our manufacturing CO_2 emissions (2.7 million tonnes) occur in countries that are signatories to the Kyoto Protocol Agreement, which went into force in February 2005. We believe that our participation in voluntary agreements to reduce vehicle emissions in the EU and Canada, our ongoing, target-driven programs to reduce manufacturing emissions and our participation in emissions-trading programs will place us in a good position to contribute to attaining Kyoto goals in those countries.

During 2004 and early 2005, Ford took several actions to address public policy related to climate change.

In April 2005, we joined other automakers in a voluntary agreement with the Canadian government to reduce greenhouse gas emissions from Canada's fleet of cars and light-duty trucks by 5.3 megatonnes by 2010. The agreement is unique, because it recognizes that achieving transportation-sector reductions in greenhouse gases depends on efficient products, as well as consumer purchase and driving behaviors and the availability of appropriate fuels.

We continue to work toward implementation of the ACEA agreement on reducing greenhouse gas emissions from vehicles, although it is increasingly challenging (see discussion on Page 21).

Earlier this year, the United States initiated discussions with Australia, China, India, Japan and South Korea to seek a framework agreement on clean development and climate change policies. The negotiations produced a new partnership between the six nations to accelerate the development and deployment of clean, energy-efficient technologies. The Asia-Pacific Partnership on Clean Development reportedly aims to identify, promote and deploy global solutions to reduce greenhouse gas emissions and establish clean development programs. We applaud this framework agreement between developed and emerging nations and support its stated goal of accelerating the introduction of clean, affordable and efficient technologies and practices in emerging nations. Specific programs and initiatives are scheduled to be developed later this year. Ford welcomes the opportunity to work with the parties of the Partnership to help deploy sustainable policies and solutions.

Ford supported passage of the U.S. Energy Policy Act of 2005. By incorporating national conservation initiatives, renewable fuel standards and consumer tax credits for fuel-efficient advanced-technology vehicles, including hybrids, we believe that the provisions of the Act will provide incentives to accelerate the expansion of fuel-efficient, advanced-technology vehicles and achieve the volumes needed to make them more affordable. We also supported the Act's approach to addressing climate change through market-based incentives, which we believe will support U.S. jobs and encourage the deployment of lower-greenhouse-gas-intensive technologies and infrastructure. In addition, these incentives will maintain a national focus on the climate change issue by accelerating the deployment of technologies that can reduce greenhouse gas emissions, and may serve as a template for other nations' acts.

New CAFE standards were not legislated in the Energy Act, as policy makers and industry recognized that there is a regulatory process in place and that the National Highway Traffic Safety Administration (NHTSA) is in the process of reforming the CAFE system and continuing to set standards at maximum feasible levels on an ongoing basis.

We expect to be a constructive partner in developing climate change approaches in all the markets in which we operate. In the past year, in addition to responding to legislative and regulatory proposals, we have called for national dialogue to identify common ground and explore alternative policy approaches that will cut CO_2 emissions from vehicles in a way that is effective, efficient and equitable.

Strategic partnerships in our supply chain

We have established two major strategic partnerships and fostered collaboration on sustainability issues, including climate change, with many of our major suppliers.

BP. In our cooperation with BP, we are taking advantage of natural synergies between the two companies, including common customers worldwide, strong retail networks, direct linkages between our product offerings (merged value chains), strong complementary technologies and shared interest in developing sustainable business models.

Ford and BP are cooperating in a project supported by the U.S. Department of Energy that is deploying a test fleet of hydrogen fuel cell vehicles in Detroit, Michigan; Sacramento, California; and Orlando, Florida. BP also plans to provide fueling support for Ford hydrogen demonstration vehicles in Europe. We are exploring issues around advanced vehicle technologies and fuels. Another area of technical cooperation will be a joint study of modern diesel technologies, with specific focus on applications for the U.S. market.

Ballard Powersystems and DaimlerChrysler. With Ballard Powersystems and DaimlerChrysler, we have worked closely to mature the development of fuel cell vehicle technologies. Ballard focuses on providing fuel cell stacks, and the two automakers focus on fuel cell systems, vehicle integration and manufacturing.

9 Ford joins companies advocating climate change leadership

During the first half of 2005, Ford Motor Company was the only U.S.-based auto company to participate in the G8 Climate Change Roundtable, formed to advise on the G8 climate change agenda and serve as a sounding board for policy options. British Prime Minister Tony Blair has made climate change a principal theme of his 2005 presidency of the G8. To support work on the issue, the World Economic Forum convened a group of 23 CEOs of leading companies that met during the Forum in Davos, Switzerland. The companies worked together to develop a statement that they presented and discussed with Prime Minister Blair in advance of the G8 meeting in Gleneagles, Scotland. Mark Fields, Executive Vice President, Ford Motor Company and President, The Americas, represented Ford Motor Company in the process.

Key points of the G8 Climate Change Roundtable statement included:

- **Recognition of the responsibility of companies to act on climate change, one of the most significant challenges of the 21st century**
- **Support for elevating the level of international attention to the issue**
- **Recognition of the need for systematic action that harnesses market forces and includes consumers in approaches to mitigating climate change on a global basis**
- **Principles for policy actions**
- **Suggestions for specific G8 actions**

The full statement is available at www.ford.com/go/sustainability.

10 Campaigners press Ford on climate change and fuel economy

The climate change and fuel economy issues have provoked some public criticism of Ford's policies and actions. In the year ending in June of 2005, Ford received approximately 188,000 letters and emails on the subject. Many of these communications came from individuals participating in NGO campaigns.

Some messages congratulated Ford on the introduction of the Escape Hybrid and asked that Ford introduce additional hybrid vehicles. Some made specific demands for fuel economy targets, while others asked Ford to demonstrate leadership in the auto industry. Some writers pledged to boycott Ford products. Some expressed support for Ford's actions. Some criticized the NGO campaigns. Letters came from Ford vehicle owners, shareholders and children.

We responded to individuals who wrote personal letters or emailed, and we have met with many of the organizations sponsoring the campaigns. For example, we have met with activist groups such as Rainforest Action Network, Global Exchange and Bluewater Network, all of which have directed campaigns at Ford on climate change and fuel economy issues. We have exchanged information to better understand their perspective and to offer insight into ours. While we share the goal of improving fuel economy and reducing greenhouse gas emissions proactively, we have disagreed on the level of improvement that is achievable within given timeframes. An open letter from Bill Ford to the Center for the New American Dream is posted on its Web site (www.newdream.org). Samples of letters received are available on the Web at www.ford.com/go/sustainability.

Top supplier collaboration. In 2001 we established the Ford-Supplier Sustainability Forum. The Forum is a place for sharing best practices, developing future Ford supplier sustainability strategies and metrics, and helping us better communicate and refine our social and environmental policies. This forum has provided a venue for discussion of climate change. Our suppliers are important partners in addressing climate change. Their manufacturing emissions comprise part of the lifecycle emissions associated with our products. They are also critical in their role of providing and participating in the development of technologies to help reduce the emissions from vehicles in operation.

We have not adopted a policy to measure the quantity of emissions generated by our entire supply chain. However, Ford of Europe is piloting a study of the greenhouse gas impact of its material choices and its logistics footprint. In addition, our efforts to encourage and, in some cases, require suppliers to implement robust environmental management systems will help them report their emissions inventories in the future. We also will seek out opportunities to partner with suppliers to improve the greenhouse gas emissions performance of our products.

Emissions trading

Ford Motor Company is playing a leading role in the development of voluntary emissions trading initiatives in Europe and North America. Ford was the only automaker involved in the UK voluntary emissions trading program, which began in 2002, and is the only auto manufacturer participating in a similar voluntary program in North America, the Chicago Climate Exchange. Under both initiatives, companies like Ford accepted emissions reduction targets. Companies that exceed their targets receive credits that either can be saved for future use or sold on the open market to other member companies that fail to meet objectives. We believe that this market-based approach can promote environmental improvements more cost-effectively than traditional regulations.

The European Union introduced a mandatory Emissions Trading Scheme (EU ETS) at the beginning of this year to support its emissions reduction objectives under the Kyoto Protocol. The EU ETS, which consists of an estimated 10,000 facilities that produce 1.8 billion tonnes of CO_2 annually, sets emissions targets for each company based on an overall CO_2 objective for the region.

Ford has 15 facilities that are regulated by the EU ETS, which initially covers specific industrial activities, including boiler houses, electric utilities, steel plants, and pulp and paper manufacturers.

Ford's experience with voluntary emissions trading programs has helped us prepare for the new EU ETS and allows our Company to enter productive discussions about market-based approaches in other countries. We would like to see these programs become harmonized to accommodate trading across different regions.

Consumer behavior

The roles of drivers and traffic management are critical factors in terms of real-world emissions. A recent study conducted by the Institute of Transportation Engineers and the U.S. Highway Administration, for example, showed that $1 billion per year spent on improving traffic signals in the United States would not only cut journey times, but also would improve the fuel economy of every vehicle on the road by 10 percent.

In Germany, Ford has trained more than 8,000 people in "eco-driving," a style and method of driving that improves fuel economy by 25 percent, thus cutting CO_2 emissions by 20 percent. Through tests with a major fleet operator, the "eco-driving" style also has been shown to reduce road accidents up to 35 percent.

Ford began training drivers in 2000, in partnership with the German Federation of Driving Instructor Associations and the German Road Safety Council. Several versions of the training are available to different kinds of driver including professional drivers, driving instructors, fleet managers and the general public. Ford dealers in Germany offer four hours of training to anyone with a valid driver's license.

The "eco-driving" method requires only modest adjustments to the driver's behavior ("eco-driving" tips are available on the Web at www.ford.com/go/sustainability). The program has been evaluated by third parties, which have affirmed the fuel savings and the lasting impact of the training. Because of the multiplier effect, approximately 1 million German novice drivers annually come on the road "eco-trained" via train-the-trainer seminars for driving instructors. Therefore the impact of the program extends well beyond the 8,000 participants to date, and is estimated to include up to 500,000 tonnes of CO_2 savings from novice drivers.

Ford has also been working with the Wisconsin Department of Natural Resources to develop a simulation game designed to help students understand the relationship between transportation and the environment, and the impacts of their choices and driving habits.

Scheduled for release in late 2005, XRT:eXtraordinary Road Trip (XRT) allows students to experiment with multiple drivers, behaviors and transportation technologies to learn how their choices affect emissions. XRT "drivers" will be able to play again and again, zooming through various conditions and situations in the simulation adventure and learning how to analyze the variables affecting a vehicle's efficiency and the environment.

Research

In 2004, more than half of our research and development budget was devoted to technologies that will reduce the environmental impact of our vehicles and facilities. Our Research and Advanced Engineering scientists and engineers collaborate with scientists around the world and have made important contributions to fundamental climate change science. They also lead the development of new technologies to save fuel and cut greenhouse gas emissions from our vehicles.

In addition to the Carbon Mitigation Initiative (see *figure 3* on page 18), we are a sponsor of the Massachusetts Institute of Technology Joint Program on the Science and Policy of Global Climate Change and the Alliance for Global Sustainability.

Reporting

We routinely report on the climate change issue and our greenhouse gas emissions in this report. We have submitted data on our 1998–2004 U.S. emissions to the U.S. Department of Energy 1605(b) Greenhouse Gas Registry, we participate in the Carbon Disclosure Project and we register our North American emissions as part of our commitment to the Chicago Climate Exchange. We have actively participated in and supported the development of the WRI/WBCSD Greenhouse Gas Protocol (www.ghgprotocol.org) because of the need for a common voluntary greenhouse gas accounting and reporting standard.

Looking ahead

This section has set out our current perspective on climate change, our progress to date, and the opportunities and challenges still before us.

The picture we have presented here is one of unresolved dilemmas. For example, we are grappling with the tension between:

- Our desire as corporate citizens to see reductions in fossil energy use, versus the fact that in many markets, it is high-fuel-consuming vehicles that provide significant profits
- Our desire for more effective and equitable government policies that address climate across all sectors, versus the need to defend our own competitive interests under current policy frameworks
- Our desire to contribute to meaningful solutions to the issue of climate change, versus the lack of agreement among national governments, investors, advocacy groups, consumers and even scientists as to what those solutions should be
- Our recognition that climate change is a major and growing environmental, social and economic challenge, versus the slowness of markets and policy makers to provide signals on which we can responsibly act
- Our participation in meeting the rapidly growing transportation needs in emerging markets, versus
  the challenge of restraining related growth in greenhouse gas emissions in those markets
- Our acceptance of a key role for automakers in addressing climate change, versus our rejection of some views that hold our industry uniquely responsible for solutions to this multi-dimensional problem

We are taking a thoughtful and systematic approach to the issue. Our top leadership is engaged in planning and executing our strategic response, and climate change considerations are increasingly integrated into our business systems and decision making. You will see a much more detailed analysis of these dilemmas and our approach to them when we publish the dedicated climate change report in December.

APPENDIX 2

California GHG regulations

In 2002, the California legislature passed a law directing the California Air Resources Board (CARB) to promulgate rules limiting greenhouse gas emissions from motor vehicles. In 2004, CARB voted to adopt a set of fleet average standards expressed in grams per mile of CO_2. Final rules incorporating these standards were adopted in 2005. The standards are set to take effect beginning with the 2009 model year and become increasingly stringent through the 2016 model year. Several other states, including New York, Connecticut, Massachusetts, Vermont, New Jersey, Pennsylvania, Rhode Island, Oregon and Washington, have either adopted parallel regulations or are in the process of doing so.

Ford supports the reduction of vehicle CO_2 emissions and is working aggressively toward the development and implementation of real, market-based solutions. However, the entire automobile industry is united in opposition to the AB 1493 rules because they constitute state fuel economy standards. The federal Corporate Average Fuel Economy (CAFE) law calls for a single, nationwide fuel economy program and prohibits individual states from regulating vehicle fuel economy. State-by-state regulation of fuel economy is unworkable because it raises the prospect of an unmanageable patchwork of state standards. Moreover, the AB 1493 regulations seek to impose a fuel economy task that is far more steep and severe than any that has been ever been imposed in the history of CAFE. As time passes and the standards grow more stringent, many if not all manufacturers will have to severely restrict or eliminate sales of larger cars and trucks in order to maintain compliance. Even with our commitment to step up hybrid production and embrace innovative technologies, Ford would not be able to comply with these standards without restricting our product lineup over time.

In December 2004, the Alliance of Automobile Manufacturers filed an action in federal court in California seeking to overturn the AB 1493 regulations. All members of the Alliance (BMW, DCX, Ford, GM, Mazda, Mitsubishi, Porsche, Toyota and Volkswagen) supported taking this action. The Association of International Automobile Manufacturers (AIAM), which includes Honda, Nissan, Aston Martin, Bosch, Delphi, Denso, Ferrari, Maserati, Hitachi, Hyundai, Isuzu, Toyota, Suzuki, Subaru, Renault, Peugeot, Mitsubishi, Kia and JAMA (Japan Automobile Manufacturers Association, Inc.), has since intervened in the litigation on the side of the Alliance. The litigation process is likely to take several years. A similar action was filed in Vermont in November 2005, and state court actions related to greenhouse gas rules have been filed in New York and Oregon. Additional cases may be filed as other states finalize their rules.

We believe the Company had an obligation to its customers and shareholders to stand with the rest of the industry in support of a single, nationwide fuel economy program with standards that are feasible. In a letter to senior Company management, CEO Bill Ford discussed the Company's opposition to the California regulation and reiterated its commitment to address the climate change issue. (The text of the letter is available at ww.ford.com/go/sustainability).

Attachment 10

CalPERS
Investment Office
P.O. Box 2749
Sacramento, CA 95812-2749
Telecommunications Device for the Deaf - (916) 795-3240
(916) 795-3400 FAX (916) 795-2842

California State Teachers'
Retirement System
7667 Folsom Blvd, MS-4
Sacramento, CA 95826

April 29, 2005

Via Overnight Courier

Richard Wagoner, Jr.
Chairman and Chief Executive Officer
General Motors Corporation
300 Renaissance Center
Detroit, MI 48265

Dear Mr. Wagoner:

We are writing to you on behalf of the California State Teachers' Retirement System (CalSTRS) and California Public Employees' Retirement System (CalPERS), owners of 1,837,871 (.33%) and 2,455,225 (.44%) shares of common stock respectively in General Motors Corporation as of April 8, 2005.

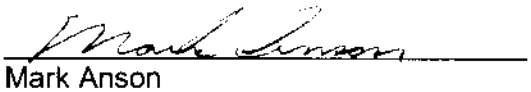
The purpose of this letter is to express our strong support for a 2005 shareowner proposal requesting that a committee of independent directors of the Board assess (a) how the Company will ensure competitive positioning based on emerging near and long-term GHG regulatory scenarios at the state, regional, national and international levels, (b) how the Company plans to comply with California's greenhouse gas standards, and (c) how the Company can significantly reduce greenhouse gas emissions from its national fleet of vehicle product (using a 2004 baseline) by 2014 and 2024, and report to shareowners (at reasonable cost and omitting proprietary information) by September 1, 2005.

With adequate, accurate and timely data disclosure, shareowners are able to more effectively make investment decisions by taking into account the business practices (including environmental practices) of the companies in which we invest. We strongly encourage the General Motors Board of Directors to comply with the shareowner proposal request. Specifically, we ask that the Board take the appropriate action on disclosing all pertinent information associated with climate change, as it relates to the 2005 shareowner proposal.

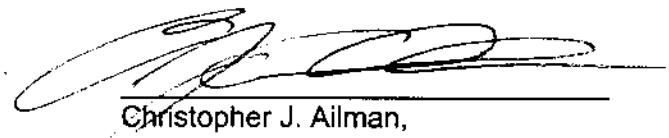
We believe the proposal facilitates improved data transparency and timely disclosure without posing any long-term harm to the company. Therefore, both CalPERS and CalSTRS will be supporting the 2005 proposal should it come to a vote at the company's upcoming annual meeting as well as hiring a proxy solicitor to encourage other shareowner support.

We would be available to discuss any pending Board action General Motors is taking to address the merits of the 2005 shareowner proposal and ask that you contact Bill McGrew, Portfolio Manager - CalPERS, at (916) 795-2431 to arrange such a meeting in person or via teleconference.

Sincerely,



Mark Anson
Chief Investment Officer, CalPERS



Christopher J. Ailman,
Chief Investment Officer, CalSTRS

CC: CalPERS Board of Administration
CalSTRS Board Members
Fred Buenrostro, Chief Executive Officer – CalPERS
Jack Ehnes, Chief Executive Officer – CalSTRS

CC: General Motors Corporation Board of Directors

CalPERS
Investment Office
P.O. Box 2749
Sacramento, CA 95812-2749
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February 10, 2006

Walter Buergi
Chairman of the Board
Aare Tessin AG fur Elektrizitat
Bahnhofquai 12
CH-4601 Olten
SWITZERLAND

Dear Dr. Buergi:

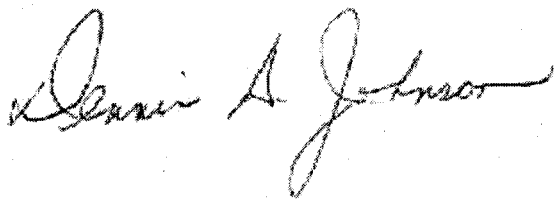
I am writing to you on behalf of the California Public Employees' Retirement System (CalPERS), owners of 328 shares of common stock in Aare Tessin AG fur Elektrizitat as of December 31, 2005.

The purpose of this letter is to express CalPERS' strong support for the Carbon Disclosure Project's (CDP) 2006 questionnaire (CDP4) that was mailed to you on February 1, 2006. CalPERS is not only supportive of the CDP's effort and are signatories on CDP4, but CDP4 also represents a collaboration among CalPERS, the California State Teachers Retirement System (CalSTRS), and the CDP to improve transparency and disclosure of environmental data in the Electric Power/Utilities Industry. Therefore, we would like to encourage Aare Tessin AG fur Elektrizitat to respond to the CDP4.

With adequate, accurate and timely data disclosure, shareowners are able to more effectively make investment decisions by taking into account the business practices (including environmental practices) of the companies in which we invest. In addition to the CDP4, there are other avenues through which Aare Tessin AG fur Elektrizitat may disclose all pertinent information associated with climate change, such as joining the California Climate Action Registry, issuing a sustainability report following the Global Reporting Initiative's Sustainability Reporting Guidelines, or joining the Chicago Climate Exchange.

I appreciate your consideration in responding to the CDP4. For those Electric Power/Utilities companies that respond to the CDP4, CalPERS will positively recognize them on our website.

Sincerely,



Dennis A. Johnson, CFA
Senior Portfolio Manager, CalPERS

CC: CalPERS Board of Administration
Fred Buenrostro, Chief Executive Officer – CalPERS
Anne Stausboll, Interim Chief Investment Officer – CalPERS

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CALSTRS
HOW WILL YOU SPEND YOUR FUTURE?

California State Teachers'
Retirement System
7667 Folsom Blvd, MS-4
Sacramento, CA 95826

February 10, 2006

Richard G. Darman
Chairman
AES Corporation
4300 Wilson Blvd., 11th Fl.
Arlington, VA 22203

Dear Mr. Darman:

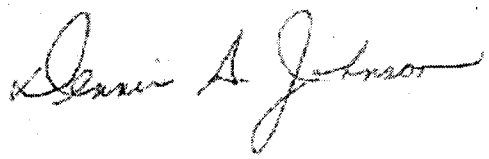
We are writing to you on behalf of the California State Teachers' Retirement System (CalSTRS) and California Public Employees' Retirement System (CalPERS), owners of 2,176,584 and 3,149,148 shares of common stock respectively in AES Corporation as of December 31, 2005.

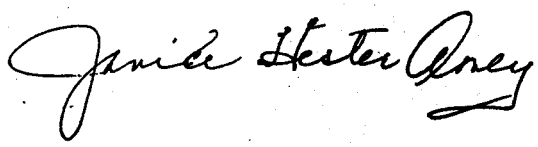
The purpose of this letter is to express our strong support for the Carbon Disclosure Project's (CDP) 2006 questionnaire (CDP4) that was mailed to you on February 1, 2006. CalPERS and CalSTRS are not only supportive of the CDP's effort and are signatories on CDP4, but CDP4 also represents a collaboration among CalPERS, CalSTRS, and the CDP to improve transparency and disclosure of environmental data in the Electric Power/Utilities Industry. Therefore, we would like to encourage AES Corporation to respond to the CDP4.

With adequate, accurate and timely data disclosure, shareowners are able to more effectively make investment decisions by taking into account the business practices (including environmental practices) of the companies in which we invest. In addition to the CDP4, there are other avenues through which AES Corporation may disclose all pertinent information associated with climate change, such as joining the California Climate Action Registry, issuing a sustainability report following the Global Reporting Initiative's Sustainability Reporting Guidelines, or joining the Chicago Climate Exchange.

We appreciate your consideration in responding to the CDP4. For those Electric Power/Utilities companies that respond to the CDP4, CalPERS and CalSTRS will positively recognize them on our respective websites.

Sincerely,





Dennis A. Johnson, CFA
Senior Portfolio Manager, CalPERS

Janice Hester Amey
Portfolio Manager, CalSTRS

CC: CalPERS Board of Administration
CalSTRS Board Members
Fred Buenrostro, Chief Executive Officer – CalPERS
Anne Stausboll, Interim Chief Investment Officer – CalPERS
Jack Ehnes, Chief Executive Officer – CalSTRS
Chris Ailman, Chief Investment Officer – CalSTRS

Attachment 12

CalPERS Utilities Greenhouse Gas Reporting Project
Portfolio Utilities Companies

CalPERS

Aare Tessin AG fur Elektrizitat
ACEA SpA
AEM SpA
Calpine Corporation
China Resources Power Holdings Company Ltd
Chugoku Electric Power Co Inc
Covanta Energy Corp
Energie Baden-Württemberg
Environmental Power Corp.
Gail LD
Green Mountain Power Corp
Hokuriku Electric Power Co Inc
Mirant Corporation
Okinawa Electric Power Co Inc
Reliance Energy Ltd
Shikoku Electric Power Co Inc
Sierra Pacific Resources
Tata Power Co
Tractebel Energia SA

CalPERS & CalSTRS

AES Corporation
Allegheny Energy Corp.
Allete Inc.
Alliant Energy Corporation
Ameren Corporation
American Electric Power Company Inc
Aquila, Inc.
Atmos Energy Corp
The Australian Gas Light Co
Avista Corporation
Cemig Cia Energ Mg
Central Vermont Public Service Corp
Centrica
CEZ - Ces Energeticke Zav
Chubu Electric Power Company Inc
Cinergy Corp
Cleco Corp
CLP Holdings Ltd
CMS Energy Corporation
Consolidated Edison Inc
Constellation Energy Group, Inc.
Contact Energy Ltd
Copel Parana Energy

Attachment 12

Dominion Resources
DPL Inc
DTE Energy Co
Duke Energy Corporation
Duquesne Light Holdings Inc.
Dynegy Inc
E.ON AG
Edison International
EDP - Energias de Portugal S.A.
El Paso Electric Company
Electric Power Development Co.
Electricity Generating Public Co Ltd
Electrobras - Centrais Electricas Brasileiras SA
Endesa S.A.
Enel SpA
Energy East Corp.
Entergy Corporation
Exelon Corporation
FirstEnergy Corp
FPL Group Inc
Gas Natural SDG
Great Plains Energy, Inc.
Hawaiian Electric Industries
Hokkaido Electric Power Co Inc
Hong Kong Electric Holdings Ltd
Iberdrola SA
IdaCorp, Inc.
International Power PLC
The Kansai Electric Power Co Inc
Keyspan Corporation
Korea Electric Power Corp
Kyushu Electric Power Co Inc
Malakoff Bhd
MDU Resources Group Inc
MGE Energy Inc.
Nisource Inc
Northeast Utilities Inc
Northwestern Corp
NRG Energy Inc
OGE Energy Corp
Oneok Inc. New
Otter Tail Corporation
Pinnacle West Capital Corp
PPL Corporation
Progress Energy Inc
Public Power Corp SA
Public Service Enterprise Group Inc
Puget Energy Inc
Reliant Energy Inc.
RWE AG
Scana Corp
Scottish Power PLC

Sempra Energy
Southern Company (The)
Suez
Teco Energy Inc
Tenaga Nasional Bhd
Tohoku Electric Power Co Inc
Transalta Corp
TransCanada Corp
TXU Corp
UGI Corporation
UIL Holdings Corporation
Union Fenosa SA
Unisource Energy Corp
Vectren Corp
Westar Energy, Inc.
Wisconsin Energy Corporation
WPS Resources Corporation
Xcel Energy Inc.
YTL Corporation Bhd
Scottish & Southern Energy PLC