

### Module: Introduction

### Page: Introduction

#### 0.1

##### Introduction

Please give a general description and introduction to your organization

Hess Corporation is a leading global independent energy company engaged in the exploration for and production of crude oil and natural gas, as well as in refining and in marketing refined petroleum products, natural gas and electricity. The company and its subsidiaries operate in two segments, Exploration and Production (E&P) and Marketing and Refining (M&R). The E&P segment explores for, develops, produces, purchases, transports and sells crude oil and natural gas. The M&R segment purchases, markets and trades refined petroleum products, natural gas and electricity. The Corporation also operates terminals and retail gasoline stations, most of which include convenience stores, that are located on the East Coast of the United States. Through February 2013, the Corporation also manufactured refined petroleum products. In January 2013, the Corporation announced its decision to cease refining operations at its Port Reading facility in February and pursue the sale of its terminal network. In January 2012, HOVENSA L.L.C. (HOVENSA), a 50% owned joint venture in the U.S. Virgin Islands, shut down its refinery. The Corporation and its joint venture partner plan to pursue the sale of HOVENSA, while the complex is operated as an oil storage terminal. The Corporation has for more than two years been engaged in transforming itself into an essentially E&P business focused on the Corporation's most promising properties and operations and intends to continue to pursue this strategy.

In 2012 Hess operated terminals and retail gasoline stations, most of which include convenience stores. Through February 2013, Hess also manufactured refined petroleum products.

In March 2013 the company announced its intention to fully exit all downstream businesses, including retail, energy marketing and energy trading. Until that process is complete, we will continue our long-standing commitment to our customers to deliver a secure product supply, competitive prices and high quality service. Nuvera Fuel Cells, a wholly owned subsidiary of Hess, conducts applied research and development and commercialization of key hydrogen energy technologies for automotive and industrial applications. Special Note Regarding Forward-Looking Statements: This CDP Investor survey response contains projections, future estimates, plans, expectations and other forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements reflect the company's current views with respect to future events and the company's performance. No assurance can be given, however, that these events will occur or that expected results expressed in any forward-looking statement will be achieved, and actual results could vary materially from those expected for a number of reasons, including risk factors affecting the company's business. A discussion of these risk factors is included in the company's annual report of Form 10-K filed with the Securities and Exchange Commission.

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**0.2****Reporting Year**

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed
Sun 01 Jan 2012 - Mon 31 Dec 2012

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**0.3****Country list configuration**

Please select the countries for which you will be supplying data. This selection will be carried forward to assist you in completing your response

Select country
Algeria
Azerbaijan
Denmark
Equatorial Guinea
Ghana
Indonesia

Select country
Libya
Malaysia
Norway
Russia
Saint Lucia
Thailand
United Kingdom
United States of America

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#### 0.4

##### Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

USD(\$)

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#### 0.6

##### Modules

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sectors, companies in the oil and gas industry and companies in the information technology and telecommunications sectors should complete supplementary questions in addition to the main questionnaire.

If you are in these sectors (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email [respond@cdproject.net](mailto:respond@cdproject.net).

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see <https://www.cdproject.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

**Module: Management [Investor]**

**Page: 1. Governance**

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1.1

**Where is the highest level of direct responsibility for climate change within your company?**

Individual/Sub-set of the Board or other committee appointed by the Board

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1.1a

**Please identify the position of the individual or name of the committee with this responsibility**

The Hess Leadership Team has the highest direct responsibility for climate change in our company. The Hess Leadership Team provides strategic business guidance and makes key operational decisions for the company. The Team establishes strategies to provide a clear focus on the promotion of environment, health, safety, and social responsibility. This responsibility includes the oversight and approval of Hess' strategies to address climate change and related impacts.

Eight corporate executive officers sit on the team, which is headed by the CEO, who until our 2013 Annual General Meeting, also held the role of Board Chairman. Hess separated the role of Chairman and Chief Executive Officer immediately following our Annual Meeting on May 16, 2013.

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1.2

**Do you provide incentives for the management of climate change issues, including the attainment of targets?**

No

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1.2a

Please complete the table

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator
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2.1

**Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities**

Integrated into multi-disciplinary company wide risk management processes

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2.1a

**Please provide further details**

**(i.) the scope of the process**

Hess monitors and assesses risks and opportunities arising from climate change policy, legislation and regulation, stakeholders, carbon markets, and weather events.

**(ii.) how risks/opportunities are assessed at a company level**

Our company's evolving enterprise-wide risk management program is helping us identify and evaluate a range of key business risks, among them those driven by social, safety and environmental factors.

We include social and environmental issues, as well as other potential risk areas among the factors considered during risk assessments. In 2012, for example, we improved our social and environmental risk metrics as a result of increased collaboration across functions and among internal subject matter experts, who help us improve our understanding of environmental, health, safety, human rights and community engagement risks. We continue to advance a common framework for the risks we identify and share them across functional areas to facilitate risk prioritization, ensure consistency and improve internal alignment. This framework and associated tools provide us the means to better recognize, understand, prioritize, and manage / mitigate key risks that impact our business.

The company's enterprise risk methodology uses a variety of tools such as sensitivity analysis, stress testing, risk mapping and risk correlation to evaluate customized scenarios for the aggregate portfolio of upstream and downstream operations, as well as for each of Hess' business segments and specific assets within these business segments. The Corporate Risk and Corporate Strategic Planning processes together provide a view of enterprise-level risks and opportunities.

The Hess Climate Change Network (CCN) was established in 2008 by the Hess Leadership Team and is comprised of executives, senior-level managers, and subject matter experts from across the businesses and from Corporate Risk, Corporate Strategic Planning and Corporate EHS&SR. The Climate Change Network monitors and assesses climate change risks and opportunities arising from climate change policy, legislation and regulation, reputational impacts, and carbon markets. When analyses indicate potential significant financial impacts this information is considered in enterprise-level risk processes.

**(iii.) how risks/opportunities are assessed at an asset level**

We identify and prioritize asset-level business risks and their underlying drivers through risk management workshops with asset leadership teams.

At Hess, asset leaders attend risk management workshops where one of the goals is to identify key business risks and their underlying drivers. Once a risk is identified, leaders evaluate possible approaches to ensure that effective plans are developed to recognize and address potential gaps and issues. As a result, we are able to better protect and enhance the value of our company and confidently pursue new business opportunities.

These workshops help teams across the organization better understand the risks they face and how to manage them to deliver the expected return. There are two key areas of focus for the workshops. The first is a discussion about the risks that team members see on the horizon, both long- and short-term, and an exercise to prioritize them according to urgency. The second is to understand what is driving those risks and who should take ownership in managing them. Once a risk is identified, Hess evaluates key scenarios to ensure we have the appropriate management plan in place and to address any potential gaps in ownership.

The enterprise risk model methodology considers the risks of asset impairment and loss for Hess-owned assets and critical third-party assets under contract to Hess that could occur due to extreme weather events such as hurricanes. Sources of data on asset-specific values for the risk model include Hess' corporate insurance department. Our insurance underwriters do a thorough evaluation of physical risks as part of determining property insurance coverage and costs.

**(iv.) the frequency of monitoring in terms of weeks/months/years**

Corporate EHS&SR and Hess' individual businesses monitor climate change risks and opportunities on an ongoing basis through subscriptions to specialized reporting services, and through our trade association memberships, attendance at climate change and energy conferences, regulatory analysis, and internal benchmarking against peer activities.

Customer facing businesses, such as Hess Energy Marketing, continuously monitor changing customer needs and preferences, and carbon markets. Corporate Risk reports various cuts of its risk assessments out to the EPLT and HLT usually on an annual basis.

Customized risk scenarios are modeled as often as necessary based on the degree of materiality and changes in assumptions and inputs. These risk assessments occur at least annually if not more frequently.

**(v.) criteria for determining materiality/priorities**

Through our risk management workshops, we prioritize risks including risks related to climate change based on the potential likelihood, impact, and velocity of the risk occurring. A risk-rating tool is used to help identify potential items requiring immediate action, those that need to be monitored, and those that remain acceptable because their level of risk is low. The risks are categorized to determine their impact on such areas as profitability, reputation, safety or operational performance.

**(vi.) to whom are the results reported**

Corporate Risk reports the results of its risk assessments to the Audit Committee of the Board. Various cuts of results are also reported out to the EPLT and HLT usually on an annual basis.

Corporate EHS&SR presents information on climate change management and performance to the Audit Committee at least annually.

Customized risk scenarios are run by the businesses at a frequency suitable to their specific strategic planning goals. The results are reported to the leadership teams of the respective businesses.

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## 2.2

### Is climate change integrated into your business strategy?

Yes

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## 2.2a

### Please describe the process and outcomes

#### ***(i) How the business strategy has been influenced, i.e. the internal process for collecting and reporting information to influence the strategy.***

We consider prudent management of climate change-related business risks and opportunities to be of significant importance to Hess' reputation and license to operate. Hess' strategic priorities related to climate change include both mitigation and resilience measures:

- reducing the emissions intensity of our operations where we have significant influence
- maintaining regulatory compliance, monitoring policy and assessing financial impacts
- top quartile industry emissions performance and climate change disclosures

Hess Operation Excellence Pillar Team oversees our climate change strategy and its execution by the Hess Climate Change Network (CCN). The CCN influences our strategy at group, business and asset levels. The CCN includes executives, senior managers and subject matter experts in order to promote a cross-functional, cross-business approach to managing climate change.

We established four CCN work groups to develop, update and execute Hess' climate change strategy. The Climate Policy Work Group monitors policy developments, and assesses their impact on our operations. The Energy Efficiency and Flaring/Venting Work Groups focus on the technical and operational factors of carbon footprint evaluation and reduction. The Carbon Markets Work Group provides guidance on forward pricing for project economics and carbon monetization opportunities.

To inform our business strategy, we monitor and measure our carbon footprint at existing and planned operations in addition to conducting energy efficiency reviews of major projects. We collect energy use data to evaluate energy efficiency improvement opportunities, identify potential areas for energy use reduction, establish energy baseline and targets, inform our 5-year climate change strategy for 2014-2019, and identify related goals. To further these efforts we are moving to a new GHG tracking and monitoring system to standardize and improve our capture of carbon data. This new system helps us identify opportunities to reduce energy use and flaring.

#### ***(ii) What aspects of climate change have influenced the strategy***

Climate change factors that have influenced Hess' business strategy include:

**Reputational risks and opportunities:** Prudent management of climate change-related business risks and opportunities is of importance to Hess' reputation and license to operate. We aim to have top quartile emissions performance in our industry and comprehensive climate change disclosures.

**Regulatory risks and opportunities:** Climate-related risk is one of Hess Corporation's risk factors as described in Item 1A of Hess' 2012 SEC 10-K filing. We monitor the evolving regulatory landscape with regard to climate change and are committed to complying with all emissions mandates. We recognize that climate

change is a global environmental concern. Continuing political and social attention to the issue of climate change has resulted in both existing and pending international agreements and national, regional or local legislation and regulatory measures to limit greenhouse gas emissions. These agreements and measures may require significant equipment modifications, operational changes, taxes, or purchase of emission credits to reduce emission of greenhouse gases from our operations, which may result in substantial capital expenditures and compliance, operating, maintenance and remediation costs.

**Physical risks:** Given the potential for extreme weather events driven by climate change to impact Hess' assets and operations, we plan for extreme weather events by leveraging structural engineering design standards, flood protection structures, well-rehearsed storm management plans and procedures, and a level of property and casualty insurance coverage consistent with industry practices.

***(iii) The most important components of the short term strategy that have been influenced by climate change***

Important short-term (next 1-5 years) components of Hess' business strategy influenced by climate change include:

Components influenced by Reputational impacts:

- commitment to top quartile climate change disclosures
- emissions reduction targets
- company-wide energy efficiency program
- flare reduction

Components influenced by Regulatory risks and opportunities:

- maintaining regulatory compliance
- monitoring related policy developments
- emissions reduction targets
- company-wide energy efficiency program

Components influenced by Physical risks and opportunities:

- physical risk management framework
- severe weather management plans and procedures

***(iv) The most important components of the long term strategy that have been influenced by climate change.***

The most important long-term (5-20 years) components of our business strategy influenced by climate change include: transparent communication of our climate change programs and performance to maintain and enhance our license to operate; clean energy initiatives that capitalize on the abundant supply of natural gas in the US and changes in environmental regulation, carbon cost sensitivity analysis for major new projects.

We have spoken publicly about the need for governments to work with industry to develop policies that will meet future energy demand and reduce GHG emissions. Transparent and equitable carbon price signals should be given serious consideration as economies recover from the recession.

In order to address reputational, physical, and regulatory risks and opportunities, we are in the process of developing a climate change policy to drive operational consistency across Hess' business units by providing internal clarity on our climate change framework, demonstrate comprehensive climate change management and increase transparency. Once adopted, this policy will provide long-term guidance for Hess' efforts to manage our carbon footprint.

***(v) How this is gaining the company strategic advantage***

The integration of climate change issues into Hess' business strategy can increase our competitive advantage. Prudent management of climate change risks and opportunities have mitigated the environmental impact of our operations, thereby protecting Hess' reputation and license to operate. Last year our climate change performance and disclosure contributed to our inclusion in the following ESG indices and sustainability rankings:

- Maplecroft's Climate Innovation Index, Dow Jones North America Sustainability Index, MSCI World ESG Index, MSCI World Socially Responsible Index, MSCI KLD 400 Social Index
- # 1 Corporate Knights S&P 500 Clean Capitalism Ranking



- # 1 in Newsweek's Green Rankings U.S. Energy Sector Ranking

**(vi) The most substantial business decisions made during the reporting year that have been influenced by the climate change driven aspects of the strategy**

To address potential regulatory risks and opportunities driven by current and future costs of carbon, we formally implemented a carbon cost sensitivity analysis for major new projects. We are accounting for the cost of carbon in future investments to promote more carbon efficient choices for equipment investment decisions. Starting in 2012, Hess incorporates carbon life cycle tools into our evaluation model for new upstream investment decisions greater than \$50 MM. The cost of carbon was included in project economics for all in carbon-regulated areas. In all other areas, the cost of carbon was included as sensitivity in project economics.

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2.2b

Please explain why not

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2.3

**Do you engage in activities that could either directly or indirectly influence policy on climate change through any of the following? (tick all that apply)**

Trade associations  
Funding research organizations  
Other

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2.3a

On what issues have you been engaging directly?

Focus of legislation	Corporate Position	Details of engagement	Proposed solution
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2.3b

**Are you on the Board of any trade associations or provide funding beyond membership?**

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2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to influence the position?
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2.3d

**Do you publically disclose a list of all the research organizations that you fund?**

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2.3e

**Do you fund any research organizations to produce public work on climate change?**

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2.3f

Please describe the work and how it aligns with your own strategy on climate change

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2.3g

**Please provide details of the other engagement activities that you undertake**

Climate change is a significant global challenge that must be met with collective action. We have spoken openly about the need for United States and world leaders to work with industry to develop comprehensive energy and climate policies that will help meet future energy demand and reduce greenhouse gas emissions.

Transparent and equitable carbon price signals should be given serious consideration as the domestic and global economies recover from the sustained recession.

Hess supports US federal climate change legislation that would reduce emissions in the US through a carbon tax on transportation fuels as a means to reduce consumption and create a fair and equitable market-based mechanism for reducing stationary source emissions.

Nuvera has partnered with the U.S. Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy to advance hydrogen fuel cell technology.

We publicly state our support for any reasonable approach to carbon regulations (mitigation and adaptation) as long as these are fair and equitable for all parties.

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### 2.3h

**What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?**

We recognize that our positions do not always align with all formal positions of the associations, organizations and collaborative working groups in which we participate. Our funding should not be considered a direct endorsement of the entire range of activities undertaken by these membership organizations. To address concerns related to potential misalignment, we publish our positions on key sustainability issues in our Corporate Sustainability Report.

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### 2.3i

Please explain why you do not engage with policy makers

## Page: 3. Targets and Initiatives

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### 3.1

**Did you have an emissions reduction target that was active (ongoing or reached completion) in the reporting year?**

Absolute and intensity targets

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### 3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions (metric tonnes CO2e)	Target year	Comment
AT1	Scope 1	18%	54%	2008	1833725	2013	Flare reduction projects in Algeria and Equatorial Guinea.
AT2	Scope 2	100%	10%	2012	800000	2012	For our operations, Hess targets to purchase at least 10 percent of annual net electricity from renewable sources. In 2012 we acquired 180,000 Green-e Energy certified RECs for wind power, equal to 180,000 megawatt hours or about 15 percent of our net purchased electricity.

3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions	Target year	Comment
IT1	Scope 1+2	100%	20%	metric tonnes CO2e per barrel of oil equivalent (BOE)	2008	44	2013	Hess has a net equity emissions intensity target that represents a 20% reduction from the 2008 base year.

3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
IT1	Decrease	16	No change	0	A 20% reduction in net equity emissions intensity would be equivalent to about an absolute CO2e decrease of about 1.6 to 1.7 million metric tonnes.

### 3.1d

Please provide details on your progress against this target made in the reporting year

ID	% complete (time)	% complete (emissions)	Comment
AT1	80%	100%	In 2012, we achieved a 61% combined reduction in flared gas volumes in Algeria and Equatorial Guinea from the 2008 base year. Our target is 50% flaring reduction by year end 2013.
AT2	100%	100%	In 2012, we purchased 180,000 Green-e Energy certified renewable energy certificates (RECs) for wind power, equivalent to 180,000 megawatt hours or about 15% of net purchased electricity used by our operations. This exceeded our annual target, which is 10% of net purchased electricity from renewable sources.
IT1	80%	0%	While we are on track in most areas, a significant transformation of Hess is underway. This impacts our ability to achieve our GHG emissions intensity reduction target (equity basis) of 20 percent below the 2008 baseline by the end of 2013. Through 2010 we reduced our equity basis GHG emissions intensity by 14 percent. However, we have subsequently exited petroleum refining with the closings of the HOVENSA joint venture refinery in January 2012 and the Port Reading refining facility in February 2013. In addition, we have announced the planned divestiture of our other downstream businesses. In 2009, we established a greenhouse gas (GHG) emissions intensity target (equity basis) of a 20 percent reduction against a 2008 baseline. The higher carbon intensity of exploration and production operations, combined with reduced production and throughput from asset sales and facility closures, mean that our normalized target is no longer achievable. However, since 2008 we have reduced absolute GHG emissions (equity basis) by 26 percent (2.8 million tonnes) through 2012.

### 3.1e

Please explain (i) why not; and (ii) forecast how your emissions will change over the next five years

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### 3.2

**Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?**

Yes

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### 3.2a

**Please provide details (see guidance)**

Hess Energy Solutions completed three fuel conversion projects for clients in 2012. We also contracted for 11 additional projects, which will convert for our clients 1,775,000 gallons of various grade fuel oil on an annual basis to cleaner burning natural gas.

Energy Solutions 2012 fuel conversion projects will save 1,945,000 gallons annually of various grade fuel oil (#2, #4, and #6) on an annual basis for 5 years (2013-2018). This equals a total savings of 106,887 metric tonnes of CO<sub>2</sub>e for our 2012 projects alone.

Methodology

The annual savings are calculated using the EPA's November 2011 Emission Factors for Greenhouse Gas Inventories for distillate fuel emission factors ((Distillate Fuel Oil No. 2: 10.21 kg CO<sub>2</sub> per gallon , 0.08 g N<sub>2</sub>O per gallon, 0.41 g CH<sub>4</sub> per gallon; Distillate Fuel Oil No. 4 10.96 kg CO<sub>2</sub> per gallon 0.09 g N<sub>2</sub>O per gallon 0.44 g CH<sub>4</sub> per gallon; Residual Fuel Oil No. 6 11.27 kg CO<sub>2</sub> per gallon 0.09 g N<sub>2</sub>O per gallon 0.45 g CH<sub>4</sub> per gallon) and Global warming potentials ( CH<sub>4</sub> 21, N<sub>2</sub>O 310) )

We are not considering originating CERs or ERUs.

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### 3.3

**Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and implementation phases)**

Yes

3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	
To be implemented*	4	127000
Implementation commenced*	3	2000000
Implemented*	6	28234
Not to be implemented	0	

3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
Low carbon energy installation	We have installed a four acre, 1.1-MW solar energy facility at our Woodbridge offices. Construction on the solar field commenced in late 2011 and was completed in early Spring 2012. 1,037-megawatt hours (MWh) of electricity were generated in 2012 after being commissioned in April. The field will generate approximately 1.8 million kilowatt hours of electricity annually. The solar field supplies approximately 22	800	400000	5600000	11-15 years

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
	percent of the building's electrical needs. The 3,472 single-axis panels have sun-tracking capability that allow up to 25 percent more sunlight capture than fixed panel systems. This voluntary project will reduce Scope 2 emissions and has an expected lifetime of 25 years. The investment figure reported for this project exclude investment tax credits.				
Process emissions reductions	We are committed to reducing our flaring through investing more than \$1 billion in oil and gas infrastructure between 2011 and 2013. This infrastructure includes oil and gas gathering lines, compression stations, and grouped production facilities. We are also in the process of more than doubling the capacity of our Tioga Gas Plant from 120 MMSCFD to 250 MMSCFD. This expansion and associated gathering infrastructure will increase our capacity to process the gas produced from our operations and other companies' operations, and will contribute to reductions in gas flaring. This project will save an estimated total of 2 million tonnes of CO2e between 2014-2017. The reduction will not be the same every year it will vary from year to year. This voluntary project will reduce our Scope 1 emissions.	500000	12500000	1200000000	>25 years
Fugitive emissions reduction	Hess has 50 vapor recovery units (VRU) in North Dakota to capture volatile organic compounds that would otherwise be vented into the atmosphere. Our North Dakota Production installed the vapor recovery units on crude oil tank batteries to reduce Volatile Organic Compounds (VOC) emissions. The project's lifetime will equal the lifetime of the batteries, which in turn are dependent on the life of the field, which can be 20-40 years. This Scope 1 project was originally implemented as a voluntary initiative. Starting in 2011 the project addresses regulatory requirements.	7434			
Fugitive emissions reduction	In 2012, as part of our participation in the EPA's Natural Gas Star program, two 1,500 horsepower electric motors were brought on-line at two of our compressor stations. Electric motors were used instead of natural gas engines thereby reducing methane leakage and improving operational efficiency, according to the EPA. Each motor costs approximately \$110,000. According to the EPA Gas Star program, the motors will continue to accrue emission reductions for 10 years, although the project lifetime is ongoing. The annual savings are based on an estimate of \$7/mcf with each motor saving approximately 3,165 mcf a year. The electric drives installed from 2010-2012 reduce nearly 60,000 mcf of methane annually.		44310	220000	
Low carbon energy	Hess purchases electricity for owned operations from renewable energy sources. In 2012 we acquired 180,000 Green-e Energy certified renewable certificates (RECs)	127000	0	153000	



Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Annual monetary savings (unit currency - as specified in Q0.4)	Investment required (unit currency - as specified in Q0.4)	Payback period
purchase	for wind power, equivalent to 180,000 megawatt hours or about 15 percent of our net purchased electricity. As a result, approximately 23 percent of our indirect energy use was from renewables. This is an ongoing voluntary initiative to reduce our Scope 2 emissions. There is no end date in the foreseeable future.				
Process emissions reductions	We continued flare reduction projects in Algeria and Equatorial Guinea. These projects are voluntary to reduce our Scope 1 emissions with no expected end date.	1500000	0	510000000	
Process emissions reductions	We installed a no-flare project in South Arne platform in Denmark. This project is voluntary to reduce our Scope 1 emissions with no expected end date.	20000		7000000	4-10 years
Other	Hess implemented a carbon sensitivity analysis for major new projects (e.g., USD 50 million or greater) beginning in 2012. In order to understand the potential associated costs and impact on financial returns and to help inform equipment selection we initiated a process to integrate carbon costs and potential emissions mitigation measures as sensitivities into project economics. There is no end date in the foreseeable future.				

### 3.3c

#### What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	EU and country, regional or state-specific regulations and/or carbon tax and cap and trade schemes.
Financial optimization calculations	Natural gas monetization opportunities in association with flaring reduction projects.
Internal price of carbon	Process developed in 2011 and implemented as a sensitivity analysis for major new projects (e.g., USD 50 million or greater)

Method	Comment
	beginning in 2012. The process can also be used for minor projects on a voluntary basis.
Internal finance mechanisms	Projects which result in cost-effectively reducing emissions while meeting oil and gas production or refinery optimization goals or non-production related goals such as upgrading or renovating headquarters office buildings to LEED standards or for Hess Energy Marketing business development purposes (e.g., renewable energy installation projects).
Lower return on investment (ROI) specification	Hess Gas plant and pipeline installations to reduce flaring of associated natural gas.

3.3d

If you do not have any emissions reduction initiatives, please explain why not

#### Page: 4. Communication

4.1

Have you published information about your company's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s)

Publication	Page/Section reference	Attach the document
In mainstream financial reports (complete)	Page 12/Corporate and Social Responsibility	<a href="https://www.cdproject.net/sites/2013/74/8274/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/Hess_Annual%20Report_2012.pdf">https://www.cdproject.net/sites/2013/74/8274/Investor CDP 2013/Shared Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/Hess_Annual Report_2012.pdf</a>
In voluntary communications (complete)	Page 44-51/ Climate Change and Energy	<a href="https://www.cdproject.net/sites/2013/74/8274/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/CSR2013.pdf">https://www.cdproject.net/sites/2013/74/8274/Investor CDP 2013/Shared Documents/Attachments/Investor-4.1-C3-IdentifyAttachment/CSR2013.pdf</a>

**Module: Risks and Opportunities [Investor]**

**Page: 5. Climate Change Risks**

**5.1**

**Have you identified any climate change risks (current or future) that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply**

- Risks driven by changes in regulation
- Risks driven by changes in physical climate parameters
- Risks driven by changes in other climate-related developments

**5.1a**

**Please describe your risks driven by changes in regulation**

ID	Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
RR1	Cap and trade schemes	We recognize that climate change is a global environmental concern. Continuing political and social attention to the issue of climate change has resulted in both existing and pending international agreements and national, regional or local legislation and regulatory measures to limit greenhouse gas emissions. These agreements and measures may require significant equipment modifications, operational changes, taxes, or purchase of emission credits to reduce emission of greenhouse gases from our operations, which may result in substantial capital expenditures and compliance, operating, maintenance and remediation costs. In addition, we market petroleum fuels, which through normal customer use result in the emission of greenhouse gases. Regulatory initiatives to	Increased operational cost	6-10 years	Direct	Likely	Low

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		<p>reduce the use of these fuels may reduce our sales of and revenues from, these products. Cap and trade schemes are anticipated to increase our operating costs and capital costs, as well as potentially reduce demand for our goods and services. Australia's proposed cap-and-trade system passed last November could regulate emissions from potential future development and production of Hess' natural gas discoveries in Australia (Block WA 390-P). For any potential Australian operations, this could result in increased operational costs, purchasing allowances, and increased capital costs (i.e. installation of pollution control equipment). It is also possible that a cap and trade scheme could reduce demand for Hess' goods, such as petroleum fuels, and services, but the magnitude would be low. Though the near-term prospects for comprehensive climate change legislation in the US diminished since 2010, the risk remains that Congress could pass such legislation in the medium or longer term. Hess anticipates that passage of such legislation would increase operating and capital costs and may lead to reduced demand for our oil, gas, and refined products. Due to the gradual phase-in of U.S. regulations and our geographic distribution of assets, we do not anticipate a significant financial impact from carbon regulations during the next 5 years.</p>					
RR2	Carbon taxes	<p>Carbon taxes could increase our operating costs as well as capital costs and potentially reduce demand for goods and services. Currently, Hess pays CO2 taxes on an equity share basis for our offshore interests in Norway. The EU has proposed CO2 and consumption taxes on heating and transportation fuels in sectors not covered by the EU ETS. We do not produce or market refined products in Europe, but reduced demand for heating and transport fuel could result in reduced demand for crude oil sold by Hess. This is very likely to reduce demand for Hess' goods/services over the next 1-5 years but the magnitude of impact will be low. Hess has made a number of significant natural gas discoveries in</p>	Increased operational cost	6-10 years	Direct	Likely	Low

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		Australia. Potential future development and production of these discoveries would likely result in emissions regulated under Australia's proposed climate change legislation beginning in 2012. According to the new legislation, in July 2012 Australia will begin charging some companies A\$23 (\$23.80) a ton for their emissions. This could potentially increase operational costs and capital costs for our Australian operations in the future.					
RR3	Emission reporting obligations	Hess' US Exploration and Production (E&P) operations are subject to the EPA's Mandatory Reporting Rule (MRR). The reporting rule requires that petroleum and natural gas facilities with 25,000 metric tons or greater of carbon dioxide equivalent emissions per year to report on GHG emissions. This reporting obligation could drive an increase in capital costs (installation of monitoring instrumentation) and operational costs for our significant upstream operations in the U.S. Hess operates a number of fields and plants in North Dakota and West Texas including the Tioga Gas Plant, the Seminole San Andres Field In the West Texas Permian Basin and the Seminole Gas Processing Plant. In January 2013, Hess announced its decision to cease refining operations at its Port Reading facility in February and pursue the sale of its terminal network. Therefore, our Port Reading refining operations will be subject to the MRR only in 2013.	Increased operational cost	Current	Direct	Virtually certain	Low
RR4	Fuel/energy taxes and regulations	Hess provides oil, natural gas, and electricity to more than 21,000 commercial and industrial customers in the Eastern United States. We market #6 and #4 heating oil fuels to commercial customers in New York City. PlaNYC 2030, an initiative under Mayor Bloomberg to address climate change and the city's increasing population, requires a phase-out of #6 and #4 heating oil in New York City (NYC) by 2015 and 2030, respectively. This phase out is likely to reduce demand and could increase Hess operational costs. While we expect reduced revenues in the future from #4 and #6 heating oil sales, this will be partially offset by increased sales of #2 heating oil, ultra-low sulfur diesel, bio-diesel	Reduced demand for goods/services	6-10 years	Direct	Likely	Medium

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		blends, and natural gas.					
RR5	General environmental regulations, including planning	Concerns have been raised in certain jurisdictions where we have operations concerning the safety and environmental impact of the drilling and development of unconventional oil and gas resources, particularly hydraulic fracturing, water usage, flaring of associated natural gas and air emissions. While we believe that these operations can be conducted safely and with minimal impact on the environment, regulatory bodies are responding to these concerns and may impose moratoriums and new regulations on such drilling operations that would likely have the effect of prohibiting or delaying such operations and increasing their cost. For example, a moratorium prohibiting hydraulic fracturing is currently impacting the Corporation's operations in France. The California Air Resources Board (ARB) Alternative Fuels Branch is working on a rule that would develop a measure to reduce methane emissions and other greenhouse gases from oil and gas operations, including hydraulic fracturing. The agency plans to develop a proposed rule sometime in 2014.	Increased capital cost	Current	Direct	Likely	Low

**5.1b**

**Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk and (iii) the costs associated with these actions**

RR1 (i): Cap and trade schemes can increase Hess' operating costs, as well as reduce demand for our goods and services. Passage of a US cap and trade scheme would increase domestic operating and capital costs and lead to reduced demand for petroleum products.

Under Australia's proposed cap-and-trade system starting in 2012, future development and production of Hess' Australian natural gas discoveries could result in regulated emissions resulting in increased operational costs, purchasing allowances, and increased costs for equipment.

RR2 (i): Proposed and implemented carbon taxes can increase our operating and capital costs and potentially reduce demand for goods and services. In 2012, Hess paid approximately \$4.5 million in CO2 taxes and EU ETS allowances for our equity share in non-operated offshore assets in Norway. The EU has proposed CO2 and consumption taxes on heating and transportation fuels in sectors not covered by the ETS. Though we do not produce or market refined products in Europe, reduced demand for heating and transport fuel would reduce demand for petroleum products in the EU.

RR3 (i): Hess' E&P must comply with the EPA's Mandatory Reporting Rule. Failure to comply with the requirements can result in fines of \$32,500 a day.

RR4 (i): The phasing out of #6 and #4 heating oil in New York City by PlaNYC 2030 can reduce demand for fuels marketed by Hess to residential and commercial customers.

RR5 (i): Concerns have been raised in certain jurisdictions where we have operations concerning the safety and environmental impact of the drilling and development of unconventional oil and gas resources, particularly hydraulic fracturing, water usage, flaring of associated natural gas and air emissions. While we believe that these operations can be conducted safely and with minimal impact on the environment, regulatory bodies are responding to these concerns and may impose moratoriums and new regulations on such drilling operations that would likely have the effect of prohibiting or delaying such operations and increasing their cost.

RR 1&2 (ii) methods used to manage risks:  
Hess monitors and analyzes domestic policy developments.

We proactively reduce emissions, including in countries where GHG emissions are currently unregulated. We implemented a \$500 million gas compression and reinjection project in Algeria that resulted in a 94% reduction in flared gas. We also implemented a \$2 million gas reinjection project in Equatorial Guinea.

We were able to reduce EU ETS costs from \$12.7 million in 2010 to \$4 million in 2012 because of a shutdown of certain facilities at our Valhall asset. The turbines used for driving the compressors and power generation have been replaced with new equipment using electric power from the shore produced from renewable energy (hydro-power).

We are doubling the capacity of our Tioga Gas Plant from 120 MMSCFD to 250 MMSCFD. This expansion and associated gathering infrastructure will, increase our ability to process the gas produced from our operations and will contribute to reductions in gas flaring. We continued to integrate energy considerations into the review process for major new projects. During the year, educational workshops were held at all locations involved in project planning. Led by a cross-functional team of internal and third party energy experts, the workshops educated project design teams on new tools to assess energy efficiency, the cost of carbon, and flare minimization for proposed major projects.

Hess is working to reduce potential CO2 tax obligations through emissions reduction projects. Our Norwegian North Sea Valhall Field implemented a project to provide land-based hydropower electricity and eliminate the use of gas turbines for offshore power generation, resulting in annual GHG reductions of ~300,000 tonnes of CO2. We also installed a no-flare project at the South Arne platform in Denmark replacing all flaring equipment to reduce potential CO2 taxes.

Hess E&P undertook a carbon lifecycle assessment for major offshore projects coming on stream after 2017, which identified carbon hotspots. This information is integrated into our decisions on equipment selection.

RR3 (ii) methods used to manage risks: To comply with the new rule, our Port Reading refining operations: 1) contracted consultants to prepare monitoring plans, gather input data, and perform required calculations and 2) are installing continuous emissions monitoring systems (CEMS).

RR4 (ii) methods used to manage risks: We identified new business opportunities to help customers comply with PlaNYC 2030 air quality and energy initiatives, including energy efficiency and savings projects and conversion of legacy oil services to natural gas coupled with long-term commodity contracts.

RR5 (ii): We recognize stakeholders' concerns about the impact shale energy operations have on safety, the environment, and public health. We publicly report on our shale energy operations and the efforts we take to manage the inherent risks associated with the business. We identify and address stakeholder social concerns that may risk our license to operate. Risk assessments of our shale energy operations in North Dakota led to plans to manage stakeholder expectations and concerns. We formed an Above Ground Risk Steering Team in 2012 to identify potential non-technical risks related to shale energy operations, including those driven by social and environmental factors. The team develops key risk mitigation strategies and addresses issues related to our license to operate. The team has taken the lead in developing guidelines that define expected operating practices to manage key above ground risks. We expect these operating practices will be finalized and implemented in 2013.

RR1&2 (iii): The Algerian gas compression and reinjection project cost \$500 million. The gas reinjection project in Equatorial Guinea cost \$2 million. There are no significant costs to the sensitivity analysis. We are investing more than \$1 billion in gas infrastructure between 2011 and 2013 to reducing our flaring.

RR3 (iii): The estimated compliance cost across our Reading and HOVENSA facilities is \$3.1 million. Since HOVENSA will be converted into an oil terminal and the Port Reading refinery has been closed, we expect actual costs to be reduced. There are no significant costs for reporting across other facilities.

RR4 & RR5 (iii): There are \$0 costs to addressing these risks. These activities would be conducted regardless of this risk.

**5.1c**

**Please describe your risks that are driven by change in physical climate parameters**

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
PR1	Change in mean (average) temperature	PR1.1 Description: The most substantial business decisions made during the reporting year that have been influenced by the climate change driven aspects of the strategy (e.g. investment, location, procurement, M&A, R&D). Both the business decision and the aspect of climate change that has influenced the business decision must be made clear in the answer. If there are none to report, this should be stated. Events like these have a significant impact on our workforce, can lead to reduced productivity as a result of site inaccessibility, and can lead to other higher costs related to delays in our drilling programs.	Increased operational cost	1-5 years	Direct	Likely	Low



ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
PR2	Tropical cyclones (hurricanes and typhoons)	<p>To the extent that climate change may result in more extreme weather related events, we could experience increased costs related to prevention, maintenance, and remediation of affected operations in addition to costs and lost revenues related to delays and shutdowns. Catastrophic events, such as include hurricanes and severe weather, may materially affect our operations and financial conditions. Our oil and gas operations are subject to unforeseen occurrences which have affected us from time to time and which may damage or destroy assets, interrupt operations and have other significant adverse effects. During 2012, we incurred charges for repairs and other expenses relating to the effects of Hurricane Sandy, which hit the Northeast Coast of the United States. Although we maintain insurance coverage against property and casualty losses, there can be no assurance that such insurance will adequately protect the Corporation against liability from all potential consequences and damages. Moreover, some forms of insurance may be unavailable in the future or be available only on terms that are deemed economically unacceptable. The storm and ensuing damage had a tremendous impact on our customers, our employees and our day-to-day business, especially affecting our Marketing and Retail customers in and around the New York metropolitan area. Despite unprecedented challenges, Hess was able to continue providing products and services to our customers. We were prepared, customer focused, committed to operating safely and remained dedicated to our corporate values through it all. Facilities downtime associated with Hurricanes Gustav and Ike in the Gulf of Mexico had the effect of reducing our third quarter 2008 production by an average of 11,000 barrels of oil equivalent per day. In the deepwater Gulf of Mexico, delays from the hurricanes in bringing back the operations of third party transportation infrastructure curtailed full resumption of our production. An increase in the number and severity of extreme weather events due to</p>	Reduction/disruption in production capacity	Unknown	Direct	Virtually certain	Low-medium

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		climate change could result in damage to Hess' assets located in coastal zones, offshore, or in inland areas vulnerable to tornados or flooding.					
PR3	Change in mean (average) precipitation	An increase in average temperature could result in decreased heating demand in northern climates. Hess provides oil, natural gas, and electricity to more than 21,000 commercial and industrial customers in the Eastern United States. Our customer-focused strategy is built around providing 'one-stop shopping' for all three major energy commodities with reliable supply plus flexibility to adjust to today's fast moving energy markets. Because our market for heating energy is located primarily in New York City and the northeastern US, climate change-induced temperature increases could result in reduced wintertime demand for energy such as heating oil and natural gas in the northeastern US. However, increased electricity demand for summertime air conditioning may offset the reduced heating demands.	Reduced demand for goods/services	Unknown	Direct	Unknown	Low

**5.1d**

**Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; and (iii) the costs associated with these actions**

PR1 (i): Aggregate plant, property, and equipment damages from Superstorm Sandy to the Port Reading refining facility and the Hess terminal network and retail sites were approximately \$20 million. We could expect to see similar damages from future storms.

PR2 (i): An increase in the number and severity of extreme weather events due to climate change could result in damage to Hess assets located in coastal zones, offshore, or in inland areas vulnerable to tornados or flooding. The Property, Plant, and Equipment (PPE) values of assets in areas prone to hurricanes or other extreme weather events is about \$8 billion. Severe weather events can also cause disruptions in exploration, and production, operations, which can lead to reduced revenue. To date, Hess has not realized any material costs from asset damage or production disruption due to extreme weather events. In 2008, the costs related to Hurricanes Gustav and Ike were limited to \$9 million after income taxes, and production was reduced by an estimated 7,000 boepd. Impacts related to disruptions in the supply chain are reflected in these costs. In 2008, hurricane activity shut down operations in the Gulf and reduced Hess' third-quarter exploration and

production earnings by around \$25 million. However, an increase in the number and severity of extreme weather events due to climate change could magnify the potential for asset damage and business interruption.

PR3 (i): Because our market for heating energy is located primarily in New York City and the northeastern US, climate change-induced temperature increases could result in reduced wintertime demand for energy such as heating oil and natural gas in the northeastern US. Hess provides oil, natural gas, and electricity to more than 21,000 commercial and industrial customers in the Eastern United States.

PR1 & PR2 (ii) methods used to manage risks:

In the last decade, experience from serious weather events in Texas, Florida, North Dakota, the U.S. Northeast and Asia has taught us the importance of early planning. We routinely prepare, test and follow detailed procedures when faced with an emergency weather event.

Hess business leaders have reviewed our performance during Superstorm Sandy to continue to improve our response and resilience in future situations. Recent changes in the global climate suggest that we must always be prepared for extreme weather events. Planning and preparation were essential to our quick recovery immediately after a storm. We intend to be even more proactive during future events by mobilizing Hess employees and contractors from outside the affected region even sooner. The value of having communication and logistical support that is based outside the affected area and improving remote access for key personnel within the impacted area were among the important lessons we learned.

As it was approaching, we tracked the superstorm closely and ensured that our retail locations, terminals and Port Reading (N.J.), a refining facility, followed pre-hurricane preparation checklists to safeguard employees and customers and secure equipment.

Early on, we arranged for and deployed 110 emergency generators from all over the country to power our operational areas that were in the storm's path. Most generators were deployed to retail gas stations but some were used at our terminals to ensure a continuity of supply. We brought in additional personnel and equipment before the storm hit, including Hess employees and contractors to provide onsite support.

We worked with our energy marketing, industrial, commercial and government customers in advance of the storm to provide them with ample fuel inventories. Our marketing staff handled a steady flow of calls from commercial, industrial and government clients needing diesel fuel to run their generators.

As the stations reopened, we posted real-time inventory data on HessExpress.com, and encouraged motorists to visit stations with fuel inventories exceeding 7,000 gallons. We publicized this information to minimize customer frustration associated with shortages. Our Facebook and Twitter pages kept customers informed about our fuel supplies.

Our people relied on teamwork and collaboration to maintain employee and customer safety and business continuity throughout this crisis. The company established several ways to communicate with employees about safety issues and the status of Hess facilities. A 24-hour hotline was established for employees. We set up a website to track the crisis as it developed, monitoring the locations of generators and personnel and recording the timeline of events around the region. Through this system we also sent out text message alerts, which were sometimes the most efficient means for getting news to employees. Our Houston office played an important role by assisting with procurement and communications during the days after the storm.

PR3 (ii) methods used to manage risks: To manage the potential risk of reduced demand for heating oil and natural gas in northeastern U.S., Hess downstream operations have begun several initiatives to diversify our portfolio into electricity. We have over 1,600 MW of managed electricity through power purchase agreements and a 50% interest in the Bayonne Energy Center a 512-megawatt natural gas fueled electric generating station built to sell electricity into the New York City market by a direct connection with the Con Edison Gowanus substation.

PR1 & PR2 (iii) the costs associated with these actions: Costs to manage these potential risks include: 1) Minimal cost implications (e.g., staff time, maintenance of backup diesel generators) Hess' severe weather preparation, response and recovery plans, and practices. 2) Internal staff time and software costs, which are very minor (under \$5,000) 3) If Hess decides to build more robust metocean structural standards for offshore platforms it will cost approximately \$100 million.

PR3: (iii) the costs associated with these actions: Hess has a 50% interest in the \$420 million joint venture electricity power plant, the Bayonne Energy Center.

5.1e

Please describe your risks that are driven by changes in other climate-related developments

ID	Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
OR1	Changing consumer behaviour	Concerns about climate change may result in reduced demand for our products. Increasing consumer preference for renewable and alternative energy and fuels and improved energy efficiency could result in reduced demand for refined petroleum products. Increased public awareness of and interest in climate change issues, energy efficiency and conservation, and renewable energy could result in lower reduced demand for refined petroleum products in Hess Marketing and Refining's core retail and energy marketing areas in the Northeast, Mid-Atlantic and Southeastern U.S. Hess Energy Marketing is the largest provider of electricity, natural gas, and fuel oil to about 21,000 commercial and industrial customers in its 18-state East Coast market area, as well as to utilities and other wholesale customers. Our retail gasoline and energy marketing activities generated earnings of \$209 million in 2012, \$185 million in 2011, and \$215 million in 2010. Excluding items affecting comparability of earnings between periods, Marketing earnings were \$138 million in 2012, \$185 million in 2011 and \$215 million in 2010. The decrease in earnings over the period from 2010 to 2012 was primarily due to lower margins and lower refined product sales volumes.	Reduced demand for goods/services	1-5 years	Direct	More likely than not	Low

5.1f

Please describe (i) the potential financial implications of the risk before taking action; (ii) the methods you are using to manage this risk; (iii) the costs associated with these actions

OR.1.1 (i) the potential financial implications of the risk before taking action: Increased public awareness of and interest in climate change issues, energy efficiency and conservation, and renewable energy will likely result in lower demand for refined petroleum products in Hess Marketing and Refining's core retail and energy marketing areas in the Northeast, Mid-Atlantic and Southeastern U.S.

Our retail gasoline and energy marketing activities generated earnings of \$209 million in 2012, \$185 million in 2011, and \$215 million in 2010. Excluding items affecting comparability of earnings between periods, Marketing earnings were \$138 million in 2012, \$185 million in 2011, and \$215 million in 2010. The decrease in earnings over the period from 2010 to 2012 (\$36 million total over 2 years) was primarily due to lower margins and lower refined product sales volumes. We could expect to see similar decreases in the future if public interest in climate change significantly decreases demand for refined petroleum products.

OR.1.1 (ii) methods used to manage risks: To manage this risk, Hess 1) monitors trends in consumer and customer preferences and responds to market demands that relate to our core competencies, 2) invested in Nuvera Fuel Cells to capitalize on any opportunities in fuel cell technology, and 3) provides top quartile sustainability reporting to inform and communicate with our stakeholders.

Hess Energy Marketing offers products and services to help customers become more energy efficient and reduce their carbon emissions. Since 2008, Hess has offered customers a suite of products and services, including carbon offsets, Demand Response, and Renewable Energy Certificates (RECs) to help customers become more energy efficient and reduce their carbon emissions. In 2012, Energy Marketing retired 61,355 offsets and 698,938 Green-E Energy certified RECs for our customers. These RECs were purchased in 2011 and then retired in June 2012.

Between 2011 and 2012, Hess increased natural gas sales by 4.5% and electricity sales by 2.3%.

Hess Energy Solutions provides energy services to help clients reduce energy use and costs through integrated commodity contracts. Depending on the customer's needs, these contracts incorporate energy efficiency, renewable energy, and fuel conversion services. Energy management and efficiency services include Demand Response, retrofit assessments, comprehensive energy audits, energy benchmarking and energy reduction plans that help customers meet their voluntary energy goals or comply with local regulations.

Hess has invested in Nuvera Fuel Cells to capitalize on opportunities in fuel cell technology. Fuel cells and hydrogen energy systems are increasingly recognized for their potential to enable clean and efficient use of domestic energy sources for transportation, stationary and other power applications. Nuvera focuses on applied research and development (R&D) and commercialization of key hydrogen energy technologies for automotive and industrial applications. Technologies include hydrogen fuel cells for electric vehicles and hydrogen generation and fueling systems.

Hess has a 50% interest in the \$420 million joint venture electricity power plant, the Bayonne Energy Center, a 512-megawatt state-of-the-industry natural-gas fired electricity generating plant that connects to the New York Independent System Operator's Zone J (NYC) electric market, the most concentrated load pocket in the U.S., lowering the Zone J heat rate and providing Hess with an additional revenue stream.

OR.1.1 (iii): Hess has a 50% interest in the \$420 million Bayonne Energy Center. Investment in Nuvera Fuel Cells has been \$100-200 million.

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## 5.1g

Please explain why you do not consider your company to be exposed to risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

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5.1h

Please explain why you do not consider your company to be exposed to risks driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

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5.1i

Please explain why you do not consider your company to be exposed to risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

**Page: 6. Climate Change Opportunities**

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6.1

**Have you identified any climate change opportunities (current or future) that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply**

- Opportunities driven by changes in regulation
- Opportunities driven by changes in physical climate parameters
- Opportunities driven by changes in other climate-related developments

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6.1a

**Please describe your opportunities that are driven by changes in regulation**

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
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ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
RO1	Fuel/energy taxes and regulations	<p>The most substantial business decisions made during the reporting year that have been influenced by the climate change driven aspects of the strategy (e.g. investment, location, procurement, M&amp;A, R&amp;D). Both the business decision and the aspect of climate change that has influenced the business decision must be made clear in the answer. If there are none to report, this should be stated. Natural gas is marketed by Hess Energy Marketing on a spot basis and under contracts for varying periods of time to local distribution companies, and commercial, industrial and other purchasers. These natural gas marketing activities are primarily conducted in the eastern portion of the United States, where the principal source of supply is purchased natural gas, not the Corporation's production from the E&amp;P segment. As the leading natural gas marketer in the Eastern United States, Hess Energy Marketing offers a variety of natural gas products and a suite of products and services to help customers become more energy efficient and reduce their carbon emissions, including carbon offsets, Demand Response, and Renewable Energy Certificates (RECs). Legislation instituting more stringent air emissions requirements and lower carbon fuels could increase demand for Hess' Energy Solutions offerings, such as energy audits and fuel conversions. Regulation of domestic CO2 emissions under the Clean Air Act may drive industrial clients to switch fuels from coal or oil to natural gas, which in turn could increase demand for our natural gas products. Hess assesses the opportunities for increased demand for new products/business services over the next 1-10 years to be likely with medium to high impact. In March of 2013, Hess announced our intention to exit the energy marketing business. Until that process is complete, the opportunities above can potentially benefit Hess. However, this impending</p>	Increased demand for existing products/services	1-5 years	Direct	Virtually certain	Low-medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		change in our portfolio decreases the potential for significant opportunities and has been accounted for in the 'Likelihood' column.					
RO2	General environmental regulations, including planning	Regulation of domestic CO2 emissions under the Clean Air Act may drive industrial clients to switch fuels from coal or oil to natural gas, which in turn could increase demand for our natural gas products. As the leading natural gas marketer in the Eastern United States, Hess offers a variety of natural gas products. Increased demand for energy management services could lead to an increase of sales and revenue for Hess Energy Marketing. Legislation or regulation that can drive green building standards or increase the green building market are likely to drive an increased interest in energy management services in our consumer base. For example, about 20,000 buildings will need annual energy benchmarking results to New York City as part of PlaNYC. Of those, Hess has identified a number of commercial and industrial buildings to approach. Hess' Energy Marketing products and services help customers become more energy efficient and reduce their carbon emissions, including carbon offsets, Demand Response, and Renewable Energy Certificates (RECs). In March of 2013, Hess announced our intention to exit the energy marketing business. Until that process is complete, the opportunities above can potentially benefit Hess. However, this impending change in our portfolio decreases the potential for significant opportunities and has been accounted for in the 'Likelihood' column.	Increased demand for existing products/services	1-5 years	Direct	Virtually certain	Medium
RO3	Product efficiency regulations and standards	Regulation of CO2 under the Clean Air Act, existing clean energy and efficiency legislation, and low carbon fuel standards may increase demand for natural gas, for either vehicle use, power generation, heating or other uses. This increase in demand can increase the natural gas sales,	Increased demand for existing products/services	Current	Direct	More likely than not	Low



ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
		<p>volume, and revenue for Hess' business groups. Natural gas is marketed by the M&amp;R segment on a spot basis and under contracts for varying periods of time to local distribution companies, and commercial, industrial and other purchasers. These natural gas marketing activities are primarily conducted in the eastern portion of the United States, where the principal source of supply is purchased natural gas, not the Corporation's production from the E&amp;P segment. Hess Energy Marketing provides oil, natural gas, and electricity to more than 21,000 commercial and industrial customers in the Eastern United States. In April of 2011, New City instituted regulations that will phase out the use of two heating oils, Number 6 oil and Number 4 oil. Under PlaNYC 2030, approximately 10,000 buildings in New York City will need to phase out these fuel oils. The fuels can be replaced by #2 fuel oil and equivalent renewable fuel blends, or the boilers can be converted to burn natural gas. Hess Energy Solutions provides conversion of heating systems from oil to natural gas, bundled with long-term natural gas supply contracts. Demand for these products may increase under any clean energy and efficiency legislation. In March of 2013, Hess announced our intention to exit the energy marketing business. Until that process is complete, the opportunities above can potentially benefit Hess. However, this impending change in our portfolio decreases the potential for significant opportunities and has been accounted for in the 'Likelihood' column.</p>					

**6.1b**

**Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity and (iii) the costs associated with these actions**

RO1 (i): Legislative and regulatory initiatives to reduce demand for refined petroleum fuels for transportation, power generation, and heating may result in Hess Energy Marketing increasing its sales of natural gas, electricity, and energy management services. In addition, Hess could generate \$10-\$15 million in renewable credit sales in the near future.

RO2 (i): Hess Energy Marketing provides oil, natural gas, and electricity to more than 21,000 commercial and industrial customers in the Eastern United States. Increased demand for energy management services could lead to an increase of sales and revenue for Hess Energy Marketing. Green building standards are likely to drive an increased interest in energy management services in our consumer base. For example, about 20,000 buildings will need annual energy benchmarking results to New York City as part of PlaNYC. Of those, Hess has identified a number of commercial and industrial buildings to approach. In New York City, recent clean air legislation mandates the phase-out of heavy heating oils, which will impact over 10,000 buildings. Hess Energy Solutions provides comprehensive fuel conversion services integrated with commodity contracts.

RO3 (i): Existing or future clean energy and efficiency legislation may stimulate demand for natural gas, for either vehicle use, power generation, heating or other uses. To the extent that regulation of CO2 under the Clean Air Act, existing or future clean energy and efficiency legislation (such as PlaNYC 2030), or low carbon fuel standards stimulate demand for natural gas, either for vehicle use, power generation, heating or other uses, Hess may realize increases in natural gas sales volume and revenue.

RO1 (ii) methods used to manage risks: Hess Energy Marketing offers products and services to help customers become more energy efficient and reduce their carbon emissions. Since 2008, Hess has offered customers a suite of products and services, including carbon offsets, Demand Response, and Renewable Energy Certificates (RECs) to help customers become more energy efficient and reduce their carbon emissions. In 2012, Energy Marketing purchased and retired almost 700,000 Green-E Energy certified RECs for our customers. Our REC sales have helped our customers join the U.S. EPA's Green Power Partnership (GPP), which highlights the annual green power purchases of leading organizations in the U.S. across different sectors. In late 2010, Energy Marketing formed Hess Energy Solutions to capture new product and service opportunities arising from more favorable pricing of natural gas relative to fuel oil, new regulations and changing customer preferences. Hess Energy Solutions is continuing to build lasting relationships with customers by providing energy services and helping them reduce their energy use and costs through integrated commodity contracts. Depending on the needs of the customer, these contracts incorporate energy efficiency, renewable energy, and fuel conversion services, including funding where appropriate. In addition to energy services, we are conducting comprehensive energy audits in accordance with ASHRAE Level 2 standards, retrofit assessments, and energy benchmarking. We can then provide customers with an energy reduction plan that can help them to achieve LEED or EnergyStar certification and comply with applicable local requirements. We can also conduct engineering studies for customer related energy efficiency capital projects such as combined heat and power. To help eligible buildings in NYC comply with clean air regulations and benefit from the long-term economic advantages of natural gas, Hess Energy Solutions, Chase and New York City Energy Efficiency Corporation (NYCEEC), an independent non-profit financial corporation established by New York City, are collaborating to facilitate conversion from heavy oil to natural gas. Hess will use its project management and natural gas supply expertise to complete the fuel conversion project and supply natural gas, with financing support from Chase and credit support from NYCEEC for the fuel conversion costs, so there will be no upfront costs to the building for the fuel conversion project.

RO2 & RO3 (ii) methods used to manage risks: Hess Energy Marketing offers products and services to help customers become more energy efficient and reduce their carbon emissions. Since 2008, Hess has offered customers a suite of products and services, including carbon offsets, and Renewable Energy Certificates (RECs) to help customers become more energy efficient and reduce their carbon emissions. In late 2010 Energy Marketing formed Hess Energy Solutions to capture new product and service opportunities arising from more favorable pricing of natural gas relative to fuel oil, new regulations and changing customer preferences.

Hess Energy Solutions continues to build lasting relationships with customers by providing energy services and helping them reduce their energy use and costs through integrated commodity contracts. Depending on the needs of the customer, these contracts incorporate energy efficiency, renewable energy, and fuel conversion services, including funding where appropriate.

In addition to energy services, we conduct comprehensive energy audits in accordance with ASHRAE Level 2 standards, retrofit assessments, and energy benchmarking. We can then provide customers with an energy reduction plan that can help them to achieve LEED or EnergyStar certification and comply with applicable local requirements. We can also conduct engineering studies for customer related energy efficiency capital projects such as combined heat and power.

Hess Energy Solutions provides conversion of heating systems from oil to natural gas integrated with long-term natural gas supply contracts. Demand for these products could increase under any clean energy and efficiency legislation. For oil to natural gas boiler conversions, Hess will provide integrated commodity agreements that include up-front funding, free energy reduction plan and 3-5 year fixed price natural gas contracts with payback factored into pricing. Hess will also identify applicable federal, state and local incentives. For customers that want to keep existing boilers, Hess can help them switch from #4 & #6 fuel oil to #2 fuel oil. Hess can also provide #2 fuel oil and biodiesel blends.

To help eligible buildings in NYC comply with clean air regulations and benefit from the long-term economic advantages of natural gas, Hess Energy Solutions, Chase and New York City Energy Efficiency Corporation (NYCEEC), an independent non-profit financial corporation established by New York City, are collaborating to facilitate conversion from heavy oil to natural gas. Hess will use its project management and natural gas supply expertise to complete the fuel conversion project and supply natural gas, with financing support from Chase and credit support from NYCEEC for the fuel conversion costs, so there will be no upfront costs to the building for the fuel conversion project.

RO1, 2 & 3 (iii): There are \$0 costs to addressing these particular opportunities; without them Hess Energy Marketing Group would continue to operate.

**6.1c**

**Please describe the opportunities that are driven by changes in physical climate parameters**

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
PO1	Change in mean (average) temperature	Volatility in the price and demand for energy from increased or decreased temperatures can offer opportunities for our Energy Marketing team. For example, volatility encourages customers to sign long-term contracts. Hotter summers over the next 5 years can help our company depending on the natural gas pricing and supply conditions. In its energy marketing activities, the Corporation sells refined petroleum products, natural gas, and electricity principally to commercial and industrial businesses at fixed and floating prices for varying periods	Increased demand for existing products/services	1-5 years	Direct	About as likely as not	Low-medium

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		of time. Commodity contracts such as futures, forwards, swaps and options together with physical assets, such as storage, are used to obtain supply and reduce margin volatility or lower costs related to sales contracts with customers. In March of 2013, Hess announced our intention to exit the energy marketing business. Until that process is complete, the opportunities above can potentially benefit Hess. However, this impending change in our portfolio decreases the potential for significant opportunities and has been accounted for in the 'Likelihood' column.					

**6.1d**

**Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity and (iii) the costs associated with these actions**

PO1.1 (i):

Hess Energy Marketing is a leading energy supplier of natural gas, electricity, and fuel oil to 21,000 commercial, industrial and small business customers in 22 U.S. states and the District of Columbia.

Volatility in the price and demand for energy driven by increased or decreased temperatures can offer opportunities for our Energy Marketing team. For example, volatility can encourage customers to sign long-term contracts while creating opportunities to increase profits. We had 278 millions of megawatt hours in outstanding electricity contracts at the end of December 31, 2012.

PO1.1 (ii) methods used to manage risks: Hess is undertaking a number of initiatives to meet the potential increase in demand. We invested in the Bayonne Energy Center, a joint venture established to build and operate a 512-megawatt natural gas fueled electric generating station in Bayonne, New Jersey, which provides power to New York City. The joint venture plans to sell electricity into the New York City market by a direct connection with the Con Edison Gowanus substation. In 2012, Bayonne Energy Center completed its first full quarter of operation and generated a profit in line with plan.

During 2012, the Corporation also formed a joint venture (Hess 50%) to build a 655-megawatt natural gas fueled electric generating facility in Newark, New Jersey. NEC, a 655-megawatt gas-fired power plant, will be constructed on a brownfields site next to our Newark terminal. This facility will use wastewater from the Passaic Valley Sewage Commission, eliminating the need to use fresh water. The NEC's electricity output, enough to power 700,000 homes, will be delivered to the regional grid. By producing energy from natural gas and using advanced emissions control technology and efficient turbines, the NEC will operate as one of the cleanest plants of its kind in the United States. It will ultimately reduce the region's reliance on older, less efficient power generation plants with higher emissions of air pollutants.

PO1.1 (iii): Costs associated with these actions: The joint venture Bayonne Energy Center cost \$420 million to construct (Hess's equity share is 50%). The proposed Newark Energy Center electric generation capacity is designed to be 655-megawatt. According to US government data, overnight capital costs per kilowatt are about \$1,000.

6.1e

Please describe the opportunities that are driven by changes in other climate-related developments

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact
OO1	Changing consumer behaviour	Changing industry/commercial behavior towards a focus on energy efficiency and conservation provides opportunities for Hess to market existing energy efficiency programs and branch into other energy related services. This increased demand could lead to increased sales and revenue for Hess. In March of 2013, Hess announced our intention to exit the energy marketing business. Until that process is complete, the opportunities above can potentially benefit Hess. However, this impending change in our portfolio decreases the potential for significant opportunities and has been accounted for in the 'Likelihood' column.	Increased demand for existing products/services	1-5 years	Direct	Likely	Low-medium
OO2	Reputation	Changing industry/commercial behavior towards a focus on energy efficiency and conservation provides opportunities for Hess to market existing energy efficiency programs and branch into other energy related services. This increased demand could lead to increased sales and revenue for Hess. Based on our materiality analysis climate change has a high level of external awareness and is of high priority to the company as part of this determination. The issues reviewed in the materiality determination are based on our internal evaluation of risk and impact, level of internal and external stakeholder interest, and relevance of international reporting frameworks and oil and gas sector guidelines and best practice. Hess may have increased access to debt and equity as a result of top quartile sustainability disclosure and management. Companies with high rankings and ratings in	Increased demand for existing products/services	Current	Direct	Unknown	Low

ID	Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact
		ESG factors have a lower cost of capital for both debt and equity according to academic studies on sustainable investing assessed in a Deutsche Bank report earlier this year. In addition, some institutional investors are recommending the inclusion of sustainability disclosure requirements into the listing rules for U.S. and global stock exchanges.					

## 6.1f

**Please describe (i) the potential financial implications of the opportunity; (ii) the methods you are using to manage this opportunity; (iii) the costs associated with these actions**

OO1.1 (i): The potential financial implications of the opportunity before taking action:

Increased demand for cleaner power generation and transportation is providing Hess Energy Marketing with natural gas-fueled electricity generation opportunities, which could provide \$25-50 million per year in capacity payments plus additional sales and revenues. Favorable natural gas economics, as well as lower carbon emissions and other air emissions relative to other fossil fuels, are stimulating demand for natural gas for transportation, power generation, heating and other uses. Changing industry/commercial behavior towards a focus on energy efficiency and conservation provides opportunities for Hess to market existing energy efficiency programs and expand into other energy related services. These products and services can be competitive differentiators and help foster customer loyalty. Between 2011 and 2012, Hess increased natural gas sales by 4.5% and electricity sales by 2.3%.

OO1(ii): The methods you are using to manage this opportunity: Hess 1) monitors trends in consumer and customer preferences and responds to market demands that relate to our core competencies, 2) built a natural gas-fueled electrical power plant, and 3) is expanding energy efficiency and carbon emissions reduction products and services. Since 2008, Hess has offered customers a suite of products and services, including carbon offsets, Demand Response, and Renewable Energy Certificates (RECs) to help customers become more energy efficient and reduce their carbon emissions.

In late 2010, Energy Marketing formed Hess Energy Solutions to capture new product and service opportunities arising from more favorable pricing of natural gas relative to fuel oil, new regulations, and changing customer preferences.

Hess Energy Solutions is continuing to build lasting relationships with customers by providing energy services and helping them reduce their energy use and costs through integrated commodity contracts.

The Corporation has a 50% interest in the Bayonne Energy Center (BEC), a \$420 million 512 MW natural gas power plant in New Jersey. BEC began operating in June 2012 and provides electricity to the New York City electric market, the most concentrated load pocket in the U.S., lowering the heat rate, displacing less efficient, higher emitting power plants in the dispatch order, and providing Hess with additional revenue.

OO1 (iii): There are \$0 costs to addressing this opportunity. Hess would still provide customers with new energy products and services as these offerings build on Hess Energy Marketing's existing business.

OO2.1(i): Positive perceptions of Hess' management of climate changes and related disclosures can lead to our inclusion in ESG indices, which could decrease our

cost of capital. Companies with high rankings and ratings in ESG factors have a lower cost of capital for both debt and equity according to academic studies on sustainable investing assessed in a Deutsche Bank report earlier this year. According to Bloomberg, "The five-year annualized return for S&P 500 companies that consistently report sustainability impacts is 3.9 percent, almost double the 2 percent return for everyone else."

Because we cannot predict shareholders future actions or the makeup of our top shareholders going forward, at this time we are unable to assign a specific monetary value to the potential for future lower cost of capital resulting from our inclusion on ESG indices. However, a number of Hess' top 25 institutional investors used sustainability data to evaluate Environmental Social and Governance (ESG) performance and inform shareholding strategy. As of the end of Q1 2013, at least 500,000 and up to 3.5M, Hess shares were held in funds and portfolios based on sustainability indices or criteria.

OO2.1 (ii): Hess is managing these opportunities through implementation of our climate change strategy, which includes:

- public disclosure of our climate change strategy, programs and performance
- reducing operational flaring associated with stranded gas
- becoming more energy efficient and incorporating more renewable energy in our energy spend
- providing customers with products and services to help them reduce their carbon footprints
- including energy efficiency best practice and carbon cost considerations in all major new investments.

We are dedicated to disclosure and transparency through top quartile current reporting activities including: publishing an annual CSR Report using the GRI framework, external assurance of our CSR report including GHG emissions, and developing a GRI Content Index for our CSR Report.

Last year our climate change performance and disclosure contributed to our inclusion in the following ESG indices and sustainability rankings:

- Maplecroft's Climate Innovation Index, Dow Jones North America Sustainability Index, MSCI World ESG Index, MSCI World Socially Responsible Index, MSCI KLD 400 Social Index
- # 1 Corporate Knights S&P 500 Clean Capitalism Ranking
- # 1 in Newsweek's Green Rankings U.S. Energy sector ranking

We also work with others in our industry on energy efficiency and GHG emissions reduction best practices, energy management systems, operational flaring reduction, and upstream energy performance methodology. We are proactively reducing emissions from several countries of operations, including those where GHG emissions are not currently regulated. We implemented a \$500 million gas compression and reinjection project in Algeria that resulted in a 94% reduction in flared gas, and a \$2 million gas reinjection project in Equatorial Guinea.

OO2.1 (iii): The gas compression and reinjection project in Algeria cost \$500 million. The gas reinjection project in Equatorial Guinea cost \$2 million. To reducing our flaring, we are investing more than \$1 billion in oil and gas infrastructure between 2011 and 2013.

There are \$0 costs associated with Hess' Measurement and Reporting team; we would undertake these activities regardless of these opportunities.

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## 6.1g

Please explain why you do not consider your company to be exposed to opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

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6.1h

Please explain why you do not consider your company to be exposed to opportunities driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

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6.1i

Please explain why you do not consider your company to be exposed to opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

## Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading [Investor]

### Page: 7. Emissions Methodology

---

7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base year emissions (metric tonnes CO2e)
Tue 01 Jan 2008 - Wed 31 Dec 2008	10347768	445521



---

**7.2**

**Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions**

Please select the published methodologies that you use	
IPIECA's Petroleum Industry Guidelines for reporting GHG emissions, 2003	
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)	
Other	

---

**7.2a**

**If you have selected "Other", please provide details below**

Scope 1 and Scope 2 GHG emissions calculations are based on The GHG Protocol (WRI/WBCSD) and also rely on sector specific guidance provided in the "Petroleum industry guidelines for reporting greenhouse gas emissions 2nd edition" (IPIECA/American Petroleum Institute (API)). The majority of emission factors we use are based on the API Compendium of GHG Emissions Estimation Methodologies for the Oil and Gas Industry as integrated into the API tool. This tool, SANGEA, utilizes U.S. Environmental Protection Agency (US EPA) and industry-specific emission factors for stationary and mobile sources. Some exploration and production (E&P) assets in the U.S. are subject to US EPA mandatory greenhouse gas reporting rules and calculate Scope 1 GHG emissions using emissions factors required by U.S. EPA.

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**7.3**

**Please give the source for the global warming potentials you have used**

Gas	Reference
CO2	IPCC Second Assessment Report (SAR - 100 year)
CH4	IPCC Second Assessment Report (SAR - 100 year)
Other: N2O	IPCC Second Assessment Report (SAR - 100 year)

---

**7.4**

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data

Fuel/Material/Energy	Emission Factor	Unit	Reference
Distillate fuel oil No 2	163.05	lb CO2 per million BTU	API Compendium of GHG Emissions
Natural gas	117.07	lb CO2 per million BTU	API Compendium of GHG Emissions
Petroleum coke	225.78	lb CO2 per million BTU	API Compendium of GHG Emissions
Residual fuel oil	171.96	lb CO2 per million BTU	API Compendium of GHG Emissions

**Page: 8. Emissions Data - (1 Jan 2012 - 31 Dec 2012)**

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**8.1**

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Equity share

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**8.2**

Please provide your gross global Scope 1 emissions figures in metric tonnes CO<sub>2</sub>e

7409486

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**8.3**

Please provide your gross global Scope 2 emissions figures in metric tonnes CO<sub>2</sub>e

## 8.4

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions which are not included in your disclosure?

Yes

## 8.4a

Please complete the table

Source	Scope	Explain why the source is excluded
Facility	Scope 1 and 2	Bayonne Energy Center is not included in our boundary because it began operation in June 2012. As such, it has been classified as an asset in transition. Emissions for this source will be reported once a full year of data is available.

## 8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
More than 5% but less than or	Assumptions Metering/	Most of our estimates are based on metered fuel flows and gas composition but some are based on	More than 5% but less than or	Assumptions	Quantity of purchased electricity is known but

Scope 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
equal to 10%	Measurement Constraints Other: Published emission factors	engineering estimated flows and composition. When calculating emissions from our use of common fuels we often use standard recognized emission factors, as each batch is not analyzed.	equal to 10%		assumptions are made regarding the appropriate electric utility emission factor to apply.

**8.6**

**Please indicate the verification/assurance status that applies to your Scope 1 emissions**

Third party verification or assurance complete

**8.6a**

**Please indicate the proportion of your Scope 1 emissions that are verified/assured**

More than 90% but less than or equal to 100%

**8.6b**

**Please provide further details of the verification/assurance undertaken, and attach the relevant statements**

Type of verification or assurance	Relevant standard	Attach the document
Limited assurance	ISO14064-3	<a href="https://www.cdproject.net/sites/2013/74/8274/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-8.6b-C3-RelevantStatement/Assurance.pdf">https://www.cdproject.net/sites/2013/74/8274/Investor CDP 2013/Shared Documents/Attachments/Investor-8.6b-C3-RelevantStatement/Assurance.pdf</a>

8.6c

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emissions Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission

8.7

Please indicate the verification/assurance status that applies to your Scope 2 emissions

Third party verification or assurance complete

8.7a

Please indicate the proportion of your Scope 2 emissions that are verified/assured

More than 90% but less than or equal to 100%

8.7b

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Type of verification or assurance	Relevant standard	Attach the document
Limited assurance	ISO14064-3	

8.8

**Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?**

No

8.8a

Please provide the emissions in metric tonnes CO2

#### Further Information

Re: Q8.7b. The verification/assurance statement for Scope 2 is attached below. ORS would not permit the statement to be attached in the allocated box in Q8.7b.

#### Attachments

[https://www.cdproject.net/sites/2013/74/8274/Investor CDP 2013/Shared Documents/Attachments/InvestorCDP2013/8.EmissionsData\(1Jan2012-31Dec2012\)/Hess\\_2012\\_Assurance Statement\\_FINAL\\_26Jun2013\\_signed.pdf](https://www.cdproject.net/sites/2013/74/8274/Investor%20CDP%202013/Shared%20Documents/Attachments/InvestorCDP2013/8.EmissionsData(1Jan2012-31Dec2012)/Hess_2012_Assurance%20Statement_FINAL_26Jun2013_signed.pdf)

**Page: 9. Scope 1 Emissions Breakdown - (1 Jan 2012 - 31 Dec 2012)**

9.1

Do you have Scope 1 emissions sources in more than one country?

Yes

---

**9.1a**

Please complete the table below

Country/Region	Scope 1 metric tonnes CO2e
Algeria	243368
Azerbaijan	101622
Denmark	140468
Equatorial Guinea	964060
Indonesia	237441
Ghana	40357
Malaysia	753959
Norway	93437
Russia	406929
Saint Lucia	5080
Thailand	231553
United Kingdom	209668
United States of America	2901859
Libya	79683

---

**9.2**

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By business division  
By GHG type

---

**9.2a**

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)
Exploration & Production	
Refining	
Retail & Marketing	
Storage, transportation and distribution	

---

**9.2b**

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
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**9.2c**

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	
CH4	
Other: N2O	



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9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
----------	--

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9.2e

Please break down your total gross global Scope 1 emissions by legal structure

Legal structure	Scope 1 emissions (metric tonnes CO2e)
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**Page: 10. Scope 2 Emissions Breakdown - (1 Jan 2012 - 31 Dec 2012)**

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10.1

Do you have Scope 2 emissions sources in more than one country?

Yes

---

10.1a

Please complete the table below

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling (MWh)
Algeria			

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling (MWh)
Russia			
Thailand			
United States of America			

**10.2**

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By business division

**10.2a**

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 emissions (metric tonnes CO2e)
Exploration & Production	
Refining	
Retail & Marketing	
Storage, transportation and distribution	

**10.2b**

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

Facility	Scope 2 emissions (metric tonnes CO2e)
----------	--

---

10.2c

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

Activity	Scope 2 emissions (metric tonnes CO2e)
----------	--

---

10.2d

Please break down your total gross global Scope 2 emissions by legal structure

Legal structure	Scope 2 emissions (metric tonnes CO2e)
-----------------	--

**Page: 11. Energy**

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11.1

**What percentage of your total operational spend in the reporting year was on energy?**

More than 0% but less than or equal to 5%

---

11.2

**Please state how much fuel, electricity, heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year**

Energy type	MWh
Fuel	9720709
Electricity	3314496
Heat	0
Steam	0
Cooling	0

### 11.3

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Residual fuel oil	93171
Distillate fuel oil No 2	970414
Natural gas	7095828
Petroleum coke	1561295

### 11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor

Basis for applying a low carbon emission factor	MWh associated with low carbon electricity, heat, steam or cooling	Comments
No purchases or generation of low carbon electricity, heat, steam or cooling	0	We do not apply a low carbon emission factor. We buy RECs but do not reduce our calculated emissions because of the RECs.

## 12.1

**How do your absolute emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?**

Decreased

## 12.1a

Please complete the table

Reason	Emissions value (percentage)	Direction of change	Comment
Emissions reduction activities	12.7	Decrease	Emissions reduction initiatives decreased our combined Scope 1 and 2 emissions by 12.7%. We achieved our 50 percent combined flaring reduction target for Algeria and Equatorial Guinea ahead of schedule. We have installed a four acre, 1.1-MW solar energy facility at our Woodbridge offices. Construction on the solar field commenced in late 2011 and was completed in early Spring 2012. 1,037-megawatt hours (MWh) of electricity were generated in 2012 after being commissioned in April. The field will generate approximately 1.8 million kilowatt hours of electricity annually. The solar field supplies approximately 22 percent of the building's electrical needs. The 3,472 single-axis panels have sun-tracking capability that allow up to 25 percent more sunlight capture than fixed panel systems. This voluntary project will reduce Scope 2 emissions and has an expected lifetime of 25 years. The investment figure reported for this project exclude investment tax credits. Hess has 50 vapor recovery units (VRU) in North Dakota to capture volatile organic compounds that would otherwise be vented into the atmosphere. Our North Dakota Production installed the vapor recovery units on crude oil tank batteries to reduce Volatile Organic Compounds (VOC) emissions. The project's lifetime will equal the lifetime of the batteries, which in turn are dependent on the life of the field, which can be 20-40 years. This Scope 1 project was originally implemented as a voluntary initiative. Starting in 2011 the project addresses regulatory requirements.
Divestment	22.6	Decrease	Divestment of some assets and shutdown of the HOVENSA joint venture refinery. In January 2012 HOVENSA, a 50 percent owned joint venture in the U.S. Virgin Islands, shut down its refinery in St. Croix reducing our year-over-year net equity emissions.
Acquisitions	0		Hess did not acquire any companies, subsidiaries, or facilities that impacted our GHG emissions.
Mergers	0		Hess did not merge with any companies during 2012.
Change in output	7	Increase	Acquisition of AOG and TRZ leases and wells in the Bakken play of North Dakota (250,000 net acres) resulted in increased "held by production" drilling and well completions and flaring of associated natural gas. Between 2011 and 2013, Hess is investing \$1.2 billion in new and expanded infrastructure (gas gathering, compression, and gas processing). This infrastructure, expected to be completed by 2014, will result in significantly reduced

Reason	Emissions value (percentage)	Direction of change	Comment
			flaring and GHG emissions by 2014. Nearly a quarter of this increase was offset by a decrease in gas production from EG wells, which resulted in reduced flaring.
Change in methodology	0	Increase	There was no change in our methodology. Since 2007, we have tracked GHG emissions from our non-operated locations based on our equity interest in each asset. Tracking emissions on a net equity basis is significantly more difficult than on an operated basis, but we believe it provides a more accurate overall picture of our carbon footprint.
Change in boundary	0		There was no change in our boundary.
Change in physical operating conditions	2.3	Increase	Hess has a 50% equity share in the Malaysia/Thailand Joint Development Area (JDA) Block A-18 in the Gulf of Thailand. Natural gas produced from some parts of this field contains high CO2 concentrations. In 2012, the well production mix in 2012 had higher CO2 content than production in 2011.
Unidentified	0		
Other	0		

## 12.2

Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
.000212	metric tonnes CO2e	unit total revenue	9.92	Decrease	Our revenue increased by 2% from 2011 to 2012, while our absolute year-over-year net equity emissions decreased by more than one million tonnes CO2e (11.26%).

## 12.3

Please describe your gross combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
541	metric tonnes CO2e	FTE employee	14.27	Decrease	Our absolute emissions of Scope 1 and 2 decreased by over 11% y-o-y while our employee base increased by nearly 3%. Between 2008 and 2013, we plan to achieve an absolute GHG reduction of three to four million tonnes of emissions, driven by improved operating processes and these discontinued operations.

#### 12.4

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
.047	metric tonnes CO2e	barrel of oil equivalent (BOE)	8.8	Increase	In 2008, Hess set a five-year GHG emissions intensity reduction target of 20 percent. We made significant progress against this target through 2010 by achieving a 15 percent intensity reduction against the baseline. However, our emissions intensity has increased substantially due to a significant decrease in throughput following the closure of the HOVENSA joint venture refinery in early 2012 and the Port Reading Refinery in February 2013. We have achieved an absolute GHG reduction of 2.8 million tonnes against our baseline, or 26 percent. Between 2008 and 2013, we plan to achieve an absolute GHG reduction of three to four million tonnes of emissions, driven by improved operating processes and these discontinued operations. Our updated 2014-2019 climate change strategy and targets will account for these significant portfolio changes.

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**13.1**

**Do you participate in any emissions trading schemes?**

Yes

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**13.1a**

**Please complete the following table for each of the emission trading schemes in which you participate**

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership
European Union ETS	Sun 01 Jan 2012 - Mon 31 Dec 2012	208064	0	197852	Facilities we own and operate

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**13.1b**

**What is your strategy for complying with the schemes in which you participate or anticipate participating?**

EU ETS Phase II: As of December 31, 2012, Hess was the operator for assets in Denmark. During Phase II (2008-2012), Denmark received 208,064 allowances per year. Hess's equity share of our Denmark operations is 58%. Our strategy to meet Phase III obligations is to bank our 2008-2012 surplus allowances. Since this asset had surplus allocations, we did not need to undertake any other compliance measures.

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**13.2**

**Has your company originated any project-based carbon credits or purchased any within the reporting period?**

Yes



13.2a

Please complete the table

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits retired	Purpose, e.g. compliance
Credit Purchase	Landfill gas	CAR (The Climate Action Reserve)	CAR (The Climate Action Reserve)	28000	28000	Yes	Voluntary Offsetting

Page: 14. Scope 3 Emissions

14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
Purchased goods and services	Relevant, calculated	9900000	We obtained total volumes of refined petroleum products Hess purchases and resells to customers and consumers. We obtained life cycle GHG emissions factors from the U.S. Department of Energy (DOE) National Energy Technology Laboratory (NETL) document DOE/NETL-1009-1346 and totaled GHG emissions for life cycle	100%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
			stage 1 (raw material acquisition), stage 2 (raw material transport) and stage 3 (liquid fuels production). The NETL study utilized GWPs for CO2, methane, and N2O from the IPCC Fourth Assessment Report (AR4-100 year); these were 1, 25 and 298 respectively. Data quality: The numbers used for the sales volumes of each type of refined petroleum product purchased for resale are from our enterprise software system. The NETL study provides detailed information on data quality for life cycle stages 1, 2 and 3 (DOE/NETL-1009-1346 pages 123-127).		
Capital goods	Not relevant, calculated	75000	We obtained information on the purchase of steel tubulars, a high volume capital good that is energy intensive due to the steelmaking process. We calculated GHG emissions based on the total weight of this capital good multiplied by the average steel manufacturing CO2 emission factor of 1.8 tonnes CO2 emitted for every tonne of steel produced (World Steel Association publication "Steel's Contribution to a Low Carbon Future," March 2013). The GWP of CO2 is 1. Data quality: The uncertainty range for the total weight of the purchased steel tubulars is between 20 and 30%.	100%	Our most relevant category of Scope 3 emissions is use of sold products. We have established a threshold of 5% of Scope 3 use of sold products emissions for determining the materiality/relevance of other Scope 3 categories. Capital goods emissions are less than 1% of use of sold products emissions and therefore not considered material.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Not relevant, explanation provided				Our most significant Scope 3 emissions are associated with customer and consumer use of our fuel and other products. We have established a threshold of 5% of Scope 3 use of sold products emissions (equivalent to 1.1 million metric tons) for determining the materiality/relevance of other Scope

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
					3 categories. We took the following steps to investigate and identify the relevance of this Scope 3 source: 1) established that more than 90% of emissions from fuel and energy related activities are already included in Hess' Scope 1 and 2 emissions (approximately 3 million metric tons) based on Hess' energy spend; 2) extrapolated that fuel-and-energy related activities not included in Scope 1 or 2 could result in GHG emissions of approximately 300,000 metric tons; 3) calculated that these are less than 2% of Scope 3 use of sold products emissions; and 4) concluded that emissions from this Scope 3 source are below our materiality threshold.
Upstream transportation and distribution	Relevant, calculated	210000	Third-party ocean transport of third-party feedstock to the Port Reading refinery and third-party refined petroleum products for resale by Hess Retail and Energy Marketing. Methodology: We used shipping records to obtain the number of transoceanic travel days for third-party cargoes. Using this information, we calculated GHG emissions based on emissions factors for marine transportation in section 4.8 of the API Compendium of GHG Emissions Methodologies for the Oil and Gas Industry. The GWPs we used for CO2, methane, and N2O were from the IPCC Second Assessment Report (SAR-100 year) and were 1, 21 and 310 respectively. Data quality: Shipping records are from the company's cargo scheduling software and there can be discrepancies between the scheduled versus the actual shipping and delivery	100%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
			dates. The uncertainty is between 10 and 20%.		
Waste generated in operations	Not relevant, explanation provided				Our most significant Scope 3 emissions are associated with customer and consumer use of our fuel and other products. We have established a threshold of 5% of Scope 3 use of sold products emissions (1.1 million metric tons) for identifying the materiality/relevance of other Scope 3 categories. We took the following steps to investigate and determine the relevance of this Scope 3 source: 1) Reviewed our 2012 enterprise wide waste generation amounts (about 200,000 metric tons) and waste management methods (38% recovered/reused/recycled, 35% treated and 26% land disposed); 2) made preliminary estimates of GHG emissions from third-party waste management using the US EPA's Waste Reduction Model (WARM version 12); 3) determined that under the worst case scenario (100% of waste was landfilled with no landfill gas recovery) emissions were less than 2% of the company's Scope 3 emissions associated with the use of sold products; and 4) concluded that emissions from this Scope 3 source are below our materiality threshold.
Business travel	Not relevant, calculated	23000	In addition to our product use emissions, in 2009 we began identifying and quantifying potential carbon hotspots in our value chain. To date, we have collected data associated with third-party supply and distribution and business travel. Scope 3 emissions from these activities are not quantitatively significant, but do demonstrate the progress we are making in assessing the GHG emissions in our	100%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
			value chain. Our emissions from employee business travel on commercial aircraft were approximately 23,000 tonnes, the same as 2011. Methodology: We obtained the company's travel services' 2012 records of all flight segments flown and total flight segment miles for employee business travel/long haul commuting. We then categorized the flight segments by flight type (short, medium, or long haul) in accordance with US EPA's Climate Leaders GHG Inventory Protocol and used the associated emission factors to calculate total CO2e emissions. One hundred and twenty percent of the calculated emissions were then offset through the purchase of 28,000 Climate Action Reserve certified carbon credits certified to the Voluntary Carbon Standard. The GWPs we used for CO2, methane, and N2O were from IPCC Second Assessment Report (SAR-100 year) and were 1, 21 and 310 respectively. Data quality (flight miles): The uncertainty is between 5 and 10%.		
Employee commuting	Not relevant, explanation provided				Our most significant Scope 3 emissions are associated with customer and consumer use of our fuel and other products. We have established a threshold of 5% of Scope 3 use of sold products emissions (equivalent to 1.1 million metric tons) for identifying the materiality/relevance of other Scope 3 categories. We took the following steps to investigate and identify the relevance of this Scope 3 source: 1) determined that employee commuting by air (e.g., for

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
					<p>rotations) is already incorporated into Scope 3 Business travel emissions; 2) identified that many employees working at Hess' corporate and E&amp;P headquarters offices and at international locations in Europe and Southeast Asia utilize mass transit options; 3) reviewed data showing that Hess provides third party transportation services for employees at field locations in Equatorial Guinea, Indonesia, Thailand, and North Dakota and already includes these transportation emissions in our Scope 1 emissions inventory; 4) estimated emissions from a scenario where 75% of Hess employees each drove 36,000 miles per year to commute to work by personal automobile, based on emissions factors for employee commuting by passenger vehicle in US EPA's Climate Leaders GHG Inventory Protocol; 4) determined that these emissions were less than 1% of Scope 3 use of sold products emissions; and 5) concluded that emissions from this Scope 3 source are below our materiality threshold.</p>
Upstream leased assets	Not relevant, explanation provided				<p>Our most significant Scope 3 emissions are associated with customer and consumer use of our fuel and other products. We have established a threshold of 5% of Scope 3 use of sold products emissions (equivalent to 1.1 million metric tons) for identifying the materiality/relevance of other Scope 3 categories. We took the following steps to investigate and determine the relevance of this Scope 3 source: 1) reviewed our 2012 Hess operated assets to determine if any were upstream leased assets; 2) identified a shore base that Hess leased and operated for part of 2012; 3) determined that this asset is already considered in Hess' Scope 1 and Scope 2 emissions boundary; and 4) concluded that</p>

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
					this Scope 3 source is not relevant to Hess.
Investments	Not relevant, explanation provided				Our most significant Scope 3 emissions are associated with customer and consumer use of our fuel and other products. We have established a threshold of 5% of Scope 3 use of sold products emissions (equivalent to 1.1 million metric tons) for identifying the materiality/relevance of other Scope 3 categories. We took the following steps to investigate and determine the relevance of this Scope 3 source: 1) identified key investments which include non-operated assets where we have an working interest and joint ventures ; 2) determined that emissions from non-operated assets and major joint ventures are included in the boundary of our net equity Scope 1 and 2 emissions inventory; 3) identified one investment, the Wilco-Hess retail joint venture, that was not already included in our Scope 1 and 2 emissions inventory; 4) extrapolated Wilco-Hess emissions based on Hess Retail emissions which are less than 1% of Scope 3 use of sold products emissions; and 5) concluded that emissions from this Scope 3 source are below our materiality threshold.
Downstream transportation and distribution	Not relevant, explanation provided				Emissions from this source were calculated in 2009, 2010 and 2011 and declined from approximately 32,000 tonnes in 2009 to 11,000 tonnes in 2011. Over this period, primary data declined from 20% to 4%. We have discontinued our calculations in 2012 for two reasons: 1) we are not confident that calculated emissions are accurate and reliable and 2) the emissions from this source are not material (e.g., they are less than five percent) relative to Scope 3 emissions associated with the use of products we make and sell.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
Processing of sold products	Not relevant, explanation provided				Our most significant Scope 3 emissions are associated with customer and consumer use of our fuel and other products. We have established a threshold of 5% of Scope 3 use of sold products emissions (equivalent to 1.1 million metric tons) for identifying the materiality/relevance of other Scope 3 categories. We took the following steps to investigate and determine the relevance of this Scope 3 source: 1) reviewed our products to identify if there was processing of sold intermediate products by downstream companies; 2) determined that this could include further processing for some of our natural gas sales; 3) extrapolated GHG emissions based on specific natural gas sales volumes and composition specifications ; 3) estimated that GHG emissions from processing of sold products was less than 2% of Scope 3 use of sold products emissions; and 4) concluded that emissions from this Scope 3 source are below our materiality threshold.
Use of sold products	Relevant, calculated	22100000	Sales volumes of each type of refined petroleum product (residual oil, diesel, and gasoline) and natural gas were multiplied by EPA GHG emission factors from Table MM-1 and NN-1 in Subparts MM and NN of US EPA's Mandatory Reporting of Greenhouse Gases rule. The EPA factors for natural gas combustion were adjusted upwards to account for our gas production in Southeast Asia which has higher than average CO2 content. The GWPs for CO2, methane, and N2O were from the IPCC Second Assessment Report (SAR-100 year) and were 1, 21 and 310 respectively. Data quality: Sales volumes	100%	



Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
			numbers were taken from the company's 2012 SEC Form 10-k. Southeast Asia gas composition data are based on actual measurements. The uncertainty of our emissions estimate is 5% or less.		
End of life treatment of sold products	Not relevant, explanation provided				Our most significant Scope 3 emissions are associated with customer and consumer use of our fuel and other products. We have established a threshold of 5% of Scope 3 use of sold products emissions (equivalent to 1.1 million metric tons) for identifying the materiality/relevance of other Scope 3 categories. We took the following steps to investigate and determine the relevance of this Scope 3 source: 1) Reviewed GHG life cycle assessment studies of petroleum fuels; 2) established that these studies do not include an "end-of-life treatment of sold products" stage for fossil fuel products since these are consumed during use; and 3) determined that this Scope 3 source is not relevant to Hess.
Downstream leased assets	Not relevant, explanation provided				Our most significant Scope 3 emissions are associated with customer and consumer use of our fuel and other products. We have established a threshold of 5% of Scope 3 use of sold products emissions (equivalent to 1.1 million metric tons) for identifying the materiality/relevance of other Scope 3 categories. We took the following steps to investigate and determine the relevance of this Scope 3 source: 1) reviewed information on number and type of downstream leased assets; 2) determined that Hess has retail sites (e.g., gas stations) that are downstream leased sites but these represent fewer than 5% of retail locations; 3) established that Hess Retail's GHG emissions from owned/operated sites are less than 1% and downstream leased retail sites

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Methodology	Percentage of emissions calculated using primary data	Explanation
					are less than 0.05% of Scope 3 use of sold products emissions; and 4) concluded that emissions from this Scope 3 source are below our materiality threshold.
Franchises	Not relevant, explanation provided				Our most significant Scope 3 emissions are associated with customer and consumer use of our fuel and other products. We have established a threshold of 5% of Scope 3 use of sold products emissions (equivalent to 1.1 million metric tons) for identifying the materiality/relevance of other Scope 3 categories. We took the following steps to investigate and determine the relevance of this Scope 3 source: 1) reviewed information on Hess-branded retail gas stations and found that franchises represented fewer than 3%; 2) calculated that Hess Retail's GHG emissions from owned/operated sites are less than 1% and franchises are less than 0.03% of Scope 3 use of sold products emissions; and 3) concluded that emissions from this Scope 3 source are below our materiality threshold.
Other (upstream)					
Other (downstream)					

**14.2**

**Please indicate the verification/assurance status that applies to your Scope 3 emissions**

Third party verification or assurance complete

**14.2a**

**Please indicate the proportion of your Scope 3 emissions that are verified/assured**

More than 90% but less than or equal to 100%

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**14.2b**

**Please provide further details of the verification/assurance undertaken, and attach the relevant statements**

Type of verification or assurance	Relevant standard	Attach the document
Limited assurance	ISO14064-3	<a href="https://www.cdproject.net/sites/2013/74/8274/Investor%20CDP%202013/Shared%20Documents/Attachments/Investor-14.2b-C3-RelevantStatementAttached/Hess_2012_Assurance%20Statement_FINAL_26Jun2013_signed.pdf">https://www.cdproject.net/sites/2013/74/8274/Investor CDP 2013/Shared Documents/Attachments/Investor-14.2b-C3-RelevantStatementAttached/Hess_ 2012_Assurance Statement_FINAL_26Jun2013_signed.pdf</a>

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**14.3**

**Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?**

Yes

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**14.3a**

**Please complete the table**

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Use of sold products	Change in output	45	Decrease	Reduced production from Hess operated and joint venture refineries.
Upstream transportation & distribution	Other: Fewer transoceanic transit days.	5	Decrease	Fewer transoceanic transit days.

**14.4**

**Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)**

No, we do not engage

**14.4a**

Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success

**14.4b**

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Number of suppliers	% of total spend	Comment

**14.4c**

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of the data

Please give details

14.4d

**Please explain why not and any plans you have to develop an engagement strategy in the future**

We did not engage in 2012 because it was not one of our strategic priorities for the year. However in 2012, we joined CDP Supply Chain for 2013 and are engaging with 10 suppliers who represent a significant percent of our spend.

**Module: Oil & Gas**

**Page: OG0 Reference information**

OG0.1

**Please enter the dates for the periods for which you will be providing data. We ask for historic data for the year ending in 2007 to the year ending in 2012 and a forecast for the year ending in 2013. The years given as column headings in subsequent tables correspond to the year ending dates selected below**

Year ending	Date range
2012	Sun 01 Jan 2012 - Mon 31 Dec 2012
2007	Mon 01 Jan 2007 - Mon 31 Dec 2007
2008	Tue 01 Jan 2008 - Wed 31 Dec 2008
2009	Thu 01 Jan 2009 - Thu 31 Dec 2009
2010	Fri 01 Jan 2010 - Fri 31 Dec 2010

Year ending	Date range
	Dec 2010
2011	Sat 01 Jan 2011 - Sat 31 Dec 2011

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**OG0.2**

Please give the gas types included in "All nonconventional gas"

Hydrocarbon group	Gas types in this group
All nonconventional gas	

---

**OG0.3**

Please give the oil types included in "All conventional oil"

Hydrocarbon group	Oil types in this group
All conventional oil	

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**OG0.4**

Please give the oil types included in "All nonconventional oil"

Hydrocarbon group	Oil types in this group
All nonconventional oil	

---

**Further Information**

Prior to 2008, Hess did not report GHG emissions on a net equity basis; thus, this information cannot be provided for 2006-2007. Hess also does not provide 2013 forecasted data as we consider these business sensitive data.

**Page: OG1 Production & reserves by hydrocarbon type**

**OG1.1**

**Is your company involved with oil & gas production or reserves?**

Yes

**OG1.2**

**Please provide values for annual production of each of the hydrocarbon types (in units of BOE) for the years given in the following table. The values required are aggregate values for the reporting organization. The values for 2013 are forward-looking estimates**

Product	2007	2008	2009	2010	2011	2012	2013 single estimate	2013 low estimate	2013 high estimate
Light & medium oils		97356000	106945000	112055000	86870000	91866000			
Conventional natural gas		42090000	41975000	40150000	37169000	35929000			
All nonconventional oils				5110000	10220000	19032000			
All nonconventional gas				549000	793000	1647000			

**OG1.3**

**Please provide values for reserves by hydrocarbon types (in units of BOE) for 2012. Please indicate if the figures are for reserves that are proved, probable or both proved and probable. The values required are aggregate values for the reporting organization**

Product	Country/region	Reserves (BOE), 2012	Date of assessment	Proved/Probable/Proved+Probable
Light & medium oils	Algeria		Tue 01 Jan 2013	Proved

Product	Country/region	Reserves (BOE), 2012	Date of assessment	Proved/Probable/Proved+Probable
Light & medium oils	Australia		Tue 01 Jan 2013	Proved
Light & medium oils	Azerbaijan		Tue 01 Jan 2013	Proved
Light & medium oils	Denmark		Tue 01 Jan 2013	Proved
Light & medium oils	Equatorial Guinea		Tue 01 Jan 2013	Proved
Light & medium oils	Ghana		Tue 01 Jan 2013	Proved
Light & medium oils	Indonesia		Tue 01 Jan 2013	Proved
Light & medium oils	Libya		Tue 01 Jan 2013	Proved
Light & medium oils	Malaysia		Tue 01 Jan 2013	Proved
Light & medium oils	Norway		Tue 01 Jan 2013	Proved
Light & medium oils	Russia		Tue 01 Jan 2013	Proved
Light & medium oils	Thailand		Tue 01 Jan 2013	Proved
Light & medium oils	United Kingdom		Tue 01 Jan 2013	Proved
Light & medium oils	United States of America	473000000	Tue 01 Jan 2013	Proved
Conventional natural gas	Denmark		Tue 01 Jan 2013	Proved
Conventional natural gas	Indonesia		Tue 01 Jan 2013	Proved
Conventional natural gas	Malaysia		Tue 01 Jan 2013	Proved
Conventional natural gas	Norway		Tue 01 Jan 2013	Proved
Conventional natural gas	Thailand		Tue 01 Jan 2013	Proved
Conventional natural gas	United Kingdom		Tue 01 Jan 2013	Proved
Conventional natural gas	United States of America	67000000	Tue 01 Jan 2013	Proved
All nonconventional oils	United States of America		Tue 01 Jan 2013	Proved
All nonconventional gas	United States of America		Tue 01 Jan 2013	Proved

#### OG1.4

**Please explain which listing requirements or other methodologies you have used to provide reserves data in OG1.3. If a company cannot provide data due to legal restrictions on reporting reserves figures in certain countries, please explain this**

The Corporation's proved oil and gas reserves are calculated in accordance with the Securities and Exchange Commission (SEC) regulations and the requirements of the Financial Accounting Standards Board. Proved oil and gas reserves are quantities, which by analysis of geoscience and engineering data, can be estimated with reasonable certainty to be economically producible from known reservoirs under existing economic conditions, operating methods and government regulations. The Corporation's estimation of net recoverable quantities of liquid hydrocarbons and natural gas is a highly technical process performed by internal teams of geoscience professionals and reservoir engineers. Estimates of reserves were prepared by the use of appropriate geologic, petroleum engineering, and evaluation



principals and techniques that are in accordance with practices generally recognized by the petroleum industry as presented in the publication of the Society of Petroleum Engineers entitled "Standards Pertaining to the Estimating and Auditing of Oil and Gas Reserves Information (Revision as of February 19, 2007)." The method or combination of methods used in the analysis of each reservoir is based on the maturity of the reservoir, the completeness of the subsurface data available at the time of the estimate, the stage of reservoir development and the production history. Where applicable, reliable technologies may be used in reserve estimation, as defined in the SEC regulations. These technologies, including computational methods, must have been field tested and demonstrated to provide reasonably certain results with consistency and repeatability in the formation being evaluated or in an analogous formation. In order for reserves to be classified as proved, any required government approvals must be obtained and depending on the cost of the project, either senior management or the board of directors must commit to fund the development. The Corporation's proved reserves are subject to certain risks and uncertainties, which are discussed in Item 1A, Risk Factors Related to Our Business and Operations of this Form 10-K.

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**OG1.5**

**Is your organization involved in the extraction of bitumen from oil sands?**

No

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**OG1.5a**

Please explain the techniques you have most commonly used and their relative energy intensity

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**Further Information**

Hess only supplies reserves by continent and for the United States. More detailed information is not disclosed because it is considered business sensitive.

**Page: OG2 Emissions by segment in the O&G value chain**

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**OG2.1**

Please indicate the consolidation basis (financial control, operational control, equity share) used to report the Scope 1 and Scope 2 emissions by segment in the O&G value chain. Further information can be provided in the text box in OG2.2

Segment	Consolidation basis for reporting Scope 1 emissions	Consolidation basis for reporting Scope 2 emissions
Exploration, production & gas processing	Equity Share	Equity Share
Refining	Equity Share	Equity Share
Storage, transportation & distribution	Equity Share	Equity Share
Retail & marketing	Equity Share	Equity Share

### OG2.2

Please provide clarification for cases in which different consolidation bases have been used and the level/focus of disclosure. For example, a reporting organization whose business is solely in storage, transportation and distribution (STD) may use the text box to explain why only the STD row has been completed

### OG2.3

Please provide masses of gross Scope 1 GHG emissions in units of metric tonnes CO<sub>2</sub>e for the organization's owned/controlled operations by value chain segment. The values required for 2013 are forward-looking estimates

Segment	2007	2008	2009	2010	2011	2012	2013 single estimate	2013 low estimate	2013 high estimate
Exploration, production & gas processing		7015831	5954360	5115756	5612594	6456260			
Refining		3264748	3065927	3263815	2833091	900205			
Storage, transportation & distribution		63034	66818	64106	54168	46235			
Retail & marketing		4156	4859	8949	9215	6786			

### OG2.4

Please provide masses of gross Scope 2 GHG emissions in units of metric tonnes CO2e for the organization's owned/controlled operations by value chain segment. The values required for 2013 are forward-looking estimates

Segment	2007	2008	2009	2010	2011	2012	2013 single estimate	2013 low estimate	2013 high estimate
Exploration, production & gas processing		224212	231474	370068	322754	353042			
Refining		80854	81471	72959	79016	71809			
Storage, transportation & distribution		9308	12238	11778	11459	10350			
Retail & marketing		131146	128196	126633	134608	149494			

#### Further Information

Prior to 2008, Hess did not report GHG emissions on a net equity basis; thus, this information cannot be provided for 2006-2007. Hess also does not provide 2013 forecasted data as we consider these business sensitive data.

#### Page: OG3 Scope 1 emissions by emissions category

##### OG3.1

Please confirm the consolidation basis (financial control, operational control, equity share) used to report Scope 1 emissions by emissions category

Segment	Consolidation basis for reporting Scope 1 emissions by emissions category
Exploration, production & gas processing	Equity Share
Refining	Equity Share
Storage, transportation & distribution	Equity Share
Retail & marketing	Equity Share

##### OG3.2

Please provide clarification for cases in which different consolidation bases have been used to report by emissions categories (combustion, flaring, process emissions, vented emissions, fugitive emissions) in the various segments

**OG3.3**

Please provide masses of gross Scope 1 GHG emissions released to atmosphere in units of metric tonnes CO2e for the whole organization broken down by emissions categories: combustion, flaring, process emissions, vented emissions, fugitive emissions. The values required for 2013 are forward-looking estimates

Category	2007	2008	2009	2010	2011	2012	2013 single estimate	2013 low estimate	2013 high estimate
Combustion		5201551	5105665	5455802	5320536	3063904			
Flaring		3034570	3714342	2847295	3031919	4148921			
Process emissions		66072	60553	74222	74781	44893			
Vented emissions		1949397	119112	8204	5776	9367			
Fugitive emissions		87623	83009	54440	76057	142401			

**Further Information**

Prior to 2008, Hess did not calculate net equity emissions. Therefore, no data are entered for 2006 and 2007. Hess also does not provide 2013 forecasted data as we consider these business sensitive data.

**Page: OG4 Transfers & sequestration of CO2 emissions**

**OG4.1**

Is your company involved in the transfer or sequestration of CO2?

No

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OG4.2

Please indicate the consolidation basis (financial control, operational control, equity share) used to report transfers and sequestration of CO2 emissions

Activity	Consolidation basis

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OG4.3

Please provide clarification for cases in which different consolidation bases have been used (e.g. for a given activity, capture, injection or storage pathway)

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OG4.4

Using the units of metric tonnes of CO2, please provide gross masses of CO2 transferred in and out of the reporting organization (as defined by the consolidation basis). Please note that questions of ownership of the CO2 are addressed in OG4.6

Transfer direction	2007	2008	2009	2010	2011	2012

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OG4.5

Please provide clarification on whether any oil reservoirs and/or sequestration system (geological or oceanic) have been included within the boundary of the reporting organization. Provide details, including degrees to which reservoirs are shared with other entities

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OG4.6

Please explain who (e.g. the reporting organization) owns the transferred emissions and what potential liabilities are attached. In the case of sequestered emissions, please clarify whether the reporting organization or one or more third parties owns the sequestered emissions and who has potential liability for them

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OG4.7

Please provide masses in metric tonnes of gross CO<sub>2</sub> captured for purposes of carbon capture and sequestration (CCS) during the reporting year according to capture pathway. For each pathway, please provide a breakdown of the percentage of the gross captured CO<sub>2</sub> that was transferred into the reporting organization and the percentage that was transferred out of the organization (to be stored)

Capture pathway in CCS	Captured CO <sub>2</sub> (metric tonnes CO <sub>2</sub> )	Percentage transferred in	Percentage transferred out
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OG4.8

Please provide masses in metric tonnes of gross CO<sub>2</sub> injected and stored for purposes of CCS during the reporting year according to injection and storage pathway

Injection and storage pathway	Injected CO <sub>2</sub> (metric tonnes CO <sub>2</sub> )	Percentage of injected CO <sub>2</sub> intended for long-term (>100 year) storage	Year in which injection began	Cumulative CO <sub>2</sub> injected and stored (metric tonnes CO <sub>2</sub> )
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OG4.9

Please provide details of risk management performed by the reporting organization and/or third party in relation to its CCS activities. This should cover pre-operational evaluation of the storage (e.g. site characterisation), operational monitoring, closure monitoring, remediation for CO<sub>2</sub> leakage, and results of third party verification

**Page: OG5 Sales and emissions intensity of production by hydrocarbon type**

**OG5.1**

Please provide values for annual sales of the hydrocarbon types (in units of BOE) for the years given in the following table. The values required are aggregate values for the reporting organization. The values for 2013 are forward-looking estimates

Product	2007	2008	2009	2010	2011	2012	2013 single estimate	2013 low estimate	2013 high estimate
Light & medium oils		97356000	106945000	112055000	108162000	110898000			
Gas (excluding LNG)		42090000	41975000	40515000	37899000	37576000			

**OG5.2**

Please provide estimated emissions intensities for the exploration, production and gas processing associated with different hydrocarbon types based on the current production and operations

Year ending	Hydrocarbon type	Emissions intensity: exploration, production & gas processing (metric tonnes CO2e per thousand BOE)
2008	Light & medium oils	40.6
2008	Conventional natural gas	107.1
2009	Light & medium oils	35.7
2009	Conventional natural gas	64.9
2010	Light & medium oils	33.7
2010	Conventional natural gas	45.6
2011	Light & medium oils	36.7
2011	Conventional natural gas	73.0
2012	Light & medium oils	41.40
2012	Conventional natural gas	80.28

**OG5.3**

Please provide estimated emissions intensities for a) storage, transportation and distribution and b) refining associated with different hydrocarbon types based on current operations

Year ending	Hydrocarbon type	Emissions intensity: storage, transportation & distribution (metric tonnes CO2e per thousand BOE)	Emissions intensity: refining (metric tonnes CO2e per thousand BOE)
2008	Light & medium oils	0.42	32.2
2009	Light & medium oils	0.46	32.7
2010	Light & medium oils	0.44	36.6
2011	Light & medium oils	1.33	38.9
2012	Light & medium oils	1.65	29.62

#### OG5.4

Please clarify how each of the emissions intensities has been derived and supply information on the methodology used where this differs from information already given in answer to the methodology questions in the main information request

Emissions Intensity for exploration, production and gas processing: At Hess, most gas production is associated with oil production. To calculate gas intensity, we used our gas-only assets divided gas-only production emissions by production BOE from gas-only fields. Our oil intensity was calculated by dividing emissions from oil and gas production by BOE from oil and gas production. The emissions from gas processing plants was included with the oil and gas because the gas processing is associated with oil production. Emissions Intensity: storage, transportation & distribution: Hess does not have any natural gas storage, transportation and distribution facilities so these blanks were left empty. Hess has liquid product terminals and calculated intensity by dividing the terminal emissions Hess BOE sales. Emissions Intensity: Divided refining equity GHG emissions by equity refining production.

#### Further Information

Prior to 2008, Hess did not calculate net equity emissions. Therefore, no data are entered for 2006 and 2007. Hess also does not provide 2013 forecasted data as we consider these business sensitive data.

**Page: OG6 Strategy for development of renewable and clean energy technologies**

#### OG6.1



**Does your organization have a strategy for the development of renewable and clean energy technologies?**

Yes

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**OG6.1a**

**Please provide details**

Hess has not historically had internal research and development capabilities which limits an organic growth strategy for the development of renewable and clean energy technologies. However, the company has selective activities in place that contribute to research, development and commercialization of clean energy technologies.

The activities include ownership of Nuvera Fuel Cells ([www.nuvera.com](http://www.nuvera.com)), membership in the Massachusetts Institute of Technology Energy Initiative, and a senior advisor to the Chairman of Hess in the area of sustainable mobility.

Nuvera Fuel Cells conducts applied research and development and commercialization of motive fuel cell power systems and hydrogen delivery solutions for automotive, industrial and aerospace applications. Nuvera is focused on applied research and development and commercialization of key hydrogen energy technologies including hydrogen fuel cells for electric vehicles and hydrogen generation and fueling systems. Nuvera has conducted research with industry partners, academic institutions and the U.S. Department of Energy National Energy Labs to advance hydrogen fuel cell technology by continuing to improve fuel cell durability and the efficiency of fuel cell stack technology. Nuvera was awarded 11 international patents in 2012, and has 63 pending patent applications under review worldwide.

One of Nuvera's key technologies is the PowerTap® hydrogen generator, which uses steam methane reformation to generate high-purity, high-pressure hydrogen. This technology capitalizes on abundant natural gas as a source of clean and cost effective hydrogen and can also use biomass methane and other renewable feedstocks. PowerTap® units are currently deployed in industrial applications, including the material handling industry.

Nuvera is also working on advanced hydrogen fuel cell systems for industrial mobility, automotive and aerospace applications. Nuvera has entered into joint development agreements with leading automotive and aerospace companies to further the advancement of Orion™, an eighth generation fuel cell stack design. One example is a partnership with a major aerospace company to develop onboard electrical power generation systems for commercial airliners.

The two primary targeted applications are transportation and material handling. In the US, Nuvera conducts its fuel cell with partners that include the U.S. Department of Energy's (DOE) National Energy Laboratories, academic institutions, and other companies active in hydrogen fuel cell R&D.

In 2011, Nuvera continued its research into improving fuel cell durability and the efficiency of fuel cell stack technology meeting DOE's 2015 cost targets. To date, Nuvera has been awarded approximately \$50 million in grants and cost share allowances, including \$8.4 million over the past three years. Nuvera is also involved in off road applications, having provided fuel cell systems to New Holland Agriculture for two generations of a new hydrogen powered tractor. The senior advisor on sustainable mobility to the Chairman of Hess is a member of Nuvera's Board of Directors, has a joint appointment at Columbia University and the University of Michigan focused on sustainable mobility, served as Vice President of Research Development and Strategic Planning at General Motors Company from 1998 to 2009, and is a contractor to the DOE's National Renewable Energy Laboratory. Hess is also an Associate Member of the Massachusetts Institute of Technology Energy Initiative, which provides us with access to experts in areas of interest such as low carbon/zero emission transportation and alternative energy.

Our membership dues are also used to fund the university's extensive energy research.

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**OG6.1b**

**Financial contribution of renewable and clean energy technologies, including CCS - sales generated**

Technology area	2009	2010	2011	2012
Other: Hydrogen fuel cells and multi-fuel hydrogen processors	0	0	0	0

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**OG6.1c**

**Financial contribution of renewable and clean energy technologies - Investment (capital expenditure + research & development)**

Technology area	2009	2010	2011	2012
Other: Hydrogen fuel cells and multi-fuel hydrogen processors	0	0	0	0

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**OG6.1d**

**Financial contribution of renewable and clean energy technologies - Earnings Before Interest, Taxation Depreciation, Amortization (EBITDA)**

Technology area	2009	2010	2011	2012
Other: Hydrogen fuel cells and multi-fuel hydrogen processors	0	0	0	0

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**OG6.1e**

**Financial contribution of renewable and clean energy technologies - net assets**

Technology area	2009	2010	2011	2012
Other: Hydrogen fuel cells and multi-fuel hydrogen processors	0	0	0	0

**OG6.1f**

**Financial contribution of renewable and clean energy technologies - please provide a short description of the technologies**

Technology area	Please provide short description of technology
Other: Hydrogen fuel cells and multi-fuel hydrogen processors	Hydrogen fuel cells that produce electricity and multi-fuel hydrogen processors that make hydrogen from both conventional (e.g., natural gas) and renewable fuels (e.g., biogas).

**Page: OG7 Methane from the natural gas value chain - approach & quantification**

**OG7.1**

**Please indicate the consolidation basis (financial control, operational control, equity share) used to prepare data to answer the questions in OG7 and OG8**

Segment	Consolidation basis
Production	Operational Control
Gathering	Operational Control
Processing	Operational Control

**OG7.1a**

**Please provide clarification for cases in which different consolidation bases have been used**

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**OG7.2**

**Does your company have written operating procedures and/or policies covering the reduction of methane leakage and venting?**

No

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**OG7.2a**

Please attach the relevant document(s) in the further information field or describe how the written procedures/policies cover these emissions sources

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**OG7.3**

**Has your company set quantitative or qualitative goals for reducing methane leakage and venting?**

No

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**OG7.3a**

Please describe

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**OG7.4**

**Has your company published a policy position on the regulation of methane emissions?**

No

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**OG7.4a**

Please attach the document

**OG7.5**

**Does the company inventory and quantify the methane emissions associated with your operations?**

Yes

**OG7.5a**

**Please indicate the proportion of methane emissions inventory estimated using the following methodologies (+/-5%)**

<b>Methodology</b>	<b>Proportion of total methane emissions estimated with methodology</b>	<b>What area of your operations does this answer relate to?</b>
Direct detection and measurement	0%	All
Engineering calculations	0< to <5%	All
Source-specific emission factors (IPCC Tier 3)	0< to <5%	All
IPCC Tier 1 and/or Tier 2 emission factors	>75%	All

**OG7.5b**

**Do your operations include the production, gathering and processing stages?**

Yes

**OG7.5c**

**Please use the following table to report the proportion of the company's natural gas production that is emitted to the atmosphere during production (differentiating if possible between production from hydraulically-fractured wells and non-hydraulically-fractured wells), gathering and processing**

<b>Stage</b>	<b>Estimate gas leaked or vented expressed as % of gas produced</b>
Overall figure for production (all wells), gathering and	0%

Stage	Estimate gas leaked or vented expressed as % of gas produced
processing	
Gathering	0%
Processing	0%

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#### Further Information

OG 7.5c

For this question, responding companies do not have the option to report a figure less than 1%. More detailed numbers are available below:

Production = .09%

Gathering = .01%

Processing = .02%

We are in the process of developing guidelines that will cover the reduction of methane leakage and venting. We expect these operating practices will be finalized and implemented in 2013. We have installed "throttling devices" on some of our high bleed pneumatic devices in North Dakota.

#### Page: OG8 Methane from the natural gas value chain - control measures

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#### OG8.1

**Are reduced emission completions relevant to your operations?**

No

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#### OG8.1a

For natural gas wells that are hydraulically-fractured, please complete the table

What proportion of completions and work-overs in the reporting year used reduced emission completion technology for these wells?	If gas is not utilized via reduced emission completion technology, please explain if it is flared or vented	What area of your operations does this answer relate to?
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**OG8.2**

**Is liquids unloading (de-watering) of natural gas wells relevant to your operations?**

No

**OG8.2a**

For gas wells with liquids accumulation requiring venting to the atmosphere or some form of artificial liquids unloading, please complete the table

What proportion has technologies in place that reduce methane venting from the liquids unloading process?	If you wish, please add context to this figure	What area of your operations does this answer relate to?
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**OG8.3**

**Does the company have a program for identifying and replacing or retrofitting high-bleed rate pneumatic controllers powered by natural gas (i.e. controllers that vent more than 6 standard cubic feet per hour)?**

No

**OG8.3a**

Please complete the table

What proportion of the company's high-bleed controllers have been replaced with low-emission alternatives?	If you wish, please add context to this figure	What area of your operations does this answer relate to?
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**OG8.4**

**Are natural gas compressors relevant to your operations?**

Yes

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**OG8.4a**

**Please complete the table**

<b>What proportion of compressors, including those at the wellhead and in gathering and processing, are either reciprocating compressors or centrifugal compressors operating wet seals?</b>	<b>What proportion of these compressors is vented to the atmosphere?</b>	<b>What area of your operations does this answer relate to?</b>
79%	Hess uses 57 compressors in our domestic gas gathering and gas processing operations. 45 compressors (79%) are either reciprocating compressors or centrifugal compressors with wet seals. All reciprocating and centrifugal compressors with wet seals vent to the atmosphere.	USA only

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**OG8.4b**

**Please explain measures you are taking to reduce emissions from these sources**

In 2012, as part of our participation in the EPA's Natural Gas Star program, two 1,500 horsepower electric motors were brought on-line at two of our compressor stations. Electric motors were used instead of natural gas engines thereby reducing methane leakage and improving operational efficiency, according to the EPA. Each motor costs approximately \$110,000. According to the EPA Gas Star program the motors will continue to accrue emission reductions for 10 years, although the project lifetime is ongoing. The annual savings are based on an estimate of \$7/mcf.

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**OG8.5**



**Is associated gas relevant to your company?**

Yes

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**OG8.5a**

**What is the company's overall approach for dealing with associated gas in terms of its relative use of venting, flaring and capture (e.g. for sale, re-injection or use as a fuel)? Companies may differentiate their approach between circumstances where there is/is not a market**

During drilling and completion activities, we use flaring to control fugitive methane emissions. In the Bakken we employ dedicated crews and equipment to separate solids, liquids (water and oil) and gas in frac fluid flowback. The flowback is separated in a closed system. Natural gas is contained and flared or sent to a gas gathering system if available. The closed loop system offers the added safeguard of containing the liquids and solids.

Hess is committed to reducing greenhouse gas emissions and flaring across our global operations as discussed in the Climate Change and Energy section of the [Corporate Sustainability Report]. Our primary sources of air emissions are fuel combustion and flaring.

Historically, in the Bakken Hess has the lowest flaring rate for conventional wells. We achieved a flaring rate of less than 0.5% by consistently building out the infrastructure necessary to gather and commercialize natural gas associated with oil production. In North Dakota, the rapid expansion of our unconventional business has resulted in a significant increase in oil production from the Bakken formation and flaring of associated gas.

In the short-term, flaring in the Bakken unconventional operation remains a significant challenge. We have acquired a number of sites that are remote and currently lack the infrastructure to implement gas gathering. To address the issue, we continue to build the infrastructure needed to mitigate long-term flaring rates. We are investing more than \$1.2 billion to capture and monetize natural gas for our unconventional wells by building out gas gathering infrastructure and expanding the capacity of our Tioga Gas Processing Plant. This is in addition to more than \$50 million we spent in 2009 and 2010 to construct a new gas gathering system and to extend the Red Sky natural gas pipeline to interconnect with a third party gas processing plant. In 2013, we plan to complete gas gathering projects in four major production areas that are expected to add up to 60 million standard cubic feet per day (MMscf/d) of capacity. In addition, we expect to complete the Tioga gas plant expansion in late 2013.

In the near-term to mitigate flaring, we are exploring options for natural gas capture at the wellhead and accessing third party infrastructure and gas processing capacity through contracts and trading agreements. We are engaging with two of our three drilling contractors to convert some drilling rigs to dual fuel (natural gas and diesel) to allow use of natural gas at the well site and to achieve cost savings. Shorter term mitigation measures include piloting third-party services at the well site to capture, compress and transport stranded Bakken gas and light liquids. We have also formed a team of subject matter experts to gain a better understanding of activities undertaken by industry peers to reduce flaring and monetize stranded gas.

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**OG8.5b**

**Outline the measures undertaken to reduce venting for example from tank and casing-head gas**

Until gas gathering infrastructure is in place to capture and transport gas for sale we equip tanks with vapor recovery units, combustors or flares to minimize venting of gas. We are engaging with two of our three drilling contractors to convert some drilling rigs to dual fuel (natural gas and diesel) to allow use of natural gas at the well site and to achieve cost savings. Shorter term mitigation measures include piloting third-party services at the well site to capture, compress and transport stranded Bakken gas and light liquids. We have also formed a team of subject matter experts to gain a better understanding of activities undertaken by industry peers to reduce flaring and monetize stranded gas.

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#### **Further Information**

OG8.1: This question is not applicable to Hess. Per EPA definitions all of our wells in Bakken and Eagle Ford are oil wells. We have very few gas wells in our operations.

OG 8.2: This question is not applicable to Hess. Per EPA definitions all of our wells in Bakken and Eagle Ford are oil wells. We have very few gas wells in our operations.

OG 8.3: The company has very few high-bleed cotnrollers and all new controllers are either low-bleed or air driven We have installed "throttling devices" on some of our high bleed pneumatic devices in North Dakota.

**Module: Sign Off**

**Page: Sign Off**

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**Please enter the name of the individual that has signed off (approved) the response and their job title**

Michal Pelzig  
Senior Manager Reporting

**CDP 2013 Investor CDP 2013 Information Request**