

## CDP 2009 Information Request

Respondent: E.I. du Pont de Nemours &amp; Company

## General introduction

DuPont is a 207 year-old global company that operates in dynamic markets around the world. Over its long history, DuPont has transformed its product and service offerings to meet the changing needs of society, basing its business strategy on detailed analysis of risk and opportunity. DuPont views climate change as an important global issue that will present numerous risks and opportunities to business and society at large. DuPont's longstanding commitment to safety and sustainability provides an additional incentive to analyze and manage risks and opportunities associated with climate change mitigation and adaptation.

## 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.

DuPont has an internal climate change leadership structure that includes teams focused on identifying and addressing the risks and opportunities associated with climate change and climate change policy. A Steering Committee made up of senior leaders from the company provides overall leadership and guidance. An Issue Group meets quarterly in person and includes broad representation from functions and those businesses most directly impacted by the issue. Other internal teams/networks focus on International Climate Policy, Intellectual Property and Climate Change / Sustainability, Emissions Trading Oversight. These teams provide greater depth of understanding of the different geographical and value chain impacts. Coordination among all of the teams allows for prioritization of issues and enables more efficient use of employee time and resources. This team structure has been put in place over the past two years, and continues to evolve as the policy context changes.

DuPont already operates in a regulated environment in the European Union where several DuPont facilities are regulated under the EU Emissions Trading Scheme (EU ETS). A large portion of DuPont's global greenhouse gas emissions are U.S.-based and therefore are not subject to existing regulation of GHG emissions. In the United States there has been considerably more activity on climate change at the state, regional and federal levels in the past year. DuPont is closely monitoring the evolving policy debate and is actively engaged in dialogue with lawmakers and their staff, offering input on elements that we believe would contribute to an effective framework for action. As a founding member of the US Climate Action Partnership (USCAP), DuPont has joined together with other major companies and NGOs to promote recommendations on a cap-and-trade program to address climate change that we believe would be both environmentally effective and economically sustainable.

DuPont believes that we have valuable input to provide into this process, given our experience taking early action to reduce GHG emissions, our voluntary participation in emissions trading as a member of the Chicago Climate Exchange (CCX), and our experience working within the EU Emissions Trading Scheme. In addition to efforts to monitor climate policy developments in Europe and the United States, DuPont also continues to monitor relevant policy discussions in other countries. DuPont also participates in multi-stakeholder dialogues regarding international climate policy frameworks.

As companies like DuPont make long term capital investment decisions, the uncertainty regarding the U.S. regulatory future (when a climate bill will be passed, what the details of a federal program would be, etc) adds an element of uncertainty to those business decisions. In addition, if in the absence of federal legislation, states were to implement legislation mandating greenhouse gas emission reductions DuPont and other companies that have customers in markets across the entire country could be disadvantaged by the added administrative costs and burden of complying with a variety of state-specific regulatory requirements. While this uncertainty regarding the regulatory future is pertinent to long-term capital investment decisions in the United States, policy uncertainty is also a factor in investment and planning decisions in many other countries around the world. This policy uncertainty also points to the risk of incompatible policy schemes being initiated in different countries and regions of the world, and the related need for coordinated global policy action, an issue discussed at greater length below.

Many anticipate that a federal climate program in the United States will lead to a rise in energy costs as a result of a price on carbon. Some believe that the carbon price signal in the economy could also lead to fuel shifting from coal to natural gas given its relatively lower carbon content, leading to further increases in the cost of natural gas and feedstocks derived from natural gas. DuPont's manufacturing processes consume significant amounts of energy and raw materials, the costs of which are subject to worldwide supply and demand as well as other factors beyond the control of the company. Significant variations in the cost of energy, which primarily reflect market prices for oil and natural gas and raw materials affect the company's operating results from period to period. When possible, the company purchases raw materials through negotiated long-term contracts to minimize the impact of price fluctuations. Additionally, the company enters into over-the-counter and exchange traded derivative commodity instruments to hedge its exposure to price fluctuations on certain raw material purchases. The company has taken actions to offset the effects of higher energy and raw material costs through selling price increases, productivity improvements and cost reduction programs. Success in offsetting higher raw material costs with price increases is largely influenced by competitive and economic conditions and could vary significantly depending on the market served. If the company is not able to fully offset the effects of higher energy and raw material costs, it could have a significant impact on the company's financial results.

Related to the potential risks associated with energy supply and costs, DuPont also continues to seek out opportunities to improve the energy efficiency of our own operations. DuPont has reported that between 1990 and 2006, we have saved over \$3 billion US through energy efficiency projects. Today DuPont's energy use is 7% below 1990 despite a 40% increase in production volume. At the corporate level, DuPont looks for opportunities to make our overall portfolio less energy intensive, and energy use is one factor that is weighed when investments or divestitures are considered.

DuPont is a producer of fluorochemicals, including refrigeration gases which are widely used in commercial refrigerators and freezers, as well as in home and automobile air conditioning units. These gases are notable because of their high global warming potential (GWP), and because the process emissions are relatively small when compared with the emissions that result from typical product use. Many of these product use emissions could be avoided if the proper policy incentives were in place to incentivize capture and recycling (or destruction) of the gases. In this case, and in other situations where a producer has limited control over the product-use emissions, appropriate policy will be necessary to drive environmentally smart behavior throughout the marketplace at all stages of the product lifecycle. DuPont is working to develop new, next-generation, lower-GWP products that could replace higher-GWP fluorochemicals while maintaining the high levels of performance and safety. DuPont is also working closely with other producers and users of fluorochemicals to encourage policymakers to enact an international agreement to cap and reduce over time the use of HFCs in a manner that is modeled after the Montreal Protocol. This would drive meaningful reductions in global greenhouse gas emissions while allowing for replacement products and technologies to be brought to market.

From the regulatory and policy risk perspective, DuPont is actively engaged with stakeholders from Capitol Hill, government agencies, NGOs, associations, and other businesses and customers in our value chain to discuss and provide input on legislative proposals. Internal development and discussion of different policy positions is done within the Climate Change Steering and Issue Teams, which include representatives from both business and corporate functions.

DuPont's regulatory advocacy is focused specifically on some key policy issues of particular importance to the company. These issues include: reliance on market-based mechanisms; ensuring coordination of climate and energy policies; providing credit for early action taken to reduce greenhouse gas emissions; attention to differential sectoral impacts of a carbon price and the ability/inability of certain sectors to pass along the price to consumers; and the inclusion of cost-containment mechanisms (such as offsets) to help moderate the cost to individual regulated entities and the economy overall while maintaining the environmental integrity of the cap.

In recent years DuPont has been involved with several major coalition efforts that resulted in public statements calling for governmental action on climate change.

The U.S. Climate Action Partnership is a CEO-driven effort that brought together a group of companies and NGOs to develop a set of consensus principles and recommendations on a mandatory, flexible federal climate change program. The USCAP coalition has been influential in encouraging and shaping the debate on action to address climate change, and continues to work together to respond to inquiries from Congress, to further discuss common policy positions, and to expand the group's membership to include additional perspectives.

Another initiative, Capital to the Capitol, organized by Ceres and the Investor Network on Climate Risk, issued a call to action to the U.S. Congress that was highly consistent with the USCAP messages. This initiative was unique in its membership, which included a group of investors who collectively have \$4 trillion assets under management.

The Global Roundtable on Climate Change (GROCC), convened by Columbia University's Earth Institute, brought together a wide range of stakeholders from around the world to discuss the science of climate change and to develop and issue recommendations for an international framework to address this global challenge.

DuPont is also actively engaged in several broad coalitions with a focus on providing a business community perspective on a range of global issues, including climate change. These include the Business Roundtable and the World Business Council on Sustainable Development (WBCSD). DuPont Chairman, Chad Holliday, serves in a leadership capacity as co-chair of the WBCSD Energy & Climate Network and is also a member of the National Academies' Committee on America's Climate Choices.

In DuPont's public policy advocacy efforts we are committed to finding solutions that ensure environmental protection while being economically sustainable. We believe that all major emitting sectors of the economy should be involved, and that a program should be structured such that the lowest-cost reductions are identified and prioritized. A climate program must also take into consideration the differential impacts of a carbon price on different sectors of the economy – for industrial manufacturers facing unregulated offshore competition, a small increase in energy costs will drive very different behavior than a similarly sized increase in energy cost would have on the average residential electricity customer. More information on DuPont's perspectives on climate policy can be found on our website: [www.dupont.com](http://www.dupont.com).

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.

DuPont has an internal climate change leadership structure that includes teams focused on identifying and addressing the risks and opportunities associated with climate change and climate change policy. A Steering Committee made up of senior leaders from the company provides overall leadership and guidance. An Issue Group meets quarterly in person and includes broad representation from functions and those businesses most directly impacted by the issue. Other internal teams/networks focus on International Climate Policy, Intellectual Property and Climate Change / Sustainability, Emissions Trading Oversight. These teams provide greater depth of understanding of the different geographical and value chain impacts. Coordination among all of the teams allows for prioritization of issues and enables more efficient use of employee time and resources. This team structure has been put in place over the past two years, and continues to evolve as the policy context changes.

DuPont is a global company with operations in approximately 80 countries worldwide. DuPont takes seriously the risk of potential physical damage to company facilities and has taken a number of proactive measures to minimize risk, such as the development and implementation of comprehensive disaster management plans. The company's emergency preparedness plans include consideration of design and siting of buildings, process safety management, community preparedness, and site emergency response. However, DuPont recognizes that even with the best preparation, the company could still be impacted if a storm caused a major interruption in business for an important supplier or customer (e.g. natural gas supplier).

DuPont works closely with many of our major supply chain partners to jointly manage supply and demand issues, taking into consideration a wide range of factors that could interrupt the normal flow of business, including major weather events.

The 2005 and 2008 U.S. Gulf Coast hurricanes drew national attention to the potential for damage resulting from hurricanes and other natural disasters. The physical and economic impacts of Hurricanes Katrina and Rita to DuPont facilities were among the most significant challenges faced by the company in 2005. As a result of thorough emergency preparedness plans, all impacted facilities remained environmentally secure, and no adverse environmental impacts resulted from this physical damage to DuPont facilities.

Other potential physical risks described by the Intergovernmental Panel on Climate Change include reduced freshwater supply and regional changes in agricultural productivity. These risks could pose a threat to company operations, particularly the agricultural work being done in regions around the world by Pioneer, a DuPont subsidiary, and our many customers in the agricultural sector.

The greatest potential for direct financial impacts resulting from climate change is related to possible physical risks to DuPont assets. DuPont has a long history and corporate culture of emergency preparedness that has enabled the company to protect its people and its assets from a variety of crisis events, including natural disaster-related events. The corporation maintains an in-depth set of safety, health and environmental (SHE) planning processes and mandatory SHE standards that specifically address preparedness and response at the facility and corporation level. These include individual, specific standards on Process Safety Management, Process Hazards Analysis, Design and Siting of Buildings, Emergency Planning, Community Preparedness and Site Emergency Response. These standards are meant to design facilities that would minimize adverse consequences of natural disasters and other emergency events, to safely prepare for such events (e.g. shutdown procedures in advance of anticipated events), and to quickly and effectively respond to consequences. The corporation also maintains a Global Crisis Management System to manage crises at the appropriate level of response: facility, business or corporate depending on the magnitude of the crisis (such as natural disaster) and the consequences. These standards and systems are further supported by an extensive set of Engineering Design Standards that provide design guidance on such things as wind loads, containment, etc., that enhance or fill gaps in building codes and industry standards. These internal procedures overlay national and local regulatory requirements such as the U.S. Clean Air Act Section 112(r), Risk Management Programs.

To help address the physical risk presented by the potential for decreased freshwater supply, DuPont has set a commitment to reduce water consumption by at least 30% by 2015 at our global sites that are located where the renewable freshwater supply is either scarce or stressed, as defined by the United Nations. At all other sites, DuPont has committed to hold water consumption flat on an absolute basis through the year 2015, offsetting any increased demand from production volume growth through conservation, reuse and recycle practices. We will continue to report our progress toward this and other sustainability goals.

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.

DuPont is committed to working to find policy solutions that are economically sustainable while addressing the environmental challenge. While no industry or company is ever removed from the risk of a potential sudden or dramatic shift in consumer sentiment, we believe that the company's attention to the issue of climate change and early action to reduce our own global GHG emission footprint has built up credibility and goodwill for the DuPont brand, and has helped position DuPont as a leader in the business community with respect to climate change.

As discussed above in the section on regulatory risks, an adequate natural gas supply is of critical importance to DuPont operations, and there is a need for policies that pull alternative fuels to the marketplace. A diverse supply of low-carbon fuels will be critical and necessary to avoid a situation where significant fuel switching occurs at an unsustainable pace, disadvantaging some sectors that rely heavily on certain fuel sources, like natural gas. For these reasons, energy and climate policies must be developed and implemented in a coordinated manner to assure that unrecoverable energy cost are not a significant risk factor.

The issue of how to estimate and assess current and/or future financial effects of the risks associated with climate change is something that is discussed at DuPont more each year, as new studies are released and progress is made toward developing and implementing climate policies. We have developed processes to incorporate a "cost of carbon" into capital expenditure and M&A decisions, with the expectation that additional federal and international policies will be implemented in the coming years that drive a carbon price through the economy.

Proposed and existing legislative efforts to control or limit greenhouse gas emissions could affect the company's energy source and supply choices as well as increase the cost of energy and raw materials derived from fossil fuels. However, the successful negotiation and implementation of sensible national, regional, and international climate change policies could provide the business community with greater certainty for the regulatory future, help guide investment decisions, and drive growth in demand for low-carbon and energy-efficient products, technologies, and services.

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.

In testimony before the House Energy & Commerce Committee on climate change legislation on April 22, 2009, DuPont Chairman Chad Holliday said "Effective climate legislation will provide companies like DuPont the certainty we need to increase our investment and accelerate development and deployment of technologies that will be critical to a low-carbon economy." (Full written testimony attached.)

A fundamental opportunity related to current and anticipated regulatory requirements on climate change is the advantage to the business community of greater certainty regarding the future regulatory path. The EU has already implemented a program, and as more nations and regions take policy action DuPont and other companies will be able to make more informed investment and business decisions. DuPont will continue to advocate for a global climate policy framework that creates meaningful linkages between federal and regional systems around the world, enabling a truly global and coordinated market-based solution to the global problem of climate change.

Climate change policies that include technology R&D incentives could create opportunities for DuPont to partner with government and other entities to secure research and development financing. This could help speed existing and drive new innovation efforts to develop technologies that would aid with climate change mitigation or adaptation. It is clear that technological innovations will be critical to enabling society to reach the near-, mid-, and long-term global emissions reductions targets under discussion in the UNFCCC process and other international policy dialogues. DuPont businesses have a role to play in helping to bring these new technologies and products to market, and in some cases would benefit from the opportunity to partner with other institutions for financing and/or a complementary core knowledge base.

Business opportunities could also result from policies that put in place process or product standards mandating greater efficiency. In many cases, DuPont is well positioned to provide customers with products that help them reduce their greenhouse gas footprint and/or improve energy efficiency (e.g. automotive lightweighting, building construction efficiency, etc). If manufacturing process efficiency requirements were instituted, DuPont would also be well-placed to be a leader in our industry, given the company's leadership in driving energy efficiency and process improvements at our facilities around the world.

Further information

<http://cdp.cdproject.net/attachedfiles/Responses/53485/9669/Final Statement of Chad Holliday Senate EPW 5-19-09.pdf>

### 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.

DuPont works closely with many of our major supply chain partners to jointly manage supply and demand issues, taking into consideration a wide range of factors that could interrupt the normal flow of business, including major weather events.

We acknowledge that there may be a need for adaptation, and it is part of how we consider future product opportunities. In general, one could expect to see increased demand for products that DuPont provides that could help with various aspects of adaptation including more extreme weather conditions. Some examples are products like Tyvek® Weatherization systems, StormRooms® with Kevlar®, and SentryGlass®. Additionally, Pioneer seeds that are increasingly resistant to adverse weather conditions; pest resistant; fertilizer efficient and high yielding; allow farmers to continually produce more food and fuel per acre with fewer inputs and can help farmers adapt to agricultural challenges related to climate change.

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.

DuPont generally views that there are a lot of innovations that will benefit by a carbon constrained world. We anticipate that limiting carbon emissions will drive demand for DuPont products and services that serve a low-carbon economy. Many of DuPont's existing products provide improved safety, efficiency, and environmental benefit in our homes, offices, and automobiles. Increased climate change mitigation efforts (resulting from voluntary or mandatory greenhouse gas emission reductions) could drive expanded demand in some of DuPont's major markets, such as automotive materials, building materials, and biofuels. In addition, some of DuPont's products could aid in climate change adaptation efforts.

In order to create more of a business focus on product opportunities related to climate change and environmental markets more broadly, DuPont included market-facing goals in addition to footprint goals in our October 2006 launch of our 2015 Sustainability Goals. The market-facing goals are aimed at capturing value in a carbon-constrained world by tying our business growth more directly to the development of products that have environmental benefits and help our customers increase their energy efficiency and/or reduce their greenhouse gas footprint.

DuPont's market-facing goals address all stages of the product development timeline, starting with R&D efforts and stretching towards marketing and sales. The goals are listed below:

- **Environmentally Smart Market Opportunities from R&D Efforts:** By 2015, DuPont will double our investment in R&D programs with direct, quantifiable environmental benefits for our customers and consumers along our value chains.
- **Products that Reduce Greenhouse Gas Emissions:** By 2015, DuPont will grow our annual revenues by at least \$2 billion from products that create energy efficiency and/or significant greenhouse gas emissions reductions for our customers. We estimate these products will contribute at least 40 million tones of additional CO<sub>2</sub> equivalent reductions by our customers and consumers.
- **Revenues from Non-Depletable Resources:** By 2015, DuPont will nearly double our revenues from non-depletable resources to at least \$8 billion.
- **Products that Protect People:** DuPont will enhance our focus on protecting people. We will increase the amount of R&D spent on developing and bringing to market new products that will protect people from harm or threats. Between now and 2015, we will introduce at least 1,000 new products or services that help make people safer globally.

Given the diversity of products and services that DuPont produces for sale in a wide range of global markets, financial opportunities as they specifically relate to climate change are not formally assessed for the company overall. Individual businesses whose portfolios include products that could be particularly impacted by climate policies or a transition to a low-carbon economy take into consideration relevant issues (e.g. potential for increased product demand resulting from policies or other incentives; anticipated growth in certain markets such as alternative fuels; etc). Expectations for new or expanded markets driven by demand for products that enable climate change mitigation or adaptation and the strategic implications for certain DuPont businesses are discussed during some of the Sustainable Growth Reviews. These reviews are led by Sustainable Growth Center leadership and conducted with individual DuPont businesses.

The following is a list of examples of innovations and initiatives that aim to create value for DuPont while also delivering environmental benefit.

#### Agriculture & Food

- Pioneer Hi-Bred a DuPont business, dramatically increases and enhances the world's food supply by using advanced plant genetics to develop field crops that are more productive, of higher quality, more nutritious, and better suited for specific uses such as biofuel production. Pioneer also works to enhance traits that make seeds more productive under certain weather scenarios, such as improving drought resistance.

#### Building and Construction

- DuPont™ Tyvek® Weatherization Systems are used in millions of homes to combat water, moisture, and air infiltration. DuPont™ Tyvek HomeWrap® forms a protective breathable barrier, helping to keep wind and rain out, contributing to energy efficiency in the home. DuPont™ Tyvek AtticWrap® creates a sealed attic system, reducing air leakage and energy loss through the roof.
- DuPont offers the broadest portfolio in the solar energy industry, with more than 10 products critical to photovoltaic production, designed to work together to help increase the efficiency and lifetime of solar modules.
- DuPont™ Sentry Glas® Plus and DuPont StormRoom® with Kevlar® help provide protection against hurricane-force winds and airborne debris.
- For the first time there's a carpet that provides both unparalleled performance and environmental benefits. SmartStrand™ with DuPont™ Sorona® renewably sourced polymer offers a combination of permanent built-in strain protection, superior durability and amazing comfort. Partially made with renewable resources, Sorona® is one of the most revolutionary materials to hit the carpet industry in 20 years.
- In addition to carpeting, a new carpet cushion was launched earlier this year that contains at least 20 percent renewable content. The EnviroStep™ carpet cushion from Carpenter is made using DuPont™ Active Layer RS moisture barrier film, which is laminated to the top surface of the cushion to prevent spills or liquids from soaking in.

#### Communications

- DuPont Imaging Technologies offers DuPont™ Cyrel®FAST, Cromaprint™ and Artistri™ digital printing systems that are environmentally smart, with no processing solvents to handle, store, or recycle. They also use significantly less energy, water, and ink, than conventional printing systems.

#### Transportation

- In partnership with BP, DuPont is developing biobutanol, a next-generation biofuel that can be produced from agricultural byproducts containing sugar, while promoting sustainable agriculture.
- DuPont and Genencor, a division of Danisco A/S, announced an agreement to form DuPont Danisco Cellulosic Ethanol LLC, a 50/50 global joint venture to develop and commercialize the leading, low-cost technology solution for the production of cellulosic ethanol – a next generation biofuel produced from non-food sources.
- DuPont technology is enabling the development and commercialization of fuel cell-powered vehicles. Today, fuel cell-powered buses and automobiles are running in demonstration fleets, a prelude to their eventual mass commercialization.
- DuPont is introducing new grades of DuPont™Hytrel® thermoplastic elastomer made with renewable resources for use in a range of automotive parts.

- DuPont announced that its reinforced DuPont™ Zytrel® nylon resin has replaced steel in exhaust system parts on all Volkswagen vehicles built on the current Golf platform, cutting weight of the component by nearly 50 percent.
- DuPont™ Spallsheid® is used to create automotive sunroofs that protect passengers more effectively and reduce weight by up to 30%.
- DuPont Performance Coatings offers low-VOC emission automotive coatings and is developing finishes based on renewable resources. Thousands of automotive collision repair facilities in the US and Europe have converted their paint operations to water-based DuPont formulations, thereby reducing emissions from solvents. High-solids DuPont formulations used in automobile manufacturing also reduce emission due to reduced use of solvents.
- DuPont has identified and is now testing new proprietary refrigerants to reduce their global warming potential in future automotive air conditioning systems.
- DuPont™Kevlar® fiber provides durability to automotive tires, protects soldiers and combat vehicles, and makes cars and airplanes stronger, lighter, and more fuel efficient.
- DuPont has committed to a three-year, \$100 million global expansion for DuPont™ Nomex®, a flame-resistant fiber. Used as a lightweight structural support, Nomex® helps substantially improve the performance and safety of most commercial aircraft.

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 operational control is exercised.

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

No parts of our business or sources are excluded from Scope 1 and Scope 2 GHG emissions reporting.

### 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.

WRI GHG Protocol Corporate Accounting and Reporting Standard – Operational Control Basis: DuPont uses the methodologies specified in the WRI Greenhouse Gas Protocol to calculate its emissions. DuPont uses the Control Approach, accounting for 100% of the emissions from operations over which it has control. DuPont reports Scope 1 direct emissions from fuel consumption at its manufacturing sites, offices and laboratories and emissions of other GHG emissions at those sites, and Scope 2 emissions associated with purchased electricity, steam and other energy bearing fluids (e.g., heat transfer fluids received from off-site) at its manufacturing sites, offices and laboratories.

Select methodologies:

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

Please also provide:

9.2 Details of any assumptions made.

Only those gases in the "Kyoto basket" (CO<sub>2</sub>, CH<sub>4</sub>, HFCs, PFCs, N<sub>2</sub>O, SF<sub>6</sub>) are included in the emissions determinations. Further, at this time it is assumed that Scope 1 N<sub>2</sub>O and SF<sub>6</sub> emissions are negligible for our facilities. N<sub>2</sub>O is only estimated for Scope 2 electricity consumption.

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

See calculation tools marked in checklist below.

Select calculation tools:

GHG Protocol - Allocation of Emissions from CHP 1.0 September 2006  
GHG Protocol - CO<sub>2</sub> emissions from fuel use in facilities 3.0 March 2008  
GHG Protocol - GHG emissions from stationary combustion 3.1 March 2008  
GHG Protocol - HFC-23 emissions from the production of HCFC-22 2.0 March 2008  
GHG Protocol - Indirect CO<sub>2</sub> emissions from purchased electricity 3.0 March 2008  
GHG Protocol - Indirect CO<sub>2</sub> emissions from Purchased Electricity, Heat, or Steam 2.0 March 2008

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

The GWPs used were taken from the Intergovernmental Panel on Climate Change Second Assessment Report (1995). The GWPs corresponding to the 100-year time horizon were applied.

9.5 The emission factors you have applied and their origin.

For Scope 1 emissions:

- For stationary combustion units, where the supplier has provided the energy content of the fuels (e.g., BTU content), we use that information. If the supplier only provided the volume or weight of fuel provided, standard conversion factors (e.g., BTU/standard cubic foot, BTU/ton, etc.) are utilized. These factors are representative of typical industrial fuels and have been utilized for reporting to ACC since 1988. The same default factors are used for consistency year to year and are very similar to other reporting guideline factors.
- For stationary combustion units, the CO<sub>2</sub> emissions were calculated based on standard conversion factors for each fuel based on the energy consumption calculated as explained in the previous paragraph. These factors are also representative of typical industrial fuels and have been utilized for reporting to ACC since 1988. The same default factors are used for consistency year to year and are very similar to other reporting guideline factors.

For Scope 2 emissions:

- For electricity purchases, Scope 2 emissions are estimated using U.S. EPA eGRID state average factors. Outside the U.S. Scope 2 emissions due to purchased electricity consumption are estimated using the WRI/CAIT latest year national averages.

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 CO<sub>2</sub>-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	01/01/2007	01/01/2006	01/01/2005
Reporting year Q7.1 End date	31/12/2008	31/12/2007	31/12/2006	31/12/2005
10.1 Total gross global Scope 1 GHG emissions in metric tonnes CO <sub>2</sub> -e	9336753	11735216	9987823	9592645
<b>10.2 Gross Scope 1 emissions in metric tonnes CO<sub>2</sub>-e by country or region</b>				
Asia Pacific	342557			
Canada	3730			
Europe	672129			
Latin America	179387			
USA	8138950			

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 <sub>2</sub> -e
<b>Total gross global Scope 1 GHG emissions in metric tonnes CO<sub>2</sub>-e - answer to question Q10.1</b>	<b>9336753</b>
Agriculture & Nutrition	580075
Applied BioSciences	136676
Coatings & Color Technology	1339788
Electronics & Communication Technology	4983702
Other	188538
Performance Materials	1212994
Safety & Protection	894980

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 <sub>2</sub> -e
<b>Total gross global Scope 1 GHG emissions in metric tonnes CO<sub>2</sub>-e - answer to question Q10.1</b>	<b>9336753</b>

10.5. Please break down your total global Scope 1 GHG emissions in metric tonnes of the gas and metric tonnes of CO<sub>2</sub>-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 <sub>2</sub>	Metric tonnes	4725611
CH <sub>4</sub>	Metric tonnes	
CH <sub>4</sub>	Metric tonnes CO <sub>2</sub> -e	
N <sub>2</sub> O	Metric tonnes	
N <sub>2</sub> O	Metric tonnes CO <sub>2</sub> -e	
HFCs	Metric tonnes	506
HFCs	Metric tonnes CO <sub>2</sub> -e	4294916

PFCs	Metric tonnes	34
PFCs	Metric tonnes CO <sub>2</sub> -e	316226
SF6	Metric tonnes	
SF6	Metric tonnes CO <sub>2</sub> -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.

N/A

Further information

Since DuPont operates hundreds of facilities that report energy consumption and greenhouse gas emissions into its Corporate Environmental Plan, we feel that the business-level data provided in response to Question 10.3 and the region-level data provided in response to Question 10.2 provide a more clear and understandable view of our emissions than would facility-level data requested in Question 10.4.

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 CO<sub>2</sub>-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	01/01/2007	01/01/2006	01/01/2005
Reporting year Q7.1 End date	31/12/2008	31/12/2007	31/12/2006	31/12/2005
11.1 Total gross global Scope 2 GHG emissions in metric tonnes CO <sub>2</sub> -e	4002807	4416207	4436587	4451629
<b>11.2 Gross Scope 2 emissions in metric tonnes CO<sub>2</sub>-e by country or region</b>				
Asia Pacific	173594			
Canada	4393			
Europe	181375			
Latin America	157127			
USA	3486316			

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
<b>Total gross global Scope 2 GHG emissions in metric tonnes CO<sub>2</sub>-e - answer to question Q11.1</b>	<b>4002807</b>
<a href="#">Agriculture &amp; Nutrition</a>	472022
<a href="#">Applied BioSciences</a>	111217
<a href="#">Coatings &amp; Color Technology</a>	1090219
<a href="#">Electronics &amp; Communication Technology</a>	460620
<a href="#">Other</a>	153418
<a href="#">Performance Materials</a>	987043
<a href="#">Saftey &amp; Protection</a>	728267

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
<b>Total gross global Scope 2 GHG emissions in metric tonnes CO<sub>2</sub>-e - answer to question Q11.1</b>	<b>4002807</b>

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.

[Responses fully provided above.](#)

Further information

[Since DuPont operates hundreds of facilities that report energy consumption and greenhouse gas emissions into its Corporate Environmental Plan, we feel that the business-level data provided in response to Question 11.3 and the region-level data provided in response to Question 11.2 provide a more clear and understandable view of our emissions than would facility-level data requested in Question 11.4.](#)

## 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.

[The only contractual arrangement for which DuPont has reported an emission value different from the state eGRID average is for electrical purchases at its Niagara, NY, facility. DuPont has a contract with Niagara Power to receive an allocation of up to 39,765 kW of firm hydroelectric power. If this is exceeded, grid average power is purchased. However, this rarely occurs and did not occur in 2008.](#)

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

[In 2008 DuPont purchased the equivalent of 180,000 megawatt-hours of renewable energy from Neuwing Energy. These RECs included 90,000 MWh Green-e certified 2008 vintage wind RECs and 90,000 MWh ERT-certified 2008 vintage biomass RECs. DuPont has not reported herein a reduction in GHG emissions due to these purchases.](#)

Further information

## 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 CO<sub>2</sub>-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

Commercial air travel, DuPont aviation emissions, DuPont and Pioneer sales and marketing fleet.

Emissions in metric tonnes CO<sub>2</sub>-e.

Commercial air travel (2008): 36,108 metric tons (189,000 flights)  
DuPont aviation emissions (2008): 7,696 metric tons (805,000 gallons fuel)  
DuPont sales and marketing fleet (2008): 13,240 metric tons  
Pioneer sales and marketing fleet (2008): 17,913 metric tons  
TOTAL: 74,957 metric tons

\*\* Please see attached document ("Question 13.1 tables") that includes this data in table form, with data from prior years alongside.\*\*

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

Commercial air travel flights and associated emissions are tracked by external travel agent service. DuPont aviation fuel use is tracked by the corporation and emissions were calculated using the proposed EPA GHG reporting rule table (9.56 metric tons (Te) CO<sub>2</sub> per thousand gallons of Jet fuel). We have partnered with our fleet provider (PHH) and Environmental Defense Fund (EDF) to track and report on our emissions from our sales and marketing fleet in the US. We are also partnering with our fleet provider in Europe. We track actual miles driven and gas purchased to calculate our emissions from our fleet.

13.2. External distribution/logistics  
Describe the main sources of emissions

To support long standing environmental goals, DuPont continually focuses on emission reductions for outbound shipment to customers. At our Parlin, NJ site we increased the payload by 50% and reduced the number of trucks by 55% through freight optimization. These results were essentially replicated at our Towanda, PA, facility, where we increased the average weight per truck 51%, reduced the number of trucks by 45%, and consumed 31,000 fewer gallons of gas.

Sentinel Transportation, LLC, a joint venture of DuPont and ConocoPhillips, reduced NOx emissions by 4000 kg and CO<sub>2</sub> emission by 3500 tons in 2007 thanks to state-of-the-art emission reduction and fuel saving programs.

Emissions in metric tonnes CO<sub>2</sub>-e.

DuPont does not at this time track total emissions resulting from external distribution/logistics.

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

See comments above in "Description of main sources of emissions" regarding our targeted efforts to reduce transportation/shipment 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

The life cycle analyses performed for certain products take into account GHG emissions attributable to the extraction processes for raw materials, and transport, production and use of the product. Examples include:  
[http://www2.dupont.com/Cyrel\\_Sustainability/en\\_US/assets/downloads/pdf/CyrelFAST\\_Sustainability.pdf](http://www2.dupont.com/Cyrel_Sustainability/en_US/assets/downloads/pdf/CyrelFAST_Sustainability.pdf)

Emissions in metric tonnes CO<sub>2</sub>-e.

DuPont does not at this time track total emissions resulting from use/disposal of company's products and services.

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

See information above in "Description of main sources of emissions" regarding an example of a product life cycle analysis.

#### 13.4 Company supply chain

Describe the main sources of emissions

In general we have not made estimates of these emissions. The life cycle analyses performed for certain products take into account GHG emissions attributable to the extraction processes for raw materials, and transport and production of ingredients. Examples include:

Cradle to Gate greenhouse gas information on renewably sourced materials:

[http://www2.dupont.com/Renewably\\_Sourced\\_Materials/en\\_US/materials.html](http://www2.dupont.com/Renewably_Sourced_Materials/en_US/materials.html)

Emissions in metric tonnes CO<sub>2</sub>-e.

DuPont does not at this time track total emissions resulting from activities in our company supply chain.

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

See information above in "Description of main sources of emissions" regarding an example of a product life cycle analysis.

#### 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

N/A

Transfers

Report emissions in metric tonnes of CO<sub>2</sub>-e.

N/A

Transfers

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

N/A

Non-transfers

Describe the main sources of emissions

N/A

Non-transfers

Report emissions in metric tonnes of CO<sub>2</sub>-e.

N/A

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.

N/A

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.

N/A

Further information

[http://cdp.cdproject.net/attachedfiles/Responses/53485/9988/Question\\_13.1\\_tables.doc](http://cdp.cdproject.net/attachedfiles/Responses/53485/9988/Question_13.1_tables.doc)

#### 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.

DuPont is committed to continuing to bring new products to market that will help our customers reduce their GHG emission footprint and transition to a carbon constrained economy. To increase our focus on providing products that provide greenhouse gas reduction benefits in the product use phase DuPont set a goal to, by 2015, grow our annual revenues by at least \$2 billion from products that create energy efficiency and/or significant greenhouse gas emissions reductions for our customers. We estimate these products will contribute at least 40 million tonnes of additional CO<sub>2</sub> equivalent reductions by our customers and consumers in the use phase. Products that are included in our reporting on this goal include: Engineering Polymers materials contributing to make vehicles lighter; Nomex® Paper and Pressboard, used in transformers in wind turbines; Nomex® Paper and PEN film laminate used in hybrid vehicles, TiPure® 902+ a titanium dioxide powder that requires less dispersion time and uses less associated energy, and CyrelFAST® thermal platemaking printing systems. Reports on our progress towards this and our other sustainability goals can be found at: <http://www.sustainability.dupont.com>. As we look ahead there are several key products that we expect will be brought to market in the coming years that will contribute meaningfully toward this goal.

DuPont is using lifecycle analysis tools to better understand the full lifecycle cost and impact of select DuPont products (such as current and next-generation biofuels), and to identify solutions that would help minimize the environmental impact throughout our value chains. We believe this type of analysis will help quantify relative costs and benefits and guide appropriate purchasing and policy decisions as emerging markets like biofuels continue to expand.

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 CO<sub>2</sub> from biologically sequestered carbon.

Emissions in metric tonnes CO<sub>2</sub> - Please use whole numbers only

65150

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.

We are reporting the same two financial intensity measurements as requested in last year's CDP, turnover (i.e., 2008 annual revenues and EBITDA, in US \$ millions)

16.1.1. Give the units. For example, the units could be metric tonnes of CO<sub>2</sub>-e per million Yen of turnover, metric tonnes of CO<sub>2</sub>-e per US\$ of profit, metric tonnes of CO<sub>2</sub>-e per thousand Euros of turnover.

GHG emissions/turnover (revenues) 420 metric tonnes/US\$million

GHG emissions/ EBITDA 3020 metric tonnes/US\$million

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

420

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.

As noted last year, although DuPont has set only absolute goals for energy consumption and greenhouse gas emissions reduction, the most appropriate intensity measurement basis is:

CO<sub>2</sub> equivalent emissions (tonnes)/Production (tonnes)

We are providing current and historical progress on greenhouse gas emissions intensity. (Please see historical data in comments box.)

16.2.1. Give the units e.g. metric tonnes of CO<sub>2</sub>-e per metric tonne of output or for service sector businesses per unit of service provided.

CO<sub>2</sub> equivalent emissions (tonnes)/Production (tonnes)

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

1.5

Further information

[Historical Data on GHG Intensity](#)

Year GHG Intensity (tonne CO<sub>2</sub>-eq/tonne production)

1990 5.2  
2000 2.5  
2001 2.1  
2002 2.2  
2003 1.9  
2004 1.9  
2005 1.8  
2006 1.6  
2007 1.7  
2008 1.5

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

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

Yes

GHG emissions were reduced significantly in 2008 compared with 2007 for three reasons:

1. DuPont continues to make efforts to conserve energy. For several consecutive years several DuPont corporate and site energy conservation programs have received awards for effective reductions from review organizations, most notably the American Chemistry Council. Energy conservation invariably results in reduced GHG emissions.

2. Although DuPont has made substantial reductions in its HFC emissions since 1995, in 2007 there was a significant increase in emissions of HFC-23 compared with 2006. This was due to a short-term upset at one site leading to a release. While 2007 HFC emissions were still lower than such emissions earlier in the decade, this did represent a relative spike compared with both 2006 and 2008 emissions.

3. In 2008 production volume was down about 5% compared with 2007. Note, however, that production based GHG intensity was also reduced, so it is obvious that the reductions described in the prior two paragraphs were over and above that which would be attributable to reduced production levels.

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.

17 %

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.

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.

Yes, a significant portion of the DuPont HFC emissions reported here has been verified by IFC International. In addition a significant portion of the DuPont GHG emissions in the U.S. will be audited this summer by FINRA on behalf of the Chicago Climate Exchange. A significant portion of the DuPont GHG emissions in Europe are verified under the European Union Emission Trading Scheme.

IFC International (Toronto, Ontario, Canada) has verified the 2008 (and prior years) emissions of HFC-23 from the DuPont HCFC-22 manufacturing facility at Louisville, KY.

FINRA will audit a significant portion of the 2008 DuPont emissions in the U.S. on behalf of the Chicago Climate Exchange during the second half of 2009. Note that emissions reported to Chicago Climate Exchange include all significant Scope 1 GHG emissions but only electricity is included in Scope 2.

As reported in response to Question 21, five major DuPont facilities in Europe are subject to the European Union ETS. As such these facilities' GHG emissions data is verified per EU requirements.

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

ICF International has attested to the accuracy of the DuPont Louisville emissions of HFC-23 and the documentation that they provided is – according to ICF International – “intended to offer the user a high level of assurance...” See attached for an example of a Greenhouse Gas Emission Reduction Verification Audit Report prepared by ICF for DuPont.

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

Please attach a copy/copies.

[http://cdp.cdproject.net/attachedfiles/Responses/53485/10153/Letter\\_Dupont\\_Annex2\\_03June04.pdf](http://cdp.cdproject.net/attachedfiles/Responses/53485/10153/Letter_Dupont_Annex2_03June04.pdf)

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

Internally developed standard consistent with industry practices.

See excerpt from attached ICF statement of assurance:

“Based on a review of the relevance, completeness, transparency and accuracy of the relevant GHG information, it is the opinion of ICF Consulting Inc. that:

- The emission reductions are verifiable as activity data relied upon in the quantification of emission reductions is collected, reported and communicated effectively. The relevant data records are maintained and protected, demonstrating historic and ongoing conformance to Emissions Reduction Creation Protocol – DuPont Louisville Works' Emissions Reduction Creation Protocol – Freon®23 Abatement – Rate-based (2002).

- The emission reductions are surplus and represent a reduction not otherwise required.

- The resulting emission reductions are both real and measurable. The methodology applied in the determination of emission reductions is acceptable, in that it draws on methodologies described in the IPCC's Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories (IPCC, 2000), Environment Canada's Greenhouse Gas Emission Measurement and Coverage for Entity Reporting (Environment Canada, 2001) and WRI/WBCSD's The GHG Protocol – a corporate accounting and reporting standard (WRI/WBCSD, 2001) and will result in a conservative estimation of emission reductions.”

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.

In addition to the verification programs described above, we note that the U.S. EPA Proposed Mandatory Greenhouse Gas Reporting Rule would include requirements for self-certification and agency review of the data and its documentation beginning with the 2010 reporting year for U.S. GHG emissions.

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.

Primary sources of uncertainty include:

1. Emission factors used for stationary combustion of fuels and eGRID factors applied to electricity consumption.
2. A significant fraction (30-50%) of facilities outside the U.S. report fuel use based on internal meters rather than invoiced quantities.
3. Waste gas, vent gas and wastewater treatment biogas volumes are determined based on internal meters and their CO2 conversions upon combustion are estimated based on process knowledge and past analysis of composition.
4. Leaks of HFCs from refrigerant units (e.g., chillers and air conditioning) are being reported for the first time this year. A number of facilities have not maintained records of these emissions. (Note for example that there are regulatory requirements in the U.S. to collect refrigerant leak data for CFCs and HCFCs, but not HFCs.)
5. Biological wastewater treatment CO2 emissions are estimated based on organic loading to the treatment system.
6. While 100% of facilities' stationary combustion fuel, waste gases used as fuel, and purchased power (e.g., electricity, steam, heat transfer fluids) are required to be reported, process emissions of GHGs may be considered de minimus at a site if in aggregate they do not exceed 3% of sitewide Scope 1 and 2 emissions and do not exceed 3600 metric tons.

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

1. Emission factors – We are unaware of the level of inaccuracy resulting from the use of emissions factors. However, DuPont strongly believes that reporting of sitewide fuel consumption and estimation of GHG emissions based on this consumption and emission factors is inherently much more accurate than the use of emission monitors. Emission monitors have instrument error, have downtime for maintenance and calibration, often miss fugitive emissions, and will tend to build error due to the need for dozens or more units per facility.

2. Meters vs. invoiced fuel – Since over 80% of fuel combustion in DuPont occurs in the U.S., only 1/3 to 1/2 of the 20% consumption outside the U.S. is based on meters, the potential for significant inaccuracy is small. Even an average of 5% inaccuracy in the same direction (i.e., all low or all high) across all those facilities would result in an 0.5% error in fuel combustion emissions or 0.2% of total Scope 1 emissions.

3. Waste gas, etc. – These emissions are estimated to comprise well less than 5% of all Scope 1 emissions. If the estimates result in an average of 10% inaccuracy in the same direction (i.e., all low or all high) across all facilities with such emissions, then an error of well less than 0.5% of total Scope 1 emissions would occur.

4. Leaks from HFC units – Those sites quantitatively reporting HFC leaks in the calendar year showed that the CO2 equivalent emissions from this source of GHGs comprised less than 2% (on average) of their total Scope 1 emissions. Furthermore, we are aware that fewer than 25% of our global sites utilize HFC-based refrigeration and large A/C units. While we will strive to ensure full reporting of this source of emissions, we estimate that the impact of the non-reporting sites results in less than 0.25% inaccuracy in our Scope 1 emissions

5. Biotreatment – These emissions are estimated to comprise less than 1% of all Scope 1 emissions. If the estimates result in an average of 20% inaccuracy in the same direction (i.e., all low or all high) across all facilities with such emissions, then an error of less than 0.2% of total Scope 1 emissions would occur.

6. De minimus process emissions – Since the de minimus reporting level is – in effect – 3% of total Scope 1 and 2 emissions at small sites and 3600 metric tons (less than 1% at most large sites), it is estimated that the impact of non-reporting of de minimus emission sources results in an error of about 1% of total Scope 1 emissions.

The uncertainties enumerated above along with other less significant sources are believed to result in an error of less than 5% in Scope 1 emissions and, since Scope 2 emissions are based almost entirely on invoiced quantities, less than 2% in Scope 2 emissions.

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.

Other

Over 70% of the combustion related direct and indirect GHG emissions reported into the DuPont Corporate Environmental Plan (CEP) are verified against invoices by the Corporate Energy Reporting manager. In addition, over 85% of the CO2 equivalents from process emissions (CO2, PFCs and HFCs) are audited and validated by a third party. Chicago Climate Exchange annually contracts FINRA to audit a representative sample of the emissions reported to CCX, which comprise over 70% of the emissions reported into the CEP system. Finally, proper conduct of the CEP input process is one element of the routine corporate second-party environmental audit required for every DuPont site.

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

FINRA audited DuPont data submitted to the Chicago Climate Exchange in 2008 for calendar year 2007 GHG emissions and electricity consumption. FINRA's Emissions Verification and Analysis Report determined that the direct emissions were understated by 1.48% and the electricity was understated by 2.25%. (It should be noted that the 2007 Scope 1 and Scope 2 data reported in response to Questions 10 and 11, above, have corrected these inaccuracies.) The audits for calendar years 2004 to 2006 reporting to Chicago Climate Exchange (each conducted by NASD in the following year) attested to accuracy well within 1% every year. The submittal and audit of the calendar year 2008 data for Chicago Climate Exchange has not been made as of this writing.

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.

550802786

Select currency

United States dollar

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	353060993	United States dollar
Heat		United States dollar
Steam	197741794	United States dollar
Cooling		United States dollar

Cost of purchased fuel

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

566791228

Select currency

United States dollar

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
-------------------------	------	----------

Stationary combustion fuels	Cost	Currency
Bituminous coal	34396205	United States dollar
Distillate fuel oil No.2	40018938	United States dollar
Kerosene (other)	22000	United States dollar
Landfill gas	1132	United States dollar
LPG	1285920	United States dollar
Natural gas	431618497	United States dollar
Residual fuel oil No.6	47885470	United States dollar
Sylvablend	596	United States dollar
Toluene	11562468	United States dollar

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.

7570717 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.

18117526 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.

Higher Heating Values

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
Waste water treatment biogas	62010
Bituminous coal	2678615
Distillate fuel oil No.2	507687
Kerosene (other)	208
Landfill gas	256995
LPG	27678
Natural gas	13428844
Residual fuel oil No.6	1034891
Sylvablend	6189
Toluene	114409

#### 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.

84 MWh

#### 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.

0 %

#### Further information

DuPont is unable to provide an answer to Question 20.5 (or Question 20.7 which depends on data from 20.5), due to the vast diversity and number of fuel combustion units.

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
<b>Free allowances metric tonnes CO2</b>	498148	498148	498148	498148	498148

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

0

21.4. The total CO<sub>2</sub> 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

369457

Further information

## 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.

In the United States, DuPont is a founding member of the Chicago Climate Exchange. Our strategy around carbon trading is to learn and help establish, by example, how a trading scheme can effectively function to decrease GHG emissions through a market-based system.

We are tracking the progress of state and regional efforts like the Regional Greenhouse Gas Initiative (RGGI) and Western Regional Climate Change Initiative. However, DuPont is not directly affected by these initiatives.

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?

In the European Union, DuPont is an active participant in the nascent carbon market and endeavors to minimize its financial exposure by buying or selling carbon credits to balance its expected emissions. DuPont continues to look to gain experience with other (mandatory and voluntary) trading schemes to be able to use them effectively and efficiently when they are needed. We expect to be able to exceed our emission reduction targets thanks to our aggressive voluntary 2015 Sustainability Footprint Goals as well as our 2010 Energy Goal to hold energy flat with 1990 levels. The 2015 Goal aims to enable DuPont to further reduce greenhouse gas emissions by another 15% globally.

In the United States, DuPont is also an active participant in the Chicago Climate Exchange. Having exceeded our commitment to reduce emissions, we have had the opportunity to sell on the exchange as a way to learn more about the pre-compliance market.

To review trading activities and ensure corporate alignment, DuPont established an internal team called the Emissions Trading Oversight Committee (ETOC), chartered to review corporate greenhouse gas emissions trading activities for alignment with the DuPont Safety, Health & Environment Commitment. This cross functional team reviews strategic trading plans and proposed sales from individual internal business units to determine whether intended sales affect DuPont's businesses, considering current and future compliance obligations and public commitments. The ETOC also guides strategic-level decision making regarding management of credits and allowances. As the global market expands, the ETOC will be responsible for broadening the scope of DuPont's strategy, transforming efforts from a regional focus to a global policy focus.

Further information

## 22. Carbon credits

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

[Yes. \(Please answer the following questions\)](#)

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

[Primarily for compliance purposes](#)

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).

[DuPont purchased 2008 vintage CER's from the secondary CDM market. These were surrendered in April 2009. DuPont has also arranged to buy similar amounts of CERs in the future.](#)

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.

[N/A](#)

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?

[No. \(Please go to question 23\)](#)

22.8. Please provide details of the role performed.

[No, DuPont is not involved in the trading of allowances as a separate business activity outside of compliance related activities for our plant sites.](#)

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)?

2004 for GHG emissions and 1990 for energy consumption. No baseline is needed for the fleet fuel efficiency goal, but the goal was initiated in 2006.

Please note that DuPont set its first GHG emissions reduction goal with the U.S. EPA Climate Leaders program in 1994, a reduction of 40% by the year 2000 compared with a baseline of 1990. This goal was achieved and in 1999, a goal was set for 65% GHG emissions reduction by 2010 against the 1990 baseline. This goal was achieved and exceeded by 2003. As DuPont divested a large component of its business in 2004, the current goal of an additional 15% GHG emissions reduction was set with a new baseline of 2004.

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

Reduce GHG emissions an additional 15% by 2015. (Between 1990 and 2003 DuPont reduced its GHG emissions by over 70%.)

Hold energy consumption flat on an absolute basis while increasing production through 2010.

DuPont will introduce fleet vehicles that represent the leading technologies for fuel efficiency and fossil fuel alternatives. By 2015, we will ensure that 100% of our off-site fleet of cars and light trucks meet these criteria.

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

All manufacturing operations, R&D facilities, and significant office spaces globally. The goals apply to all units for which DuPont has operating control. The fleet fuel efficiency goal applies to our off-site fleet of cars and light trucks operated by businesses over which DuPont has operating control.

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

For the GHG emissions: from 2004 to 2015

For the energy goal: from 1990 to 2010

For the fleet fuel efficiency goal: from 2006 to 2015

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?

For both the energy and the GHG emissions goal we have installed hundreds of energy conservation projects over the years under programs including the DuPont Energy Challenge and the Capital Set-Aside for energy conservation projects. We are currently operating under the DuPont "Bold Energy Program". See item 23.10 to understand the effectiveness of these programs to date.

In addition, DuPont currently uses renewable energy as 7.5% of its total energy consumption. These sources provide energy at a net GHG emissions level of nearly zero.

DuPont is reducing HFC emissions substantially by thermal destruction of some off-gases and by improving process efficiency in the production process to limit HFC off-gas generation. Plans are in place to further reduce HFC emissions by installing an on-site thermal destruction process prior to the GHG emission reduction goal target date.

DuPont has been purchasing vehicles that reduce fossil fuel energy consumption while still providing safety performance. Current examples include gas or diesel-electric hybrid, clean diesel and ethanol-fueled (E-85) vehicles.

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?

DuPont conducts an annual site-by-site inventory of its energy consumption (e.g., fuel and purchased electricity, steam and other energy bearing materials use), which is also used to determine energy-based greenhouse gas emissions and an inventory of its non-energy-based GHG emissions.

Energy is reported on a common BTU basis corporation-wide. GHG emissions are reported on a metric tonne of CO2 equivalents basis. All key performance indicators are determined on a site-by-site basis, on a business-by-business basis, on a country-by-country basis and on a regional basis.

We have partnered with our fleet provider (PHH) and Environmental Defense Fund (EDF) to track and report on our emissions from our sales and marketing fleet in the US. We are also partnering with our fleet provider in Europe. We track actual miles driven and gas purchased to calculate our emissions from our fleet.

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.

GHG emission reduction – By 2007 a reduction of 6% had been achieved. Through reductions explained in response to Question 17, DuPont will appear to have achieved its 15% reduction goal by 2008. However, note that some of this reduction is believed to have been achieved due to reduced production resulting from the recent economic downturn. Therefore, DuPont must continue to reduce GHG emissions so that the goal can be achieved as the Company's plan for growth comes to fruition.

Energy reduction through 2008 – TBD (2007 = reduced by 8%)

Fleet fuel efficiency through 2008 – 39% of the fleet is leading technology.

Actual greenhouse gas emissions of DuPont and Pioneer Sales and Marketing fleet:

Pioneer emissions - metric tons 13,320 (2005) 14,254 (2006) 16,573 (2007) 17,913 (2008)  
 DuPont emissions - metric tons 17,249 (2005) 15,499 (2006) 14,676 (2007) 13,240 (2008)

DuPont set its original greenhouse gas emissions reduction goals in the 1990s against a baseline year of 1990. This includes a goal of holding energy flat regardless of production increases against a baseline of 1990 energy consumption. In fact, to date DuPont has reduced its energy use by about 8% despite a 45% increase in production over that period of time. The estimated savings from these energy conservation efforts are about \$3 billion. This reduction in energy consumption has carried a concomitant reduction in greenhouse gas emissions. Taken as a whole, DuPont energy conservation programs and projects have met financial return rates as good as or better than those required for approval of growth investments. The plan for the future is that further energy conservation efforts will also be required to meet financial return hurdle rates.

In addition, DuPont has made major reductions in emissions of non-CO2 Kyoto gases through improved production efficiency and through destruction using "end-of-pipe" control technologies. From 1990 through 2003 DuPont reduced its greenhouse gas emissions by 72%.

Upon divesting itself of much of its nylon operations in 2004, DuPont reset its GHG base year and set the new goal of 15% GHG emissions reduction by 2015. Through 2007 DuPont has achieved over 9% reductions. It is not certain whether there will be substantially more reductions available from energy conservation efforts because such reductions may be balanced by growth plans. Additional reductions will be achieved through non-Kyoto gas emission reductions through improved efficiency and destruction using additional "end-of-pipe" control technology. It is anticipated that some of the investment in control technologies will be offset through sale of certified emissions reduction (CER) credits.

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
GHG reductions through reductions in CFC, HFC, N2O and CO2 emissions and through energy efficiency programs	150000000	United States dollar	Early 1990s - present

Further information

The cost to achieve the reductions in greenhouse gas emissions through reductions in CFC, HFC, N2O and CO2 emissions and through energy efficiency programs to date is estimated to approach US\$150 million since the early 1990s. DuPont historically has not tracked investment attributable to greenhouse gas reduction projects formally. Often CO2 emissions reductions and energy efficiency improvements are achieved as components of larger projects; and often as locally expensed programs. There has been no practicable means or reason to roll-up these costs.

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
----------------	-------------------	---------------------	---------

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.

DuPont does not feel that it can reasonably project its GHG emissions over the near- and medium-term due to the volatile economic conditions that exist. DuPont will continue to strive to reduce energy consumption and GHG emissions in accordance with the Company's mission of Sustainable Growth. The Company believes that it can assure that it will achieve its goal of 15% reduction in GHG emissions through the year 2015 against a baseline of 2004.

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.](#)

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

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.

DuPont does not feel that it can reasonably project its energy use over the near- and medium-term due to the volatile economic conditions that exist. DuPont will continue to strive to reduce energy consumption in accordance with the Company's mission of Sustainable Growth. In fact, this will be a key contribution to sustainability.

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.](#)

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

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

When DuPont projects its progress towards goals, we index each parameter (e.g., energy consumption, each component of GHG emissions) on the basis of the production forecast for each manufacturing area on every site, and then modify this result by identification of specific projects that would increase or decrease the parameter value.

Further information

Looking forward, DuPont is scoping out its options for achieving the current goals through our Corporate Environmental Plan process. A complete set of alternatives for fully achieving the goals has not yet been developed, so that future investment and cost has not been estimated.

## 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?

DuPont has developed and implemented a 'Design for Sustainability' model to assure consideration of the 2010 and 2015 Sustainability goals for capital projects. The model also includes carbon value NPV calculations for a range of estimates of future carbon costs estimates. We believe the inclusion of consideration of our 2015 Sustainability Goals and the estimates of the future cost of carbon will support our goal to maximize our return on investment.

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.

N/A

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

Environmental Policy Committee of the Board of Directors

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

The Environmental Policy Committee, chaired by William Reilly, former administrator of the U.S. Environmental Protection Agency. This Committee is responsible for reviewing the company's environmental policies and practices including our response to the issue of global climate change. The Committee meets three times per year and has additional conference calls as necessary.

The Senior VP - DuPont Operations & Engineering has corporate responsibility for managing and overseeing the corporate actions to assure compliance with all facility based laws and regulations. The Vice President and Chief Sustainability Officer and Chair of the DuPont Climate Change Steering Team, has corporate responsibility for climate change related policies, positions and advocacy. The Climate Change Steering Committee encompasses a team of senior leaders from key functions and businesses to provide leadership on:

- How DuPont should be positioned relative to proposed state, federal, and international policies
- How DuPont should implement strategies to comply with greenhouse gas regulations
- How DuPont can incentivize business leaders to provide additional consideration of product opportunities that relate to climate change mitigation or adaptation

In addition, the heads of each business platform in DuPont are responsible and accountable for ensuring their businesses contribute to the successful attainment of corporate goals for greenhouse gas reductions and energy efficiency as well as seeking appropriate business opportunities to help customers and consumers address the challenge of climate change through innovative products and services.

Further information

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?

Not directly, but individuals are also eligible for Accomplishments awards which include financial rewards. Each team that is recognized for a Sustainable Growth Excellence Award is given a \$5000 grant to donate to the safety, health, environmental, or educational initiative of their choice.

Each year since 1990 DuPont has held an award program to recognize the most significant employee accomplishments. The Sustainable Growth Excellence Awards seek to honor those teams and individuals who have made significant contributions toward DuPont implementing our mission, vision and the Sustainability Goals. More information on the program is available on the website at: [http://www2.dupont.com/Sustainability/en\\_US/sustain\\_action/examples/excellence\\_awards.html](http://www2.dupont.com/Sustainability/en_US/sustain_action/examples/excellence_awards.html)

26.3. Who is entitled to benefit from those incentives?

Everyone in the corporation.

Further information

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.

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

Provided on page 16 of the Corporate Data Book <http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9NDcxN3xDaGlzZEIEPS0xFFR5cGU9Mw==&t=1>

Climate change is also addressed in DuPont's 10K filing. See pages 41-42 of the 2008 10K, available at: [http://media.corporate-ir.net/media\\_files/irol/73/73320/BOP72619BOP005\\_BITS\\_N\\_1519.pdf](http://media.corporate-ir.net/media_files/irol/73/73320/BOP72619BOP005_BITS_N_1519.pdf)

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

Yes

Sustainability Progress Report [http://www2.dupont.com/Sustainability/en\\_US/assets/downloads/DuPont\\_2008\\_Sustainability\\_Progress\\_Report.pdf](http://www2.dupont.com/Sustainability/en_US/assets/downloads/DuPont_2008_Sustainability_Progress_Report.pdf)

And on DuPont Sustainability website:

[http://www2.dupont.com/Sustainability/en\\_US/Performance\\_Reporting/reducing.html](http://www2.dupont.com/Sustainability/en_US/Performance_Reporting/reducing.html)

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

In January 2007 DuPont was a founding member of the United State Climate Action Partnership (USCAP). USCAP is an alliance of major businesses and leading climate and environmental groups that have come together to call on the federal government to enact legislation requiring significant reductions of greenhouse gas emissions. DuPont continues to be actively involved with USCAP, including the January 2009 publication of the 'Blue Print for Legislative Action' available at: [http://www.us-cap.org/pdf/USCAP\\_Blueprint.pdf](http://www.us-cap.org/pdf/USCAP_Blueprint.pdf)

DuPont participated in The Global Roundtable on Climate Change (GROCC) which brought together high-level, critical stakeholders from all regions of the world — including senior executives from the private sector and leaders of international governmental and non-governmental organizations — to discuss and explore areas of potential consensus regarding core scientific, technological, and economic issues critical to shaping sound public policies on climate change.

In November 2007 DuPont was one of over 80 companies that endorsed the Bali Communiqué on Climate Change which called in governments at the United Nations Climate Change Conference to take action to agree to a work-plan of comprehensive negotiations to ensure such a global agreement can be signed in Copenhagen in 2009, to come into force post 2012.

DuPont Chairman Chad Holliday continues to be a co-chair of the World Business Council for Sustainable Development (WBCSD) Energy and Climate Focus area. In April 2009 the working group published the report- "Toward a Low Carbon Economy, A business contribution to the international energy & climate debate" available at: [http://www.wbcsd.org/DocRoot/xML0gs6ogM1C8vbIkKBY/TowardsLowCarbonEconomy\\_030409\\_4print.pdf](http://www.wbcsd.org/DocRoot/xML0gs6ogM1C8vbIkKBY/TowardsLowCarbonEconomy_030409_4print.pdf)

Chad Holliday testified to the U.S. House of Representatives' Energy and Commerce Committee on April 22, calling on Congress to establish legislation that includes Cap and Trade. He also testified to the Senate Environment and Public Works Committee on May 19, focusing on the opportunities rising from addressing climate change. See press release- <http://onlinepressroom.net/DuPont/NewsReleases/>.

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?

Business unit?

Factory?

Product group?

Other

Unable to breakdown by category?

Further information

### 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							
Group 2							
Group 3							
Group 4							
Group 5							
<b>Total</b>							

Further information

### 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.

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.

Further information

### 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.

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).

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.

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.

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

## Water Module

### W1.1 Regulatory risks - own operations

How is your company exposed to regulatory risks related to water in its own operations?

Further information

### W1.2 Physical risks - own operations

How is your company exposed to physical risks related to water in its own operations?

Further information

### W1.3 Reputational risks - own operations

How is your company exposed to reputational risks related to water?

Further information

### W1.4 Regulatory risks - your supply chain

How are the companies in your supply chain exposed to regulatory risks related to water?

Further information

### W1.5 Physical risks - your supply chain

How are the companies in your supply chain exposed to physical risks related to water?

Further information

### W1.6 Reputational risks - your supply chain

How are the companies in your supply chain exposed to reputational risks related to water?

Further information

### W1.7 Opportunities

How do water-related aspects of climate change present opportunities for your company?

Further information

### W2.1 Reporting boundary

Please indicate the category that best describes the company, entities or group for which your response is prepared:

Further information

### W2.2 Reporting year

Please explicitly state the dates of the accounting year or period for which figures for water usage are reported.

[Dates not selected.](#)

Further information

### W2.3 Methodology

Please specify the methodology used by your company to calculate water usage.

Further information

### W2.4 Water usage - own operations

Are you able to provide data for the total water used in your operations?

W2.4.1 Please provide figures for total water withdrawal by source type for your own operations

Surface water

Ground water

Rainwater

Waste water

Municipal water

Total

W2.4.2 Please provide figures for percentage and total volume of water recycled and reused.

Total volume recycled/reused.

Percentage of total withdrawals reported above

W2.4.3 Please provide figures for total water discharge.

Point source

Non-point source

Truck

Total

Further information

### W2.5 Water sources and habitats

Please list water sources significantly affected by your withdrawal of water

Please list habitats affected by discharges of water and runoff from your operations

Further information

## W2.6 % of operations in water-stressed regions

Are you able to identify which of your operations are in water-stressed regions?

If so, please report the percentage of your operations which is in these regions.

Further information

## W2.7 Water usage - your supply chain

W2.7.1 Are you able to provide a figure for the total water used by your tier 1 suppliers?

If so please provide it here

W2.7.2 Are you able to provide a figure for the total water used in your upstream supply chain?

If so please provide it here

Further information

## W2.8 % of supply chain in water-stressed regions

W2.8.1 Are you able to identify which of your tier 1 suppliers are operating in water-stressed regions?

If so, please state the percentage of your purchases which come from water-stressed regions

W2.8.2 Are you able to identify how much of your total upstream supply chain raw materials come from water-stressed regions?

If so, please state the percentage of your supply chain's raw materials that come from water-stressed regions.

Further information

## W3.1 Water management

W3.1.1 Does your company have a water management plan?

W3.1.2 Does the plan address factors outside of directly operated plants?

W3.1.3 What are the goals of the plan?

W3.1.4 What activities are you considering in the plan?

W3.1.5 Who is responsible for the plan?

Further information