

CDP 2009 Information Request

Respondent: Ford Motor Company

General introduction

Risk and Opportunities

1. Regulatory Risks: (CDP6 1(a)(i))

1.1 Is your company exposed to regulatory risks related to climate change?

We consider our company to be exposed to regulatory risks.

Climate-related legislation and regulation increasingly affect our business, including our manufacturing facilities, the emissions from our vehicles and, less directly, our markets.

In the United States, for example, the new Obama Administration is committed to passing comprehensive federal climate legislation, which would affect both our vehicles and our operations. Over the last year or so, a number of significant developments have taken place with respect to regulatory programs that would set greenhouse gas emissions or fuel economy standards for motor vehicles.

- In July 2008, the U.S. Environmental Protection Agency (EPA) issued an Advance Notice of Proposed Rulemaking requesting comment on the potential regulation of GHGs from both mobile and stationary sources under the federal Clean Air Act (CAA). In April 2009, the EPA published a proposed "endangerment" finding for GHGs; if the EPA finalizes this finding, it would trigger a number of regulatory provisions under the CAA. The EPA has also issued a proposed set of regulations on the reporting of GHG emissions from mobile and stationary sources.
- In March 2009, the National Highway Traffic Safety Administration (NHTSA) promulgated final Corporate Average Fuel Economy (CAFE) standards for the 2011 model year. By April 2010, NHTSA is expected to issue standards for the 2012 through 2016 model years.
- In January 2009, President Obama requested the EPA to reconsider its earlier denial of a waiver for California's AB 1493 regulations, which would impose GHG standards on motor vehicles at the state level. Congress has directed EPA to complete its review by June 30, 2009.
- On May 19, President Obama announced a framework agreement among the federal government, the State of California and automobile manufacturers to develop a national standard for fuel economy/greenhouse gas emissions for model years 2012–2016.

In Europe, the European Parliament passed legislation at the end of 2008 that will result in the regulation of the CO₂ emissions of our fleet of vehicles. Under the legislation, manufacturers will be required to ensure that their average fleet CO₂ emissions – for all the vehicles they make that are registered in the EU – are below 130 g/km. In 2012, 65 percent of the manufacturer's fleet must comply with this target. The percentage increases to 75 percent in 2013, 80 percent in 2014 and 100 percent in 2015. The long-term target for CO₂ emissions is set to 95 g/km; it will be reviewed again in 2013.

Additionally, the EU's Emission Trading Scheme regulations apply to eight Ford and Volvo facilities in the UK, Belgium, Sweden and Spain. Ford anticipated the start of this trading scheme and established internal business plans and objectives to maintain compliance with the regulatory requirements.

In Asia, Japan, South Korea and Taiwan have adopted fuel-efficiency targets. For example, Japan established fuel-efficiency targets for 2010 passenger car and commercial trucks, with incentives for early adoption. Also, the Chinese government has introduced weight-based fuel-consumption standards for passenger cars and light-duty commercial vehicles. Ford's product offerings comply with the standards in all of these markets.

To mitigate these risks, in the United States and elsewhere, we are actively advocating for comprehensive policy approaches that will provide a coherent framework for GHG emission reductions, so that companies can move forward in transforming their businesses with a clear understanding of their obligations.

Since 2007, Ford has been a member of the U.S. Climate Action Partnership (USCAP), a group of businesses and leading environmental organizations that have come together to call on the federal government to quickly enact strong national legislation to require significant reductions of GHG emissions. With a new administration in Washington that is committed to enacting climate legislation, the prospects for a new U.S. policy framework are stronger than ever.

In January 2009, USCAP released A Blueprint for Legislative Action, a report that details comprehensive, integrated policy recommendations for developing legislation that would create an environmentally effective and economically sustainable national climate protection program. The Blueprint is a consensus product of a diverse group of companies and environmental organizations; it attempts to provide a balanced approach to key linked issues that must be addressed in any national climate legislation. The Blueprint recommends a cap-and-trade program and complementary standards as a framework for legislation that can slow, stop and reverse the growth of greenhouse gas emissions.

These issues are discussed in more detail in the Climate Change Policy and Partnerships section of our 2008/2009 sustainability report (<http://www.ford.com/microsites/sustainability-report-2008-09/issues-climate-policy>).

Further information

2. Physical Risks: (CDP6 1(a)(ii))

2.1 Is your company exposed to physical risks from climate change?

We consider our company to be exposed to physical risks.

Global climate change raises the potential for shifting patterns of extreme weather and other risks to our facilities. For insurance purposes, we assess the risks each of our facilities faces (with input from third-party engineers) at least annually. This risk assessment is updated based on new data and takes into account the risk of exposure to hurricanes, tornadoes, other storms, flooding and earthquakes. As a result of this process, we believe we have a good understanding of the physical risks faced by our facilities and how those risks are changing over time.

Extreme weather has the potential to disrupt the production of natural gas, a fuel necessary for the manufacture of vehicles. Supply disruptions raise market rates and jeopardize the consistency of vehicle production. To minimize the risk of production interruptions, Ford has established firm delivery contracts with natural gas suppliers and installed propane tank farms at key manufacturing facilities as a source of backup fuel. Higher utility rates have prompted Ford to revisit and implement energy-efficiency actions that previously did not meet our internal rate of return.

Additionally, physical risks include the impact of changing water supplies on facilities in drought-prone areas, the number of employees who live in areas with limited access to clean water and the number of suppliers in water-scarce areas. In 2008, we piloted the use of a new water management tool developed by the World Business Council for Sustainable Development. This tool can be used to track water use, develop water management metrics and reporting systems, and assess water-related risks for individual facilities. A team of graduate students from the Kellogg School of Management at Northwestern University worked with Ford to analyze our global water use and water risks using this tool. Using water consumption data from our global manufacturing facilities, this project allowed Ford to evaluate water risks to its operations and prioritize actions to reduce those risks.

Further information

3. Other Risks: (CDP6 1(a)(iii))

3.1 Is your company exposed to other risks as a result of climate change?

We consider our company to be exposed to other risks.

Our markets changed dramatically during 2008. The serious global recession has depressed auto sales across all markets. Record oil prices in the first half of the year accelerated the shift from larger vehicles and light trucks to smaller, more fuel-efficient vehicles (including cars and crossovers) and diesel-powered vehicles. Oil prices then plunged during the second half of the year, which may have dampened interest in hybrid and other vehicles with superior fuel economy. However, we anticipate – and many of our customers believe – that volatile and increasing energy costs are likely to continue to drive the market for fuel-efficient vehicles in the long run. Energy security is also a major concern in several markets in which we operate.

Within these broad trends, there are regional differences. In North America, new regulations, volatile fuel prices and energy security concerns are encouraging the sales of smaller and more fuel-efficient vehicles. In emerging markets, the growth in vehicle sales is raising concerns about emissions and congestion. In Europe, the long-term trend of high-priced fuel and more fuel-efficient vehicles has led to a major shift toward diesel-powered vehicles, which now make up more than half of all new vehicle sales. This trend is reinforced by sales incentives in some European countries designed to encourage new vehicle sales, with the aim of reducing carbon dioxide emissions from older, less-efficient vehicles. Some of these incentives are bound to upper limits of CO2 emissions of 160 g/km and less, which has boosted sales of small cars. Other schemes are linked to regulatory emissions standards (e.g. Euro 4).

These market shifts are very significant to our Company. Everywhere we operate, the future financial health of our Company depends on our ability to predict market shifts of all kinds and to be ready with the products and services our customers demand.

Further information

4. Regulatory Opportunities: (CDP6 1(b)(i))

4.1 Do regulatory requirements on climate change present opportunities for your company?

Regulatory requirements present opportunities for my company.

The regulatory risks outlined in section 1.1 also give rise to market and leadership opportunities. At Ford, we accept that simply "not getting worse" is not good enough. The auto industry must work together with suppliers, government, the fuel industry and consumers to reduce carbon dioxide (CO2) levels from transportation so we can help stabilize atmospheric CO2 concentrations. Accomplishing this goal will require that all sectors of the economy, including the transportation sector, do their share. To achieve real and lasting results, all global stakeholders must make long-term commitments for a sustainable future.

In the United States and elsewhere, we are actively advocating for comprehensive policy approaches that will provide a coherent framework for GHG emission reductions, so that companies can move forward in transforming their businesses with a clear understanding of their obligations.

As Ford brings hybrids, EcoBoost™ engines and electric vehicles to market, one challenge will be how to encourage consumers to replace their older, less-efficient vehicles with those offering new technologies. This is a particular problem in the current economic environment, in which vehicle sales have dropped dramatically. Some European countries have provided incentives to consumers to buy vehicles that are more fuel-efficient. This also helps cut pollution from tailpipe emissions, as newer vehicles generally have cleaner exhaust.

In Germany, for example, a government program provides discounts for new-car buyers of €2,500 (about \$3,400 at current exchange rates), with the trade-in of a car at least nine years old that will be scrapped. The program helped boost car sales in March 2009 to a rate 40 percent higher than the previous year.

Ford would like to see a similar approach enacted in the United States to spur sales, boost tax revenue and reduce CO2 and smog-forming emissions from vehicles.

Also, Ford is involved in numerous partnerships and alliances with universities, coalitions, nongovernmental organizations and other companies to improve our understanding of climate change. For example, Ford is:

- A member of the United States Climate Action Partnership (USCAP), an alliance of major businesses and leading climate and environmental groups that have come together to develop an economy-wide, market-driven approach to reduce greenhouse gas emissions, as discussed in the U.S. Climate Change Legislation section of our 2008/09 sustainability report (<http://www.ford.com/microsites/sustainability-report-2008-09/issues-climate-policy-legislation>)
- Working closely with BP to explore vehicle technologies and low-carbon fuel technologies
- A founding member of the Carbon Mitigation Initiative at Princeton University to study the fundamental scientific, environmental and technical issues related to carbon management
- A charter member of the Sustainable Transportation Energy Pathways Program at the University of California-Davis Institute of Transportation Studies, which aims to compare the societal and technical benefits of alternative sustainable fuel pathways
- A member of the Massachusetts Institute of Technology's Joint Program on the Science and Policy of Global Climate Change

Our participation in these and other partnerships helps us to formulate improved strategies for products and policies that will in turn help to address climate change and energy security.

Ford's ability to comply with climate-related regulations and respond to markets influenced by the issue is of increasing interest to investors. Thus, providing climate-change-relevant information to investors and shaping our business strategy with climate change in mind are important elements of maintaining access to capital.

Further information

5. Physical Opportunities: (CDP6 1(b)(ii))

5.1 Do physical changes resulting from climate change present opportunities for your company?

Physical changes present opportunities for my company.

While we can reasonably identify the regulatory opportunities associated with the competitive advantages of being first to market with advanced GHG reducing technologies, it is not so easily done for physical opportunities given the nature of the automotive industry. However, physical changes, whether associated with climate change or not, can give rise to opportunities for strengthening community and government relationships as well as improving operations management.

For example, Ford is increasingly expanding abroad with its community relations. In 2008, Ford continued its partnership with the GlobalGiving Foundation, an organization that has worked with Ford Motor Company Fund to expand our giving to international communities affected by major disasters.

Ford provided immediate assistance to communities in need of clean water after Cyclone Nargis struck Myanmar, and provided assistance to children recovering emotionally from the effects of flooding in Tabasco, Mexico. Through the Ford GlobalGiving Web site, Ford employees were able to give and have their donations matched to help those affected by the earthquake in China's Sichuan Province. Ford's Asia Pacific Africa personnel, in cooperation with GlobalGiving and the Asia Injury Prevention Foundation, expanded Ford's Driving Skills for Life Program in Thailand, Vietnam, Indonesia and the Philippines. Also through the GlobalGiving Foundation, Ford Export Operations and Global Growth Initiatives supported the Ford Volunteer Corps Global Week of Caring through work with its international dealers.

The Mexican Center for Philanthropy has recognized Ford of Mexico as a Socially Responsible Company for seven consecutive years. The award is given to companies that encourage quality of life in the workplace, strong ethics, environmental care in its operations and close involvement in the community. Ford and its dealers were lauded for building 209 schools across Mexico and for working to protect endangered species, among other community-focused initiatives.

In addition, water scarcity is an increasingly significant issue in many regions of the world, and our reduction efforts are ahead of the curve. Initiatives that address this issue can also have the potential for waste and energy benefits.

In 2000, Ford launched a water-reduction initiative and set a target of 3 percent year-over-year reductions in water use. From 2000 to 2008, Ford's global manufacturing operations reduced water consumption by more than 56 percent, or approximately 9.5 billion gallons. We reduced global water use approximately 24 percent from 2007 to 2008 alone.

When the initiative began, many facilities had little ability to track their water usage. Ford engineers thus developed a patented Water Estimation Tool (WET), a software program that helps facilities to predict their water usage. They then paired WET with WILD (Water Ideas to Lessen Demand), a list of practical ideas for reducing water use depending on where and when use is the greatest. Our facilities made good progress for several years, meeting or exceeding the 3 percent year-over-year water reduction goal that applied to all facilities. To encourage continued progress, Ford environmental engineers are developing "single point lessons" that document practices demonstrated to save water. These lessons are cascaded for mandatory implementation in all facilities and are included in facility business plans. Single point lessons implemented thus far include leak identification, cooling tower optimization and vehicle water testing.

Water use at each facility is also tracked in the Global Emissions Manager database, our global emissions management and tracking system. Water use is included in GEM in a monthly tracking scorecard reviewed by senior management.

Further information

6. Other Opportunities: (CDP6 1(b)(iii))

6.1 Does climate change present other opportunities for your company?

Climate change presents other opportunities for my company.

Increased awareness of climate change related issues has allowed us to sharpen our focus on providing sustainable transportation. Ford's Blueprint for Sustainability is the result of years of progress towards this goal, and outlines a plan to deliver products that customers want while doing our share to stabilize worldwide greenhouse gas concentrations.

Our product globalization strategy is designed to help us respond to changing markets and regional preferences. We are leveraging our best technology from around the world to create global platforms that offer superior fuel economy, safety, driving dynamics and customer features. We then tailor each global platform to national or regional preferences and requirements. New technology is also cutting the time required to bring new vehicles to market, which helps us respond more effectively to the ever-increasing pace of change in our markets. Many of these factors are spurred in part by efforts to meet global and regional GHG mitigation targets, but subsequently help Ford to continually improve its products overall.

Within the Sustainable Technologies and Alternative Fuels Plan, Ford has outlined a detailed approach to electrification. Running vehicles partly or wholly on electricity can reduce or eliminate CO2 emissions from the vehicle itself, but the overall emission benefits depend on the fuel or mix of fuels used to make the electricity. Because electricity can be made from a wide variety of fuels, including domestic sources and renewable fuels, electrification addresses both energy security and climate change concerns. It also offers flexibility in tailoring lower-carbon solutions based on locally available fuels and technology options like carbon capture and storage.

Expanding electrification holds tremendous promise, but a range of implementation challenges must be considered. These challenges relate to cost, battery technology, the development of charging infrastructure, the interface with utilities and how to ensure that potential emissions-reduction benefits are realized. We have partnered with the Electric Power Research Institute and Southern California Edison to explore these and other issues involved in expanding the use of plug-in hybrid electric vehicles. This partnership was expanded in early 2009, and through it Ford will now supply plug-in vehicles to eight additional partners for real-world testing.

In addition, reducing the carbon impact of transportation presents new opportunities for examining the overarching concept of mobility. Our goal is to make mobility affordable in every sense of the word – economically, environmentally and socially. Today, there are 6.7 billion people in the world. By 2050, there will be 9 billion people, 75 percent of whom will live in urban areas. Forty of the world's 50 largest cities will be in countries outside of North America, Europe or Japan. These mega-cities – urban areas of 5–10 million people or more – will be increasingly affluent and increasingly crowded. Residents of these cities will want – and deserve – the same freedom of mobility that many in developed nations enjoy today.

Automobiles have provided personal mobility for more than 100 years. There are currently 900 million vehicles in the world, and that number is increasing rapidly as individuals in developing markets reach new levels of prosperity; it could reach 2 billion by the middle of this century.

This sounds like good news for an automotive company, and to some extent, it is. Our most rapid sales growth is taking place in emerging markets. But a business model built on private ownership of automobiles comes with inherent challenges. With respect to climate change, transportation of people and goods already accounts for about 14% of global human-caused greenhouse gas emissions. This percentage may rise as global demand for mobility increases. Energy costs, infrastructure constraints, and resource limits all provide additional obstacles. Taken together, these trends point to increasingly diverse and fragmented markets for traditional automobile sales. They also point to significant opportunities for companies that are able to respond to mobility needs creatively.

As we reach the limits of conventional models of mobility, "new mobility" offers a practical route forward. New mobility approaches transportation needs and options from a systems perspective. It relies on collaborative partnerships and information technology to bring existing services, products, technologies, infrastructure and design together into something that is greater than the sum of its parts – smarter, more sustainable, more convenient, more equitable and better connected.

When mobility models change, so do the needs of our customers and potential customers. For several years, Ford has worked with a wide range of academic and public and private sector partners to explore sustainable mobility issues, advance thinking and catalyze on-the-ground projects to test different approaches to urban mobility. The insights we gain from this work help us to understand the forces that are shaping our markets, our role in addressing mobility challenges and the opportunities these trends present for us.

For more information on the topics covered in Section 1 of the CDP Questionnaire, please see the Climate Change Risks and Opportunities section of our annual sustainability report (<http://www.ford.com/microsites/sustainability-report-2008-09/issues-climate-risks>)

Further information

Greenhouse Gas (GHG) Emissions Accounting, Emissions Intensity, Energy and Trading

7. Reporting Year (CDP6 Q2(a)(ii))

Information about how to respond to this section may be found in "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)" developed by the World Resources Institute and the World Business Council for Sustainable Development ("the GHG Protocol"), see <http://www.ghgprotocol.org/>. ISO 14064-1 is compatible with the GHG Protocol as are a number of regional/national programme protocols. For more information see <http://www.ghgprotocol.org/> and use the guidance button above.

Please provide CDP with responses to questions 7, 8, 9, 10.1, 10.2, 11.1 and 11.2 for the three years prior to the current reporting year if you have not done so before or if this is the first time you have answered a CDP information request. Please work backwards from the current reporting year, so that you enter data for your oldest reporting period last.

Questions 10.1, 10.2, 11.1, and 11.2 are on subsequent webpages and the dates that you give in answer to question 7 will be carried forwards to automatically populate those webpages.

7.1. Please state the start date and end date of the year for which you are reporting GHG emissions.

Start date: 01 January 2008

End date: 31 December 2008

Financial accounting year: 01 January 2008

8. Reporting Boundary: (CDP6 Q2(a)(i))

8.1. Please indicate the category that describes the company, entities, or group for which Scope 1 and Scope 2 GHG emissions are reported.

Companies over which financial control is exercised – per consolidated audited Financial Statements.

8.2. Please state whether any parts of your business or sources of GHG emissions are excluded from your reporting boundary.

9. Methodology: (CDP6 Q2(a)(iii))

9.1. Please describe the process used by your company to calculate Scope 1 and Scope 2 GHG emissions including the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 GHG emissions.

Please provide your answer in the text box. In addition to this description, if relevant, select a methodology from the list of published methodologies. This will aid automated analysis of the data.

CO2 emissions from energy usage (e.g., electricity, natural gas, and coal) represent the significant source of greenhouse gas emissions from our manufacturing facilities. For our emissions reports, we use the GHG Protocol Scopes 1 and 2. Our direct CO2 emissions "within the fence posts" are from combustion of natural gas and coal. Indirect CO2 emissions from usage of purchased electricity comprise roughly two-thirds of our total manufacturing-related CO2 emissions. Our commitment letter to CCX covers CO2 emissions from energy used at manufacturing facilities throughout North America (Canada, Mexico, and U.S.) (both direct and indirect emissions sources). We report joint venture emissions based upon our equity ownership split.

Select methodologies:

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

Please also provide:

9.2 Details of any assumptions made.

9.3 The names of and links to any calculation tools used.

Select calculation tools:

9.4 The global warming potentials you have applied and their origin.

9.5 The emission factors you have applied and their origin.

Ford calculates its GHG emissions using the WRI protocol provided factors or country specific factors when available. Under the EU-ETS emissions are calculated as required by the program.

Further information

10. Scope 1 Direct GHG Emissions: (CDP6 Q2(b)(i))

Instructions for question 10 and question 11 (following page)

When providing answers to questions 10 and 11, please do not deduct offset credits, Renewable Energy Certificates etc, or net off any estimated avoided emissions from the export of renewable energy, carbon sequestration (including enhanced oil recovery) or from the use of goods and services. Opportunities to provide details of activities that reduce or avoid emissions are provided elsewhere in the information request.

Carbon dioxide emissions from biologically sequestered carbon e.g. carbon dioxide from burning biomass/biofuels should be reported separately from emissions Scopes 1, 2 and 3. If relevant, please report these emissions in question 15. However, please do include any nitrous oxide or methane emissions from biomass/biofuel combustion in your emissions under the three scopes.

Please answer the following questions using Table 1.

Please provide:

10.1. Total gross global Scope 1 GHG emissions in metric tonnes of CO₂-e

Please break down your total gross global Scope 1 emissions by:

10.2. Country or region

Please provide CDP with responses to questions 10.1 and 10.2 for the three years prior to the current reporting year if you have not done so before or if this is the first time you have answered a CDP information request. Please work backwards from the current reporting year, so that you enter data for your oldest reporting period last. Table 1 (below) and table 5 (Q11.1 and 11.2) will be automatically populated with the dates that you give in answer to 7.1.

Electric utilities should report emissions by country/region using the table in question EU3.

Table 1 - Please use whole numbers only. Use the "Other" option in the drop down menu to enter the name of a region.

Reporting year Q7.1 Start date	01/01/2008
Reporting year Q7.1 End date	31/12/2008
10.1 Total gross global Scope 1 GHG emissions in metric tonnes CO₂-e	1867223
10.2 Gross Scope 1 emissions in metric tonnes CO₂-e by country or region	

Your answer to question 10.1 will be automatically carried forward to tables 2 and 3 below if you add a country or region in answer to 10.2 or press "Save" at the end of the page.

Please tick the box if your total gross global Scope 1 figure (Q10.1) includes emissions that you have transferred outside your reporting boundary (as given in answer to 8.1). Please report these transfers under 13.5.

Where it will facilitate a better understanding of your business, please also break down your total global Scope 1 emissions by:

10.3. Business division

and/or
10.4. Facility

10.3. Business division (only data for the current reporting year requested)

Table 2 - Please use whole numbers only.

Business Divisions - Enter names below	Scope 1 Metric tonnes CO ₂ -e
Total gross global Scope 1 GHG emissions in metric tonnes CO₂-e - answer to question Q10.1	1867223

10.4. Facility (only data for the current reporting year requested)

Table 3 - Please use whole numbers only.

Facilities - Enter names below	Scope 1 Metric tonnes CO ₂ -e
Total gross global Scope 1 GHG emissions in metric tonnes CO₂-e - answer to question Q10.1	1867223

10.5. Please break down your total global Scope 1 GHG emissions in metric tonnes of the gas and metric tonnes of CO₂-e by GHG type. (Only data for the current reporting year requested.)

Table 4 - Please use whole numbers only.

Scope 1 GHG Type	Unit	Quantity
CO ₂	Metric tonnes	1867223
CH ₄	Metric tonnes	
CH ₄	Metric tonnes CO ₂ -e	
N ₂ O	Metric tonnes	
N ₂ O	Metric tonnes CO ₂ -e	
HFCs	Metric tonnes	
HFCs	Metric tonnes CO ₂ -e	
PFCs	Metric tonnes	
PFCs	Metric tonnes CO ₂ -e	
SF ₆	Metric tonnes	
SF ₆	Metric tonnes CO ₂ -e	

10.6. If you have not provided any information about Scope 1 emissions in response to the questions above, please explain your reasons and describe any plans you have for collecting Scope 1 GHG emissions information in future.

Further information

In 2008, The Rawsonville Plant and Sterling Plant were added to Ford's scope. In order to keep transparency all values back to the baseline (2000) have been adjusted as shown in attached file ([Adjusted Ford Emissions](#))

http://cdp.cdproject.net/attachedfiles/Responses/53509/11541/Adjusted_Ford_Emissions.xls

11. Scope 2 Indirect GHG Emissions: (CDP6 Q2(b)(i))

Important note about emission factors where zero or low carbon electricity is purchased:

The emissions factor you should use for calculating Scope 2 emissions depends upon whether the electricity you purchase is counted in calculating the grid average emissions factor or not – see below. You can find this out from your supplier.

Electricity that IS counted in calculating the grid average emissions factor:

Where electricity is sourced from the grid and that electricity has been counted in calculating the grid average emissions factor, Scope 2 emissions must be calculated using the grid average emissions factor, even if your company purchases electricity under a zero or low carbon electricity tariff.

Electricity that is NOT counted in calculating the grid average emissions factor:

Where zero or low carbon electricity is sourced from the grid or otherwise transmitted to the company and that electricity is not counted in calculating the grid average, the emissions factor specific to that method of generation can be used, provided that any certificates quantifying GHG-related environmental benefits claimed for the electricity are not sold or passed on separately from the electricity purchased.

[Click here](#) to see the instructions from the previous page on answering question 11.

Please answer the following questions using Table 5.

Please provide:

11.1. Total gross global Scope 2 GHG emissions in metric tonnes of CO₂-e.

Please break down your total gross global Scope 2 emissions by:

11.2. Country or region

Please provide CDP with responses to questions 11.1 and 11.2 for the three years prior to the current reporting year if you have not done so before or if this is the first time you have answered a CDP information request. Please work backwards from the current reporting year, so that you enter data for your oldest reporting period last. Table 5 will be automatically populated with the dates that you gave in answer to 7.1.

Table 5 - Please use whole numbers only. Use the "Other" option in the drop down menu to enter the name of a region.

Reporting year Q7.1 Start date	01/01/2008
Reporting year Q7.1 End date	31/12/2008
11.1 Total gross global Scope 2 GHG emissions in metric tonnes CO₂-e	3528327
11.2 Gross Scope 2 emissions in metric tonnes CO₂-e by country or region	

Your answer to 11.1 will be automatically carried forward to tables 6 and 7 below if you add a country or region in answer to 11.2 or press "Save" at the end of the page.

Where it will facilitate a better understanding of your business, please also break down your total global Scope 2 emissions by:

11.3. Business division

and/or

11.4. Facility

11.3. Business division (only data for the current reporting year requested)

Table 6 - Please use whole numbers only.

Business Divisions - Enter names below	Scope 2 Metric tonnes CO₂-e
Total gross global Scope 2 GHG emissions in metric tonnes CO₂-e - answer to question Q11.1	3528327

11.4. Facility (only data for the current reporting year requested)

Table 7 - Please use whole numbers only.

Facilities - Enter names below	Scope 2 Metric tonnes CO₂-e
Total gross global Scope 2 GHG emissions in metric tonnes CO₂-e - answer to question Q11.1	3528327

11.5. If you have not provided any information about Scope 2 emissions in response to the questions above, please explain your reasons and describe any plans you have for collecting Scope 2 GHG emissions information in future.

Further information

[See question 10 and attached file](#)

12. Contractual Arrangements Supporting Particular Types of Electricity Generation: (CDP6 Q2(b)(i)- Guidance)

12.1. If you consider that the grid average factor used to report Scope 2 emissions in question 11 does not reflect the contractual arrangements you have with electricity suppliers, (for example, because you purchase electricity using a zero or low carbon electricity tariff), you may calculate and report a contractual Scope 2 figure in response to this question, showing the origin of the alternative emission factor and information about the tariff.

12.2. If you retire any certificates (eg: Renewable Energy Certificates) associated with zero or low carbon electricity, please provide details.

13. Scope 3 Other Indirect GHG Emissions: (CDP6 Q2(c))

For each of the following categories, please:

- Describe the main sources of emissions,
- Report emissions in metric tonnes of CO₂-e,

- state the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

Notes about question 13

When providing answers to question 13, please do not deduct offset credits, Renewable Energy Certificates etc, or net off any estimated avoided emissions from the export of renewable energy, carbon sequestration (including enhanced oil recovery) or from the use of goods and services. Opportunities to provide details of activities that reduce or avoid emissions are provided elsewhere in the information request.

Carbon dioxide emissions from biologically sequestered carbon e.g. carbon dioxide from burning biomass/biofuels should be reported separately from emissions Scopes 1, 2 and 3. If relevant, please report these emissions in question 15. However, please do include any nitrous oxide or methane emissions from biomass/biofuel combustion in your emissions under the three scopes.

13.1 Employee business travel

Describe the main sources of emissions

While we currently do not measure the impact of employee business travel on climate change, we are looking at ways to measure and offset these effects. Continuing work from last year, we are in the process of benchmarking other industries in order to establish our own procedures and metrics.

Emissions in metric tonnes CO₂-e.

State the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

13.2. External distribution/logistics

Describe the main sources of emissions

Logistics (the transportation of parts and vehicles) is a relatively small part of Ford's environmental footprint, accounting for about 0.5 percent of vehicle life cycle emissions, for example. However, logistics is a key business function that requires more than getting things from point A to point B. Logistics managers are key partners in ensuring that our factories have the parts and materials needed for efficient operation without maintaining excess inventory. They also try to minimize costs, fuel use and the environmental impacts of packaging and protect the quality of shipped items. An example of an innovative approach to optimize these factors for sustainability is the development of a closed-loop packaging system.

More information on distribution and logistics can be found in the Environment: Supply Chain: Logistics section of our sustainability report (<http://www.ford.com/microsites/sustainability-report-2008-09/environment-supply-logistics>).

Emissions in metric tonnes CO₂-e.

State the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

13.3 Use/disposal of company's products and services

For auto manufacture and auto component companies – please refer to the additional questions for these sectors before completing question 13.3.

Describe the main sources of emissions

Emissions in metric tonnes CO₂-e.

State the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

13.4 Company supply chain

Describe the main sources of emissions

We have not, as a policy, measured the quantity of emissions generated by our supply chain. The Supplier Sustainability Forum, formed in 2001, is a place for sharing best practices, developing future Ford-supplier strategies and metrics, and helping us better communicate and refine our sustainability policies. This forum is one area where the topic of climate change has been discussed.

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.

Continuing work from the previous year, we are currently in the process of benchmarking other industries with large supply chain operations, in an attempt to include the best practices in procedures and metrics for our own supply chain.

As of the second quarter of 2009, all of our Q1 suppliers are ISO 14001 certified.

Please also see the following url for additional information in how we are addressing this issue.
<http://www.ford.com/microsites/sustainability-report-2008-09/environment-supply-logistics>

Supply Chain

We are currently evaluating climate change risks and opportunities across our supply chain and searching for new opportunities and relationships that will enhance supplier environmental performance. Within the Aligned Business Framework agreement with suppliers, environmental leadership is integral to overall business performance metrics. Climate-change-related activities are highlighted as potential leadership opportunities.

In addition, our requirement that suppliers implement robust environmental management systems will better enable them to understand, measure and report their emissions. We also will seek out opportunities to partner with suppliers to improve the greenhouse gas emissions performance of our products and processes, and improve energy efficiency throughout the life-cycle, including the supply chain.

Beyond CO2

We are also addressing other (non-CO2) greenhouse gases such as hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrous oxide (N2O) and sulfur hexafluoride (SF6). We have prohibited SF6 in tires and PFCs in open systems since 1999. We are minimizing the use of HFCs in vehicle air conditioning and prohibit the use of HFCs in other on-board vehicle applications (e.g., as used in some spare tire kits). We are working with our suppliers to optimize air conditioning efficiency, reduce refrigerant leakage rates and investigate alternatives. We are also actively conducting research to evaluate the environmental fates of potential alternative air conditioning refrigerants to replace HFC-134a and have made our research data available to the scientific community. We prohibited the use of SF6 in magnesium casting as of January 2004 through our Restricted Substance Management Standard.

The vast majority of the life-cycle greenhouse gases associated with motor vehicle use are in the form of CO2; relatively small amounts of other greenhouse gases are emitted. A small amount of methane (CH4) is formed in the engine and emitted into the atmosphere. We have assessed the contribution to climate change made by methane emissions from vehicles as about 0.3 to 0.4 percent of that of the CO2 emissions from vehicles. We also try to minimize N2O tailpipe emissions. We have assessed the contribution to climate change from N2O emissions from vehicle tailpipes (not including potential emissions associated with fuel production) as about 1 to 3 percent of that of the tailpipe CO2 emissions from vehicles. We are in the process of assessing N2O emissions associated with fuel (especially biofuel) production.

Emissions in metric tonnes CO₂-e.

State the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

13.5 Other

If you are reporting emissions that do not fall into the categories above, please categorise them into transferred emissions and non-transferred emissions (please see guidance for an explanation of these terms).

Please report transfers in the first three input fields and non-transfers in the last three input fields.

Transfers

Describe the main sources of emissions

Transfers

Report emissions in metric tonnes of CO₂-e.

Transfers

State the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

Non-transfers

Describe the main sources of emissions

Non-transfers

Report emissions in metric tonnes of CO₂-e.

Non-transfers

State the methodology, assumptions, calculation tools, databases, emission factors (including sources) and global warming potentials (including sources) you have used for calculating emissions.

13.6 If you have not provided information about one or more of the categories of Scope 3 GHG emissions in response to the questions above, please explain your reasons and describe any plans you have for collecting Scope 3 indirect emissions information in future.

Further information

14. Emissions Avoided Through Use Of Goods And Services (New for CDP 2009)

14.1. If your goods and/or services enable GHG emissions to be avoided by a third party, please provide details including the estimated avoided emissions, the anticipated timescale over which the emissions are avoided and the methodology, assumptions, emission factors (including sources), and global warming potentials (including sources) used for your estimations.

Further information

15. Carbon Dioxide Emissions from Biologically Sequestered Carbon: (New for CDP 2009)

An example would be carbon dioxide from burning biomass/biofuels.

15.1. Please provide the total global carbon dioxide emissions in metric tonnes CO₂ from biologically sequestered carbon.

Emissions in metric tonnes CO₂ - Please use whole numbers only

Further information

16. Emissions Intensity: (CDP6 Q3(b))

16.1. Please supply a financial emissions intensity measurement for the reporting year for your combined Scope 1 and 2 emissions.

Please describe the measurement.

<http://www.ford.com/microsites/sustainability-report-2008-09/environment-data-energy>

16.1.1. Give the units. For example, the units could be metric tonnes of CO₂-e per million Yen of turnover, metric tonnes of CO₂-e per US\$ of profit, metric tonnes of CO₂-e per thousand Euros of turnover.

<http://www.ford.com/microsites/sustainability-report-2008-09/environment-data-energy>

16.1.2. The resulting figure.

Use a decimal point if necessary. Please use a "." rather than a ",", i.e. please write 15.6 rather than 15,6

16.2. Please supply an activity related intensity measurement for the reporting year for your combined Scope 1 and 2 emissions.

Please describe the measurement.

16.2.1. Give the units e.g. metric tonnes of CO₂-e per metric tonne of output or for service sector businesses per unit of service provided.

16.2.2. The resulting figure.
Use a decimal point if necessary. Please use a "." rather than a ",", i.e. please write 15.6 rather than 15,6

Further information

17. Emissions History: (CDP6 Q2(f))

17.1. Do emissions for the reporting year vary significantly compared to previous years?

No - Please go to question 18.

If the answer to 17.1 is Yes:

17.1.1. Estimate the percentage by which emissions vary compared with the previous reporting year.

This box will accept numerical answers containing a decimal point. Please use "." not ",", i.e. write 10.6, not 10,6.

11 %

Have the emissions increased or decreased?

Decreased

Further information

18. External Verification/Assurance: (CDP6 Q2(d))

18.1. Has any of the information reported in response to questions 10 – 15 been externally verified/assured in whole or in part?

Yes, it has been externally verified/assured in whole or in part.(Please continue with questions 18.2 to 18.5)

It would aid automated analysis of responses if you could select responses from the tick boxes below. However, please use the text box provided if the tick boxes menu options are not appropriate.

18.2. State the scope/boundary of emissions included within the verification/assurance exercise.

Scope 1 Q10.1

Scope 2 Q11.1

Please use the text box below to describe the scope/boundary of emissions included within the verification/assurance exercise if the tick box menu options above are not applicable.

Over two-thirds of Ford's global facility GHG emissions are third-party verified. All of Ford's North American GHG emissions data since 1998 are externally verified by FINRA, the auditors of the NASDAQ stock exchange, as part of membership in the Chicago Climate Exchange. In addition, all emissions data covered by the EU Trading Scheme and voluntary UK Trading Scheme are third-party verified.

All EU-ETS verification statements are provided to Ford by facility from CICS for UK facilities, Lloyds for Germany and Spain, and Flemish Verification Office for Belgium. Ford's North American GHG emissions data is verified by FINRA. Any verification statements are available upon request.

18.3. State what level of assurance (eg: reasonable or limited) has been given.

18.4. Provide a copy of the verification/assurance statement.

Please attach a copy/copies.

18.5. Specify the standard against which the information has been verified/assured.

North American facilities are verified against the WRI GHG Protocol. European facilities are verified against the EU ETS rules and guidelines.

18.6. If none of the information provided in response to questions 10-15 has been verified in whole or in part, please state whether you have plans for GHG emissions accounting information to be externally verified/assured in future.

Further information

19. Data Accuracy: (CDP6 Q2(e) – New wording for CDP 2009)

19.1. What are the main sources of uncertainty in your data gathering, handling and calculations e.g.: data gaps, assumptions, extrapolation, metering/measurement inaccuracies etc?

If you do not gather emissions data, please select emissions data is NOT gathered and proceed to question 20.

Emission data is gathered.

19.2. How do these uncertainties affect the accuracy of the reported data in percentage terms or an estimated standard deviation?

Ford has established comprehensive internal controls including centralized tracking of all emissions data globally, internal procedures for establishing emissions trading strategies and status reports, and central coordination of all CO2-related audits and reporting. This global, centralized approach has supported our participation in facility CO2 initiatives in a more cost-effective and operationally efficient manner.

Ford has established global roles and responsibilities and policies and procedures to help ensure compliance with emissions trading initiatives worldwide.

Ford adopted the Global Emissions Manager (GEM) database that serves as a central repository for our facilities to consistently input and assess energy and CO2 data. We have found that emissions data management is performed most efficiently when centralized in this manner. We subsequently expanded GEM to include water usage, waste management, and other environmental metrics that support Ford's sustainability objectives

19.3. Does your company report GHG emissions under any mandatory or voluntary scheme (other than CDP) that requires an accuracy assessment?

Yes (Please answer the following questions - 19.3.1, 19.3.2).

19.3.1 Please provide the name of the scheme.

EU emissions trading scheme

19.3.2. Please provide the accuracy assessment for GHG emissions reported under that scheme for the last report delivered.

Further information

20. Energy and Fuel Requirements and Costs: (New for CDP 2009)

Please provide the following information for the reporting year:

Cost of purchased energy

20.1. The total cost of electricity, heat, steam and cooling purchased by your company.

Select currency

20.1.1. Please break down the costs by individual energy type.

Table 8 - The "Cost" column will not accept text. Please use whole numbers only.

Energy type	Cost	Currency
Electricity		
Heat		
Steam		
Cooling		

Cost of purchased fuel

20.2. The total cost of fuel purchased by your company for mobile and stationary combustion.

Select currency

20.2.1. Please breakdown the costs by individual fuel type.

Table 9 - The cost column will not accept text. Please use whole numbers only.

Mobile combustion fuels	Cost	Currency
Kerosene		

Stationary combustion fuels	Cost	Currency
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Energy and fuel inputs

The following questions are designed to establish your company's requirements for energy and fuel (inputs). Please note that MWh is our preferred unit for answers as this helps with comparability and analysis. Although it is usually associated with electricity, it can equally be used to represent the energy content of fuels (see CDP 2009 Reporting Guidance for further information on conversions to MWh).

Purchased energy input

20.3 Your company's total consumption of purchased energy in MWh.

Please use whole numbers only.

[17854 MWh](#)

Purchased and self produced fuel input

20.4. Your company's total consumption in MWh of fuels for stationary combustion only. This includes purchased fuels, as well as biomass and self-produced fuels where relevant.

Please use whole numbers only.

[7113 MWh](#)

In answering this question and the one below, you will have used either Higher Heating Values (also known as Gross Calorific Values) or Lower Heating Values (also known as Net Calorific Values). Please state which you have used in calculating your answers.

20.4.1. Please break down the total consumption of fuels reported in answer to question 20.4 by individual fuel type in MWh.

Table 10 - Please use whole numbers only

Stationary combustion fuels	MWh
-----------------------------	-----

Energy output

In this question we ask for information about the energy in MWh generated by your company from the fuel that it uses. Comparing the energy contained in the fuel before combustion (question 20.4) with the energy available for use after combustion will give an indication of the efficiency of your combustion processes, taking your industry sector into account.

20.5. What is the total amount of energy generated in MWh from the fuels reported in question 20.4?

Please use whole numbers only.

20.6. What is the total amount in MWh of renewable energy, excluding biomass, that is self-generated by your company?

Please use whole numbers only.

Energy exports

This question is for companies that export energy that is surplus to their requirements. For example, a company may use electricity from a combined heat and power plant but export the heat to another organisation.

20.7. What percentage of the energy reported in response to question 20.5 is exported/sold by your company to the grid or to third parties?

Please use whole numbers only.

20.8. What percentage of the renewable energy reported in response to question 20.6 is exported/sold by your company to the grid or to third parties?

Please use whole numbers only.

Further information

[As a matter of policy, we do not disclose the company's energy costs and data related to energy costs.](#)

21. EU Emissions Trading Scheme: (CDP6 Q2(g)(i) – New wording for CDP 2009)

Electric utilities should report allowances and emissions using the table in question EU5.

21.1. Does your company operate or have ownership of facilities covered by the EU Emissions Trading Scheme (EU ETS)?

[Yes \(Please answer the following questions - 21.2 to 21.4\)](#)

Please give details of:

21.2. The allowances allocated for free for each year of Phase II for facilities which you operate or own. (Even if you do not wholly own facilities, please give the full number of allowances).

Table 11 - Please use whole numbers only.

	2008	2009	2010	2011	2012
Free allowances metric tonnes CO2					

21.3. The total allowances purchased through national auctioning processes for the period 1 January 2008 to 31 December 2008 for facilities that you operate or own. (Even if you do not wholly own facilities, please give the total allowances purchased through auctions by the facilities for this period).

Total allowances purchased through auction

21.4. The total CO₂ emissions for 1 January 2008 to 31 December 2008 for facilities which you operate or own. (Even if you do not wholly own facilities, please give the total emissions for this period.)

Total emissions in metric tonnes

[224608](#)

Further information

[The EU Trading Scheme regulations apply to eight Ford and Volvo facilities in the UK, Belgium, Sweden, Spain and Germany.](#)

[Detail information of allowances awarded to Ford during Phase I and Phase II are available publicly through the European Commission Website and the Members of State's NAP websites.](#)

[As a matter of policy, we do not disclose financial aspects related to Company profitability. Administering the paperwork, verification, data collection associated with the 8 Ford facilities covered by the EU ETS is a time and resource intensive exercise. Ford and other companies and industry associations actively work with the EU and member country governments to streamline the administrative requirements for future phases.](#)

22. Emissions Trading: (CDP6 Q2(g)(ii) - New wording for CDP 2009)

Electric utilities should read EU6 before answering these questions.

22.1. Please provide details of any emissions trading schemes, other than the EU ETS, in which your company already participates or is likely to participate within the next two years.

[We participate or anticipate participating in trading schemes other than the EU ETS in the next two years.](#)

CDM/JI

Ford actively monitors developments under the Kyoto CDM/JI initiatives, RGGI, Australia Cap and Trade and other national/regional climate change initiatives.

Chicago Climate Exchange (CCX)

Ford, along with 11 other companies and the City of Chicago, founded the Chicago Climate Exchange (CCX). The CCX is a GHG emissions-reduction and trading program for emission sources and projects in North America. It is a self-regulated, rules-based exchange designed and governed by CCX members. Ford is the first and only auto manufacturing participant in the Exchange.

Through the CCX, we have committed to reducing our North American facility emissions by six percent between 2000 and 2010. The Exchange marks the first time in the United States that major companies in multiple industries have made a voluntary binding commitment to use emissions trading to reduce their North American GHG emissions. The Exchange enables participants to receive credit for their reductions and to buy and sell credits to find the most cost-effective way of achieving reductions.

RGGI

Ford does not have any facilities directly impacted by the RGGI program.

Others

Ford was also one of the original companies to join the UK Emissions Trading Scheme, the first government-sponsored, economy-wide, cross-industry GHG trading program. Ford Motor Company Limited (UK) entered the program in March 2002, committing to and achieving a five percent CO2 reduction for eligible plants and facilities over five years.

22.2. What is your overall strategy for complying with any schemes in which you are required or have elected to participate, including the EU ETS?

Ford has established global roles/responsibilities and internal controls including policies and procedures to help ensure compliance with emissions trading initiatives worldwide. Besides CO2 trading, Ford is engaged in numerous facility CO2 initiatives including:

Mexico GHG Pilot Program

The Mexico GHG Program started as two year partnership between La Secretaria de Medio Ambiente y Recursos Naturales (SEMARNAT), World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD). It is a voluntary program established to help Mexican companies to quantify greenhouse gas emissions. Ford Motor Company was proud to be the only auto manufacturer to participate in the first phase of the program where we are committed to reporting emissions annually.

Canadian Voluntary Challenge and Registry

Ford voluntarily reports GHG emissions to the Canadian Voluntary Challenge and Registry (VCR). It has been reporting annual emissions since 1999. Over the years, it has received the highest level of achievement in the reporting system, which includes two Leadership Awards in the Automotive Manufacturing Sector category as well as qualifying as a Silver Champion level Reporter in 1999 and Gold Champion Level Reporter from 2000 to 2003, 2005 & 2006.

Philippines GHG Program

The Philippine Greenhouse Gas Accounting and Reporting Program (PhilGARP) - partnership between Klima Climate Change Center of the Manila Observatory, Philippine Business for the Environment, the Department of the Environment and Natural Resources, Department of Energy, WBCSD, and WRI – was launched in November 2006. To date, 15 companies are completing GHG inventories. Ford was the first and only automobile company to submit a report to the program.

Australian GHG Challenge Plus Program

The Australian GHG Challenge Plus Program builds on the success of the Australian Greenhouse Challenge Program established in 1995. In 1997, Ford was the first automotive company to join the voluntary program and continues to report its Australian facility emissions annually.

The Climate Registry (TCR)

TCR is a non-profit organization established to measure and publicly report GHG emissions using a single reporting standard across industry sectors. TCR represents a linking of several state-sponsored GHG emissions reporting efforts, including the California Climate Action Registry and the Eastern Climate Registry. Ford supports the global harmonization of GHG monitoring and reporting practices. TCR represents a significant step toward that goal.

Brazil GHG Program

Ford Motor Company is proud to be the first auto manufacturer to participate in the first phase of the program where we are committed to reporting emissions annually.

China GHG Program

In 2008, Ford became the first automaker to release a greenhouse gas emissions report in China. The report covers the Chongqing facility operated by Ford's joint venture in China – the Changan Ford Mazda Automobile Co., Ltd. (CFMA). The CFMA's innovative GHG monitoring and reporting activities demonstrate the Company's commitment to the overall sustainability of its manufacturing operations in China. Our first GHG report for the Chongqing facility was submitted to China's State Environmental Protection Administration in April 2008.

Further information

22. Carbon credits

22.3. Have you purchased any project-based carbon credits?

No. (Please go to question 22.5)

Please indicate whether the credits are to meet one or more of the following commitments:

Please also:

22.4 Provide details including the type of unit, volume and vintage purchased and the standard/scheme against which the credits have been verified, issued and retired (where applicable).

22.5. Have you been involved in the origination of project-based carbon credits?

No. (Please go to question 22.7)

22.6. Please provide details including:

- Your role in the project(s),
- The locations and technologies involved,
- The standard/scheme under which the projects are being/have been developed,
- Whether emissions reductions have been validated or verified,
- The annual volumes of generated/projected carbon credits,
- Retirement method if used for own compliance or offsetting.

22.7. Are you involved in the trading of allowances under the EU ETS and/or project-based carbon credits as a separate business activity, or in direct support of a business activity such as investment fund management or the provision of offsetting services?

22.8. Please provide details of the role performed.

Further information

Performance

23. Reduction plans & goals: (CDP6 Q3(a))

23.1. Does your company have a GHG emissions and/or energy reduction plan in place?

Yes. (Please go to question 23.3)

23.2. Please explain why.

It would aid automated analysis of responses if you could select a response from the options below as well as using the text box. However, please just use the text box provided if the options are not appropriate.

If the menu options above are not appropriate, please answer the question using the text box below:

Goal setting

23.3. Do you have an emissions and/or energy reduction target(s)?

Yes. (Please answer the following questions)

23.4 What is the baseline year for the target(s)?

The 2006 model year is used as a baseline for overall product emissions targets. Water and energy use targets as a whole are relative to data from the year 2000, although certain targets have been updated to a 2006 baseline.

23.5. What is the emissions and/or energy reduction target(s)?

We have set a goal to reduce the emissions of our U.S. and EU new vehicle CO2 emissions by 30 percent by the year 2020, compared to a 2006 model year baseline.

Our blueprint for sustainability, unveiled in last year's Sustainability Report, spells out our product strategy to meet this goal. The blueprint builds on a series of commitments the Company has made, or participated in, to reduce the greenhouse gas emissions from our products and operations.

Globally, we have implemented a target to improve the energy efficiency of our manufacturing operations by 9% between 2006 and 2009, following an improvement of 22% from 2000 to 2006.

More information about specific U.S. and EU commitments, as well as targets for other regions, can be found in the Climate Change-Related Commitments and Progress section of our sustainability report (<http://www.ford.com/microsites/sustainability-report-2008-09/issues-climate-blueprint-commitments>).

23.6. What are the sources or activities to which the target(s) applies?

The amount of carbon dioxide generated by the light-duty vehicle sector is dependent on three major factors:

1. The fuel economy of the vehicles, which in turn depends on many characteristics of the vehicles themselves (such as their weight, powertrain and aerodynamics);
2. The well-to-wheels greenhouse gas profile of the fuels used in the vehicles; and
3. How the vehicles are used and maintained by their drivers.

Our shorthand for this, and the organizing framework for this discussion, is "Vehicle + Fuel + Driver = GHG emissions." More recently, we have added government to the equation, recognizing the indispensable role of governments in coordinating actions across sectors, providing leadership in areas like infrastructure development to meet transportation demand and creating a harmonized legal and political framework that leverages market forces to lead to the desired result.

To respond to each of these domains, as well as the risks and opportunities posed by the climate change issue, our long-term strategy is to contribute to climate stabilization by:

- Continuously reducing the greenhouse gas emissions and energy usage of our operations
- Developing the flexibility and capability to market more lower-GHG-emission 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

Please see question 23.5 for the scope of our new vehicle CO2 emissions target, as well as the Climate Change-Related Commitments and Progress section of our sustainability report (<http://www.ford.com/microsites/sustainability-report-2008-09/issues-climate-blueprint-commitments>) for information on specific targets.

23.7. Over what period/timescale does the target(s) extend?

As stated previously, the U.S. and EU vehicle emissions target extends to 2020, and the current energy efficiency target for global operations extends to the end of this year. Manufacturing and operational objectives are normally reviewed on an annualized basis.

However, individual targets apply to a wide variety of timescales, depending on their compliance with various emissions regulations or internal Ford goals. Sustainability is a core component of our business strategy, and goes well beyond the scope of any individual energy or GHG reduction plan. The Company's sustainability governance ensures that relevant issues are addressed quickly and with the full collaboration of stakeholders. We recognize that mitigating climate change will take a holistic, long-term approach, and our goals are updated as necessary to complement our larger blueprint for sustainability.

Further information

23. GHG emissions and energy reduction activities

23.8. What activities are you undertaking or planning to undertake to reduce your emissions/energy use?

Ford's blueprint for sustainability product strategy – called the Sustainable Technologies and Alternative Fuels Plan – details the near-, mid- and long-term steps we are taking – many of which are already underway – to develop and deploy vehicle and fuel technologies to implement the blueprint. The blueprint is supported by our sustainable mobility governance, which establishes structures and accountability for implementing the strategy.

To develop the blueprint, we analyzed the reduction in global GHG emissions that will be required to achieve the goal of climate stabilization. The analysis showed that very large reductions in emissions will be required to achieve the carbon-dioxide concentration accepted to minimize environmental impacts. Next, we analyzed the current and projected contribution of light-duty cars and trucks to global GHG emissions (currently about 20 percent of CO2 emissions in the U.S. and about 11 percent globally) and the reduction needed to contribute to stabilization.

We used these assumptions in a model that considers both vehicle technology and fuel options. The purpose of the model was to determine the best combination of options that will yield the required emissions reductions at the most affordable cost. We then developed scenarios to assess how the vehicle and energy sectors can work together, each developing its own optimal but coordinated strategies on fuels and vehicle technologies. The output of this model and analysis is the Sustainable Technologies and Alternative Fuels Plan. For more information on the plan, please refer to (<http://www.ford.com/microsites/sustainability-report-2008-09/issues-climate-technologies>) in our 2008/09 sustainability report.

During 2008 and early 2009, we introduced vehicles and technologies consistent with our blueprint for sustainability and CO2 reduction goal:

- In the United States, we introduced two new hybrid vehicles: the Ford Fusion and Mercury Milan Hybrids. These vehicles have been rated by the U.S. Environmental Protection Agency (EPA) at 41 mpg in city driving and 36 mpg highway, making them the most fuel-efficient midsize sedans in America. We now offer four hybrid models and have sold more than 100,000 to date.
- We are offering EcoBoost™ technology on the 2010 Lincoln MKS, Lincoln MKT, Taurus SHO and Ford Flex in North America. EcoBoost uses a combination of turbocharging, direct injection and reduced displacement to deliver significant fuel-efficiency gains without sacrificing engine power or performance, improving vehicle fuel economy up to 20 percent and reducing CO2 emissions up to 15 percent compared to larger displacement engines. EcoBoost, which will be offered globally, is also more affordable than many other fuel-efficiency technologies. By 2013, Ford will have EcoBoost V-6 and I-4 engines in approximately 1.3 million vehicles per year. In North America, 90 percent of Ford's nameplates will offer the technology.
- In 2008, we introduced the Ford Fiesta EOnetic, which gets more than 62 mpg (approximately 78 mpg in Imperial gallons)¹ and emits just 98 g/km of CO2, making it the most fuel-efficient five-seat family car in the UK. It joins the EOnetic European Focus and Mondeo models, all of which use specially calibrated versions of already fuel-efficient diesel engines to achieve outstanding economy and emissions performance.
- We are using multiple fuel-saving technologies in all of our new vehicles. For example, through a combination of aerodynamics and other improvements, we improved the fuel economy of the entire 2009 F-150 lineup by an average of eight percent. We also introduced an F-150 Special Fuel Economy edition that delivers 21 mpg in

highway driving, a 12 percent improvement in fuel economy over previous models and best-in-class fuel economy for full-size pickup trucks. In its most popular midsize engine, the 2009 F-150 gets unsurpassed fuel economy with 15 mpg city/20 mpg highway, which beats the Toyota Tundra's 14 city/17 highway with a comparable engine.

Improvements in the fuel economy of our vehicles will accelerate as we implement our Sustainable Technologies and Alternative Fuels Plan, which includes short-, medium- and long-term actions. The short-term actions have been incorporated into our cycle plan, which specifies the vehicles we will build in the next five years. We are actively researching and developing the technologies to be used in the mid to long term, including diesel hybrids and other clean diesel technologies; plug-in hybrids; biofuelled vehicles; hydrogen internal-combustion engines; hydrogen fuel cell powertrains; and various combinations of these technologies, plus weight reductions.

In particular, we have accelerated the electrification part of our vehicle and fuel technology plan, as follows:

- In 2010, we will introduce the Transit Connect battery electric vehicle, a compact van, for low-volume sales to fleets.
- By 2011, we will bring a battery electric Focus to North America.
- In 2012, we will introduce our next-generation hybrid technology and plug-in hybrid vehicles.

More details about Ford's best-in-class vehicles are available in the Economy section of our sustainability report (<http://www.ford.com/microsites/sustainability-report-2008-09/economy-recovery-products-efficient>).

Paradoxically, the "driver" portion of the GHG emissions equation holds the potential for substantial emission reductions at minimal cost, but it is often overlooked. Ultimately, drivers decide which vehicles and fuels they will purchase and how those vehicles will be driven. While our major focus is on the vehicles we make, we have also reached out to drivers around the world to promote the practice of "eco-driving."

Ford has demonstrated that drivers who practice "eco-driving" can improve their fuel economy by an average of 24 percent. Eco-driving tips are available to the public on Ford's Web site and online training is available through the Driving Skills for Life (DSFL) program. In addition, a Web-based eco-driving program has been available to all U.S. salaried Ford employees since 2006.

Ford began work on the eco-driving concept in 2000, when we first offered an eco-driving program through our German dealerships, in partnership with the German Federation of Driving Instructor Associations and the German Road Safety Council. The program trains drivers in conservation-minded driving and vehicle maintenance habits. The program uses specially trained and certified instructors to run programs for several target groups, including fleet drivers and customers. During 2008, approximately 1,000 drivers participated in the program.

During 2008, we expanded our eco-driving training efforts globally. In the U.S., Ford partnered with Phoenix-based Pro Formance Group to pilot a hands-on U.S. training program. As a first step, top instructors from the German program trained U.S. trainers in coaching techniques. These trainers, in turn, trained drivers to test a pilot approach that would certify eco-driving instructors to train Ford's fleet customers.

In Asia, Ford launched the DSFL driver training program in 2008 with a "train-the-trainers" workshop in Bangkok, Thailand, in March. At the workshop, Ford professionals from Germany trained two to three representatives from the Philippines, Vietnam, Thailand and Indonesia. The DSFL program was customized to address the higher average age of beginner drivers in the region, as well as the unique driving environments within each market. It places equal emphasis on safe driving and eco-driving, as customers in the region are interested in both. In 2009, the program will be expanded to Taiwan, China and India.

We are also reaching out to our dealer body to create eco-driving awareness with car buyers and engaging policy makers about the possibility of integrating eco-driving techniques into driver education.

Our product strategy is complemented by actions to reduce energy use and GHG emissions in our operations. Operational energy use and greenhouse gas emissions are inextricably linked. The majority of our facilities' energy comes from fossil fuel sources; hence operational energy use is a significant source of our companywide GHG emissions. Our efforts to reduce energy use and increase the use of renewable energy are also part of our strategy to reduce our GHG emissions and overall climate impacts.

Since 2007, we have been using a utility metering and monitoring system to collect incoming electricity and natural gas consumption data for all Ford plants in North America. We use this near-real-time information to create energy-use profiles for all Ford facilities and to improve decisions about nonproduction shutdowns and load shedding, which involves shutting down certain pre-arranged electric loads or devices when we reach an upper threshold of electric usage. During 2008, this metering and monitoring system was essential in helping us to minimize energy use during extended production slowdowns and production shutdowns. Using this tool and other best practices, Ford's manufacturing facilities reached record lows in energy use.

Ford continues to use energy performance contracts to upgrade and replace infrastructure at its plants, commercial buildings and research facilities. Through these contracts, Ford partners with suppliers to replace inefficient equipment, funding the capital investment over time through energy savings. Projects have been implemented to upgrade inefficient lighting systems, paint-booth process equipment and compressed air systems, and to significantly reduce the use of steam in our manufacturing facilities. Since 2000, Ford has invested more than \$220 million in plant and facility upgrades.

Ford has also established a three-year global effort to consolidate and redesign its data centers using best practices identified by the DOE and EPA's Energy Star program. First, we are consolidating data centers to dramatically reduce the number of managed facilities and their total energy demand. By 2010, we will have consolidated 20 existing centers into just six, a reduction of 70 percent. We are also "virtualizing" 2,000 servers into just 100 physical servers. These consolidations will result in a 90 percent reduction in power needs and a 95 percent reduction in cooling needs.

During this process we are also changing the layout of our remaining data centers to maximize their energy efficiency. By directing conditioned air into equipment racks, as opposed to cooling entire server rooms, expensive chilled air is used much more efficiently, and the load on building cooling equipment is reduced. We have also developed and implemented global data center design specifications, so that all new and remodeled data centers will meet high energy-efficiency standards. This three-year data center initiative is projected to yield \$35 million in operational cost efficiencies.

We are also implementing a network-controlled system on air compressors used in the powerhouses of our powertrain and vehicle assembly plants. This industry best-in-class system can significantly reduce energy consumption. It allows for the real-time collection of key usage data through an enterprise-wide, Web-based data management tool. This data can then be used to determine the overall efficiency of each system and identify savings opportunities. The savings opportunity reports are generated automatically and sent to plant managers, who can then initiate corrective actions. The system also allows for remote troubleshooting of the equipment, which can extend equipment life and reduce maintenance costs. The system is also being used for remote operation of equipment at select facilities. As of January 2009, we had installed these systems at 29 plants on 181 compressors.

In 2008, we implemented a range of energy-saving measures at our Chicago Stamping Plant. For example, we replaced metal halide light fixtures in work bays with high-efficiency fluorescent fixtures. We also installed special controls on the plant powerhouse and wastewater treatment equipment, which will increase energy and process efficiency. These automated systems can schedule equipment startup and shutdown to match production schedules and can notify plant personnel and equipment suppliers of operational problems and equipment failures. Similar systems have been installed at our Walton Hills and Buffalo Stamping Plants.

In addition, we are implementing a new paint process that eliminates the need for paint to cure after the prime coat. This technology, called "three wet," reduces CO2 emissions by 15 percent and volatile organic compound emissions by 10 percent. In addition to these environmental benefits, this process maintains industry-leading quality and reduces costs. The paint formulation contains new polymers and other additives to prevent running and sagging during the three-wet application process. Ford's laboratory tests show that this high-solids, solvent-borne paint also provides better long-term resistance to chips and scratches than water-borne paint. In part

due to the quality benefits of the three-wet process, Ford tied for first place in the 2008 Global Quality Research System automotive quality survey for paint durability². The process is also expected to reduce costs per vehicle, because it allows the elimination of a spray booth and an oven, and the attendant energy costs required to run them.

We completed the installation of a full production enamel line using the three-wet process at the Ohio Assembly Plant, which started production in March 2008. Ford is currently installing the three-wet paint process in three other assembly facilities globally: the Chennai plant in India, the Craiova plant in Romania and the Cuautitlán Assembly Plant in Mexico. Multiple facilities in North America are being evaluated for three-wet conversion, as refurbishment actions are being planned in line with the corporate business plan.

At our Twin Cities and St. Thomas Assembly plants in 2008, we implemented a new paint pre-treatment technology that significantly reduces energy use, energy costs, water use and waste production. This technology uses zirconium oxide instead of zinc phosphate, which allows the pre-treatment process to operate at room temperature instead of an elevated temperature. The new process also requires fewer steps, further reducing energy consumption. The technology has already resulted in a \$150,000 savings in energy costs at each plant.

In 2008, Ford also began implementing a new parts washing system developed in partnership with our supplier ABB Robotics. This technology reduces the amount of energy used in the parts washing process by more than 60 percent and reduces energy costs by approximately 90 percent. For more information, please see the Minimum Quantity Lubricant machining case study.

We are also capturing our own waste products and turning them into fuel. We have implemented "fumes-to-fuel" technology – which captures emissions from the painting process and uses them to generate electricity – in paint shops at three of our manufacturing facilities. This process cuts down on fossil fuel use and the resulting CO₂ emissions, as well as reducing emissions from our paint shops. For more information, please see the Volatile Organic Compounds section.

In Europe, our Cologne Merkenich Development Center implemented a heat-energy reclamation joint venture with the local utility RheinEnergie. In early 2009, the Cologne facility was connected to one of RheinEnergie's boiler houses via a 2.6 km pipe. This pipe transfers what was formerly waste heat to a heat exchanger, which then reuses that heat to produce electricity. This system reduces CO₂ emissions from the Cologne site by 191,000 metric tons per year. Ford and RheinEnergie signed an agreement to maintain this heat-exchange partnership for at least 10 years.

In 2008, Ford continued to participate in legislative and regulatory processes concerning renewable energy portfolios and energy efficiency strategies. Ford participates in these processes at the local, state and federal level by advocating for the use of energy efficiency as part of the long-term solutions for meeting electric generation needs and reducing greenhouse gas emissions. We also advocate for the use of programs such as the EPA's Energy Star Industrial Focus Groups as a model for developing strategies to benchmark industrial energy efficiency. Ford supported Michigan's and Ohio's new renewable portfolio standards, which include requirements for energy efficiency.

We have been a leader in facilities-related GHG and energy-use reductions, public reporting of our GHG emissions, and participation in GHG reduction and trading schemes.

- In 2008, we were the first automaker to join The Climate Registry (TCR), a voluntary carbon disclosure project that links several state-sponsored GHG emissions-reporting efforts, including the California Climate Action Registry and the Eastern Climate Registry. As TCR members, we must demonstrate environmental stewardship by voluntarily committing to measure, independently verify and publicly report GHG emissions on an annual basis using TCR's General Reporting Protocol.
- We were the first automaker to participate in GHG reporting initiatives in China, Australia, the Philippines and Mexico. In late 2007, Ford of Mexico was recognized by the Mexican government for four consecutive years of participation in that country's voluntary GHG reporting program. Ford's first report was used as the template for subsequent reporting in that program.
- We voluntarily report GHG emissions in the United States and Canada.
- We are the only automaker participating in the Chicago Climate Exchange, North America's first GHG emissions-reduction and trading program.
- We were the first automaker to join the UK's Emissions Trading Scheme, which required us to agree to GHG emissions targets for all of our UK-based operations. This system was predecessor to the current mandatory European Union Emission Trading Scheme.
- Since 2005, GHG emissions from our European manufacturing facilities have been regulated through the EU Emission Trading Scheme. These regulations apply to nine Ford and Volvo facilities in the UK, Belgium, Sweden, Spain and Germany.

Our participation in these reporting, emissions-reduction and trading schemes has played an important role in accelerating our facilities' GHG emissions reductions activities.

For more on operational activities, please refer to the Environment: Operations section of the 2008/09 sustainability report (<http://www.ford.com/microsites/sustainability-report-2008-09/environment-operations>).

Further information

23. Goal evaluation

23.9. What benchmarks or key performance indicators do you use to assess progress against the emissions/energy reduction goals you have set?

Ford's manufacturing management sets environmental targets annually for all of our facilities. We develop these targets through a comprehensive process that considers past performance, future regulation trends, environmental technology advances, financial conditions and other relevant factors. The global targets are then translated into regional- and facility-level targets, which differ depending on the relevant regulations and financial and production constraints in each region. Within our powertrain operations, for example, goals are set by determining the highest-performing powertrain plant for each environmental performance metric. Then each "best-in-class" plant's performance becomes the new goal that every powertrain plant is required to meet.

In 2005, we began to implement an Environmental Operating System (EOS) at our North American assembly plants. As a counterpart to our Quality Operating System, the EOS provides a standardized, streamlined approach to maintaining compliance with all legal and Ford internal requirements. The EOS drives compliance responsibility to the operations level by assigning compliance-related tasks to the appropriate personnel and tracking the completion of those tasks. The EOS is integrated with other key management systems at the plant level, including ISO 14001. The EOS provides information, standardized tools and processes to support the ISO 14001 requirement to identify and manage compliance issues. The EOS has been fully implemented throughout U.S. and Canadian manufacturing operations, and is currently being implemented in the rest of our global operations.

Ford has moved to group ISO 14001 certification for its plants in North America. All powertrain plants share a single group certification. Likewise, assembly plants, stamping plants, Ford Customer Service Division facilities and South American plants each have their own group certification. Instead of being audited yearly by a third party, each plant is now audited every three years. Group certification saves time and money, with no degradation in plant environmental performance.

In Ford's Global Product Development System, environmental objectives – including targets for fuel economy, vehicle emissions, the use of recycled materials and renewable materials, and restrictions on substances of concern – are defined at the outset of the design process for every new Ford vehicle. We track our progress toward these targets throughout the product development process. The targets are broken down from the vehicle level to the supplier or component level, and they

enter into each contractual agreement signed between Ford and its suppliers. As part of our One Ford global integration process, we are developing targets for a range of vehicle attributes, such as fuel economy, quality and safety, which will make our vehicles either leaders or among the leaders with competitor vehicles in the same segments. We develop these competitive vehicle attribute targets for every vehicle program to deliver on key customer demands and Ford strategies by using a range of consumer data, internal brand data and competitor vehicle data. Based on this process, we have determined that beginning with the 2010 model year, all of our new vehicles will be the best in class or among the best in class for fuel economy in their segment. We have already begun to implement this product attribute leadership; as of May 2009, all of our 2010 model year vehicles released in 2009, and many of our 2009 model year vehicles, meet this commitment.

Further information

23. Goal achievement

23.10. What emissions reductions, energy savings and associated cost savings have been achieved to date as a result of the plan and/or the activities described above? Please state the methodology and data sources you have used for calculating these reductions and savings.

Ford has reduced global energy consumption by 33.7 percent since 2000 and reduced energy consumption per vehicle by 10.4 percent during the same period. In 2008, Ford improved energy efficiency in its North American operations by 4.5 percent, resulting in savings of approximately \$16 million. We measure energy efficiency in North America using our Energy Efficiency Index. To drive continued progress, we have set targets to improve our facility energy efficiency by three percent globally and three percent in North America in 2009.

We reduced our total facilities-related carbon dioxide emissions by approximately 45 percent, or 4.3 million metric tons from 2000 to 2008. During this same period, we reduced facilities-related CO2 emissions per vehicle by 24 percent. We have set a target to reduce our North American facility GHG emissions by 6 percent between 2000 and 2010 as part of our Chicago Climate Exchange commitment. The Company has also committed to reduce U.S. facility emissions by 10 percent per vehicle produced between 2002 and 2012, as part of an Alliance of Automobile Manufacturers program. Ford has already achieved a target to reduce absolute emissions from UK operations by 5 percent over the 2002–2006 timeframe, based on an average 1998–2000 baseline.

The U.S. Environmental Protection Agency and U.S. Department of Energy again recognized Ford's energy efficiency achievements by awarding us a 2009 Energy Star Sustained Excellence Award, which recognizes Ford's continued leadership and commitment to protecting the environment through energy efficiency. This is Ford's fourth consecutive year winning this prestigious award. The Energy Star Sustained Excellence Award requires organizations to demonstrate proficiency through the management of projects and programs, data collection and analysis, and communication actions, including community outreach and active participation in Energy Star industry forums. Among the achievements recognized by the award is a 35 percent improvement in the energy efficiency of Ford's U.S. facilities since 2000.

For the 2008 model year, the Corporate Average Fuel Economy (CAFE) of our cars and trucks increased by 2.9 percent relative to 2007. Preliminary data for the 2009 model year indicates that the CAFE of our cars and trucks will improve by another 4.0 percent compared to 2008.

In Europe, we have reduced the average CO2 emissions of the vehicles we sell by 18.9 to 22.9 percent depending on the brand, compared with a 1995 baseline. We have achieved these reductions by introducing a variety of innovations, including an advanced common-rail diesel engine, available on many of our vehicles, and lightweight materials.

Further information about goal achievement can be found in the Climate Change: Progress and Performance section (<http://www.ford.com/microsites/sustainability-report-2008-09/issues-climate-progress>) as well as the Environment: Progress section (<http://www.ford.com/microsites/sustainability-report-2008-09/environment-progress>) of our sustainability report. Data and methodologies used to perform reduction calculations are accessible in the report's Environment: Data section (<http://www.ford.com/microsites/sustainability-report-2008-09/environment-data>).

23.11. What investment has been required to achieve the emissions reductions and energy savings targets or to carry out the activities listed in response to question 23.8 and over what period was that investment made?

Table 13 - The "Investment number" column will not accept text. Please use whole numbers only.

Emission reduction target/energy saving target or activity	Investment number	Investment currency	Timescale
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Further information

23. Goal planning & investment

Electric utilities should read the table in question EU3 for giving details of forecasted emissions.

23.12. What investment will be required to achieve the future targets set out in your reduction plan or to carry out the activities listed in response to question 23.8 above and over what period do you expect payback of that investment?

Table 14 - The "Number" column will not accept text. Please use whole numbers only.

Plan or action	Investment number	Investment currency	Payback
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23.13. Please estimate your company's future Scope 1 and Scope 2 emissions for the next five years for each of the main territories or regions in which you operate or provide a qualitative explanation for expected changes that could impact future GHG emissions.

If possible, please use table 15 below to structure your answer to the question or alternatively use the text box below.

Scope 1 forecasted emissions in Table 15 below are in the following units.

Scope 2 forecasted emissions in Table 15 below are in the following units.

Table 15 - The "Scope" columns will not accept text. Please use whole numbers only.

Type in the name of the territory or region for which you are giving data and then press "Add Territory/Region". If giving a global figure instead of separate figures for regions or territories, please write "global" in the box labelled "Enter name of territory or region".

[Click here to see a sample table.](#)

Future reporting years:											
End date for year end DD/MM/YYYY											
Emission forecasts	Scope 1	Scope 2	Scope 1	Scope 2	Scope 1	Scope 2	Scope 1	Scope 2	Scope 1	Scope 2	

23.14. Please estimate your company's future energy use for the next five years for each of the main territories or regions in which you operate or provide a qualitative explanation for expected changes that could impact future GHG emissions.

If possible, please use table 16 below to structure your answer to the question or alternatively use the text box below.

Table 16 - Please use whole numbers only.

Type in the name of the territory or region for which you are giving data and a description of the data you are giving e.g. electricity consumption. Then press "Add Row". If giving a global figure instead of separate figures for regions or territories, please use the word "global". This table will also accept different types of units e.g. units of volume or mass.

[Click here to see a sample table.](#)

Future reporting years:											
End date for year end DD/MM/YYYY											
Energy use estimates for territory/region	Number	Units	Number	Units	Number	Units	Number	Units	Number	Units	

23.15. Please explain the methodology used for your estimations and any assumptions made.

Further information

24. Planning: (CDP6 Q3(c))

24.1. How do you factor the cost of future emissions into capital expenditures and what impact have those estimated costs had on your investment decisions?

[Our internal capital investment project approval process ensures consideration is given to energy usage \(and CO2 emissions\) and other environmental impacts prior to final project approval.](#)

[The current economic situation is having a greater impact on capital investment decisions than any other single factor. Emission reductions, as related to energy use reductions and other efficiencies, typically are a valued added aspect to capital improvements.](#)

Further information

Governance

25. Responsibility: (CDP6 Q4(a))

25.1. Does a Board Committee or other executive body have overall responsibility for climate change?

[Yes. \(Please answer question 25.3 and 25.4\)](#)

25.2 Please state how overall responsibility for climate change is managed and indicate the highest level within your company with responsibility for climate change.

[Please see the response to Q25.3.](#)

25.3. Which Board Committee or executive body has overall responsibility for climate change?

[The following are the primary structures we use to manage and embed accountability for sustainability within Ford.](#)

- Board and Executive-Level Responsibility: Ford's governance of sustainability issues builds on a strong foundation of Board of Director and senior management accountability for the Company's environmental, social and economic performance. At the Board level, the Sustainability Committee has primary responsibility for reviewing strategic sustainability issues, though some of those issues are also addressed in other committees and by the Board as a whole. Within management, the Group Vice President of Sustainability, Environment and Safety Engineering has primary responsibility for sustainability issues and oversees the Sustainable Business Strategies, Environmental Policy, and Safety groups, as well as having dotted-line oversight over the Sustainable Mobility Technology group (which is formally part of the Product Development function).
 - Dedicated Sustainability Function: Ford's Sustainable Business Strategies office coordinates corporate-wide sustainability strategy and activities, including leading the Company's corporate-level sustainability reporting and stakeholder engagement and integrating sustainability throughout the Company.
 - Integration into Core Functions: Numerous functions within the Company have responsibility for some or multiple aspects of sustainability. For example, the Workplace Health and Safety Office, Environmental Quality Office and Human Resources Department each manage specific issues that fall under the umbrella of sustainability. In addition, as Ford works to embed sustainability more deeply across all functions, groups such as Product Development, Purchasing and Manufacturing are taking on an increasing role in the Company's sustainability efforts. For example, Product Development is taking the lead on the Company's sustainable mobility efforts, and Global Purchasing is managing sustainability issues in the supply chain, including assessment and training programs associated with our Code of Basic Working Conditions.
 - Issue-Specific Structures: Ford has also developed structures to address specific global sustainability issues facing the Company. For example, we have established a Sustainable Mobility Group – a senior-level team led by the Group Vice President of Sustainability, Environment and Safety Engineering – responsible for defining our climate change strategy and delivering our sustainability strategy in the marketplace. The Group's strategic direction is provided by a senior executive forum, including Vice President and executive stakeholders, which guides the development of the vision, policy and business goals.
- Ford's Board addresses significant business issues as a full group and through five committees: Audit, Compensation, Finance, Nominating and Governance, and Sustainability. In July 2008, the former Environment and Public Policy Committee was renamed the Sustainability Committee, reflecting the evolution of its responsibilities and the Company's challenges and opportunities. The principal functions of the Sustainability Committee are as follows.
- Assist management in the formulation and implementation of policies, principles and practices to foster the sustainable growth of the Company on a worldwide basis. "Sustainable growth" means the ability to meet the needs of present motor vehicle customers while taking into account the needs of future generations. "Sustainable growth" shall also encompass a business model that creates value consistent with the long-term preservation and enhancement of financial, environmental and social capital.
 - Assist management in the formulation and implementation of policies, principles and practices to permit the Company to respond to evolving public sentiment and government regulation in the area of motor vehicle and stationary source emissions, especially in the area of greenhouse gas emissions and fuel economy and CO2 regulation.
 - Assist management in setting strategy, establishing goals and integrating sustainability into daily business activities across the Company.
 - Review on a continuing basis new and innovative technologies that will permit the Company to achieve sustainable growth and Company actions to protect those technologies.
 - Review on a continuing basis partnerships and relationships, both current and proposed, with customers and others that support the Company's sustainable growth.
 - Review on a continuing basis the Company's communication and marketing strategies relating to sustainable growth.

25.4. What is the mechanism by which the Board or other executive body reviews the company's progress and status regarding climate change?

Please see the response to Q25.3.

Further information

For Q.25.1.

Please visit the Governance section of Ford's annual Sustainability Report at: www.ford.com/go/sustainability

As we state in numerous places throughout this questionnaire, Ford does not address climate change as a specific business issue. Rather the issues raised regarding climate change are addressed in the Company's overall approach to sustainability as it relates to environmental, social and economic issues.

26. Individual Performance: (CDP6 Q4(b))

26.1. Do you provide incentives for individual management of climate change issues including attainment of GHG targets?

Yes. (Please go to question 26.2)

26.2. Are those incentives linked to monetary rewards?

Technically, yes. Bonuses and merit pay increases are linked to the accomplishment of individual annual performance objectives. This occurs at all levels of the salaried staff of the Company. Please see comments in the "Further information" block below.

Currently, for CY2009 and 2010, Ford Motor Company has suspended bonuses and merit increases as part of the plan to break even or better by CY2011.

26.3. Who is entitled to benefit from those incentives?

Technically anyone based on their performance objectives for the year and the joint assessment (management and individual) of whether the objectives were accomplished and how well.

Please see comments in the "Further information" block below.

Further information

Q26.1., 2. & 3.

It is important to note the performance objectives are framed in the language of the automotive industry. They relate to performance targets like reducing CO2 per kilometer or improving fuel economy in terms of miles per gallon (mpg). They are also characterized in other efficiencies like reduced energy usage or improved efficiency, water use reduction, land-fill waste avoidance, reducing the amount of chemicals used in a process, etc. Rarely are these objectives couched in terms of climate change vernacular, with the notable exception being individuals working in the Environmental Quality areas of the Company.

27. Communications: (CDP6 Q4(c))

27.1. Do you publish information about the risks and opportunities presented to your company by climate change, details of your emissions and plans to reduce emissions?

Yes, but not in the language of climate change.

If so, please indicate which of the following apply and provide details and/or a link to the documents or a copy of the relevant excerpt:

27.2. The company's Annual Report or other mainstream filings.

Yes

27.3. Voluntary communications (other than to CDP) such as Corporate Social Responsibility reporting.

Yes

Further information

28. Public Policy: (CDP6 Q4(d))

28.1. Do you engage with policymakers on possible responses to climate change including taxation, regulation and carbon trading?

Yes

Further information

Auto Sector

AU1.0 Sales volumes (to be answered by auto manufacturers)

[Click here](#) to read instructions on answering these questions.

Auto manufacturers should provide an overview of their historic, current and planned sales volumes by fuel type/engine technology and if possible by region and vehicle type. See the guidance for standard definitions of vehicle segmentation and regions. Please give sales figures in thousands of vehicles e.g. 38,000 vehicles sold should be entered as "38" in the tables.

AU1.1 Sales of gas/petrol vehicles

Please enter whole numbers only. Please give sales figures in thousands of vehicles e.g. 38,000 vehicles sold should be entered as "38" in the tables.

Enter reporting period dates. The 12-month period must end in the year listed at the top of the column.		y/e 2002	y/e 2003	y/e 2004	y/e 2005	y/e 2006	y/e 2007	y/e 2008	y/e 2009 estimated	y/e 2010 estimated	y/e 2011 estimated
Start date DD/MM/YYYY for reporting year		01/01/2002	01/01/2003	01/01/2004	01/01/2005	01/01/2006	01/01/2007	01/01/2008			
End date DD/MM/YYYY for reporting year		31/12/2002	31/12/2003	31/12/2004	31/12/2005	31/12/2006	31/12/2007	31/12/2008			
USA	Total	17100	17000	17300	17500	17100	16500	13500			
Of which	Passenger cars total	8100	7600	7700	7900	8100	7900	7100			
Of which	Two-seaters										
	Sedans mini-compact										
	Sedans sub-compact										
	Sedans compact										
	Sedans mid-size										
	Sedans large										
	Station wagon small										
	Station wagons mid-size										
	Station wagons large										
Of which	Light trucks & SUVs total	9000	9400	9600	9600	9000	8600	6400			
Of which	Pick-up										
	Van										
	SUV										
	Others										
W. Europe	Total										
Of which	Segment A-B										
	Segment C										
	Segment D										
	Segment E-F										
	Others										
Japan	Total										
Of which	Large										

	Standard																			
	Small																			
	Mini																			
China	Total																			
India	Total																			
Brazil	Total																			
Russia	Total																			
CEE	Total																			
Other	Total																			
	TOTAL																			

AU1.1.1 Companies should provide an explanation if different vehicle segmentation is used or if data is unavailable or commercially sensitive.

Ford has Sales Volume data for Ford of Europe, Ford of South America, and Ford Asia Pacific Africa, but does not report the data on a per country basis as listed above. Please refer to pages 8-11 of attached 2009 10K document for other market information.

AU1.2 Sales of diesel vehicles

Please enter whole numbers only. Please give sales figures in thousands of vehicles e.g. 38,000 vehicles sold should be entered as "38" in the tables.

Enter reporting period dates. The 12-month period must end in the year listed at the top of the column.		y/e 2002	y/e 2003	y/e 2004	y/e 2005	y/e 2006	y/e 2007	y/e 2008	y/e 2009 estimated	y/e 2010 estimated	y/e 2011 estimated
Start date DD/MM/YYYY for reporting year											
End date DD/MM/YYYY for reporting year											
USA	Total										
Of which	Passenger cars										
	Light trucks & SUVs										
W. Europe	Total										
Of which	Segment A-B										
	Segment C										
	Segment D										
	Segment E-F										
	Others										
Japan	Total										
China	Total										
India	Total										
Brazil	Total										
Russia	Total										
CEE	Total										
Other	Total										
	TOTAL										

AU1.2.1 Companies should provide an explanation if different vehicle segmentation is used or if data is unavailable or commercially sensitive.

Data is unavailable.

AU1.3 Sales of alternatively-powered vehicles

This category includes vehicles powered by Liquid Petroleum Gas (LPG), Compressed Natural Gas (CNG), fuel cells, compressed air, electricity and hybrids.

Please enter whole numbers only. Please give sales figures in thousands of vehicles e.g. 38,000 vehicles sold should be entered as "38" in the tables.

Enter reporting period dates. The 12-month period must end in the year listed at the top of the column.		y/e 2002	y/e 2003	y/e 2004	y/e 2005	y/e 2006	y/e 2007	y/e 2008	y/e 2009 estimated	y/e 2010 estimated	y/e 2011 estimated
Start date DD/MM/YYYY for reporting year											
End date DD/MM/YYYY for reporting year											
USA	Total										
W. Europe	Total										
Japan	Total										
China	Total										
India	Total										
Brazil	Total										
Russia	Total										
CEE	Total										
Other	Total										
	TOTAL										

AU1.3.1 Companies should provide an explanation if different vehicle segmentation is used or if data is unavailable or commercially sensitive.

Data is unavailable.

Further information

http://cdp.cdproject.net/attachedfiles/Responses/53509/11411/2009_FORD_MOTOR_CO_10K.pdf

AU2.0 CO2 emissions of vehicles sold (to be answered by auto manufacturers)

Investors realise that emissions indicators may vary from country to country, but they expect auto manufacturers to provide historical and projected CO₂ emissions (in gCO₂/Km or gCO₂/mile). Please refer to our guidance for conversion factors between fuel economy and CO₂ emissions.

AU2.1 Please explain any historic and anticipated changes in the CO₂ emissions profile of vehicles sold (e.g. introduction of clean technologies, changes to sales mix) for the time period 2002-2013.

Ford does not provide this information publicly.

That said, relative to the text in AU2.0, the U.S. Environmental Protection Agency (EPA) developed fact sheets to facilitate consistency of assumptions and practices in the calculation of emissions of greenhouse gases from transportation and mobile sources. The fact sheets are intended as a reference for anyone estimating emissions benefits of mobile sources air pollution control programs. Visit <http://www.epa.gov/otaq/climate> for detailed fact sheets. An example of the CO₂ conversion used to convert mpg to g/mi CO₂ is provided below.

A gallon of gasoline is assumed to produce 8.8 kilograms (or 19.4 pounds) of CO₂. This number is calculated from values in the Code of Federal Regulations at 40 CFR 600.113-78, which EPA uses to calculate the fuel economy of vehicles, and relies on assumptions consistent with the Intergovernmental Panel on Climate Change (IPCC) guidelines.

In particular, 40 CFR 600.113-78 gives a carbon content value of 2,421 grams (g) of carbon per gallon of gasoline, which produces 8,877 g of CO₂. (The carbon content is multiplied by the ratio of the molecular weight of CO₂ to the molecular weight of carbon: 44/12).

This number is then multiplied by an oxidation factor of 0.99, which assumes that 1 percent of the carbon remains un-oxidized. This produces a value of 8,788 g or 8.8 kg (19.4 lbs) of CO₂.

Please see the following urls for other detailed public information on this subject:

<http://www.ford.com/microsites/sustainability-report-2008-09/environment-products>

<http://www.ford.com/microsites/sustainability-report-2008-09/environment-products-economy>

<http://www.ford.com/microsites/sustainability-report-2008-09/environment-products-tailpipe>

<http://www.ford.com/microsites/sustainability-report-2008-09/issues-climate>

<http://www.ford.com/microsites/sustainability-report-2008-09/issues-climate-blueprint>

<http://www.ford.com/microsites/sustainability-report-2008-09/issues-climate-technologies>

AU2.2 Please explain the methodology used to calculate CO₂ emissions of vehicles sold and any differences with data published by industry associations or governmental agencies or the methodologies they have used. As the US Environmental Protection Agency adapted its driving cycles after 2007, companies should indicate if and when historical data for average CAFE have been recalculated using the new driving cycles (Reformed CAFE). More generally, companies are encouraged to provide comparable data over time and indicate changing methods.

The methodology used to calculate CO₂ from a gasoline vehicle is provided in question AU2.0. Starting in model year 2008, the Environmental Protection Agency changed the fuel economy label calculation to account for real-world driving conditions by incorporating the effects of higher speeds, more aggressive driving, seasonal conditions, and accessory usage. The USEPA Fuel Economy website, <http://www.fueleconomy.gov/feg/>, provides a comparison of the old and new label values.

AU2.3 Sales-weighted CO₂ emissions for gas/petrol-powered vehicles.

To sales-weight figures, we would ask companies to add the CO₂ emissions in gCO₂/Km or gCO₂/mile of every vehicle sold within each type and then divide by the total number of vehicles within that type. Enter that figure and the corresponding units in the table.

Use a decimal point if necessary. Please use a "." rather than a "," i.e. please write 150.6 rather than 150,6

Enter reporting period dates. The 12-month period must end in the year listed at the top of the column.		Select units: gCO ₂ /km or gCO ₂ /mile	y/e 2002	y/e 2003	y/e 2004	y/e 2005	y/e 2006	y/e 2007	y/e 2008	y/e 2009 estimated	y/e 2011 estimated	y/e 2013 estimated
Start date DD/MM/YYYY for reporting year												
End date DD/MM/YYYY for reporting year												
USA	Total											
Of which	Passenger cars total											
Of which	Two-seaters											
	Sedans mini-compact											
	Sedans sub-compact											
	Sedans compact											
	Sedans mid-size											
	Sedans large											
	Station wagon small											
	Station wagons mid-size											
	Station wagons large											

Of which	Light trucks & SUVs total																		
Of which	Pick-up																		
	Van																		
	SUV																		
	Others																		
W. Europe	Total																		
Of which	Segment A-B																		
	Segment C																		
	Segment D																		
	Segment E-F																		
	Others																		
Japan	Total																		
Of which	Large																		
	Standard																		
	Small																		
	Mini																		
China	Total																		
India	Total																		
Brazil	Total																		
Russia	Total																		
CEE	Total																		
Other	Total																		
	TOTAL																		

AU2.3.1 Companies should provide an explanation if different vehicle segmentation is used or if data is unavailable or commercially sensitive.

[This is commercially sensitive information and Ford does not provide this information publically.](#)

AU2.4 Sales-weighted CO₂ emissions for diesel-powered vehicles.

Use a decimal point if necessary. Please use a "." rather than a "," i.e. please write 150.6 rather than 150,6

Enter reporting period dates. The 12-month period must end in the year listed at the top of the column.	Select units: gCO ₂ /km or gCO ₂ /mile	y/e 2002	y/e 2003	y/e 2004	y/e 2005	y/e 2006	y/e 2007	y/e 2008	y/e 2009 estimated	y/e 2011 estimated	y/e 2013 estimated
Start date DD/MM/YYYY for reporting year											
End date DD/MM/YYYY for reporting year											
USA	Total										
Of which	Passenger cars										
	Light trucks & SUVs										
W. Europe	Total										
Of which	Segment A-B										
	Segment C										
	Segment D										
	Segment E-F										
	Others										
Japan	Total										
China	Total										
India	Total										
Brazil	Total										
Russia	Total										
CEE	Total										
Other	Total										
	TOTAL										

AU2.4.1 Companies should provide an explanation if different vehicle segmentation is used or if data is unavailable or commercially sensitive.

[This is commercially sensitive information and Ford does not provide this information publically.](#)

Further information

AU3.0 Clean technologies (for auto manufacturers and equipment suppliers)

Auto manufacturers should provide the percentage or number of new vehicles equipped with the technologies listed in the table. (Please note that in this table we ask you to enter numbers in full, rather than in units of a thousand i.e. 38000 not 38. Please do not use punctuation or spacing. Write 38000, not 38,000 or 38 000.)
Equipment suppliers should provide the percentage of sales for each technology.

Auto manufacturers, please indicate if you are providing:

AU3.1 Clean technologies (for auto manufacturers and equipment suppliers)

Please enter whole numbers only.

If you wish to give data for a technology that is not listed, please type in the name in the box next to "Enter other type". Then select the category under which it should appear i.e. ICE, hybrids, zero emissions, transmission, body, or others (if none of the previous categories are appropriate) and then select "Add other".

Enter reporting period dates. The 12-month period must end in the year listed at the top of the column.		y/e 2008	y/e 2013 estimated
Start date DD/MM/YYYY for reporting year			
End date DD/MM/YYYY for reporting year			
ICE	Reduced friction loss		
	Improving Direct Injection		
	Downsizing with turbo charge		
	Variable valve timing/control		
	Optimised/Advanced cooling circuit		
	Exhaust heat recovery		
HYBRIDS	Flexfuel (>B20: > E30)		
	Start-& Stop		
	Start & stop & regenerative braking		
	Mild hybrid (motor assisted)		
ZERO EMISSIONS	Full hybrid (electric drive)		
	Full electric		
	Hydrogen fuel cell		
TRANSMISSION	Compressed air		
	Optimised gearbox ratios		
	Piloted gearbox		
BODY	Dual-clutch		
	Improved aerodynamic efficiency		
OTHERS	Weight reduction		
	Low rolling resistance tyres		
	Advanced after-treatment		

AU3.1.1 Companies should provide an explanation if data cannot be provided according to the proposed nomenclature or if it is unavailable or commercially sensitive.

As requested above, the information is commercially sensitive or unavailable.

Please see the following urls for information that has been released publicly:

<http://www.ford.com/microsites/sustainability-report-2008-09/issues-climate-blueprint>

<http://www.ford.com/microsites/sustainability-report-2008-09/issues-climate-technologies>

<http://www.ford.com/microsites/sustainability-report-2008-09/issues-climate-technologies-economy>

<http://www.ford.com/microsites/sustainability-report-2008-09/environment-products-economy>

<http://www.ford.com/microsites/sustainability-report-2008-09/issues-climate-case-electrification>

Further information

Supplier Module

SM 1 Ability to Split Scope 1 and 2 Emissions by Business Category

The aim of these questions is to help your customers estimate the extent to which your Scope 1 and Scope 2 emissions are linked with their purchases of services or goods from you.

Please note that we use the term "product" to cover both goods and services.

SM 1.1 Are you able to break down your total Scope 1 and Scope 2 emissions by the following categories:

- Business division
- Business unit
- Factory
- Product group
- Other

Please give details in each case.

Business division?

No

Business unit?

No

Factory?

Yes

We have emissions for each factory in Ford as this is how the data is collected. However, this is not useful information for customers

Product group?

Yes

See later. An example of our approach can be seen in our Product Sustainability Index communication

Other

Unable to breakdown by category?

Further information

http://cdp.cdproject.net/attachedfiles/Responses/53509/10999/PSI_Report_Sustainability_2008.pdf

SM 1.2 Splitting Scope 1 and Scope 2 Emissions by Category

SM 1.2. Using your preferred method (question SM 1.1) for splitting emissions, please consider what are the five biggest emitting categories (e.g. business units or product groups) for your company? For each of the five biggest emitting categories, plus any other categories specified by your customer(s), please complete the table SM1.2.

[Click here to see a sample of a completed table.](#)

Please complete this table. Use the figure given in answer to question 11.1. as the basis for your Scope 2 emissions.

	Category e.g. business division, business unit, factory, product group.	Total emissions (number)	Total emissions Units of measure e.g. metric tonnes CO2-e	Do these represent emissions from Scope 1 only, Scope 2 only, or both?	Output	Units	Major emission Sources
Group 1	Fiesta	319	Metric Tonnes CO2-e per unit	Scope 1 and 2			Electricity
Group 2	Focus	367	CO2-Metric Tonnes CO2-e per unit	Scope 1 and 2			Electricity
Group 3	Mondeo	392	CO2-Metric Tonnes CO2-e per unit	Scope 1 and 2			Electricity
Group 4	S-Max	392	Metric Tonnes CO2-e per unit	Scope 1 and 2			Electricity
Group 5	Galaxy	392	Metric Tonnes CO2-e per unit	Scope 1 and 2			Electricity
Other	Fiesta Van	340	Metric Tonnes CO2-e per unit	Scope 1 and 2			Electricity
Other	Transit (ex-Southampton)	725	Metric Tonnes CO2-e per unit	Scope 1 and 2			Electricity
Other	Transit (ex-Turkey)	622	Metric Tonnes CO2-e per unit	Scope 1 and 2			Electricity
Total							

Further information

All data is total CO2-e on a per unit basis.

The CO2 assumes national average CO2 per kwh except where we are using on-site generated renewable energy or are buying a green tariff.

Compared to co's who build cars in France, we are at a disadvantage in terms of CO2 given the French Govt focus on nuclear power.

SM 1.3 Methodology

SM 1.3. Please explain how you have identified the GHG sources listed in the previous question, including major limitations to this process and assumptions made.

Describe your system for allocating emissions to the groups in the table.

Where published information has been used, please provide a reference(s).

Give the degree of confidence that you have in the figures expressed as a percentage, e.g. you estimate that they are accurate to +/- 15%.

If the allocation of emissions to different categories has been externally verified, please give details.

Most of our plants build a range of vehicles, although typically the vehicles are of a similar size. We know the total CO2 per plant and allocate the CO2 per vehicle based on an assessment of the energy that went into that size vehicle. We know the totals are correct but it is possible that the allocation between models might favour larger vehicles. We are confident that they are accurate within 5%.

Further information

SM 1.4 Challenges and Developments

What are the challenges in allocating emissions to different business categories and what would help you to overcome these challenges? Please describe whether and how you plan to develop your capabilities to allocate your emissions in the future.

We see no immediate need to break down CO2-e by product beyond that shown as the percentage of total life cycle CO2 is not materially affected and the range of CO2-e per vehicle, at least for cars is relatively small. We see little upside for improving the accuracy as these numbers represent under 2% of total life cycle CO2-e. Our focus is on issues like fuel economy, material choices, logistics, etc

Further information

Ford has a significant concern as to how customers will use or understand the CO2-e data provided. A manufacturer's in-house CO2 is highly dependent on how integrated the company is. The more integrated e.g. in-house stampings, in-house wheel plants, in-house engine manufacturing will all have an impact on CO2 levels. Comparisons between co's without this understanding or the plants where they make their products are therefore extremely difficult.

SM 2. Your engagement with your suppliers

Your customers want to engage with you to learn more about the emissions from their immediate suppliers. The purpose of this section is to find out what you in turn are doing to engage with your own suppliers.

SM 2.1 Do you have a strategy for engaging with your suppliers on their GHG emissions and the impacts of climate change on their business? If so, please provide details of this strategy. To give a sense of the scale of this engagement, please include the number of suppliers with whom you are engaging and the proportion of your total spending that they represent.

If you do not have a strategy, please explain any plans you have to develop one in the future.

Yes

All Ford suppliers have to be ISO14001 accredited. Ford has held briefings with our largest suppliers on CO2 educations and awareness. We have also engaged suppliers in the following CO2 reductions actions:

- Avoiding/reducing severe greenhouse gases (Flouorocarbons etc) through selection of A/C and other systems
- Reducing part weights, to improve fuel economy with a trade-off process
- improving vehicle efficiency through technology (eg. start-stop, regenerative braking)
- reduced parasitic losses through eg. EPAS
- reducing friction through technology (eg. low rolling resistance tires)
- use of recycled materials
- More returnable packaging

As can be seen above our focus with suppliers is more to do with reducing the "usage" phase CO2-e footprint. This is because 85% of the life-cycle CO2-e is associated with usage. This is the focus we want. We are working with suppliers to look at identifying those materials with high CO2 footprints and to be more aware of countries with high CO2 per kWh. We are also developing tools to address the logistics footprints. The complexity of vehicles though is considerable with Ford having 130,000 parts supplied by 5,500 manufacturing sites.

Further information

SM 2.2 Use of data

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data (for example: identifying major GHG sources to prioritise emissions reduction actions, identifying physical risks in the supply chain, stimulating innovation, etc).

As explained in SM2.1 our focus is on supplier technologies. An example is our work with BP where we have been able to develop engine oils and transmission oils that reduce fuel consumption.

We made presentations to the heads of the top 50 suppliers encouraging them to identify potential technologies that could be developed to reduce fuel consumption/CO2.

Further information

SM 3. Emissions over the lifecycle of goods and services

SM 3.1. Please list any major successes and/or planned activities to reduce GHG emissions in the lifecycle of groups of products or individual products, including an estimate of the possible reductions for each initiative.

The best way of explaining our total approach is to take the example of our new Fiesta. The new Fiesta weighs 40kg less than the previous model, and has new powertrains, its diesel engines were designed in a facility that uses green electricity and are assembled in a plant that gets all its power from on-site wind turbines, the vehicle itself is assembled in a plant that gets its electricity from hydro-electric and the plant also makes use of surplus heat from a neighbouring combined and heat power station. These assembled Fiestas are then shipped to the UK partly via barge and ship. Once sold these vehicles can then join Ford's partner BP with its targetneutral offset scheme.

Ford estimates that the new engines and weight reduction on the new Fiesta will save over 70,000 Tonnes of CO2 per annum compared with the prior model. The wind turbines save 3,000 Tonnes of CO2 and the sourcing of the electricity at the Cologne plant saves 190,000 Tonnes of CO2. Therefore, just these 3 actions save over 270,000 Tonnes of CO2. We have installed in 2009 wind turbines at our facility in Belgium manufacturing the Mondeo, S-Max and Galaxy.

Ford has introduced the ECONetc range, a brand focused on class leading CO2 products.

SM 3.2 Do you offer customers information or steps they can take to reduce the GHG emissions associated with use of your products, and - in the case of goods - with their disposal? Please give examples.

There is greater to work with our customers. Ford developed a greener driving program (called various names in different markets e.g. Smarter Driving in UK (Joint program with Energy Savings Trust). See <http://www.energysavingtrust.org.uk/Cars-travel-and-driving/Drivers/Smarter-driving/The-smarter-driving-challenge>

After tuition the participants in the Challenge achieved an average 33.4% increase in MPG. And this was after less than half an hour of instruction!

We have programs operating in North America and elsewhere in Europe with similar results.

Further information

SM 3.3 and 3.4 Individual Request Questions

Some suppliers may have customers who request that they provide estimates of GHG emissions over a particular product's lifecycle. Others may have estimated this information for their own purposes and wish to publicise it. If you fall into either group, please answer the following question and then complete the table SM 3.4.

SM 3.3 Please give details of the method that you have used to estimate lifecycle emissions. State if you have followed a published procedure (e.g. ISO 14040 & 14044 or PAS 2050) or one that you have developed yourself.

Clearly define the good or service for which data is being given and the boundary of your assessment. Please make it clear which GHGs and GHG sources are included in your assessment. If relevant GHGs and GHG sources are excluded, please describe them and give reasons for omissions.

Give references to data sources used.

If you are giving life cycle assessment (LCA) information for more than one product, please use this text box to describe your methodologies, each time making it clear to which product you are referring.

SM 3.4. Emissions over the lifecycle of goods and services

An example of the lifecycle stages of a service might be - in the case of a hotel stay - check in, use of room, check out, cleaning.

Further information

The attached file covers a more meaningful way of communicating this data.

http://cdp.cdproject.net/attachedfiles/Responses/53509/11001/CDP_by_Vehicle_2008.xls