

Water 2015 Information Request Centrica

CDP

Module: Introduction

Page: W0. Introduction

W0.1

Introduction

Please give a general description and introduction to your organization.

About

Energy plays a vital role in the lives of millions of individuals, families and businesses every day – from keeping our homes warm and well lit, to manufacturing the products we rely on. Centrica is committed to securing reliable and competitive energy supplies our customers need, responsibly.

To achieve this, our 37,500 employees work hard at every stage of the energy value chain - from sourcing and generating to servicing and supplying energy in our chosen markets. Our International Downstream businesses supply energy and related services that give customers greater choice and control over their energy through innovative, low carbon products and services. These are provided by British Gas in the UK, Direct Energy in North America and Bord Gáis Energy in the Republic of Ireland. Our International Upstream business, Centrica Energy, responds to market conditions by delivering a balanced mix of gas and oil production, power generation and energy trading. Centrica Energy operates in the UK, Europe, Canada and Trinidad and Tobago. Centrica Storage is a wholly owned subsidiary of Centrica which stores and processes gas supplies for utilities, traders and producers in the UK.

Impact on water

We recognise that water availability is an increasingly significant issue for global stakeholders and we are committed to not only increase the visibility of our water footprint but also reduce our impact through robust environmental management. Water however remains a non-material risk for our business because for a company our size, we consume a relatively small amount of water and do not operate water-intensive activities in water-stressed areas. Moreover, using the Water Footprint Networks definition, the vast majority of water we withdraw is used rather than consumed as it is returned to the same water catchment area within the same cycle period, whilst ensuring minimal changes to the water's characteristics. Most of our water-related risks and opportunities lie within the upstream business, where cooling and process water at power and gas assets represent more than 99% of the total water we use. These risk and opportunities, however, are not considered to have a substantial impact on our business, operations or revenue.

Our water use falls into four main categories:

- Cooling water water that is used rather than consumed as it is redirected through pipes to cool power generation or gas processing facilities, before returning to the same water source over a short period of time. Our cooling water is sourced from seas, rivers and estuaries (98% is saline);
- Process water consumed water which is then subject to on or offsite treatment before being used again or returned to a water source;
 Operational water water consumed within gas exploration and production activities, such as hydraulic well-stimulation or enhanced gas recovery;



• Office water - water consumed at our buildings.

Within this disclosure, the following definitions are employed:

- Use where we withdraw and return water to the same catchment area and within the same water cycle period (e.g. cooling water);
- Consumption where we withdraw and use water but do not return it, or return it within a different cycle period, or to a different location (such as a sewer or treatment plant);
- Discharge where water is returned to a water source or sent for offsite treatment.

As worldwide sources of clean water become increasingly under threat, we remain steadfast in our commitment to ensure water is used both efficiently and responsibly not only in our business, but across our supply chain too.

W0.2

Reporting year

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

Period for which data is reported

Wed 01 Jan 2014 - Wed 31 Dec 2014

W0.3

Reporting boundary

Please indicate the category that describes the reporting boundary for companies, entities, or groups for which water-related impacts are reported.

Other: Companies, entities or groups in which we have both equity share and operational control



W0.4

Exclusions

Are there any geographies, facilities or types of water inputs/outputs within this boundary which are not included in your disclosure?

Yes

W0.4a

Please report the exclusions in the following table

Exclusion	Please explain why you have made the exclusion					
Water consumed in Canadian gas well stimulation or enhanced gas recovery	In 2014, we consumed operational water in our Canadian gas exploration and production activities during well- stimulation and enhanced gas recovery. Work is currently underway to increase the visibility of our water footprint relating to this specific area through the implementation of data collection processes that will enable us to better measure, monitor, manage and report this water use. We aim to report by the end of 2015. We calculate that the volumes involved in our Canadian activities represent less than 1% of our total water input and are not located in water-stressed areas so the associated risks and opportunities are not material to our business.					



Module: Current State

Page: W1. Context

W1.1

Please rate the importance (current and future) of water quality and water quantity to the success of your organization

Water quality and quantity	Direct use importance rating	Indirect use importance rating	Please explain	
Sufficient amounts of good quality freshwater available for use	Important	Important	 Access to freshwater sources for direct use is important to our business because we require process water to run our gas-fired power stations. This involves sufficient volumes of good quality, clean water for purposes such as steam generation in closed-cycle power generation. Our demand for freshwater is however in decline, following a number of divestments and closures of power assets across our generation portfolio during 2014. Reliable freshwater sources are also important in our indirect water use. This is because many of the power generators we purchase energy from require it for their own generating processes. The extent of consumption across generators does however vary and is dependent on the technology employed alongside their regional location. Access to freshwater is less critical across our gas supply chain. Other supply chains have yet to be evaluated. 	
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Direct access to saline water remains important to the success of our business when it is used as cooling water within our power, gas and oil assets. The vast majority of this water is abstracted from estuaries or the open sea; sources which are associated with very low risks regarding quantity and quality. For indirect use, recycled, produced and brackish water is likely to be important for some of our suppliers of gas and electricity, which we subsequently provide to our customers. Consequently, sufficient availability of these water types remains important to our business. The importance of their availability will however vary depending on the technology employed at each power station or energy asset.	



W1.2

For your total operations, please detail which of the following water aspects are regularly measured and monitored and provide an explanation as to why or why not

Water aspect	% of sites/facilities/operations	Please explain
Water withdrawals- total volumes	76-100	We measure and monitor water input volumes across the vast majority of our sites which use or consume water. In a small number of cases, it is not possible to undertake measurement because we only occupy part of the building (offices only) and are therefore not responsible for building management, which means we do not have access to water-use data.
Water withdrawals- volume by sources	76-100	Centrica measures and monitors water input volumes by source category. In a small number of cases, it is not possible to undertake measurement because we only occupy part of the building (offices) and are therefore not responsible for building management. This means we do not have access to water-use data.
Water discharges- total volumes	1-25	We routinely measure water discharge volumes at our energy generating and production sites which represent the vast majority of discharge volumes (approximately 99%). We do not however routinely measure water discharges from our office locations because while these represent the majority of our sites from a 'number of sites' perspective, they form an immaterial portion of our water discharge (less than 1%). We therefore do not consider this particular measure to be as informative as 'percentage of discharge volumes measured'.
Water discharges- volume by destination	1-25	Where we measure discharge volumes, we do so by destination, therefore the coverage is the same as for discharge volumes. We do not routinely measure water discharges from our office locations because while these represent the majority of our sites from a 'number of sites' perspective, they form an immaterial portion of our water discharge (less than 1%). We therefore do not consider this particular measure to be as informative as 'percentage of discharge volumes measured'.
Water discharges- volume by treatment method	1-25	By recording our discharge volumes by destination we are able to monitor how our discharges are being treated. We measure the vast majority of discharges by volume, but a lower percentage when viewed as a percentage of number of sites. Measuring by percentage of sites is not such a meaningful indicator given our diverse site portfolio because while our office locations represent the majority of our



Water aspect	% of sites/facilities/operations	Please explain
		sites, they form an immaterial portion of our water discharge (less than 1%).
Water discharge quality data- quality by standard effluent parameters	1-25	Centrica routinely measures the quality of our water discharges at sites where we have a legal or contractual requirement to monitor and/or report pursuant to consented quality limits. Although this covers a material proportion of our discharges by volume, it is not a requirement at more than 75% of our sites.
Water consumption- total volume	76-100	We are able to calculate the total volume of water consumption across our business because we measure 99% of our input and output water volumes while also recording the water discharge routes for all discharges.
Facilities providing fully- functioning WASH services for all workers	76-100	As part of our duty of care to our people and through our Health, Safety and Environment assurance activities, Centrica ensures and verifies that all employees have access to WASH services at their normal place of work.

W1.2a

Water withdrawals: for the reporting year, please provide total water withdrawal data by source, across your operations

Source	Quantity (megaliters/year)	How does total water withdrawals for this source compare to the last reporting year?	Comment
Fresh surface water	906	Much lower	Following the sale in January 2014 of our three gas-fired power stations in Texas, US, our demand for fresh surface water has reduced significantly. Two of the sold sites used freshwater for cooling and process requirements.

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Source	Quantity (megaliters/year)	How does total water withdrawals for this source Comment compare to the last reporting year?	
Brackish surface water/seawater	683695	About the same	Brackish surface water/seawater is used for cooling in coastal power and oil and gas assets, as well as at our offshore oil and gas assets.
Rainwater	7	Much lower	We use harvested rainwater at our gas-fired power station at Langage located at Plymouth, UK. In the second half of 2014, we used far less harvested rainwater than normal due to a planned outage at the site.
Groundwater - renewable	233	Much lower	The sale of our North American Frontera power plant in Texas, led to a significant reduction in our demand for borehole water. This reduction was however partly offset by an increase in reported groundwater use at our Canadian gas production operations as a result of better reporting.
Groundwater - non- renewable	0	Not applicable	Centrica does not withdraw non-renewable groundwater across its operations.
Produced/process water	405	Much lower	Produced water (or formation water) is a by-product brought to the surface with natural gas as part of the gas production process. This water is separated from the gas and condensate and is generally discharged to sea. In 2014, we sold our North Sea gas asset, Kittiwake, which has led to a significant reduction in produced water volumes.
Municipal supply	985	Much lower	Following the sale in January 2014 of our three gas-fired power stations in Texas, US, our demand for municipal water has reduced significantly. Of this, approximately 40% of our municipal water supply is deemed 'non-potable' and is used as process water in our UK power stations.
Wastewater from another organization	0	Not applicable	Centrica does not use waste water across its operations.
Total	686231	About the same	Our total water withdrawals have changed by less than 5% compared to 2013.



W1.2b

Water discharges: for the reporting year, please provide total water discharge data by destination, across your operations

Destination	Quantity (megaliters/year)	How does total water discharged to this destination compare to the last reporting year?	Comment
Fresh surface water	78	Much lower	Following the sale in January 2014 of our three gas-fired power stations in Texas, US, our discharge of waste water to fresh surface water has reduced significantly.
Brackish surface water/seawater	683407	About the same	Brackish surface water/seawater is used for cooling in coastal power generation and oil and gas assets as well as offshore oil and gas assets. The water is returned to the same water source over a short period of time.
Groundwater	187	Much higher	This is wastewater disposed via injection wells in our Canadian gas production operations. We have reported an increase in volumes compared to last year due to improved quality of reporting.
Municipal treatment plant	282	About the same	Waste water from certain operational assets and all our office locations is sent to municipal water treatment facilities.
Total	683954	About the same	Our total water discharges have changed by less than 5% compared to 2013.



W1.2c

Water consumption: for the reporting year, please provide total water consumption data, across your operations

Consumption (megaliters/year)	How does this consumption figure compare to the last reporting year?	Comment
2557	Lower	We calculate our water consumption in accordance with Ceres Aqua Gauge's definition as the 'amount of water that is used but not returned to its original source'. This also aligns with the Water Footprint Networks definition. For Centrica, this primarily comprises of water that is lost through evaporation or sent for off-site treatment following use. Our total water consumption was significantly reduced in 2014 compared to 2013. This was largely due to the sale of three gas-fired power stations in Texas, US, which had relatively high levels of fresh water consumption through cooling and process requirements.

W1.3

Do you request your suppliers to report on their water use, risks and/or management?

Yes



W1.3a

Please provide the proportion of suppliers you request to report on their water use, risks and/or management and the proportion of your procurement spend this represents

Proportion of suppliers %	¹ Total procurement spend %	Rationale for this coverage
1-25	1-25	Assessment focusses on water risks and management for new and existing suppliers whose contracts are due for renewal, based on risk associated with their sector, size and location. This is more effective than focusing purely on our spend profile because it enables us to detect potential risks that are likely more material. Suppliers are principally engaged through our supply chain risk management process which spans social, ethical and environmental issues. This includes an online supplier self-assessment tool by independent supply chain sustainability experts, EcoVadis, which incorporates water risk. Suppliers provide information on their water policies, consumption reduction practices, recycling infrastructure, pollution prevention and reporting. Following analysis by EcoVadis, we receive risk scores for suppliers. Where a supplier is deemed to have inadequate performance (a medium or high risk rating), we work collaboratively with them to develop corrective action plans to improve and embed sustainable behaviour. Progress against action plans is monitored via the online platform with reassessment occurring after 12 months to evaluate whether required changes have been implemented. Where suppliers fail to meet required standards, their contract may be terminated. Relevant suppliers are not only incentivised to report through ongoing supplier engagements, assessments and forums, but it is a pre-requisite of renewing and starting key supply contracts with Centrica.

W1.3b

Please choose the option that best explains why you do not request your suppliers to report on their water use, risks and/or management



Primary reason	Please explain

W1.4

Has your organization experienced any detrimental impacts related to water in the reporting period?

No

W1.4a

Please describe the detrimental impacts experienced by your organization related to water in the reporting year

	Country	River basin	Impact indicator	Impact	Description of impact	Length of impact	Overall financial impact	Response strategy	Description of response strategy
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W1.4b

Please choose the option below that best explains why you do not know if your organization experienced any detrimental impacts related to water in the reporting year and any plans you have to investigate this in the future

Primary reason	Future plans
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Module: Risk Assessment

Page: W2. Procedures and Requirements

W2.1

Does your organization undertake a water-related risk assessment?

Water risks are assessed

W2.2

Please select the options that best describe your procedures with regard to assessing water risks

Risk assessment procedure	Coverage	Scale	Please explain
Comprehensive company-wide risk assessment	Direct operations and supply chain	All facilities and suppliers	Identifying and understanding our most significant risks and developing strategies to mitigate them, is essential to managing our business responsibly. Environmental and water-related risks are effectively controlled through their inclusion within business risk management procedures, which ensures they are subject to the highest levels of rigour and governance.
			Each identified risk from asset to company level is consistently assessed and reported according to the Group Risk Management Policy, standards and assessment matrices.

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Risk assessment procedure	Coverage	Scale	Please explain
			Water risk in our supply chain is managed through our supply chain risk management programme, which includes water risks. Suppliers identified as medium or high risk are required to put in place corrective action plans and demonstrate required improvements have been achieved to ensure effective management of their social and environmental impacts.

W2.3

Please state how frequently you undertake water risk assessments, what geographical scale and how far into the future you consider risks for each assessment

Frequency	Geographic scale	How far into the future are risks considered?	Comment
Six-monthly or more frequently	River basin	1 to 3 years	We generally consider risks for up to three years ahead in our routine risk assessments. When considering our growth strategy, we will take a longer perspective which is typically between five and 10 years into the future (ref Q.W2.4).

W2.4

Have you evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy?

Yes, evaluated over the next 5 years



W2.4a

Please explain how your organization evaluated the effects of water risks on the success (viability, constraints) of your organization's growth strategy?

Due to the variability of water accessibility and the impacts of its use over time and by location alongside the diversity of our business activities, we evaluate the effects of water risks on our growth plans at an individual site or project level. For new projects, a high-level strategic assessment of the activity and intended location will be undertaken, including any material water-related risks and impacts. If viable, relevant developments such as power stations or oil and gas assets undergo detailed planning and/or licensing applications, which involve the completion of environmental impact assessments in liaison with the appropriate regulators, authorities and other interested parties. This process evaluates our potential water requirements, the various options for meeting those requirements and the possible impacts and mitigations of resource use, consumption and discharge. A recent example of this is Centrica's entry into a 25% non-operating stake in the proposed Bowland shale gas sites in the UK, where significant focus is placed on the potential risks associated with the ongoing demand for water of suitable quality for hydraulic fracturing, in addition to the availability of waste water treatment capacity. Best practice processes to effectively manage these potential risks have subsequently been developed and published in support of the proposed operations.

Similarly, detailed due diligence processes are undertaken when new assets are acquired to evaluate both current and future water-related risks relevant to the activity or organisation.

This approach forms part of our capital allocation process and is an input into our strategic planning process. In 2014, water-related risks, although fully considered, did not materially affect Centrica's growth strategy. This is principally due to our current growth plans being low risk for water in terms of both activity and location.

W2.4b

What is the main reason for not having evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy, and are there any plans in place to do so in the future?

Main reason Current plans Timeframe until evaluation Comment
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Please state the methods used to assess water risks

Method	Please explain how these methods are used in your risk assessment
Internal company knowledge	Internal company knowledge - Our environmental specialists are integrated into the assessment and management of risks at a site, business and corporate level. Specialist input is captured via methods like quarterly risk reviews and peer review quality checks.
WBCSD Global Water Tool	WBCSD Global Water Tool - This Tool helps us understand the proportion of our current and planned operations located in water- stressed regions.
Other: Environmental Impact Assessment (EIA) EcoVadis Sustainable Supply Chain Management tool	Environmental Impact Assessment (EIA) - EIAs are a detailed method of evaluating potential water requirements of a proposed activity or asset, options for meeting those requirements and possible impacts and mitigations of resource use, consumption and discharge or treatment. This informs understanding of our planned or likely impacts while material water-related risks are integrated into risk assessments to ensure sufficient controls are in place. We generally use this approach for high hazard, high impact facilities and activities rather than low hazard, low impact facilities such as offices. EcoVadis Sustainable Supply Chain Management tool - We use supply chain sustainability specialist, EcoVadis, to assess water-related risks against sector appropriate criteria. Where a supplier has inadequate performance (a medium or high risk rating), we work collaboratively to develop corrective action plans. Identified risks are integrated into our risk assessment process.

W2.6

Which of the following contextual issues are always factored into your organization's water risk assessments?

Issues	Choose option	Please explain
Current water availability and quality parameters at a local level	Relevant, included	Local water quality and availability will always be relevant across our facilities where water is required. Where surface or ground water is abstracted from the natural environment, this is factored into local Environmental Impact Assessments (EIA) and permit or license applications. Material risks associated with reduced local water quality and availability do not currently exist but we will continue to assess this as a potential risk to the business.

W2.5



Issues	Choose option	Please explain
Current water regulatory frameworks and tariffs at a local level	Relevant, included	Water regulatory frameworks and tariffs at a local level are relevant at all of our facilities which require water. Our assessments, using internal company knowledge, indicate that our operational facilities which require large volumes of municipal water or which abstract from and discharge to freshwater, are most at risk from current and future regulatory and financial costs associated with water. As we do not have many operational facilities that require large volumes of municipal or freshwater, we have yet to change our operations materially as a consequence.
Current stakeholder conflicts concerning water resources at a local level	Relevant, included	Where appropriate, we will always consider stakeholder conflicts when assessing water resources, especially when they conflict at a local level with our water requirements. Currently the only local stakeholder concerns recorded relate to the proposed Bowland shale gas sites in the UK of which we have a 25% non-operating stake. These concerns are being assessed and dealt with through the EIA and planning process.
Current implications of water on your key commodities/raw materials	Relevant, included for some facilities/suppliers	Our key commodities and raw materials are gas and power, both for our own consumption as well as for re-sale to our customers. As such, we limit our water risk assessment to these suppliers alongside other key suppliers through our supply chain risk management process, including the EcoVadis process which spans social, ethical and environmental issues including water. Water is recognised as one of a number of key considerations that may affect their ability to supply us; which we aim to mitigate by developing a diverse supply chain to ensure continuity of supply.
Current status of ecosystems and habitats at a local level	Relevant, included for some facilities/suppliers	It is vital that our upstream operational facilities that abstract from and discharge to freshwater consider the local ecosystems and habitats they interact with. These considerations are included in EIA's where appropriate and within permitting requirements as well as being subject to ongoing assessment and/or monitoring. Other facilities, such as offices, do not have material considerations or impacts on local ecosystems and habitats.
Current river basin management plans	Not relevant, included	Current river basin management plans will be factored into our risk assessments for operational assets that require significant volumes of freshwater. We do this using internal company knowledge in order to understand any potential impacts on the quantity or quality of water available to us. Our upstream assets do not presently face any material risks relating to river basins and it is not relevant for our low risk sites such as offices.
Current access to fully-functioning WASH services for all employees	Relevant, included	As part of our duty of care to our employees and through our internal company knowledge across our Health, Safety and Environment assurance activities, Centrica ensures and verifies that all its employees have access to water, sanitation and hygiene (WASH) services at their normal place of work. At the strategic level, any new proposal or change in our external environment which may prevent us from fulfilling this commitment will be included in risk



Issues	Choose option	Please explain
		assessments. At the site level, task risk assessments include welfare considerations for our people.
Estimates of future changes in water availability at a local level	Relevant, included for some facilities/suppliers	Changes in water availability are commonly reviewed using internal company knowledge and external input from engagement with water suppliers. Any concern of potential changes would be dealt with promptly at the local level to reflect the facilities future requirements. Other facilities, such as offices, generally do not have material considerations regarding future changes in water availability.
Estimates of future potential regulatory changes at a local level	Relevant, included for some facilities/suppliers	We primarily focus on our operational facilities that abstract from and discharge to rivers and estuaries. In these cases, we must consider current and future regulatory and financial costs associated with water within our routine risk assessment process using internal company knowledge. Other facilities, such as offices, do not have material considerations regarding future potential regulatory changes.
Estimates of future potential stakeholder conflicts at a local level	Relevant, included for some facilities/suppliers	Using internal company knowledge and third party experts, we make estimations of future potential stakeholder conflicts but only when assessing potentially contentious activities which include sensitivities regarding water use and consumption. For example, we analyse potential conflicts that could arise regarding our 25% non-operating stake in the proposed Bowland shale gas sites in the UK so that we can better mitigate negative impacts should they arise in reality.
Estimates of future implications of water on your key commodities/raw materials	Relevant, included for some facilities/suppliers	Our key commodities/raw materials are gas and power for our own consumption and for re-sale to our customers. We therefore limit our water risk assessment to these suppliers. Water is one of a number of key considerations that may affect their ability to supply us in the future, which we aim to mitigate by developing a diverse supply chain. Future risks are estimated using internal company knowledge as part of contract negotiations or renewals.
Estimates of future potential changes in the status of ecosystems and habitats at a local level	Relevant, included for some facilities/suppliers	Our operational facilities that abstract from and discharge to freshwater (rivers and estuaries), must consider not just the current local ecosystems and habitats of the abstraction and discharge environments, but also predictable changes and impacts over the life of the asset/operation. These considerations will be included in EIAs and are subject to ongoing assessment and/or monitoring. Other facilities such as offices, do not have material considerations regarding future potential changes in the status of ecosystems and habitats.
Scenario analysis of availability of sufficient quantity and quality of	Relevant, included for some	At assets or operations where water availability is important, we will consider future changes in water availability in our risk assessments using internal company knowledge. This may take the



Issues	Choose option	Please explain
water relevant for your operations at a local level	facilities/suppliers	form of supply continuity risk which will involve liaison with utility companies and the careful structuring of supply agreements, or liaison with regulators on permitted withdrawal volumes. We have additionally undertaken climate change adaptation risk assessments in the UK which model potential water-related risks and scenarios for our power stations decades in advance.
Scenario analysis of regulatory and/or tariff changes at a local level	Relevant, included for some facilities/suppliers	Scenario analysis of regulatory changes are undertaken in relation to potential new or revised water-related legislation which may impact our assets. This is generally limited to operational assets rather than low-risk sites like offices. For example, regulation implemented in the UK that aims to protect the UK's eel population required us to model the implications and costs of the various potential outcomes.
Scenario analysis of stakeholder conflicts concerning water resources at a local level	Relevant, included for some facilities/suppliers	Centrica uses internal company knowledge and third party expert support to undertake scenario analysis of stakeholder conflicts when analysing the viability of potentially controversial development options. For instance, we used scenario analysis in the application for the proposed Bowland shale gas exploration sites in the UK in which we have a 25% non-operating stake.
Scenario analysis of implications of water on your key commodities/raw materials	Not relevant, explanation provided	Our key commodities and raw materials are gas and power for our own consumption and for re-sale to our customers. Centrica operates in relatively stable supply markets which include Europe and North America, and seeks to reduce risks further by developing a stable and diverse supply base with manageable and predictable water-risk exposure. Consequently, we do not currently consider scenario analysis with regard to our key commodities and raw materials as necessary.
Scenario analysis of potential changes in the status of ecosystems and habitats at a local level	Relevant, included for some facilities/suppliers	Centrica undertakes scenario analysis in relation to the status of ecosystems for assets that pose a potential risk to water resources and habitats. These operations are generally regulated and require ongoing monitoring of local ecosystems to ensure impacts are within our planned scenario's modelled at the time of permit/planning application (often through EIA). We may also model changes in the status of ecosystems and commit to undertaking action should agreed limits be exceeded.



Which of the following stakeholders are always factored into your organization's water risk assessments?

Stakeholder	Choose option	Please explain
Customers	Relevant, included	Customers are factored into our organisation's water risk assessment to ensure continuity of supply. Any material risks to water availability which could impact operational output has the potential to negatively impact our security of supply to customers.
Employees	Relevant, included	Employees are included in the organisation's water risk assessment in order to assess the risk of not meeting our duty of care by providing suitable WASH facilities. The availability of water is a key component of upholding this commitment.
Investors	Relevant, included	Investors are factored into the organisation's water risk assessment because any disruption to planned operations or change in future risk exposure, has the potential to impact negatively on revenue and profitability alongside shareholder perception towards the company.
Local communities	Relevant, included	Where a facility extracts or discharges significant volumes of fresh water, where applicable, other stakeholders such as local communities and special interest groups will be engaged.
NGOs	Relevant, included for some facilities/suppliers	NGO positions on our activities, especially where a facility extracts or discharges significant volumes of freshwater, are materially important to us and where applicable, we will engage directly with the NGO community and factor their views and insights into our risk assessments. This does not currently apply to our low risk sites like offices.
Other water users at a local level	Relevant, included for some facilities/suppliers	Where a facility extracts or discharges significant volumes of freshwater, other water users will be factored into our risk assessment where appropriate. This does not currently apply to low risk sites such as our offices.
Regulators	Relevant, included for some facilities/suppliers	We operate numerous highly regulated assets, many of which are subject to water-related permits, licences or consents. In these cases, the relevant regulator is always factored into our risk assessments as their evaluation of our operational performance is important to the continuity of our business.
River basin management authorities	Relevant, included for some facilities/suppliers	Where a facility extracts or discharges significant volumes of freshwater, river basin management authorities and their plans will be factored into our risk assessments where applicable.

Page 19 of 35

W2.7



Stakeholder	Choose option	Please explain
Statutory special interest groups at a local level	Relevant, included for some facilities/suppliers	Where a facility extracts or discharges significant volumes of freshwater, other stakeholders such as local communities and special interest groups will also be engaged where applicable. This does not currently apply to our office locations.
Suppliers	Relevant, included	Suppliers are initially assessed on sector, geography and size. Those identified as potentially high risk are requested to complete our more detailed risk assessment on their social and environmental performance which includes a component on water management. An overall supply chain risk profile is subsequently developed and maintained through this process which is factored into our risk management process.
Water utilities/suppliers at a local level	Relevant, included for some facilities/suppliers	Where a facility extracts or discharges significant volumes of freshwater, the water utilities or suppliers are factored into the water risk assessment as any disruption to their operations could negatively impact on their ability to meet our water demand.

W2.8

Please choose the option that best explains why your organisation does not undertake a water-related risk assessment

Primary reason	Please explain



Module: Implications

Page: W3. Water Risks

W3.1

Is your organization exposed to water risks, either current and/or future, that could generate a substantive change in your business, operations, revenue or expenditure?

No

W3.2

Please provide details as to how your organization defines substantive change in your business, operations, revenue or expenditure from water risk

Individual risks across our direct operations and our supply chain are ranked by assessing potential financial and non-financial impacts alongside the likelihood of materialisation. A 1-5 impact and likelihood scale is used, with the overall rating (1-25) calculated through multiplying impact by likelihood. Substantive risks are then identified using a Group Risk Analysis Matrix. Substantive (or major) risks are defined as those with a score of 15 or over alongside those with a lower score but which are likely to result in catastrophic loss (High Impact/Low Likelihood). Financial impacts relative to the Business Unit's operating profit targets are subsequently calibrated to produce a Group score. Non-financial impacts include Health Safety and Environment, Brand and Reputation, Legal, Regulatory, Customers and Employees. Further statistical modelling, scenario planning and commercial analyses are carried out where necessary and provide an overall rating.

Each quarter, every business unit conducts a review of the internal and external environment in order to assess the presence of new and emerging risks alongside the identification of changes to existing risks, which incorporates water-related risks. Risk profiles are generated and reported to a Business Risk Management Committee (BRMC) or equivalent to evaluate, report and advise on the material risks as well as consider the adequacy of mitigating controls and actions. The most material risks are reported to the Group Risk Management Committee (GRMC) to ensure it has a clear understanding of our aggregate risk profile and that effective controls are in place to manage these risks. High Impact/Low Likelihood risks are also considered by the BRMC and GRMC. Regular, in-depth review of risks is also undertaken at both Business Unit and Group level as appropriate.

The Audit Committee receives a quarterly risk update as part of an overall Group Assurance paper which provides an assessment of principal risks facing the company and the adequacy of associated controls. These reports, supplemented by management discussions, enable it to track issues, monitor performance and ensure remedial action is taken if significant failings or weaknesses are identified.



W3.2a

Please provide the number of facilities* per river basin exposed to water risks that could generate a substantive change in your business, operations, revenue or expenditure and the proportion of total operations this represents

Country	River basin	Number of facilites	Proportion of total operations exposed to risk within river basin (%)	Comment
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W3.2b

Please provide the proportion of financial value that could be affected at river basin level associated with the facilities listed in W3.2a

Country	River basin	Financial reporting metric	Proportion of chosen metric that could be affected within the river basin	Comment
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W3.2c

Please list the inherent water risks that could generate a substantive change in your business, operations, revenue or expenditure, the potential impact to your direct operations and the strategies to mitigate them



Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
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W3.2d

Please list the inherent water risks that could generate a substantive change in your business operations, revenue or expenditure, the potential impact to your supply chain and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs	
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W3.2e

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your direct operations that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain
Risks exist, but no	Centrica is not currently exposed to substantive water-related risks. This is primarily because we do not operate water-intensive activities in water-stressed areas.
substantive impact anticipated	One risk we are exposed to is the availability of water for cooling requirements at our upstream assets. The supply of large volumes of water is important to these activities, however the vast majority of this water is abstracted from estuaries or the open seas, which are sources associated with very low risks regarding quantity and quality requirements. Moreover, the vast majority of water we withdraw is



Primary reason	Please explain
	used rather than consumed, as it is returned to the same water catchment area within the same cycle period, further reducing the risks of supply interruption. This can be demonstrated by our climate change adaptation assessments undertaken for our UK power assets, which rate flooding and water availability as low or very low risk.
	Another inherent risk relates to the cost of water to our business. This is however currently immaterial when compared with other commodity costs such as gas.
	We do not foresee material tightening of relevant regulations and have strong operational systems and process controls to manage and mitigate pollution risks.

W3.2f

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your supply chain that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain
Risks exist, but no substantive impact	Gas and power sales are the most important components in our supply chain, both of which are reliant to varying degrees on the availability of water for their operations. As such, an inherent risk of water-related supply interruption exists. This risk is however not substantive as we purposely procure power from multiple generators in the open market while gas is purchased from various sources including international supply contracts. This flexibility reduces our exposure to water-related risks.
anticipated	Water-related risks also exist in the supply chains of many other services and products we procure. Identification of high risk suppliers occur through our comprehensive supply chain risk management programme and to date, no suppliers have been found to have substantive water-related risks.

W3.2g

Please choose the option that best explains why you do not know if your organization is exposed to water risks that could generate a substantive change in your business operations, revenue or expenditure and discuss any future plans you have to assess this



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Page: W4. Water Opportunities

W4.1

Does water present strategic, operational or market opportunities that substantively benefit/have the potential to benefit your organization?

No

W4.1a

Please describe the opportunities water presents to your organization and your strategies to realize them

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Please explain
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W4.1b

Please choose the option that best explains why water does not present your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain
Opportunities exist, but nothing substantive	Water is not material to the growth or cost saving opportunities for the business. The cost of water is not significant enough to present substantive saving opportunities. We have yet to identify major commercial, competitive or other opportunities related to water. While our approach to water-related biodiversity and habitat protection provides local engagement opportunities, these are not substantive.



Primary reason	Please explain
	We hold an annual strategy conference during which the Board examines all opportunities including any related to water in new markets, technologies and potential investments. Due diligence to assess commercial viability, market landscapes and future regulation is then conducted before strategies are presented to the Investment Sub-Committee. Once measures are agreed, Business Units subsequently develop detailed strategies to maximise opportunities and model commercial returns.

W4.1c

Please choose the option that best explains why you do not know if water presents your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain

Module: Accounting

Page: W5. Facility Level Water Accounting (I)

W5.1

Water withdrawals: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number Cou	ountry	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain the change if substantive
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Page: W5. Facility Level Water Accounting (II)

W5.1a

Water withdrawals: for the reporting year, please provide withdrawal data, in megaliters per year, for the water sources used for all facilities reported in W5.1

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non- renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment	
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W5.2

Water discharge: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility referen	ice number	Total water discharged (megaliters/year) at this facility	How does the total water discharged at this facility compare to the last reporting year?	Please explain the change if substantive
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W5.2a

Water discharge: for the reporting year, please provide water discharge data, in megaliters per year, by destination for all facilities reported in W5.2

Facility reference numberFresh surface waterMunicipal Treatment PlantSeawaterGroundwater	Comment	
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W5.3

Water consumption: for the reporting year, please provide water consumption data for all facilities reported in W3.2a

Facility reference number Consumption (megaliters/year) How does this compare to the last reporting year? Please explain the child is the substantive of the last reporting year?

W5.4

For all facilities reported in W3.2a what proportion of their water accounting data has been externally verified?

Water aspect % verification	What standard and methodology was used?
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Module: Response

Page: W6. Governance and Strategy

W6.1

Who has the highest level of direct responsibility for water within your organization and how frequently are they briefed?

Highest level of direct responsibility for water issues	Frequency of briefings on water issues	Comment
Individual/Sub-set of the Board or other committee	Scheduled - monthly	The Chief Executive has responsibility for the Group Environment Policy. The Executive Committee, of which the Chief Executive is Chair, are briefed monthly by the Group Director of Health, Safety and Environment on

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Highest level of direct responsibility for water issues	Frequency of briefings on water issues	Comment
appointed by the Board		performance whereby any material water-related issues are raised and discussed. Significant water-related incidents are reported within 24 hours to the Chief Executive.

W6.2

Is water management integrated into your business strategy?

Yes

W6.2a

Please choose the option(s) below that best explain how water has positively influenced your business strategy

Influence of water on business strategy	Please explain
Greater due diligence	Factoring water risks and management into our due diligence, investment and procurement decisions ensures we have full visibility of water risks and obligations. This in turn enables these to be effectively managed and mitigated, thus enhancing business resilience. Managing our water requirements in a sustainable, compliant and transparent way helps us secure and maintain our social and legal licence to operate. Strong water stewardship, high operational standards and the setting and measurement of targets and KPIs, helps us strive for improvement and sends a clear message to our stakeholders that we take this matter seriously and are effective in managing our water-related risks and opportunities.



W6.2b

Please choose the option(s) below that best explains how water has negatively influenced your business strategy

Influence of water on business strategy	Please explain
No measurable influence	In general, we experience only localised operational constraints relating to access to water supplies or waste water discharge. These are managed through design, technology and innovation and in agreement with the relevant regulators or authorities. We have not experienced a negative impact on our business strategy relating to water. It is unlikely that this situation will change in the future in relation to our existing activities and assets, but could occur through entering into new activities, technologies or geographies.

W6.2c

Please choose the option that best explains why your organization does not integrate water management into its business strategy and discuss any future plans to do so

Primary reason	Please explain

W6.3

Does your organization have a water policy that sets out clear goals and guidelines for action?

Yes



W6.3a

Please select the content that best describes your water policy (tick all that apply)

Content	Please explain why this content is included
Publicly available	Our Group Environment Policy includes a key commitment to the efficient use and effective management of resources such as water. This is because the transparent and efficient use of resources is a key part of our commitment to operate responsibly, which helps us meet our environmental goals and stakeholder expectations.
Company-wide Incorporated within group environmental, sustainabiilty or EHS policy	We do not include performance standards for direct operations or for suppliers within our Group Policy as this level of detail is contained within Business Unit standards and procedures. We include a commitment to customer education on energy use as this is our core product. We do not extend this commitment to water as we are not involved in the provision of water-related products to customers.

W6.4

How does your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) during the most recent reporting period compare to the previous reporting period?

Water CAPEX (+/- % change)	Water OPEX (+/- % change)	Motivation for these changes
		We do not have detailed data on water CAPEX or OPEX spend.



Page: W7. Compliance

W7.1

Was your organization subject to any penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations in the reporting year?

No

W7.1a

Please describe the penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations and your plans for resolving them

Facility name	Incident	Incident description	Frequency of occurrence in reporting year	Financial impact	Currency	Incident resolution
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W7.1b

What proportion of your total facilities/operations are associated with the incidents listed in W7.1a

W7.1c

Please indicate the total financial impacts of all incidents reported in W7.1a as a proportion of total operating expenditure (OPEX) for the reporting year. Please also provide a comparison of this proportion compared to the previous reporting year

Impact as % of OPEX	Comparison to last year



Page: W8. Targets and Initiatives

W8.1

Do you have any company wide targets (quantitative) or goals (qualitative) related to water?

Yes, targets and goals

W8.1a

Please complete the following table with information on company wide quantitative targets (ongoing or reached completion during the reporting period) and an indication of progress made

Category of target	Motivation	Description of target	Quantitative unit of measurement	Base- line year	Target year	Proportion of target achieved, % value
Reduction in consumptive volumes	Water stewardship	Reduce British Gas office water use by 3% in 2014, compared to 2013. Although we lowered our water consumption by 0.64% in 2014, we failed to meet our target of 3% reduction compared to the previous year. In 2015, we aim to reduce our UK office water use by a further 3%.	% reduction per business unit	2013	2014	21%

W8.1b

Please describe any company wide qualitative goals (ongoing or reached completion during the reporting period) and your progress in achieving these

Goal	Motivation	Description of goal	Progress
Other: Full compliance with our	Recommended sector best	Compliance with our prescribed limits: Where we have site-specific limits on the quality of discharge and quantity of abstraction, our goal is	In 2014, no significant incidents arose that resulted in legal action. However, there

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Goal	Motivation	Description of goal	Progress
prescribed limits on water management	practice	to ensure compliance with them. We set this goal pursuant to our policy commitment to prevent pollution, be compliant and continually improve. We track performance against this goal daily and report it to senior management monthly. We report progress externally as an annual total for a calendar year. This goal is ongoing.	were a number of reportable incidents that were water-related, involving minor leaks or spills of hydrocarbons to the sea.

W8.1c

Please explain why you do not have any water-related targets or goals and discuss any plans to develop these in the future

Module: Linkages/Tradeoff

Page: W9. Managing trade-offs between water and other environmental issues

W9.1

Has your organization identified any linkages or trade-offs between water and other environmental issues in its value chain?

No

W9.1a

Please describe the linkages or trade-offs and the related management policy or action



Environmental issues	Linkage or trade-off	Policy or action

Module: Sign Off

Page: Sign Off

W10.1

Please provide the following information for the person that has signed off (approved) your CDP water response

Name	Job title	Corresponding job category
James Rushen	Group Head of Environment	Environment/Sustainability manager

W10.2

Addressing water risks effectively, in many instances, requires collective action. CDP would like to support you in finding potential partners that are also working to tackle water challenges in the river basins you report against. Please select if your organization would like CDP to transfer your publicly disclosed risk and impact drivers and response strategy data from questions W1.4a, W3.2b, W3.2c, W4.1a and W8.1b to the United Nations Global Compact Water Action Hub.

No

CDP