

CDP6

Greenhouse gas emissions questionnaire

Responding corporation: Centrica

Published July 2008

General Information

It is not a requirement of the CDP questionnaire to give an introduction to your answer, but if you would like to do so, please give it here in the text box below or attach a document.

Introduction

About Centrica

Our vision is to be a leading integrated energy company in our chosen markets. We source, generate, process, store, trade, save and supply energy and provide a range of related services.

We secure and supply gas and electricity for millions of homes and businesses and offer a distinctive range of home energy solutions and low-carbon products and services.

We have strong brands and distinctive skills which we use to achieve success in our chosen markets of the UK, North America and Europe, and for the benefit of our employees, our customers and our shareholders.

Read more about Centrica at www.centrica.com

Our position on climate change

We are committed to contributing to the creation of a sustainable, low-carbon future, while ensuring the security of present and future energy supplies. Climate change makes managing our and helping our customers manage their carbon emissions our principal environmental imperative.

The ever-growing need to address climate change presents risks and opportunities for our business and our customers. Reducing carbon emissions while securing future energy supplies for our customers is a very significant challenge. But we believe that climate change science makes unequivocal the case for a low-carbon future and as a leading energy company we have an important role to play in making it happen.

Our strategy is to lead the consumer market for low-carbon energy products and services; to maintain our low-carbon position in power generation, and to work with our employees and suppliers to reduce the environmental impact of our operations.

We published a revised Group Environmental policy in 2007. It outlines our commitment to reduce our overall impact on climate change both directly through our own business activities and also indirectly through supply chain management and by helping our customers and employees to use energy more efficiently.

Read more about our climate change strategy
<http://www.centrica.co.uk/index.asp?pageid=472>

Watch a video about our climate change impact
<http://www.centrica.co.uk/index.asp?PageID=321&mediaid=177&category=38&startrow=1>

Read our Group Environment Policy http://www.centrica.co.uk/files/pdf/businessprinciples_environment.pdf

Company Turnover, Note

Centrica's presentational currency is pounds sterling. Centrica does not generally report its results of operations or financial position in any currency other than pounds sterling. The turnover reported below in US dollars is an approximation based on average exchange rates for the period presented. The amount is unaudited and is not necessarily indicative of the amount that would actually be reported if Centrica were to report its results of operations in US dollars.

Where available please can you provide the following identification numbers for your primary listings/ordinary shares and information for your company:

Company Turnover (also known as sales) in millions of US\$
32795

ISIN number
GB00B033F229

CUSIP number
652463101

SEDOL number
B033F22

1 - Risks and Opportunities

Question 1(a)(i) Regulatory Risks

How is your company exposed to regulatory risks related to climate change?

We consider our company to be exposed to regulatory risks because...

We operate in highly regulated markets around the world, where policy decisions can fundamentally affect our commercial operations. As a leading integrated energy company, policy-makers are particularly keen to understand our perspectives on a range of issues including climate change.

a) Risks

i) Regulatory risks

We have chosen a strategy of maintaining our low-carbon energy portfolio including a major commitment to renewable generation and leading the consumer market fit low carbon products and services. Therefore our principal regulatory risks relate to failure of governments and regulators to follow through on commitments relating to climate change including:

- Non-compliance with legislation including the UK Renewables Obligation (RO), EU Emissions Trading Scheme (EU ETS) and UK Carbon Emissions Reduction Target (CERT) scheme
- Fulfilling increasingly stretching emissions reduction targets including the UK Government's 60% reduction target by 2050 (which may increase to 80%) and the EU renewable energy target to produce 20% of all energy from renewable sources by 2020
- Failure of the legislative framework to deliver the necessary carbon price over the longer term to ensure the viability of investment in new technologies to tackle climate change
- Failure to develop a legislative framework at Federal, State and Provincial level in North America that assigns a cost to carbon emissions and provides certainty required for planning and investment purposes
- An ineffective planning regime making it difficult to achieve planning consent for the development of new assets such as wind farms and other power generation infrastructure
- Failure of the CERT framework to facilitate innovation in the delivery of energy efficiency improvements resulting in over-reliance on traditional measures

UK legislation

Policy consultations on a wide variety of energy and environmental issues have been ongoing since the publication of the Government's Energy Review in July 2006. These culminate in the 2008 Energy Bill, and in individual bills on planning and climate change targets, which are currently in the parliamentary process.

Centrica has been active during this period of consultation to help inform and shape policy on issues including the future of the RO and CERT, measures to improve the planning system for new energy infrastructure projects, proposals for changes to energy billing and metering, and the scope for microgeneration and heat technologies in meeting emissions reduction targets.

We also continue to support a firm political commitment to the EU Emissions Trading Scheme post-2012, which is critical to new investment decisions, including 100% auctioning of allowances for power generators.

North American regulation

There is currently relatively high political and regulatory risk in North America and we expect this to continue in the short term as the landscape evolves.

Canada

The regulatory environment in Canada continues to be fragmented despite growing legislative momentum in the last year. New legislation was introduced in Alberta and the Canadian federal government announced its 'Turning the Corner' emissions reduction plan.

United States

In the US various cap-and-trade bills are being debated at Federal level most prominently the Lieberman-Warner bill (S. 2191). While the L-W bill is not expected to pass out of this congress, the framework of the plan has the support of the remaining major candidates from both parties. It is expected that a similar bill will likely pass in 2009 or 2010, going into effect in perhaps 2012. The Regional Greenhouse Gas Initiative (RGGI) and Western Climate Initiative (WCI) were also introduced.

The Voluntary Carbon Market

Currently in North America, only the province of Alberta has greenhouse gas emission regulations for large emitters which includes an offset system with approved protocols. Across the rest of North America, there is an active voluntary carbon market in which Direct Energy also participates.

Within this current voluntary carbon market, however, there are no mandatory standards or legislated protocols to which emission offsets must adhere. To help safeguard the legitimacy of emission offsets within this evolving, ever-changing voluntary carbon market environment, Direct Energy performs due diligence on its carbon offset acquisitions to ensure we hold and provide a diversified portfolio of quality carbon offsets.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(a)(ii) Physical Risks

How is your company exposed to physical risks from climate change?

We consider our company to be exposed to physical risks because...

ii) Physical risks

The effects of climate change on weather patterns will create a number of operational and commercial risks and challenges for Centrica.

Gas production and supply

Increasingly unpredictable and adverse weather conditions such as prolonged winters will increase pressure on gas supplies. Severe weather events such as prolonged and heavy rainfall in the UK and increased frequency of hurricanes in America may increase the physical risks facing our CCGTs.

Rainfall changes will affect hydro-generation output and, therefore, the electricity supply mix in both the UK and North America.

Effects on gas-fired power generation (combined cycle gas turbines CCGTs)

Temperature changes have positive and negative effects upon the output of power stations. Warmer ambient temperature results in less air being drawn into the turbine so less gas can be burned. Output from a typical gas fired power station could reduce from, 800MW to 720MW during a hot summer. Increases in atmospheric pressure leads to an increase in air density and therefore an increase in electrical output. Atmospheric humidity also affects generation, humid air is less dense than dry air so an increase in air humidity will reduce mass flow and therefore efficiency.

Power station cooling regimes

Rising air temperatures will also cause rises in sea and river temperatures, cooling systems using these two sources of cooling will become less efficient and sea and river ecosystems more sensitive to elevated temperatures possibly further limiting return water temperatures.

Sea level changes will affect inlet and outlet characteristics and river hydrography. Potential flooding of coastal or low lying stations may affect business continuity.

Air cooled power stations will also be affected by rises in ambient air temperatures and wind speed becoming less efficient.

Other physical assets

Some of our offices, call centres and training facilities are likely to be at higher risk of damage and/or disruption as a result of more severe weather conditions e.g. flooding.

Our customers rely on the ability of our engineers and technicians to visit their properties to install, maintain and repair gas and electrical appliances. Severe weather conditions could reduce the mobility of our field force. Combinations of weather events such as a warm start to the winter period followed by a severe cold snap can create extreme workloads for our service engineers.

There is an indirect risk of damage to the transportation and transmission infrastructure for gas and electricity, operated by third party organisations, as a result of adverse weather conditions.

Adverse weather conditions may impact on availability and ease of access to offshore facilities such as wind farms.

Energy Demand, Supplier Operations and other Availability Issues

Short-term and longer-term demand forecasting will become less reliable with an increase in weather pattern changes. Wetter and milder winters are predicted having an effect on winter time energy demand for heating.

Energy trading will be affected by factors such as severe wind events (hurricanes/tropical storms) and severe temperatures. Carbon trading forecast information could affect the market e.g. a prolonged cold snap in UK would lead to greater use of coal generation (50% winter generation in 2005).

In terms of customer behaviour and energy load shape, consideration needs to be given to whether or not the future energy load shape could be met with renewables and improved energy efficiency, for example the correlation between weather that is suitable for solar or wind generation and hot weather events increasing the demand for air conditioning etc.

The effect of the increased use of air conditioning (both commercial and domestic) is already being detected during the daytime, in addition to increased night-time demand in cities as a result of the urban heat island effect.

Climate change will also affect lighting levels with the general prediction that illumination will be lower due to increased cloud cover resulting in greater demand for artificial lighting.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(a)(iii) General Risks

How is your company exposed to general risks as a result of climate change?

We consider our company to be exposed to general risks because...

iii) General risks

Reduced consumption

Over time consumers are likely to increase the energy efficiency of their homes and businesses to save money as energy prices increase and to reduce their carbon footprint in response to climate change. Therefore the average amount of energy we sell to each customer will correspondingly decline. This shift in consumer behaviour is presenting new business opportunities for Centrica to advise customers on how to make their homes and businesses more energy efficient and to supply low-carbon products and services.

Lifestyle factors

Standards of living, demographics (more single homeowners), travel, leisure, ownership of brown and white goods, energy efficiency and work patterns will all have significant impact on consumption patterns.

Brand and reputation management

Building and maintaining positive brand positions is central to delivering our business strategy. We recognise the important role that our response to climate change and sustainability issues plays in the broader perception of Centrica and our key consumer brands, British Gas and Direct Energy. If we continue to get it right we will create value; equally, we understand the risks of getting it wrong.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(a)(iv) Risk Management

Has your company taken or planned action to manage the general and regulatory risks and/or adapt to the physical risks you have identified?

We have taken or planned action.

iv) Risk management

Our approach

Identifying and assessing risks and implementing effective mitigating controls are fundamental to achieving our strategic objectives. The Board, supported by the Executive Committee, sets Centrica's strategic direction, which includes the level of risk the company is prepared to accept.

The Corporate Responsibility Committee (CRC) is authorised by the Board to review the effectiveness of the Group's processes and controls for identifying and managing social and environment risks and opportunities – including climate change – that could materially affect the Group's business performance and reputation. The CRC sets objectives, performance targets and policies for managing key risks and opportunities, which are monitored by the Board.

Read more about our risk management process
<http://www.centrica.com/index.asp?pageid=386>

Climate change risk

Climate change is recorded on our risk register as one of the top five risks affecting the company. As such it is managed through our risk management process from business units all the way up to the Audit Committee and Board. The status of the individual risks and associated controls are continuously monitored and periodically reported to these Committees.

Regulatory risks

We work with political and regulatory stakeholders to increase their understanding of our business and to shape the policy environment in which we operate. Playing a full and active role in the political process supports the creation of competitive energy markets that deliver consumer choice, promote security of supply and facilitate the move towards a low-carbon society.

Our key political stakeholders include the UK Government, EU Commission, UK and EU politicians and their advisers, Scottish, Welsh and London Assembly members, civil servants, NGOs and trade associations. In North America we engage with regulators on federal, national, state and provincial levels, as well as a wide variety of other public officials and stakeholders, through four dedicated Government and Regulatory Affairs teams: Canada East, Canada West, US North and US South.

We respond to formal consultations by Government, opposition parties, select committees and others and often join forces with other organisations to raise awareness of key issues. We arrange for officials to visit our sites to gain first-hand experience of our business. We also work closely with the UK Foreign and Commonwealth Office to support our international gas exploration and procurement activities.

We are a member of many organisations actively involved in shaping the policy environment in our markets. For example, we sit on the Corporate Leaders Group on Climate Change (CLG), which exists to provide business support for significant carbon reduction targets, and we actively engage in political communication programmes coordinated by the CLG.

In 2007 we played an active part in the debate on reducing carbon emissions, including the development of EU emissions reduction targets and phase three of the EU Emissions Trading Scheme (ETS). In North America, we continued to engage with federal, state and provincial policy-makers as well as industry groups to inform thinking on carbon legislation. The price of carbon is a significant factor in our investment decisions and we believe that effective cap and trade systems such as the ETS will provide long-term visibility.

General risks

Reduced consumption, lifestyle factors, brand and reputation

In 2007 we launched a new business unit – British Gas New Energy – to lead our low-carbon strategy in the UK. In North America we formed a centralised group to coordinate Direct Energy's climate change activities. On both sides of the Atlantic our increased focus on developing innovative low-carbon products and services for our customers is an important growth opportunity.

British Gas New Energy has been established to advise customers on how to make their homes and businesses more energy efficient and provide low-carbon products and services to facilitate this.

We are exploring various new technologies in partnership with other companies, including work to develop a next-generation fuel cell domestic boiler that produces both heat and electricity for homes.

The launch of British Gas New Energy builds on the green position already established by our customer-facing businesses. British Gas Residential has the lowest carbon intensity of any major UK energy supplier and is the leading provider of domestic energy-efficiency products, while British Gas Services is the UK's leading supplier of A-rated, high efficiency boilers.

British Gas remained the largest provider of household energy efficiency products in the UK, providing 17.3m products in 2007. Our Green Streets campaign, which links 64 households in eight cities across the UK, aims to highlight the positive impact simple energy efficiency products and behaviours can have. In Texas, Direct Energy is taking part in a demand response project which will improve energy efficiency and reduce grid demand at peak times.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(a)(v) Financial and Business implications

How do you assess the current and/or future financial effects of the risks you have identified and how those risks might affect your business?

We assess current and/or future financial effects by...

Our risk management process is accessed via the following link
<http://www.centrica.com/index.asp?pageid=386>

v) Financial and Business Implications

The most immediate impact on our business is via the EU ETS. The pricing of CO₂ emissions has a direct impact on the running costs of our power stations and the cost of electricity that we purchase from other generators. The wholesale price of power is assumed to contain the full opportunity cost of CO₂ irrespective of whether the allowances needed to offset emissions were purchased or given out free.

A major risk for the future is what the cost of carbon emissions will be and the impact this has on the relative economics of different forms of generation from renewables, to fossil-fuelled to nuclear. We produce our own forecasts of future carbon prices, with strong emphasis on credible high and low scenarios as well as a 'central' view. A further risk, which impacts on future carbon prices, is the uncertainty in the rules which dictate what the price will be. This relates to both Phase 3 of EU ETS and also the successor Kyoto agreements and the UK's specific carbon reduction targets.

The economic costs of carbon are factored into generation despatch decisions and the costs recovered via the energy sales arrangements. The exposure of our supply business to carbon prices, via electricity prices, is recognised and treated as a commodity exposure that needs to be hedged within our normal commodity risk management procedures.

During Phase 2 of the EU ETS, the allocation of substantial volumes of free allowances based on historic ownership of generation assets had a distorting effect on retail competition because it resulted in some vertically-integrated utilities having lower carbon costs than others (or receiving larger windfalls).

On the supply side, we assess the potential impact of climate change in terms of rising energy efficiency and other mitigation efforts, together with warming trends, having some impact on overall energy consumption. On longer term strategy, we are very conscious of the UK Government's low-carbon ambitions, and our need to play a full part in realising these important goals.

We are a major investor and supporter in the UK's renewable generation programme and anticipate participating, in due course, in future new nuclear power projects. Both these will reduce further our already low carbon emissions from our generation portfolio, reducing our risk exposure to future high carbon prices.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(b)(i) Regulatory Opportunities

How do current or anticipated regulatory requirements on climate change offer opportunities for your company?

We consider that current or anticipated regulatory requirements offer opportunities because...

b) Opportunities

i) Regulatory opportunities

Our principal regulatory opportunities are to:

- Develop increased revenue streams through the provision of energy efficiency products and services for example through the UK Government's CERT programme and its successor microgeneration support packages.
- Develop new business opportunities in both our upstream and downstream businesses based on meeting renewable energy and carbon emissions reduction targets such as the EU renewable energy target (20% by 2020) and the 60% carbon reduction target set for 2050.
- Further develop our existing expertise in carbon trading, in line with EU ETS and emerging regulatory frameworks in North America, to accrue future competitive advantage in this market in the carbon-constrained economy of the future.
- Ensure that Direct Energy participates fully in the public policy debate on climate change and carbon emissions reduction and successfully anticipates the introduction of legislation to maximise commercial opportunities.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(b)(ii) Physical Opportunities

How do current or anticipated physical changes resulting from climate change present opportunities for your company?

We consider that current or anticipated physical changes offer opportunities because...

ii) Physical opportunities

A significant portion of the effort to stabilise climate change has been focused on mitigation against its physical causes with significantly less attention placed on the issues we face in adapting to changes in our physical environment.

Adverse weather conditions will present challenges and opportunities for our customers. While milder winters will lead to a reduction in energy demand for heating, warmer summers create increased demand for cooling during the day and night.

As a leading energy company, our primary opportunity is to play a major role in helping our millions of customers adapt to the effects of climate change.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(b)(iii) General Opportunities

How does climate change present general opportunities for your company?

We consider that climate change offers opportunities because...

iii) General opportunities

Leadership in energy efficiency

Downstream the continued need to deliver year-on-year increases in energy efficiency products and services in the domestic and commercial and industrial markets presents Centrica with significant long-term opportunities. This is an area where we have the opportunity to build on our leadership position.

Lowest carbon generation

Gas fired power stations deliver a lower carbon intensity (g CO₂/KWh) than other fossil-fuelled power plants. Our fleet of gas-fired power stations and renewable assets means that the electricity we supply to our UK customers has the lowest carbon intensity of all major suppliers. This is a significant opportunity to differentiate British Gas in the increasingly carbon conscious marketplace and invest further to maintain our lowest carbon positioning.

Reducing our operational footprint

We also have opportunities to improve our own climate change performance by improving the efficiency of our operations in areas including building energy use and fleet operations. We recognise that by maximising these opportunities we can increase our credibility in the marketplace and build pride and engagement in climate change and environmental matters among employees.

Microgeneration

On the residential level, as power prices rise, costs for carbon are passed on to consumers and governments provide incentives for renewable energy, we expect dramatic growth in distributed microgeneration technologies. The current microgeneration market remains fairly small in the short term but post-2010 we believe that there is the potential for the microgeneration market to grow rapidly and regard this as a significant opportunity for both British Gas and Direct Energy.

Positive stakeholder perceptions

In a competitive market in which consumers are increasingly taking account of sustainability issues in their purchasing decisions we recognise the opportunity to communicate our climate change and carbon reduction commitments to build positive perceptions among customers, employees and wider stakeholders.

Working in partnership

We believe tackling climate change requires collaboration not just with our customers, employees and suppliers but by establishing partnerships with other organisations to maximise commercial and carbon reduction opportunities.

Educating and changing behaviour

With tens of millions of customer relationships in the UK, North America and Europe, Centrica has a tremendous opportunity to educate people about climate change, encourage and incentivise behaviour that will deliver carbon reductions and help society to adapt to the challenges of climate change.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 1(b)(iv) Maximizing Opportunities

Do you invest in, or have plans to invest in products and services that are designed to minimize or adapt to the effects of climate change?

Climate change has led to investment or planned investment in order to maximise climate change opportunities.

iv) Maximising opportunities

Commercial opportunities

In 2007 we launched a new business unit – British Gas New Energy (BGNE) – to lead our low-carbon strategy in the UK. BGNE was established to help British Gas become the leader in low carbon energy services. Our priority is to exploit today's opportunities and build capabilities to win in the longer term.

In North America we have formed a centralised group to coordinate Direct Energy's climate change activities. We have also created Direct Energy Consulting, a new business providing diagnostic, advisory, project management, and implementation services for energy efficiency to commercial and industrial customers. On both sides of the Atlantic our increased focus on developing innovative low-carbon products and services for our customers is an important growth opportunity.

Industry-leading green energy tariffs

British Gas launched two industry-leading green tariffs – 'Zero Carbon' and 'Future Energy'. Future Energy is 100% renewable electricity and we make contributions to the Energy for Tomorrow Fund, which supports carbon reduction projects in UK communities. Zero Carbon is our 'greenest' tariff and is dual fuel. It provides 12% ROC backed and 100% LEC/REGOs backed electricity and offsets 100% of the gas emissions from consumption with UN certified offsets.

Direct Energy extended its carbon neutral gas programme – the first of its kind in Canada – to retail, commercial and industrial customers in Ontario, Alberta and Manitoba after a successful launch in British Columbia. It provides customers with the ability to reduce their carbon footprint by offsetting the greenhouse gases they produce in their homes with carbon credits that fund clean energy projects around the world. Direct Energy is the largest provider of green electricity in Canada.

Leadership in energy efficiency

British Gas remained the largest provider of household energy efficiency products in the UK, providing 17.3m products in 2007. We provide energy efficiency products to enable customers to reduce their energy costs and CO₂ emissions. Energy efficiency is as much about a change of lifestyle and behaviour as about practical measures. Through our advice and education programmes we aim to show customers the financial, social and environmental benefits of being more energy efficient.

In July 2007, Direct Energy launched the Canadian Environmental Equipment Manufacturers Association (CEEMA). CEEMA is a network of Canadian-based manufacturers and service providers dedicated to reducing energy consumption, energy costs and greenhouse gas emissions through its variety of technologically advanced, energy efficient heating and cooling products. We have helped deploy EnviroTower technology, a cooling tower system that improves energy and water efficiencies by 15% and 20%, respectively, while reducing greenhouse gas emissions by 15%.

Read more about our British Gas energy efficiency programmes

<http://www.britishgas.co.uk/energy-efficiency/>

Find out more about Green Streets

<http://www.britishgas.co.uk/greestreeets>

Energy efficiency advice

As well as installing energy efficiency products we provide expert advice to help our customers make their homes more energy efficient, cut their energy costs and reduce their carbon footprint. We are using our main advertising channels to communicate with customers on energy efficiency and climate change issues.

The British Gas Energy Advice Service offers free advice and information on energy-saving ideas. Our highly trained advisers are qualified with a certificate in energy awareness from the City & Guilds of the London Institute. We are constantly reviewing our training programmes to ensure our advisers have the right skills to help our customers.

Our team of community energy advisers works with local authorities and housing associations to promote energy efficiency and generate referrals to our energy efficiency grant schemes. They help ensure that those customers most in need receive our support and assistance.

Energy Savers Report

The British Gas Energy Savers Report is a bespoke home energy efficiency audit. We provide consumers with a rating for their property and make recommendations to help them improve their energy efficiency. Over 2m households completed the survey so far with c. 2m acting on our advice to implement measures such as insulating their lofts and installing light bulbs as well as changing some of the behavioural things they do like starting to turn their TV off standby. On average these households will save 10% or ½ tonne of CO₂ each year.

High efficiency condensing boilers

The majority of our customers' energy carbon footprint is generated by burning the gas we supply to their homes. The most effective way to reduce these emissions today is to install more efficient boilers. Currently, British Gas installs around 7% of all residential boilers. British Gas currently installs over 120,000 high efficiency domestic boilers each year. British Gas' energy-saving boilers release less CO₂ emissions than conventional boilers and can help to reduce our customers' heating bills by as much as 40%. We have taken the lead in the market (going beyond legislative requirements) and only install A-rated boilers with maximum energy efficiency that also have the capability to be linked up to solar heating equipment or other renewable sources of energy.

In 2007 we were responsible for distributing £16.5m of £300 Warm Front grants for over 60s in replacing the heating systems – in doing so, we encouraged energy efficient behaviours from a lower income group. We have also recently launched the British Gas 300+ which is the first boiler to have an energy usage indicator built in. Research from Oxford University suggests that the increased visibility of energy usage will lead to behavioural reductions of c10%.

Energy Performance Certificates

Centrica launched a new Energy Performance Certificate product offering to the residential market in the summer of 2007. Centrica have expanded this offer to include Local Authorities, serviced via our Housing Services Group. The focus for 2008 is to develop the private landlord market opportunity given the new legislation which will impact landlords from 1 October 2008.

Smart Home Energy Conservation Programme

The Direct Energy Smart Home Energy Conservation Programme and research project in Ontario provides residents with a high-tech conservation kit to help change their energy consumption habits. Participants in an energy conservation project in Milton, Ontario conserved almost seven per cent more electricity compared to their neighbours during peak hours – when conservation is needed most – with the help of an easy-to-use, web-based monitoring system.

Participants were able to monitor energy usage in real-time, and remotely control their home's lighting and appliances with one easy-to-use web interface. With better information about the way they used energy, consumers developed new 'greener' habits by shifting energy patterns, using less during peak periods and overall.

Demand Response programme in Ontario

Direct Energy is building automation systems to assist clients with load shedding and demand management through centralised integrated network technology. Our customers can target the peak price hours of electricity and reduce their usage and benefit from a noticeable reduction in operating costs and greenhouse gas emissions. Scheduled load shedding and utility-based 'demand response' programmes are prevalent in North America.

Working in partnership

We are working in partnership with a number of major consumer product companies to provide funding for particularly energy efficient products in the market and provide support for new products which are coming to market. In partnership with B&Q, we provide funding to promote a range of home energy saving goods. Customers receive savings on a wide range of products, including loft insulation, low energy lighting and energy efficient appliances.

We are working in partnership with retailers to increase awareness of energy efficiency at the point of purchase and provide incentives for consumers to buy products with high energy efficiency ratings.”

We are working in partnership with retailers to increase awareness of energy efficiency at the point of purchase and provide incentives for consumers to buy products with high energy efficiency ratings.

Microgeneration

Fuel Cell Boilers

In January 2008 we announced a £20m investment working with Ceres Power on the development of a domestic combined heat and power boiler using ground-breaking fuel cell technology.

Solar Thermal and Solar PV

In 2007 British Gas began offering solar thermal hot water systems to customers across the UK. In 2007 we introduced a scheme in partnership with local authorities offering a council tax rebate of £500 to customers installing these systems.

Low Carbon Building Programme

British Gas is the only UK energy supplier to gain accredited supplier status across all five microgeneration technologies under the Government's Low Carbon Building Programme. The programme provides access to grant funding of up to 50% for the installation of solar photovoltaic, ground source heat pumps, biomass, wind and solar thermal technologies. We have completed 65 installations with a grant value of £1.2m and an installation value of £2.5m. We are responsible for more than 30% of all grant applications under the scheme.

Educating and changing behaviour

Green Streets

The British Gas Green Streets programme is Britain's largest green social experiment and has pitted 64 households in eight streets across the country against each other to see who can reduce their energy consumption the most. Each street was given a £30,000 budget to spend between the eight houses chosen for that street. Each street has been given their own support team consisting of energy efficiency experts from British Gas.

The scheme has been a successful awareness campaign and has reached over 2m people through TV and newspapers. In the first two months we have seen an overall reduction in energy consumption of over 20% across the eight streets. The scheme and British Gas have been nominated for an award by IGEM for being "Leaders in energy efficiency".

Generation Green Schools Programme

Generation Green is British Gas' market leading green schools programme, it went live on April the 21st. The first phase of the programme (Apr- Sep) is to recruit as many schools as possible through communications and our website www.generationgreen.co.uk. The schools will be rewarded for green actions they take and parents and consumers can donate credits to their school through filling in our online energy savers report. The scheme will be widely launched to consumers through TV from the start of the new term in September.

Lowest carbon generation

The carbon intensity of the power we generate for our British Gas customers is already significantly lower than the other five major UK suppliers. In 2007, 394 grams of carbon dioxide were emitted for every kilowatt hour (g CO₂/kWh) of power we generated. To ensure we maintain this leadership position, we have set a target to reduce our UK power generation carbon intensity to 380g CO₂/kWh by 2012 and aim to go even further by cutting our intensity to 350g CO₂/kWh by 2020.

This is a significant challenge, but we believe that our focus on relative, rather than absolute, targets will enable us to reduce CO₂ emissions and continue to provide secure energy supplies for our customers. Our strategy to invest in low-carbon generation such as high-efficiency gas-fired power stations and offshore wind farms will not only enable us to meet our own targets but enable Centrica to play a key role in meeting broader UK and European emissions reduction targets.

In North America, we own and operate a small fleet of power generating facilities. In aggregate, these facilities emitted 366g CO₂/kWh in 2007. This is one of the lowest carbon intensities of a thermal power generation fleet in North America.

Direct Energy's Wholesale New Energy team is focused on the development of and investment in carbon emission reducing or removing projects including the types of projects listed below:

- Landfill gas and waste management (including waste to energy)
- Biogas digesters
- Biomass
- Renewable energy
- Energy efficiency
- Other Alberta regulatory-compliant types
- Other anticipated Canadian regulatory-compliant types
- Other RGGI regulatory-compliant types

Investing in renewables

Centrica has made a significant commitment to invest in the development of renewable generation assets, primarily offshore wind farms. Demanding new EU renewables targets suggest the UK must build 40GW of wind farms. DBERR has indicated that 33GW of that should be offshore. Centrica has committed to invest £1.5bn in developing wind generation capacity in the UK. Our first onshore wind farm, Glens of Foudland in Aberdeenshire, which was fully commissioned in July 2005, continues to achieve excellent levels of operational availability averaging more than 97%, including grid outages outside our control. Barrow offshore wind farm is a Centrica 50/50 joint venture with Danish energy Group DONG Energy. By April 2006, the UK's first offshore substation and all 30 turbines had been installed. Commercial generation was achieved in 2006. In August 2007 Centrica acquired a 50% equity stake in the 72MW Braes of Doune wind farm in Stirlingshire, coinciding with commissioning of the asset by developer Airtricity. Scottish and Southern has more recently acquired the other 50 per cent. Centrica purchases the entire output of the 36 turbine wind farm. Onshore construction of Lynn and Inner Dowsing wind farms commenced in late 2006, and offshore in 2007. Foundations for the 54 turbine 194MW wind farm, export and inter array cables, and much of the onshore work was completed by the end of the year. A new onshore substation is now operational and the installation of turbines began at the end of March. Subject to offshore weather conditions, vital to construction progress, we expect the two wind farms to be complete and commissioned by the end of the year.

In January 2007, we submitted an application for consent for the 250MW Lincs wind farm, the first of our prospective developments in the so called 'second round' of offshore projects. We expect determination of Lincs shortly. Environmental survey work for both of these prospective 500MW sites is complete. Centrica has worked with interested stakeholders first to build an understanding of the sites and of any issues that their prospective development might raise. It has also involved stakeholders in the development and choice of environmental studies.

Together with other wind farms in development, our UK generation capacity in the next few years is expected to reach more than 1.6GW.

Read more about our investment in renewables
<http://www.centricaenergy.com/index.asp?pageid=21>

In Texas, Direct Energy signed a seven-year deal to buy the output of AES Corporation's 170MW Buffalo Gap Wind Farm 3, bringing our total wind power offtake commitment in North America to 813MW.

Our investment is helping AES finance additional wind developments, providing additional liquidity in the renewable energy certificate market while promoting the shift towards a low-carbon future.

Clean Coal technology

Centrica is a supporter of carbon capture and storage technology and think the UK should move ahead with support for both post- and pre-combustion technology, giving the UK the best options for meeting domestic climate change targets whilst contributing to the global battle on climate change.

In November 2006, Centrica plc announced it has acquired an option to participate in a clean coal power generation project through an agreement with Progressive Energy Limited which provides Centrica with an 85% interest in development company Coastal Energy Limited, which is seeking full consents for the right to construct a new Integrated Gasification Combined Cycle (IGCC) clean coal power station in Teesside, UK. Under the same agreement, Centrica also acquired a 55% interest in COOTS Limited, a CO₂ pipeline and storage company.

If progressed, the project would be one of the first to combine Integrated Gasification Combined Cycle (IGCC) and Carbon Capture and Storage (CCS) capabilities, and would lead to the development of a 'clean coal' power station to supply electricity for British Gas customers, together with a pipeline and storage project to capture the CO₂ emissions.

Significant investment has been made in the project through 2007 both in respect of the power station project itself and in identifying options for carbon capture, transportation and storage. Work continues on securing various planning consents to retain an option for future development. We have been active in seeking UK Governmental support for the development of pre-combustion carbon capture and storage technology so as to encourage early deployment of the technology.

Carbon trading

The cost of carbon has become an important factor in all investment decisions taken by Centrica in the power and gas markets. We actively use all available methods to manage our exposure to the risk of rising carbon costs through abatement and emissions trading. Centrica has been actively trading in the EU Emissions Trading market for almost four years and has also been active in the international carbon credit market. We aim to meet the cost of our CO₂ emissions in the most economic manner for our customers and shareholders, thus following the spirit of Kyoto.

Direct Energy is actively trading in the voluntary carbon and emissions markets in North America and is a liquidity provider to the Chicago Climate Exchange. We provide a range of carbon and renewable product offerings to our broad North American customer base. Within the voluntary carbon market, Direct Energy strives to provide high quality voluntary emission reduction credits to our customers.

In the regulated carbon markets, we offer carbon offsets eligible as compliance options, where available. In anticipation of broader carbon emission regulations and further carbon market evolution, we are actively positioning ourselves to provide pre-compliance carbon alternatives to our counterparties. International carbon offerings, including EU Allowances, Certified Emission Reductions and Emission Reduction Units, are also available.

Reducing our operational footprint

An important part of our climate change strategy is to work with our employees and suppliers to reduce the environmental impact of our operations.

Energy management

Energy management programmes are central to the way we run our facilities. They enable us to optimise the heating and cooling of our offices, reduce our energy demand and cut costs. We achieved a 10% reduction in UK office energy use in 2007.

In North America, Direct Energy undertook a carbon footprint measurement initiative. The intention of this project was to allow us to identify areas where we can reduce our energy consumption and carbon footprint. This work will continue through 2008.

Transport initiatives

We seek to improve the efficiency of our fleet by working closely with vehicle manufacturers, providing driver training for our people and by encouraging flexible working patterns, video and teleconferencing.

In the UK we launched a new company car policy in the UK to remove the most polluting vehicles, enabling all eligible employees to select from cars emitting less than 200g of CO₂ per km. Green parking spaces were also created for cars with emissions below 120g of CO₂ per km and for those car-sharing.

Waste management

We seek to use materials that limit the operational waste we generate. Where waste is unavoidable, we aim to minimise incineration or landfill by recycling and reusing where possible. We narrowly missed our target to maintain a 62% recycling rate in 2007, achieving 60%.

Management system

We introduced a new Group-wide environment policy to provide clear direction for our programmes. In addition, we developed a Group Environmental Management System ready for implementation, commencing with British Gas in 2008.

Engaging employees

We introduced our 'Being Green' campaign across the company to encourage employees to help reduce our operational footprint. The campaign is the focal point for our 'Green Teams' – employee volunteers who coordinate local activities to help us meet our environmental goals.

In North America, Direct Energy launched the Green Office Challenge to further engage our employees and promote environmentally responsible office behaviour. Using online tools we provide tips and an ideas exchange for our employees. The programme is supported by local Green Office Champions at our various office facilities.

Positive stakeholder perceptions

We were recognised as a climate leader by the international Carbon Disclosure Project and by WWF as the leading green supplier in Britain. Our increased focus on climate change is delivering improved performance in socially responsible investment (SRI) research and there is a significant and growing interest among employees about our climate change strategy.

Would you like to provide any additional information relating to this question that you have not provide elsewhere?

No

Question 1(b)(v) Financial and Business Implications

How do you assess the current and/or future financial effects of the opportunities you have identified and how those opportunities might affect your business?

We assess current and/or future financial effects by...

V) Financial and Business Implications

The most immediate impact on our business is via the EU ETS. The pricing of CO₂ emissions has a direct impact on the running costs of our power stations and the cost of electricity that we purchase from other generators. The wholesale price of power is assumed to contain the full opportunity cost of CO₂, irrespective of whether the allowances needed to offset emissions were purchased or given out free. A major risk for the future is what the cost of carbon emissions will be and the impact this has on the relative economics of different forms of generation from renewables, to fossil-fuelled, to nuclear. We produce our own forecasts of future carbon prices, with strong emphasis on credible high and low scenarios as well as a "central" view.

A further risk, which impacts on future carbon prices, is the uncertainty in the rules which dictate what the price will be. This relates to both Phase 3 of EU ETS and also the successor Kyoto agreements and the UK's specific carbon reduction targets.

The economic costs of carbon are factored into generation despatch decisions and the costs recovered via the energy sales arrangements.

The exposure of our supply business to carbon prices, via electricity prices, is recognised and treated as another "commodity exposure" that needs to be hedged within our normal commodity risk management procedures.

During Phase 2 of the ETS, the fact that substantial volumes of EU allowances are given out free based on historic ownership of generation assets has a distorting effect on retail competition because it results in some vertically integrated utilities having lower carbon costs than others (or receiving larger windfalls).

On the supply side, we assess the potential impact of climate change in terms of rising energy efficiency and other mitigation efforts, together with warming trends, having some impact on overall energy consumption.

On longer-term strategy, we are very conscious of the UK Government's low carbon ambitions, and our need to play a full part in realising these important goals. We are a major investor in and supporter of the UK's renewable generation programme and anticipate participating, in due course, in future new nuclear power projects. Both of these will reduce further our already low carbon emissions from our generation portfolio, reducing our risk exposure to future high carbon prices.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

2 - Greenhouse Gas (GHG) Emissions Accounting

Question 2(a)(i) Reporting Boundary

Calculation tools that will assist companies in calculating GHG emissions from particular activities, such as the combustion of fuels, production processes, etc can be found at: <http://www.ghgprotocol.org/calculation-tools/all-tools>. Companies new to emissions reporting are strongly recommended to use these tools to assist them in their calculations. If you have used a calculation tool, please list it under the question on methodologies.

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

Companies over which operational control is exercised.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes

i) Reporting Boundary

The majority of GHGs reported are based on the operational control category as most of our significant emission sources are owned directly by Centrica plc. This excludes reporting the emissions from the Langede Receiving Facility in Lincolnshire for which Centrica holds the PPC permit but not control for the EU ETS responsibility.

The one area of the business where we are using the equity share criteria is for the energy company SPE in Belgium in which Centrica has a 25.5% equity interest.

Question 2(a)(ii) Reporting Year

Please explicitly state the dates of the accounting year or period for which GHG emissions are reported.

Start date: 01 January 2007

End date: 31 December 2007

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes

All reporting years are based on calendar years. Data on scope 1, 2 and 3 emissions are calculated using the WRI GHG protocol. Our interpretation of the scopes is explained below. We have also recalculated our historical GHG emission based on this interpretation.

b) Direct and Indirect Emissions

Scope 1

Direct GHG emissions from sources owned or controlled by Centrica.

- Upstream power generation
- Upstream gas production and storage
- Fleet (including contractors) and company cars (business mileage)
- Refrigerant losses (offices)
- Gas consumed at Centrica buildings

Scope 2

Electricity indirect GHG emissions – accounts for the emissions from purchased electricity consumed by the company.

- Electricity consumed in our offices
- Electricity imported and consumed at our power stations, gas storage and processing plant

Methodologies

GHG emissions are measured and calculated using a number of methodologies including:

- EU ETS data (combustion sources)
- Direct measurement from operational facilities e.g. nitrogen regeneration units, CO₂ incinerator etc.
- Energy metering at facilities and office locations
- Measurement of operational parameters e.g. business flights, fleet and company car mileage etc.
- Conversion of data to CO₂-e is made using recognised and published emission factors

c) Other Emissions

Scope 3

Emissions as a consequence of Centrica's activities but released from sources not owned or controlled by Centrica.

- Air travel
- Rail travel
- Power purchased for supply to end users
- Outsourced services
- Data Centres
- Off-shored business activities

Question 2(a)(iii) Methodology

Please specify the methodology used by your company to calculate GHG emissions.

If you have used the GHG Protocol or ISO 14064-1, please also give references to any calculation tools that you have used or an explanation of any calculation methods that you have devised yourself. Please explain the data sources of the Global Warming Potentials and emission factors used in your calculations. If you cannot find a reference for them within a supplied calculation tool, please contact the provider of the calculation tool for the information.

If you have used a methodology that you have devised yourself, please would you explain your methodology, including methods of calculation, and the data sources of the Global Warming Potentials and emission factors.

GHG Protocol

Emissions covered by the EU ETS are calculated based on fuel consumption and an energy emissions factor expressed in tCO₂/TJ: $tCO_2 = \text{Fuel consumed} \times \text{Net Calorific Value of fuel (TJ/tonne)} \times \text{Fuel's Emissions Factor (tCO}_2/\text{TJ)} \times \text{Oxidisation Factor}$. Emissions from other operational sources are calculated using the same formula.

Emissions data from energy use, transportation etc., are collected both via manual and automated data feeds from across the Centrica Group of companies and the CO₂ emissions calculated using standard emission factors such as those published by DEFRA.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(b)(i) Scope 1 and Scope 2 of GHG Protocol

Are you able to provide a breakdown of your direct and indirect emissions under Scopes 1 and 2 of the GHG Protocol and to analyse your electricity consumption?

Yes

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(b)(i)(y) Scope 1 and Scope 2 of GHG Protocol - Year 1 answers

Please enter the dates for the reporting period that you specified in (answer to question 2(a)(i)), and then answer the questions for that period. By selecting the "Add Additional Year Figures" button at the end of this webpage, you can repeat the process for the previous reporting period, and then for the reporting period before that, and so on. If possible, please give data going back to the reporting period ending in 2004. You do not have to enter historical data if you have already reported this information in response to previous CDP questionnaires

Please enter the accounting year used to report GHG emissions details below.

Start date: 01 January 2007

End date: 31 December 2007

Scope 1 Direct GHG Emissions: Please provide:

a. Total global Scope 1 activity in Metric Tonnes CO₂-e emitted.

9561717 CO₂e metric tonnes

b. Total Scope 1 activity in Metric Tonnes CO₂-e emitted for Annex B countries.

9561717 CO₂e metric tonnes

By country - Scope 1 activity in metric tonnes of CO₂-e by individual country

Using the same methodology please state your emissions per country. NB : If it is not practical for you to list emissions on a full country by country basis, please list here countries with significant emissions in the context of your business and combine the remainder under "rest of world". If you already have this information in another format (e.g Excel) please attach it.

Country	Scope 1 Emissions (metric tonnes CO ₂ -e)
United Kingdom	7001108
USA	2129814
Belgium	430795

Scope 2 - Indirect GHG emissions: Please provide:

c. Total global Scope 2 activity in metric tonnes CO₂-e emitted

122713 CO₂e metric tonnes

d. Total Scope 2 activity in metric tonnes CO₂-e emitted for Annex B countries

122713 CO₂e metric tonnes

By country - Scope 2 activity in metric tonnes of CO₂-e by individual country

Country	Scope 2 Emissions (metric tonnes CO ₂ -e)
United Kingdom	61421
USA	61292

Electricity consumption

e. Total global MWh of purchased electricity

62578110 MWh

f. Total MWh of purchased electricity for Annex B countries

62578110 MWh

By country – MWh of purchased electricity by individual country.

Country	
United Kingdom	30075640
USA	32502470

g. Total global MWh of purchased electricity from renewable sources

2067659 MWh

h. Total MWh of purchased electricity from renewable sources for Annex B countries

By country – MWh of purchased electricity from renewable sources by individual country.

Country	
United Kingdom	1024521
USA	1043138

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes

Data provided for power purchased includes the power purchased for sale to end user and power purchased for consumption at Centrica offices, power stations (including power import for power station start-up) etc.

Our North American data (US & Canada) is consolidated and reported above as USA data.

Question 2(b)(i)(y) Scope 1 and Scope 2 of GHG Protocol - Year 2 answers

Please enter the dates for the reporting period that you specified in (answer to question 2(a)(i)) , and then answer the questions for that period. By selecting the “Add Additional Year Figures” button at the end of this webpage, you can repeat the process for the previous reporting period, and then for the reporting period before that, and so on. If possible, please give data going back to the reporting period ending in 2004. You do not have to enter historical data if you have already reported this information in response to previous CDP questionnaires.

Please enter the accounting year used to report GHG emissions details below.

Start date: 01 January 2006

End date: 31 December 2006

Scope 1 Direct GHG Emissions: Please provide:

a. Total global Scope 1 activity in Metric Tonnes CO₂-e emitted.

7522463 CO₂e metric tonnes

b. Total Scope 1 activity in Metric Tonnes CO₂-e emitted for Annex B countries.

7522463 CO₂e metric tonnes

By country - Scope 1 activity in metric tonnes of CO₂-e by individual country

Using the same methodology please state your emissions per country. NB : If it is not practical for you to list emissions on a full country by country basis, please list here countries with significant emissions in the context of your business and combine the remainder under “rest of world”. If you already have this information in another format (e.g Excel) please attach it.

Country	Scope 1 Emissions (metric tonnes CO ₂ -e)
United Kingdom	5134407
USA	1922399
Belgium	465657

Scope 2 - Indirect GHG emissions: Please provide:

c. Total global Scope 2 activity in metric tonnes CO₂-e emitted

49218 CO₂e metric tonnes

d. Total Scope 2 activity in metric tonnes CO₂-e emitted for Annex B countries

49218 CO₂e metric tonnes

By country - Scope 2 activity in metric tonnes of CO₂-e by individual country

Country	Scope 2 Emissions (metric tonnes CO ₂ -e)
United Kingdom	40017
USA	9201

Electricity consumption

e. Total global MWh of purchased electricity

f. Total MWh of purchased electricity for Annex B countries

By country – MWh of purchased electricity by individual country.

Country

g. Total global MWh of purchased electricity from renewable sources

h. Total MWh of purchased electricity from renewable sources for Annex B countries

By country – MWh of purchased electricity from renewable sources by individual country.

Country

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes

During 2006 our scope 1 data covered all direct emissions from UK, North America and an equity share (25.5%) of SPE in Belgium.

Data referenced to USA above covers emissions from our USA and Canadian businesses (data is aggregated and reported internally as North America).

Question 2(b)(i)(y) Scope 1 and Scope 2 of GHG Protocol - Year 3 answers

Please enter the dates for the reporting period that you specified in (answer to question 2(a)(i)) , and then answer the questions for that period. By selecting the “Add Additional Year Figures” button at the end of this webpage, you can repeat the process for the previous reporting period, and then for the reporting period before that, and so on. If possible, please give data going back to the reporting period ending in 2004. You do not have to enter historical data if you have already reported this information in response to previous CDP questionnaires.

Please enter the accounting year used to report GHG emissions details below.

Start date: 01 January 2005

End date: 31 December 2005

Scope 1 Direct GHG Emissions: Please provide:

a. Total global Scope 1 activity in Metric Tonnes CO₂-e emitted.

7047337 CO₂e metric tonnes

7047337 CO₂e metric tonnes b. Total Scope 1 activity in Metric Tonnes CO₂-e emitted for Annex B countries.

By country - Scope 1 activity in metric tonnes of CO₂-e by individual country

Using the same methodology please state your emissions per country. NB : If it is not practical for you to list emissions on a full country by country basis, please list here countries with significant emissions in the context of your business and combine the remainder under “rest of world”. If you already have this information in another format (e.g Excel) please attach it.

Country Scope 1 Emissions (metric tonnes CO₂-e)

United Kingdom 7047337

Scope 2 - Indirect GHG emissions: Please provide:

c. Total global Scope 2 activity in metric tonnes CO₂-e emitted

41446 CO₂e metric tonnes

d. Total Scope 2 activity in metric tonnes CO₂-e emitted for Annex B countries

41446 CO₂e metric tonnes

By country - Scope 2 activity in metric tonnes of CO₂-e by individual country

Country	Scope 2 Emissions (metric tonnes CO ₂ -e)
United Kingdom	41446

Electricity consumption

e. Total global MWh of purchased electricity

f. Total MWh of purchased electricity for Annex B countries

By country – MWh of purchased electricity by individual country.

Country

g. Total global MWh of purchased electricity from renewable sources

h. Total MWh of purchased electricity from renewable sources for Annex B countries

By country – MWh of purchased electricity from renewable sources by individual country.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Question 2(b)(i)(y) Scope 1 and Scope 2 of GHG Protocol - Year 4 answers

Please enter the dates for the reporting period that you specified in (answer to question 2(a)(i)) , and then answer the questions for that period. By selecting the “Add Additional Year Figures” button at the end of this webpage, you can repeat the process for the previous reporting period, and then for the reporting period before that, and so on. If possible, please give data going back to the reporting period ending in 2004. You do not have to enter historical data if you have already reported this information in response to previous CDP questionnaires.

Please enter the accounting year used to report GHG emissions details below.

Start date: 01 January 2004
End date: 31 December 2004

Scope 1 Direct GHG Emissions: Please provide:

a. Total global Scope 1 activity in Metric Tonnes CO₂-e emitted.

8043392 CO₂e metric tonnes

b. Total Scope 1 activity in Metric Tonnes CO₂-e emitted for Annex B countries.

8043392 CO₂e metric tonnes

By country - Scope 1 activity in metric tonnes of CO₂-e by individual country

Using the same methodology please state your emissions per country. NB : If it is not practical for you to list emissions on a full country by country basis, please list here countries with significant emissions in the context of your business and combine the remainder under “rest of world”. If you already have this information in another format (e.g Excel) please attach it.

Country	Scope 1 Emissions (metric tonnes CO ₂ -e)
United Kingdom	8043392

Scope 2 - Indirect GHG emissions: Please provide:

c. Total global Scope 2 activity in metric tonnes CO₂-e emitted

38986 CO₂e metric tonnes

d. Total Scope 2 activity in metric tonnes CO₂-e emitted for Annex B countries

38986 CO₂e metric tonnes

By country - Scope 2 activity in metric tonnes of CO₂-e by individual country

Country	Scope 2 Emissions (metric tonnes CO ₂ -e)
United Kingdom	38986

Electricity consumption

e. Total global MWh of purchased electricity

f. Total MWh of purchased electricity for Annex B countries

By country – MWh of purchased electricity by individual country.

Country

g. Total global MWh of purchased electricity from renewable sources

h. Total MWh of purchased electricity from renewable sources for Annex B countries

By country – MWh of purchased electricity from renewable sources by individual country.

Country

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Question 2(b)(iii) Electric Utilities - Emissions by Fuel Type - Year 1 answers

On the previous page, companies were asked to report their emissions by scope of the GHG Protocol and by country. Electric utility companies are additionally asked to report on emissions by fuel type. We request that emissions data is given by country going back to the reporting period ending in 2000. You can enter data for previous reporting periods using the “Add Additional Year Figures” button at the bottom of the page. Please report in two ways: absolute emissions in Metric Tonnes CO₂-e and emissions intensity in Metric Tonnes CO₂-e/MWh of production.

Please explicitly state the start and end date of the accounting year or period for which GHG emissions are reported.

Start date: 1 January 2007

End date: 31 December 2007

a) Please select a country, and then enter a figure for absolute emissions in Metric Tonnes CO₂-e for each of the following fuels for the reporting period you have given above:

Country	United Kingdom
Coal - hard	
Coal - lignite	
Fuel oil	
Gas	
Combined Cycle (CCGT)	7972114
CHP	
Total thermal	
Of which Solid biomass	
Total	

b) Please select a country, and then enter a figure for emissions intensity Metric Tonnes CO₂-e/MWh for each of the following fuels for the reporting period you have given above:

Country	United Kingdom
Coal - hard	
Coal - lignite	
Fuel oil	
Gas	
Combined Cycle (CCGT)	
CHP	
Total thermal	
Of which Solid biomass	
Total	390

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes

The carbon emissions used to calculate this figure are the average annual emissions from all wholly owned power generation assets and all other power generation assets from which Centrica is entitled to output under site specific contracts.

Question 2(b)(iii) Electric Utilities - Emissions by Fuel Type - Year 2 answers

On the previous page, companies were asked to report their emissions by scope of the GHG Protocol and by country. Electric utility companies are additionally asked to report on emissions by fuel type. We request that emissions data is given by country going back to the reporting period ending in 2000. You can enter data for previous reporting periods using the "Add Additional Year Figures" button at the bottom of the page. Please report in two ways: absolute emissions in Metric Tonnes CO₂-e and emissions intensity in Metric Tonnes CO₂-e/MWh of production.

Please explicitly state the start and end date of the accounting year or period for which GHG emissions are reported.

Start date: 1 January 2006

End date: 31 December 2006

a) Please select a country, and then enter a figure for absolute emissions in Metric Tonnes CO₂-e for each of the following fuels for the reporting period you have given above:

Country United Kingdom

Coal - hard

Coal - lignite

Fuel oil

Gas

Combined Cycle (CCGT) 4341248

CHP

Total thermal

Of which Solid biomass

Total

b) Please select a country, and then enter a figure for emissions intensity Metric Tonnes CO₂-e/MWh for each of the following fuels for the reporting period you have given above:

Country	United Kingdom
Coal - hard	
Coal - lignite	
Fuel oil	
Gas	
Combined Cycle (CCGT)	
CHP	
Total thermal	
Of which Solid biomass	
Total	394

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No.

Question 2(b)(iii) Electric Utilities - Emissions by Fuel Type - Year 3 answers

On the previous page, companies were asked to report their emissions by scope of the GHG Protocol and by country. Electric utility companies are additionally asked to report on emissions by fuel type. We request that emissions data is given by country going back to the reporting period ending in 2000. You can enter data for previous reporting periods using the "Add Additional Year Figures" button at the bottom of the page. Please report in two ways: absolute emissions in Metric Tonnes CO₂-e and emissions intensity in Metric Tonnes CO₂-e/MWh of production.

Please explicitly state the start and end date of the accounting year or period for which GHG emissions are reported.

Start date: 1 January 2005

End date: 31 December 2005

a) Please select a country, and then enter a figure for absolute emissions in Metric Tonnes CO₂-e for each of the following fuels for the reporting period you have given above:

Country	United Kingdom
Coal - hard	
Coal - lignite	
Fuel oil	
Gas	
Combined Cycle (CCGT)	4845031
CHP	
Total thermal	
Of which Solid biomass	
Total	

b) Please select a country, and then enter a figure for emissions intensity Metric Tonnes CO₂-e/MWh for each of the following fuels for the reporting period you have given above:

Country	United Kingdom
Coal - hard	
Coal - lignite	
Fuel oil	
Gas	
Combined Cycle (CCGT)	
CHP	
Total thermal	
Of which Solid biomass	
Total	412

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No.

Question 2(b)(iv) Electric Utilities - Capacity - Year 1 answers

In addition to emissions inventories, electric utility companies are asked to give historic and current installed capacity by energy source. If possible, companies are asked to give figures going back to the reporting period ending in 2000. You can enter data for previous reporting periods using the "Add Additional Year Figures" button at the bottom of the page.

Please explicitly state the start and end date of the accounting year or period for which capacity is reported.

Start date: 01 January 2007

End date: 31 December 2007

Companies are asked to provide total installed capacity (in MW) by country and by energy source for the reporting period given above:

Country	United Kingdom	USA
Coal - hard		
Coal - lignite		
Fuel oil		
Gas		
Combined Cycle (CCGT)	3170	1261
CHP		
Total thermal		
Of which Solid biomass		
Nuclear		
Hydro		
Wind	152	
Solar		
Other renewables		
Total		

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(b)(iv) Electric Utilities - Capacity - Year 2 answers

In addition to emissions inventories, electric utility companies are asked to give historic and current installed capacity by energy source. If possible, companies are asked to give figures going back to the reporting period ending in 2000. You can enter data for previous reporting periods using the "Add Additional Year Figures" button at the bottom of the page.

Please explicitly state the start and end date of the accounting year or period for which capacity is reported.

Start date: 01 January 2006

End date: 31 December 2006

Companies are asked to provide total installed capacity (in MW) by country and by energy source for the reporting period given above:

Country	United Kingdom	USA
Coal - hard		
Coal - lignite		
Fuel oil		
Gas		
Combined Cycle (CCGT)	3170	1261
CHP		
Total thermal		
Of which Solid biomass		
Nuclear		
Hydro		
Wind	152	
Solar		
Other renewables		
Total		

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(b)(iv) Electric Utilities - Capacity - Year 3 answers

In addition to emissions inventories, electric utility companies are asked to give historic and current installed capacity by energy source. If possible, companies are asked to give figures going back to the reporting period ending in 2000. You can enter data for previous reporting periods using the “Add Additional Year Figures” button at the bottom of the page.

Please explicitly state the start and end date of the accounting year or period for which capacity is reported.

Start date: 01 January 2005

End date: 31 December 2005

Companies are asked to provide total installed capacity (in MW) by country and by energy source for the reporting period given above:

Country	United Kingdom	USA
Coal - hard		
Coal - lignite		
Fuel oil		
Gas		
Combined Cycle (CCGT)	3170	1017
CHP		
Total thermal		
Of which Solid biomass		
Nuclear		
Hydro		
Wind	62	
Solar		
Other renewables		
Total		

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(b)(iv) Electric Utilities - Capacity - Year 4 answers

In addition to emissions inventories, electric utility companies are asked to give historic and current installed capacity by energy source. If possible, companies are asked to give figures going back to the reporting period ending in 2000. You can enter data for previous reporting periods using the "Add Additional Year Figures" button at the bottom of the page.

Please explicitly state the start and end date of the accounting year or period for which capacity is reported.

Start date: 01 January 2004

End date: 31 December 2004

Companies are asked to provide total installed capacity (in MW) by country and by energy source for the reporting period given above:

Country	United Kingdom	USA
Coal - hard		
Coal - lignite		
Fuel oil		
Gas		
Combined Cycle (CCGT)	2792	1017
CHP		
Total thermal		
Of which Solid biomass		
Nuclear		
Hydro		
Wind	62	
Solar		
Other renewables		
Total		

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(b)(iv) Electric Utilities - Capacity - Year 5 answers

In addition to emissions inventories, electric utility companies are asked to give historic and current installed capacity by energy source. If possible, companies are asked to give figures going back to the reporting period ending in 2000. You can enter data for previous reporting periods using the "Add Additional Year Figures" button at the bottom of the page.

Please explicitly state the start and end date of the accounting year or period for which capacity is reported.

Start date: 01 January 2003

End date: 31 December 2003

Companies are asked to provide total installed capacity (in MW) by country and by energy source for the reporting period given above:

Country	United Kingdom
Coal - hard	
Coal - lignite	
Fuel oil	
Gas	
Combined Cycle (CCGT)	2140
CHP	
Total thermal	
Of which Solid biomass	
Nuclear	
Hydro	
Wind	
Solar	
Other renewables	
Total	

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(b)(iv) Electric Utilities - Capacity - Year 6 answers

In addition to emissions inventories, electric utility companies are asked to give historic and current installed capacity by energy source. If possible, companies are asked to give figures going back to the reporting period ending in 2000. You can enter data for previous reporting periods using the "Add Additional Year Figures" button at the bottom of the page.

Please explicitly state the start and end date of the accounting year or period for which capacity is reported.

Start date: 01 January 2002

End date: 31 December 2002

Companies are asked to provide total installed capacity (in MW) by country and by energy source for the reporting period given above:

Country	United Kingdom
Coal - hard	
Coal - lignite	
Fuel oil	
Gas	
Combined Cycle (CCGT)	1681
CHP	
Total thermal	
Of which Solid biomass	
Nuclear	
Hydro	
Wind	
Solar	
Other renewables	
Total	

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(b)(iv) Electric Utilities - Capacity - Year 7 answers

In addition to emissions inventories, electric utility companies are asked to give historic and current installed capacity by energy source. If possible, companies are asked to give figures going back to the reporting period ending in 2000. You can enter data for previous reporting periods using the "Add Additional Year Figures" button at the bottom of the page.

Please explicitly state the start and end date of the accounting year or period for which capacity is reported.

Start date: 01 January 2001

End date: 31 December 2001

Country United Kingdom

Coal - hard

Coal - lignite

Fuel oil

Gas

Combined Cycle (CCGT) 1441

CHP

Total thermal

Of which Solid biomass

Nuclear

Hydro

Wind

Solar

Other renewables

Total

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(b)(iv) Electric Utilities - Capacity - Year 8 answers

In addition to emissions inventories, electric utility companies are asked to give historic and current installed capacity by energy source. If possible, companies are asked to give figures going back to the reporting period ending in 2000. You can enter data for previous reporting periods using the "Add Additional Year Figures" button at the bottom of the page.

Please explicitly state the start and end date of the accounting year or period for which capacity is reported.

Start date: 01 January 2000

End date: 31 January 2000

Companies are asked to provide total installed capacity (in MW) by country and by energy source for the reporting period given above:

Country	United Kingdom
Coal - hard	
Coal - lignite	
Fuel oil	
Gas	
Combined Cycle (CCGT)	0
CHP	
Total thermal	
Of which Solid biomass	
Nuclear	
Hydro	
Wind	
Solar	
Other renewables	
Total	

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Question 2(b)(v) Electric Utilities - Production - Year 1 answers

Please also disclose production output in GWh by country and by energy source for the reporting period ending in 2007 and previous seven reporting periods. You can enter data for previous reporting periods using the "Add Additional Year Figures" button at the bottom of the page.

Please explicitly state the start and end date of the accounting year or period for which production is reported.

Start date: 01 January 2007

End date: 31 December 2007

Please select a country and then enter figures for the following energy sources for the reporting period given above:

Country	United Kingdom
Coal - hard	
Coal - lignite	
Fuel oil	
Gas	
Combined Cycle (CCGT)	19647
CHP	
Total thermal	
Of which Solid biomass	
Nuclear	
Hydro	
Wind	199
Solar	
Other renewables	
Total	

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(b)(v) Electric Utilities - Production - Year 2 answers

Please also disclose production output in GWh by country and by energy source for the reporting period ending in 2007 and previous seven reporting periods. You can enter data for previous reporting periods using the "Add Additional Year Figures" button at the bottom of the page.

Please explicitly state the start and end date of the accounting year or period for which production is reported.

Start date: 01 January 2006

End date: 31 December 2006

Please select a country and then enter figures for the following energy sources for the reporting period given above:

Country United Kingdom

Coal - hard

Coal - lignite

Fuel oil

Gas

Combined Cycle (CCGT) 10541

CHP

Total thermal

Of which Solid biomass

Nuclear

Hydro

Wind 147

Solar

Other renewables

Total

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(b)(v) Electric Utilities - Production - Year 3 answers

Please also disclose production output in GWh by country and by energy source for the reporting period ending in 2007 and previous seven reporting periods. You can enter data for previous reporting periods using the "Add Additional Year Figures" button at the bottom of the page.

Please explicitly state the start and end date of the accounting year or period for which production is reported.

Start date: 01 January 2005

End date: 31 December 2005

Please select a country and then enter figures for the following energy sources for the reporting period given above:

Country United Kingdom

Coal - hard

Coal - lignite

Fuel oil

Gas

Combined Cycle (CCGT) 11641

CHP

Total thermal

Of which Solid biomass

Nuclear

Hydro

Wind 40

Solar

Other renewables

Total

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Question 2(b)(ii) Scopes 1 and 2 of GHG Protocol

If you are unable to detail your Scope 1 and Scope 2 GHG emissions and/or electricity consumption, please report the GHG emissions you are able to identify together with a description of those emissions. If you have answered 2(b)(i), please go to question 2(c)(i).

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(c)(i) Other Emissions – Scope 3 of GHG Protocol

How do you identify and/or measure Scope 3 emissions?

Scope 3

Emissions as a consequence of Centrica's activities but released from sources not owned or controlled by Centrica.

- Air travel
- Rail travel
- Helicopter and shipping
- Power purchased for supply to end users
- Outsourced services
- Data Centres
- Off-shored business activities

Please provide where possible:

a. Details of the most significant Scope 3 sources for your company.

The most significant element within Centrica's scope 3 emissions is the inclusion of the CO₂ associated with the sale of purchased electricity that is sold to an end user. Centrica has included this figure in our scope 3 data for 2007.

b. Details in metric tonnes CO₂-e of GHG emissions in the following categories:

i Employee business travel.

7706 CO₂e metric tonnes

ii External distribution/logistics

iii Use/disposal of company's products and services.

28292469 CO₂e metric tonnes

iv Company supply chain.

c. Details of the methodology you use to quantify or estimate Scope 3 emissions.

Data 3 emissions are calculated from data feeds from our procurement of rail and flight data, data submissions from our service providers such as shipping and helicopter service companies. Conversion to tonnes CO₂ is calculated using recognised emission factors e.g. DEFRA.

Calculation of the CO₂ resulting from the sale of purchased electricity that is sold to the end user is made using approved fuel mix factors.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes

Employee business travel scope 3 data covers rail and flight data, company car use is included in our scope 1 emissions.

Data covering our logistics (British Gas Fleet vehicles) is also covered in our scope 1 emissions.

We are currently making plans to include our supply chain scope 3 data in subsequent submissions.

Question 2(d) External Verification

(i) Has the information reported in response to Questions 2(b)- (c) been externally verified or audited or do you plan to have the information verified or audited?

Yes (Please go to 2(d)(ii))

(ii) If your answer to question 2d(i) is Yes, please provide or attach a copy of the audit or verification statement or state your plans for verification.

All EU ETS data has been verified in accordance with the emissions trading requirements.

(iii) Please specify the standard or protocol against which the information has been audited or verified.

EU ETS requirements

Data reported in our 2007 CR Report is assured by Corporate Citizenship (see link below).

<http://www.centrica.com/index.asp?pageid=469>

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes

ETS verification statements have been sent to the GDP secretariat.

Centrica is currently developing a replacement environmental data capture, collation and reporting tool as a replacement for our existing Trilogy system. This system will enable us to capture more accurate data relating to a wide range of environmental parameters that are pertinent to our operations, including climate change data. Phase one of the project will be completed by the end of quarter three 2008. In addition, data validation via a third party is scheduled before the end 2008, with year-on-year data validation (in addition to ETS validation) occurring thereafter.

Question 2(e) Data Accuracy

Does your company have a system in place to assess the accuracy of GHG emissions inventory calculation methods, data processes and other systems relating to GHG measurement? If so, please provide details. If not, please explain how data accuracy is managed.

Yes, we do have a system.

Centrica collects data from a wide range of sources including power stations, gas platforms, company cars, fleet operation, offices and buildings. We experience the challenges of any large and complex organisation in gathering large volumes of data both manually and via automatic data feeds.

We concluded during 2006/7 that the existing data management systems were inadequate for future data management and reporting requirements. Centrica is currently developing a new data management system together with a Group wide environmental data reporting guide.

Phase 1 (UK) implementation will be completed by the end of quarter three 2008 with data validation completed by year end. Phase 2 will include the cascade of the system to the EU and North American businesses again with full environmental data validation to follow.

All EU ETS data from our EU power stations and gas operations is collected and validated in line with the regulatory requirements.

We believe that complete and accurate climate change data is of critical importance and as such we are heavily investing in this new system.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(f) Emissions History

Do the emissions reported for your last accounting year vary significantly compared to previous years? If so, please explain reasons for the variations.

Yes, they do vary significantly.

The upstream emissions which make up the major component of our scope one emissions relate to the operating profile of our facilities. There are a number of factors which influence our emissions profile including the price of gas, the operating mode (base load versus two shifting) and outages (planned or reactive).

Our scope two emissions are less variable but are affected by external factors such as ambient weather conditions. We have restructured elements of the business, such as outsourcing our data centres. In these situations we will continue to report the energy used in our data centres however the data will move from scope two into scope three.

Emissions from our power generation and gas processing assets have increased due to our increased usage of these assets in 2007. During 2006 the wholesale price of gas was much higher resulting in our gas-fired plants being less economical to run. In addition we had several unplanned outages which have not occurred during 2007.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(g) Emissions Trading

i) Does your company have facilities covered by the EU Emissions Trading Scheme?

Yes, our company has facilities covered by the EU ETS. (Please see 2(g)(i)(a), (b) and (c) and 2(g)(ii).)

If so:

a) Please provide details of the annual allowances awarded to your company in Phase I for each of the years from 1 January 2005 to 31 December 2007 and details of allowances allocated for Phase II commencing on 1 January 2008.

In all cases, please enter whole numbers without punctuation, For example, enter 2000 instead of 2,000.

Please enter allowance in Metric Tonnes of CO₂:

1 January 2005-31 December 2005

7267623 Metric Tonnes CO₂

1 January 2006-31 December 2006

7267623 Metric Tonnes CO₂

1 January 2007-31 December 2007

7267623 Metric Tonnes CO₂

b) Please provide details of actual annual emissions from facilities covered by the EU ETS with effect from 1 January 2005.

Please enter emissions in Metric Tonnes of CO₂.

1 January 2005-31 December 2005

6674440 Metric Tonnes CO₂

1 January 2006-31 December 2006

4910412 Metric Tonnes CO₂

1 January 2007-31 December 2007

6735267 Metric Tonnes CO₂

Phase II annual allowances

1 January 2008 – 31 December 2008

5562719 Metric Tonnes CO₂

1 January 2009 – 31 December 2009

6651519 Metric Tonnes CO₂

1 January 2010 – 31 December 2010

6651519 Metric Tonnes CO₂

1 January 2011 – 31 December 2011

6651519 Metric Tonnes CO₂

1 January 2012 – 31 December 2012

6651519 Metric Tonnes CO₂

c) What has been the impact on your company's profitability of the EU ETS?

The impact of the EU ETS on our operations and profitability results primarily from the wholesale power generation market in the UK. Due to the deregulated nature of the electricity market, the cost of carbon feeds directly into the power price. This results in additional revenue for power generators as the majority of allowances required are currently distributed free by Member States. Centrica has always advocated the removal of free allowances, and were pleased that this has happening within the UK during phase II to a small degree, with the introduction of auctioned allowances. We also welcome the decision to allow 100% auctioning during phase III.

ii) What is your company's strategy for trading or participating in regional and/or international trading schemes (eg: EU ETS, RGGI, CCX) and Kyoto mechanisms such as CDM and JI projects? Explain your involvement for each of the following:

EU ETS

The cost of carbon has become an important factor in all investment decisions taken by Centrica in the power and gas markets. We actively use all available methods to manage our exposure to the risk of rising carbon costs through abatement and emissions trading. Centrica has been actively trading in the EU Emissions Trading market for almost four years and has also been active in the international carbon credit market. We aim to meet the cost of our CO₂ emissions in the most economic manner for our customers and shareholders, thus following the spirit of Kyoto.

Centrica believes that the flexible mechanisms provided under Kyoto are important options to help installations manage their carbon exposure and we are constantly looking to manage our carbon position using both abatement and carbon credits.

CDM/JI

Centrica is active in the CER and ERU markets and has invested in numerous CDM and JI projects across the globe. We are also an investor in Climate Change Capital's second Carbon Fund which is widely considered as the world's largest private carbon fund.

CCX

Direct Energy is able to provide a suite of carbon and renewable product offerings to our broad North American customer base. Within the voluntary carbon market, Direct Energy strives to provide high quality voluntary emission reduction credits to our customers. In the regulated carbon markets, we offer carbon offsets eligible as compliance options, where available. In anticipation of broader carbon emission regulations and further carbon market evolution, we are actively positioning ourselves to provide pre-compliance carbon alternatives to our counterparties. International carbon offerings, including EU Allowances, Certified Emissions Reductions and Emission Reduction Units, are also available.

RGGI

Others

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(g)(iii) Electric Utilities - EU ETS Allowances

On the previous page, companies were asked to report their EU ETS allowances by year. Please would electric utility companies also supply the information by country and state how many of the allowances they have received are for new power plants.

a) 1 January 2005-31 December 2005

Country	United Kingdom
Allowance in metric tonnes of CO ₂	7267623
Of which allowances for new power plants	0

b) 1 January 2006-31 December 2006

Country	United Kingdom
Allowance in metric tonnes of CO ₂	7267623
Of which allowances for new power plants	0

c) 1 January 2007-31 December 2007

Country	United Kingdom
Allowance in metric tonnes of CO ₂	7267623
Of which allowances for new power plants	0

d) Phase II

1 January 2008-31 December 2008

Country	United Kingdom
Allowance in metric tonnes of CO ₂	5562719
Of which allowances for new power plants	244592

1 January 2009-31 December 2009

Country	United Kingdom
Allowance in metric tonnes of CO ₂	6651519
Of which allowances for new power plants	1333392

1 January 2010-31 December 2010

Country	United Kingdom
Allowance in metric tonnes of CO ₂	6651519
Of which allowances for new power plants	1333392

1 January 2011-31 December 2011

Country	United Kingdom
Allowance in metric tonnes of CO ₂	6651519
Of which allowances for new power plants	1333392

1 January 2012-31 December 2012

Country	United Kingdom
Allowance in metric tonnes of CO ₂	6651519
Of which allowances for new power plants	1333392

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(g)(iv) Electric Utilities - Non-EU Trading Regimes - Year 1 answers

Electric utility companies with significant operations outside the EU covered by emission trading regimes are asked to give their emissions by country or regional regulatory regime and their allowances by country or regional regulatory regime. Please give your emissions and allowances in either Metric Tonnes of CO₂ or Metric Tonnes of CO₂-e as appropriate to the country or regional regulatory regime concerned.

Please enter the dates of the reporting period finishing in 2007 used to answer this question
By selecting the “Add Additional Year Figures” button at the end of this page, you can repeat the process for the previous reporting periods.

Dates not selected.

Country/Regulatory Regime

Total CO₂ emissions

Total CO₂-e emissions

CO₂ allowances

CO₂-e allowances

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 2(g)(v) Electric Utilities – Participation in CDM/JI

For EU electricity companies only, please give the amount of CERs and ERUs issued. Please enter whole numbers without punctuation. For example, please enter 2000 instead of 2,000.

Phase 1 (2005-2007) CERs/ERUs.

Of which credits from projects for which the group is listed as a direct participant

Of which credits obtained from carbon funds

Of which credits from HFC projects

Total for phase 2 (2008-2012)

Of which credits from projects for which the group is listed as a direct participant

Of which credits obtained from carbon funds

Of which credits from HFC projects

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes

Information relating to volumes of CERs and ERUs is commercially sensitive and therefore confidential.

Question 2(g)(vi) Electric Utilities – Other Offsets - Year 1 answers

Please enter the dates of the reporting period finishing in 2007 used to answer this question about other offset schemes not covered by preceding questions. By selecting the “Add additional year figures” button at the end of this webpage, you can repeat the process for the previous reporting periods. Please report in either Metric Tonnes of CO₂ or Metric Tonnes of CO₂-e as appropriate and exclude voluntary offsets.

Dates not selected.

Please would electric utility companies give their offsets by country for the reporting period given above.

Country/Regulatory Regime	Metric Tonnes CO ₂ -e	Metric Tonnes CO ₂	Other
---------------------------	----------------------------------	-------------------------------	-------

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes

Question 2(h) Energy Costs

i) Please identify the total costs in US \$ of your energy consumption eg from fossil fuels and electric power.

If you want to enter a number less than 1, please ensure you use a decimal point (e.g. 0.3) and NOT a comma (e.g. 0,3)

ii) What percentage of your total operating costs does this represent?

iii) What percentage of energy costs are incurred on energy from renewable sources?

More details

Data relating to the cost of energy consumption is confidential

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

3 – Performance

Question 3(a) Reduction Plans

i) Does your company have a GHG emissions reduction plan in place? If so, please provide details along with the information requested below. If there is currently no plan in place, please explain why.

Yes, we have a reduction plan in place. (Please proceed to part (ii))

ii) What is the baseline year for the emissions reduction plan?

2007

If you want to give further information or describe a rolling target, please do so here.

iii) What are the emissions reduction targets and over what period do those targets extend?

Upstream

Key target: Reduce power generation carbon intensity to 380g CO₂/kWh by 2012 and to 350g CO₂/kWh in 2008.

Downstream

Key target: Deliver UK CERT carbon savings target of 16.1m tonnes CO₂ in 2008.

Operational

Key target: Achieve 5% reduction in UK office energy use.

iv) What activities are you undertaking to reduce your emissions eg: renewable energy, energy efficiency, process modifications, offsets, sequestration etc? What targets have you set for each and over what timescales do they extend?

Additional targets and commitments

- Generate first power from Lynn and Inner Dowsing wind farms.
- Achieve planning consent for Lincs wind farm development.
- Continue to assess the feasibility of a clean coal development at Teesside.

The carbon intensity of the power we generate for our British Gas customers is already significantly lower than the other five major UK suppliers. In 2007, 394 grams of carbon dioxide were emitted for every kilowatt hour (g CO₂/kWh) of power we generated. To ensure we maintain this leadership position, we have set a target to reduce our UK power generation carbon intensity to 380g CO₂/kWh by 2012 and aim to go even further by cutting our intensity to 350g CO₂/kWh by 2020.

This is a significant challenge, but we believe that our focus on relative, rather than absolute, targets will enable us to reduce CO₂ emissions and continue to provide secure energy supplies for our customers. Our strategy to invest in low-carbon generation such as high-efficiency gas-fired power stations and offshore wind farms will not only enable us to meet our own targets but enable Centrica to play a key role in meeting broader UK and European emissions reduction targets.

As part of our PPC requirements we will be carrying out detailed energy audits as part of the agreed improvement plans for the assets, the findings of which will be used in future energy efficiency programmes. There have been significant energy efficiency improvements in our gas production part of the business as a direct result of our approach to the PPC permitting process particularly in the areas of power supply and utilisation through the targeting of inefficient on-site power generation.

We continue to investigate opportunities for further operational improvements which are likely to be undertaken over the long term.

In the UK we have and will continue to undertake energy audits across the operational assets which are the most significant contributors to our overall carbon footprint. Further work is underway in our power generation business to investigate and evaluate options for enhanced operational efficiency and reliability.

Centrica currently sources around 5% of the electricity we supply to our customers from renewable sources. Our Renewable Obligation Certificates come from both independent green generators and from our own renewable sources. Centrica has made a significant commitment to invest in the development of renewable generation assets, primarily offshore wind farms. Demanding new EU renewables targets suggest the UK must build 40GW of wind farms. DBERR has indicated that 33GW of that should be offshore. Centrica has committed to invest £1.5bn in developing wind generation capacity in the UK over the next five years.

Downstream

Key target: Deliver UK CERT carbon savings target of 16.1m tonnes CO₂ in 2008.

Additional targets and commitments

- Become the leading supplier of green energy to domestic customers in the UK directly and through partnerships.
- Develop capability to install low-carbon microgeneration for UK domestic, business and public sector customers.
- Extend our British Gas Energy Savers Report programme to domestic and business customers.

We have significant opportunities to deliver major carbon reductions through our main consumer brands, British Gas and Direct Energy. In UK we must deliver challenging energy efficiency targets under the Government's CERT programme – as the largest supplier we have the largest target. Relative to other suppliers we have adopted an innovative and industry leading energy efficiency programme to deliver on our targets, including technology innovation and partnerships with more than 70 local councils.

Operational

Key target: Achieve 5% reduction in UK office energy use.

Additional targets and commitments

- Finalise and make public our carbon footprint commitments in North America.
- Further develop 'Being Green' to motivate and engage employees.
- Extend our environmental management system throughout British Gas.
- Make progress with extending our environmental management system across our operations in North America.
- Introduce a new cross-group framework to improve the quality of our environmental performance monitoring and reporting.

We have been implementing emission reduction programmes for a number of years with a particular focus on emissions from energy use in our buildings, paper usage, water consumption and waste minimisation and recycling.

Our first five-year environmental action plan ran from 2000 to 2005 and we are currently into the second year of our second five-year plan. Reduction plans are based on the calendar year. For further reduction measures 2007 will be taken as the base year.

Our UK building energy efficiency target is a further 5% reduction in 2008. In North America our internal emissions reduction target is currently in development, but we would expect it to range from 5-10% in absolute reduction over 5 years.

Employee engagement is an integral element of our carbon reduction strategy.

Our individual business units have developed specific programmes as part of our carbon reduction strategy. For example, Centrica Energy (CE) has developed a carbon scorecard that applies to the power and gas processing elements of the business. Initiatives within the carbon scorecard include the following projects:

Improve plant efficiency

As an upstream energy business, our most significant source of direct carbon emissions is our fleet of gas-fired power stations. Throughout 2008 we will be implementing a series of measures across our fleet designed to improve plant efficiency with the aim of saving over 50,000t CO₂ emissions annually thereafter, the equivalent emissions of up to 10,000 cars.

Reduce energy consumption at CE head office

By focusing on reducing energy consumption at our Windsor headquarters, we will be supporting the ongoing efforts in this area which already operate across our sites. Last year these activities contributed to a successful 10% reduction in energy use across our property portfolio, and in 2008 the aim is for another substantial reduction.

Measure and improve CE carbon footprint

We are currently identifying and measuring all the contributing sources to CE's carbon footprint, including energy use at all our sites and offices, rail and air travel and business mileage, incorporating both our UK and other European businesses. Once this is complete we can focus on initiatives to reduce this without negative impacts on our other business objectives.

Increase employee awareness of climate change

We can all play a role in combating climate change if we are made aware of the impact and what we can do as individuals and teams. During 2008 we will aim to increase awareness of this area for all Centrica staff.

Future commitments

Centrica is currently setting and considering new targets that will require significant capital expenditure in the upstream parts of the business. At this current time further details have not been finalised and cannot be reported.

v) What investment has been or will be required to achieve the targets and over what time period?

Centrica will be investing £1.5bn in renewable energy assets over the next five years.

vi) What emissions reductions and associated costs or savings have been achieved to date as a result of the plan?

The carbon intensity of the power we generate for our British Gas customers is already significantly lower than the other five major UK suppliers. In 2007, 394 grams of carbon dioxide were emitted for every kilowatt hour (g CO₂/kWh) of power we generated. To ensure we maintain this leadership position, we have set a target to reduce our UK power generation carbon intensity to 380g CO₂/kWh by 2012 and aim to go even further by cutting our intensity to 350g CO₂/kWh by 2020.

This is a significant challenge, but we believe that our focus on relative, rather than absolute, targets will enable us to reduce CO₂ emissions and continue to provide secure energy supplies for our customers. Our strategy to invest in low-carbon generation such as high-efficiency gas-fired power stations and offshore wind farms will not only enable us to meet our own targets but enable Centrica to play a key role in meeting broader UK and European emissions reduction targets.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 3(b) Emissions Intensity

i) What is the most appropriate measurement of emissions intensity for your company?

Other e.g CO₂/kWh of power generated

Please give your company's emissions intensity figure for the measurement given above.

If you want to enter a number less than 1, please ensure you use a decimal point (e.g. 0.3) and NOT a comma (e.g. 0,3)

390

ii) Please state your GHG emissions intensity in terms of total tonnes of CO₂-e reported under Scope 1 and Scope 2 per US \$m turnover and EBITDA for the reporting year.

Scope 1/ US\$millions turnover

292

Scope 2/ US\$millions turnover

3.74

Scope 1/ EBITDA

1895

Scope 2/ EBITDA

24.32

iii) Has your company developed emissions intensity targets?

Yes, we have developed emission intensity targets. (Please answer questions (a) and (b) below.)

a) If the answer to part (iii) above is yes, please state your emissions intensity targets

In 2007, 394 grams of carbon dioxide were emitted for every kilowatt hour (g CO₂/kWh) of power we generated. To ensure we maintain this leadership position, we have set a target to reduce our UK power generation carbon intensity to 380g CO₂/kWh by 2012 and aim to go even further by cutting our intensity to 350g CO₂/kWh by 2020.

b) If the answer to part (iii) above is yes, please state what reductions in emissions intensity have been achieved against targets and over what time period.

The target above has been set against the 2007 baseline and will deliver the intensity reduction. In the UK we have already achieved the following reductions in this level of carbon intensity since 2005:

2005/06 412g CO₂/kWh

2006 394g CO₂/kWh

2007 390g CO₂/kWh

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 3(c) Planning

Do you forecast your company's future emissions and/or energy use?

Yes, we do. (Please answer questions (i) to (iii) below.)

i) Please provide details of those forecasts, summarize the methodology used and the assumptions made.

If you are able to give quantified forecasts of Scope 1 and Scope 2 emissions and/or electricity consumption, you can enter numerical data on the next page.

The largest source of direct emissions for Centrica is our fleet of gas-fired power stations and the level of emissions is dictated primarily by the economics of the wholesale fuel markets, including the cost of carbon.

Any estimates of future running patterns, and hence emissions will therefore have to make assumptions of the likely future cost of carbon. In this way the full cost of carbon is fully factored into the operational decisions made on all our generating assets

When forecasting our future emissions costs we use several high and low scenario cases, these ensure that the planning process contains a range a possible outcomes and therefore costs for CO₂ emissions. These assumptions are updated on a regular basis and contain market data collected from a range of sources, they include phase II & III caps, current and future EUA prices and CDM issues.

Investment decisions we make in the wholesale energy markets also takes into account levels of emissions and their costs, in particular how this can best be managed

We actively trade in gas, power and CO₂ emissions, protecting the Company's position and assets. The emissions trading is undertaken as a hedging tool as a direct result of changing policy as well as to mitigate the effects of the EU ETS and Renewables Obligation for Centrica.

We are large investors in low carbon technology, including the building of both onshore and offshore wind farms and the investigation of developing a carbon capture and storage power generator.

ii) How do you factor the cost of future emissions into capital expenditure planning?

Any capital expenditure in the power sector area will use this range of carbon prices as part of the cost assessment process. Therefore any new investment decisions will have the cost of carbon factored into them.

iii) How have these considerations made an impact on your investment decisions?

We actively trade in gas, power and CO₂ emissions, protecting the Company's position and assets. The emissions trading is undertaken as a hedging tool as a direct result of changing policy as well as to mitigate the effects of the EU ETS and Renewables Obligation for Centrica.

We are large investors in low-carbon technology, including the building of both onshore and offshore wind farms and the investigation of developing a carbon capture and storage power generator.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 3(c) (i) Planning - Forecasted emissions/electricity use - Year 1 answers

This page gives you the opportunity to give numerical forecasts for emissions and electricity use. If possible, please provide emissions forecasts for the next five reporting periods. Use the "Add additional year figures" button at the end of the page to enter emission forecasts for successive reporting periods. Note: Please enter whole numbers without punctuation. For example, use 2000 instead of 2,000

Please enter the accounting period used to report GHG emissions details below.

Dates not selected.

Forecasted Scope 1 Direct GHG Emissions: Please provide:

a. Forecasted Total global Scope 1 emissions in Metric Tonnes CO₂-e.

b. Forecasted Total Scope 1 emissions in Metric Tonnes CO₂-e for Annex B countries.

By country - Forecasted Scope 1 emissions in Metric Tonnes of CO₂-e by individual country

Using the same methodology please state your emissions forecasts per country. NB: If it is not practical for you to list emissions on a full country by country basis, please list here countries with significant emissions in the context of your business and combine the remainder under "rest of world". If you already have this information in another format (e.g Excel) please attach it.

Country Scope 1 Emissions (metric tonnes CO₂-e)

Scope 2 Indirect GHG emissions: Please provide:

c. Forecasted total global Scope 2 emissions in Metric Tonnes CO₂-e

d. Forecasted total Scope 2 emissions in Metric Tonnes CO₂-e for Annex B countries

By country - Forecasted Scope 2 emissions in Metric Tonnes of CO₂-e by individual country

Country Scope 2 Emissions (metric tonnes CO₂-e)

Forecasted electricity consumption

e. Forecasted total global MWh of purchased electricity

f. Forecasted total MWh of purchased electricity for Annex B countries

By country – Forecasted MWh of purchased electricity by individual country.

Country

g. Forecasted total global MWh of purchased electricity from renewable sources

h. Forecasted total MWh of purchased electricity from renewable sources for Annex B countries

By country – Forecasted MWh of purchased electricity from renewable sources by individual country.

Country

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes. Information relating to forecast electricity use is confidential.

Question 3(c)(iv) Planning - Electric Utilities Forecasted Absolute and Relative Emissions By Fuel Type - Year 1 answers

Electric utility companies have already been asked for their past emissions broken down by fuel type and country. This page asks the same questions, but looking forwards. Please forecast your absolute emissions in Metric Tonnes of CO₂-e and emissions intensity in Metric Tonnes of CO₂-e/MWh of production for the next five reporting periods by country and fuel type. Use the “Add Additional Year Figures” button at the end of the webpage to enter successive reporting periods.

Please explicitly state the start and end date of the accounting year or period for which GHG emissions are forecasted.

Dates not selected.

Please select a country, and then enter a figure for forecasted absolute emissions in Metric Tonnes CO₂-e for each of the following fuels for the reporting period given above:

Country

Coal - hard

Coal - lignite

Fuel oil

Gas

Combined Cycle (CCGT)

CHP

Total thermal

Of which Solid biomass

Total

Please select a country, and then enter a figure for forecasted emissions intensity metric tonnes CO₂-e/MWh for each of the following fuels for the reporting period given above:

Country

Coal - hard

Coal - lignite

Fuel oil

Gas

Combined Cycle (CCGT)

CHP

Total thermal

Of which Solid biomass

Total

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes. Information relating to forecast emissions is confidential.

Question 3(c)(v) Planning - Electric Utilities - Capacity - Year 1 answers

In addition to forecasted emissions, electric utility companies are asked to give details of planned capacity by country and energy source for the next five reporting periods. Please select a reporting period, a country and then give data for the different energy sources. Use the "Add Additional Year Figures" button at the end of the page to enter successive reporting periods. Companies are asked to provide total installed capacity (in MW) by country, reporting period, and by energy source in the following categories:

Please explicitly state the start and end date of the accounting period for which capacity is reported.

Start date: 01 January 2007

End date: 31 December 2007

Companies are asked to provide total installed capacity (in MW) by country and by energy source in the following categories for the reporting period given above:

Country	United Kingdom	USA
Coal - hard		
Coal - lignite		
Fuel oil		
Gas		
Combined Cycle (CCGT)	3170	1261
CHP		
Total thermal		
Of which Solid biomass		
Nuclear		
Hydro		
Wind	332	
Solar		
Other renewables		
Total		

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 3(c)(v) Planning - Electric Utilities - Capacity - Year 2 answers

In addition to forecasted emissions, electric utility companies are asked to give details of planned capacity by country and energy source for the next five reporting periods. Please select a reporting period, a country and then give data for the different energy sources. Use the "Add Additional Year Figures" button at the end of the page to enter successive reporting periods. Companies are asked to provide total installed capacity (in MW) by country, reporting period, and by energy source in the following categories:

Please explicitly state the start and end date of the accounting period for which capacity is reported.

Start date: 01 January 2006

End date: 31 December 2006

Companies are asked to provide total installed capacity (in MW) by country and by energy source in the following categories for the reporting period given above:

Country	United Kingdom	USA
Coal - hard		
Coal - lignite		
Fuel oil		
Gas		
Combined Cycle (CCGT)	4055	1261
CHP		
Total thermal		
Of which Solid biomass		
Nuclear		
Hydro		
Wind	332	
Solar		
Other renewables		
Total		

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 3(c)(v) Planning - Electric Utilities - Capacity - Year 3 answers

In addition to forecasted emissions, electric utility companies are asked to give details of planned capacity by country and energy source for the next five reporting periods. Please select a reporting period, a country and then give data for the different energy sources. Use the "Add Additional Year Figures" button at the end of the page to enter successive reporting periods. Companies are asked to provide total installed capacity (in MW) by country, reporting period, and by energy source in the following categories:

Please explicitly state the start and end date of the accounting period for which capacity is reported.

Start date: 01 January 2005

End date: 31 December 2005

Companies are asked to provide total installed capacity (in MW) by country and by energy source in the following categories for the reporting period given above:

Country	United Kingdom	USA
Coal - hard		
Coal - lignite		
Fuel oil		
Gas		
Combined Cycle (CCGT)	4055	1261
CHP		
Total thermal		
Of which Solid biomass		
Nuclear		
Hydro		
Wind	332	
Solar		
Other renewables		
Total		

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 3(c)(v) Planning - Electric Utilities - Capacity - Year 4 answers

In addition to forecasted emissions, electric utility companies are asked to give details of planned capacity by country and energy source for the next five reporting periods. Please select a reporting period, a country and then give data for the different energy sources. Use the "Add Additional Year Figures" button at the end of the page to enter successive reporting periods. Companies are asked to provide total installed capacity (in MW) by country, reporting period, and by energy source in the following categories:

Please explicitly state the start and end date of the accounting period for which capacity is reported.

Start date: 01 January 2004

End date: 31 December 2004

Companies are asked to provide total installed capacity (in MW) by country and by energy source in the following categories for the reporting period given above:

Country	United Kingdom	USA
Coal - hard		
Coal - lignite		
Fuel oil		
Gas		
Combined Cycle (CCGT)	4055	1261
CHP		
Total thermal		
Of which Solid biomass		
Nuclear		
Hydro		
Wind	582	
Solar		
Other renewables		
Total		

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 3(c)(vi) Planning - Electric Utilities - Production - Year 1 answers

Earlier in the questionnaire, electric utilities were asked to give details of past production output. This question looks forward and asks electric utilities to give details of forecasted production in GWh by country and energy source for the next five reporting periods. Please select a reporting period, a country and then give data for the different energy sources. Use the "Add Additional Year Figures" button at the end of the webpage to enter successive reporting periods.

Please explicitly state the start and end date of the accounting period for which production is reported.

Dates not selected.

Please disclose production output in GWh by country and by energy source in the following categories for the reporting period given above:

Country

Coal - hard

Coal - lignite

Fuel oil

Gas

Combined Cycle (CCGT)

CHP

Total thermal

Of which Solid biomass

Nuclear

Hydro

Wind

Solar

Other renewables

Total

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

Yes. Information relating to forecast production is confidential.

4 – Governance

Question 4(a) Responsibility

Does a Board Committee or other executive body have overall responsibility for climate change? If not, please state how overall responsibility for climate change is managed. If so, please answer parts (i) and (ii) below.

Yes, an executive body does have overall responsibility for climate change.

i) Which Board Committee or executive body has overall responsibility for climate change?

a) Responsibility

The Corporate Responsibility Committee (CRC) (a sub-committee of the Board) has overall responsibility for climate change. The CRC reports regularly to the Board on the effectiveness of the company's climate change strategy and its performance in relations to key targets and management indicators. Sam Laidlaw, Chief Executive has personal responsibility for our climate change strategy.

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

Climate change is recorded on our risk register as one of the top five risks affecting the company. As such it is managed through our risk management process from business units all the way up to the Audit Committee and Board. The status of the individual risks and associated controls are continuously monitored and periodically report to these Committees.

Read more about our Corporate Responsibility Committee

<http://www.centrica.com/index.asp?pageid=387>

Read more about our risk management process

<http://www.centrica.com/index.asp?pageid=386>

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 4(b) Individual Performance

Do you assess or provide incentive mechanisms for individual management of climate change issues including attainment of GHG targets? If so, please provide details.

Yes, we do.

b) Individual Performance

Directors and managers with accountability for delivering specific aspects of our climate change strategy have incentive mechanisms based on the successful delivery of key objectives and targets.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 4(c) Communications

Please indicate whether you publish information about the risks and opportunities presented to your company by climate change, details of your GHG emissions and plans to reduce emissions through any of the following communications:

i) the company's Annual Report or other statutory filings

Yes

c) Communications

We publish information about the risks and opportunities presented to Centrica by climate change, details of our GHG emissions and plans to reduce emissions through out:

Annual Report

- Report home page <http://www.centrica.com/files/reports/2007ar/index.asp>
- Corporate responsibility summary <http://www.centrica.com/files/reports/2007ar/index.asp?ageid=120>
- Principle risks and uncertainties <http://www.centrica.com/files/reports/2007ar/index.asp?pageid=118>
Corporate Responsibility Report
- Report home page <http://www.centrica.com/index.asp?pageid=469>
- Climate change section <http://www.centrica.com/index.asp?pageid=472>
- Climate change video (see link below)
<http://www.centrica.com/index.asp?PageID=321&mediaid=177&category=38&startrow=1>
- Performance data <http://www.centrica.com/index.asp?pageid=490>
- Targets and commitments <http://www.centrica.com/index.asp?pageid=510>

ii) formal communications with shareholders or external parties

Yes

As above

iii) voluntary communications such as Corporate Social Responsibility reporting

Yes

As above

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No

Question 4(d) Public Policy

Do you engage with policymakers on possible responses to climate change including taxation, regulation and carbon trading? If so, please provide details.

Yes

d) Public Policy

Key priorities

Encourage support for:

- An EU cap and trade emissions trading scheme – 100% auctioning for power generation and ever-tightening caps
- A regulatory, policy and fiscal framework that will deliver a significant increase in renewable generation investment in the UK
- A policy framework to encourage the deployment of non-renewable low-carbon investment including carbon capture and storage and nuclear generation
- A policy framework to allow for a significant increase in installed capacity of microgeneration technologies, both heat and power.

We recognise that climate change is the biggest single environmental issue the world has to face both today and in the future. We also note the assessment highlighted in the Stern Review that the risks of the worst impacts of climate change can be substantially reduced if greenhouse gas levels in the atmosphere can be stabilised between 450 and 550ppm CO₂ equivalent. The implication of that is that stabilisation in this range requires global emissions to be at least 25% below current levels by 2050. We accept the validity of this argument.

Our view is that climate change is happening, and that human activity is contributing to it, so we therefore need to develop policies and action plans aimed at first slowing and, eventually, stabilising the processes which are causing the change.

We consider that the UK and EU should take a leadership position on climate change, and that there are competitive advantages in moving early to a low-carbon economy. In order to incentivise the necessary step-change in investment in low-carbon goods and services, a clear policy framework that establishes a long-term carbon price and therefore a long-term value in reducing emissions is required, backed up with appropriate support frameworks and the removal of regulatory and other barriers.

Whilst it may be difficult to achieve, we consider that a gradual slowing and then reduction of global greenhouse gas emissions is possible. We are committed to playing our part in that process and to actively supporting Government policy and action plans aimed to achieve this. Centrica aims to engage in an ongoing and constructive dialogue with stakeholders engaged in developing UK and EU climate change policy. We respond to formal government and other consultations on a wide variety of issues, and hold regular informal meetings with a wide range of stakeholders including government, other parties, NGOs and think tanks to exchange thinking on a range of issues. We are also members of a number of organisations involved in the carbon agenda including the Corporate Leaders Group.

Targets

Clear and binding emission reduction targets in the EU and UK underpin policy and regulatory frameworks by giving industry the confidence to invest in more expensive lower-carbon technologies and services. We therefore welcome the binding and unilateral EU target to cut greenhouse gases by 20% by 2020, and fully support the EU objective of a 30% reduction by the same year if international agreement can be found.

We also support the EU's objective of achieving significantly higher levels of renewable energy in the EU's overall energy mix. Centrica believes that the corresponding UK target of 15% renewable energy by 2020 represents a challenging but achievable target. Delivery of this target will depend on appropriate regulatory, policy and fiscal frameworks being in place, the removal of barriers, and public acceptability of the need for investment.

We support UK government carbon targets and understand that the UK energy sector must play a major part in meeting those targets.

We understand and accept that a balance needs to be struck between effort at home and abroad, and that the UK needs to show some leadership in finding real carbon cuts at home. Nevertheless, we believe that delivering emission reductions at the lowest cost to the global economy is a valid objective which, in the absence of legally-binding targets, opens a pathway to Kyoto for many developing countries.

Emissions Trading

In the first two phases of the EU ETS, non-free allocation of allowances by Member States was restricted to a maximum of just 5% and 10% respectively. No auctioning was undertaken by the UK government in Phase I and an auction level of 7% has been implemented for Phase II, which will be taken from the free allocation that would otherwise have gone to the electricity generation sector.

As this sector faces no international competition and carbon costs can be, and are, recouped through the received price, we agree that this 7% should be taken from the generation sector and would have liked to have seen the maximum 10% auctioned.

We believe that the free allocation of allowances to sectors which are able to recover the cost of allowances through their received price is the Scheme's fundamental flaw, and have lobbied to mitigate the negative competitive distortions caused by this. We agree that auctioning should be the basic principle for allocation and that those sectors where cost pass through can and does occur, including the power generation sector, should have to pay for 100% of their carbon requirement from 2013. We are pleased that the draft EU directive for Phase III incorporates this.

We welcome the proposal to move to a system of central cap setting, with greater certainty of tighter caps consistent with 2020 reduction targets, and the proposed trajectory beyond 2020.

We agree that where possible the scheme should be extended to include additional sectors and gases, though measures must be taken to ensure any such inclusions do not threaten the integrity or stability of the scheme. We recognize the value of the Clean Development Mechanism in delivering significant emission reduction investments and developing the global carbon market, and believe the directive should ensure this continues beyond the current Kyoto targets of 2012.

Renewables Obligation

Centrica's interest in large-scale renewables is predominantly in offshore wind, where we are looking to develop a number of projects. We believe that the development of large-scale renewables should continue to be supported under a reformed and banded RO.

Maintaining but reforming the existing system will allow a continuous flow of investment, will maintain investor confidence, and is consistent with the parameters of a competitive market.

Under a banded RO, suppliers will remain obligated to deliver renewable generation, thus encouraging their participation in renewables. We believe that there is some scope for increasing the renewables target supported under this mechanism.

Centrica believes that the UK electricity sector is capable of rising to the challenge of deploying renewable projects at scale over the next decade, though this will require significant effort from all stakeholders to remove barriers to investment.

We do not believe that mega projects such as the proposed Severn Barrage project should be supported via the Renewables Obligation mechanism.

These projects which have limited potential to be copied elsewhere are characterised by their enormous size. If allowed into the RO scheme, these projects will either produce a significant amount of generation thus potentially flooding the market with ROCs, or no generation, potentially starving the system of ROCs. Either way, the existing system would be destabilised, threatening existing investments. We believe that any support for projects of this type should therefore be outside the RO mechanism.

We do not believe that the RO is a suitable vehicle for supporting domestic and community level renewable installations.

Microgeneration

The sheer size of the heat market as a proportion of the overall energy market (around twice the size of the electricity market in energy terms) means there is significant scope for the heat market to make important contributions to both the 2020 Renewable and 2050 Carbon Targets, both through continued energy efficiency improvements and through the deployment of low carbon and renewable microgeneration.

In order to stimulate the widespread deployment of these and other microgeneration technologies an appropriate support framework is vital. Any effective support mechanism for microgeneration will need to recognise the specific deployment issues involved, and the differing needs of different microgeneration technologies.

Barriers to microgeneration include the often high up-front capital costs, as well as regulatory issues (including problems with planning and high transaction costs for accessing ROCs), and a lack of consumer understanding about what can be achieved in this area. All of these barriers will need to be addressed.

The Government currently provides support to some technologies such as offshore wind in excess of the price of carbon avoided. This is done when these technologies offer additional benefits such as diversity of supply, technological learning, and creation of a UK export industry. Where other technologies provide similar benefits then a similar level of financial support should be available. We believe this is the case for a number of renewable heat technologies.

Whilst the 2% additional innovation band for microgeneration in CERT is a positive step, we do not believe that this is sufficient to bring about a market transformation in this sector, and do not believe that CERT should be viewed as the primary support mechanism for microgeneration. Additional assistance will therefore be required.

Assistance could be in the form of either capital support or revenue support. We see merit in both and would work within either framework to deliver products to our customers. The most often mooted revenue support mechanism is a feed-in tariff. The effectiveness of this mechanism is likely to depend on the level at which it is set, and its operation.

Suppliers, who have an existing relationship with customers, are best-placed to administer a feed-in-tariff scheme. Allowing suppliers to reclaim revenue paid out to customers from a central fund is crucial. If the scheme is not funded centrally, suppliers may be disproportionately disadvantaged and unwilling to promote microgeneration technologies as a result. The scheme could be funded from general taxation, although we note the significant revenues that are likely to be raised from auctioning emission allowances in the future and believe that this could be a source of future support.

A feed-in-tariff would provide an ongoing revenue stream for a defined period. We believe that if the appropriate revenue was guaranteed, suppliers and others would actively consider introducing services designed to lower the capital cost of relevant technologies.

Green tariffs

The legislation surrounding the production and certification of “green” energy has evolved over recent years, such that each unit of green energy produced now attracts various different certificates. Simultaneous with this, the market for selling green energy to customers has evolved, with green offerings now being supported in many different ways. This is understandable in the context of an emerging market and a complex range of certificates. However, as customer awareness of climate change issues has grown and the market for green energy has matured, Centrica believes that we now need to evolve the market standards for green energy to provide greater clarity to customers and a higher hurdle for green claims.

Ofgem are currently consulting on how to define a green tariff and Centrica is actively participating in those discussions. We believe that this consultation represents a unique opportunity to create clarity as to what constitutes a valid claim in relation to a worthwhile green product offered to energy consumers.

Centrica advocates a test of ‘green-ness’ that is entirely based on additionality and moves away altogether from REGOs and low-carbon FMD declarations (by removing the need to demonstrate the source of the electricity in order to make a green claim). We believe that additionality can be quite broadly defined to enable innovation and customer choice - involving additional ROC retirement, good quality carbon offsets, contributions to a green fund the application of which can be shown to deliver a non-trivial emissions reduction, or other approaches.

CERT and Suppliers Obligation

Consideration of the government’s domestic energy efficiency scheme post-2011 is at an early stage and we are keen to work with stakeholders on the detailed design of the scheme after this date. We support a more flexible, outcome-focused approach to delivering greenhouse gas abatement in the household sector, but stress the importance of a sensible transition from existing programmes to any post-2011 obligation.

We believe that in order to be sustainable in the longer-term, reducing emissions in the domestic sector needs to be consumer-led, rather than pushed through mandatory reduction targets. A balance needs to be found between customer-pull and legislative-push.

The imposition of targets in this sector without consumer understanding and support to reduce emissions could be counter-productive. We believe that consumer pull for the creation of low-carbon energy services does exist and we have responded with the creation of a new business unit specifically to lead our drive to offer green, low-carbon products and services to customers who want to manage their impact on climate change.

Any suppliers' obligation that is introduced will need to establish clear objectives at the outset. Most notably, the industry response may change depending on whether it is primarily a measure to reduce greenhouse gases through a reduction in carbon intensity, or whether the primary purpose is to reduce energy demand.

Carbon capture and storage

We believe new coal generation should be built with pre-combustion technology, committing to carbon capture from the outset. This will give the best opportunity to make an immediate impact on UK emissions through encouraging the early deployment of cleaner generation to fill the expected generation gap over the next decade. In short, it is difficult to see how carbon reduction targets can be met without the early deployment of carbon capture and storage.

In the longer-term, we believe that the primary support mechanism for generation with carbon capture and storage should be a carbon price established through the EUETS. Given the political uncertainty surrounding the scheme going forward, and the current Phase II price for carbon, a bridging mechanism may well be required in order to bring projects forward sooner rather than later. In addition, although the individual components of CCS are not new, further support is likely to be needed to reflect first-of-kind integration risks.

Would you like to provide any additional information relating to this question that you have not provided elsewhere?

No