

Module: Introduction

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0.1

Introduction

Please give a general description and introduction to your organization.

About

Centrica's vision is to be the leading integrated energy company, with customers at our core. Our aim is to meet the growing energy needs of our 31m customers and deliver long-term value to over 680,000 shareholders. We are active at every stage of the energy chain and through our strong business brands and worldwide skilled workforce of 40,000; we source, generate, process, store, trade, save, service and supply energy to homes and business across our chosen markets in the UK and North America. Our International Downstream business saves and supplies energy and provides related services like low carbon products and home energy solutions, through British Gas in the UK and Direct Energy in North America. Our International Upstream businesses, Centrica Energy and Direct Energy, deliver energy security through a balanced mix of gas and oil production, power generation and energy trading. Centrica Energy operates in the UK, Netherlands, Norway and Trinidad and Tobago while Direct Energy is focussed on North America. Our Centrica Storage business is a wholly owned subsidiary of Centrica, and stores gas supplies for the UK. The Rough storage facility is UK's largest, providing over 70% of the country's capacity.

Impact on climate change

We believe that climate change is one of the single biggest global challenges. Energy generation and energy consumption are substantial contributors to greenhouse gas (GHG) emissions, which are a main driver of climate change. As an integrated energy company and through our corporate responsibility ambition to be the most trusted energy company, we play a pivotal role in helping tackle climate change by transforming the way energy is generated and empowering customers to reduce their energy use. As we evolve our business strategy alongside the changing energy landscape, we must balance all three priorities of the 'energy trilemma': keeping the lights on in an affordable way while moving to a low carbon future.

Impact on water

We recognise that water availability is an increasingly significant issue for global stakeholders and are therefore committed to increase the visibility of our water footprint as well as reduce our impact through robust environmental management. We do not however consider water a major material issue for Centrica because for a company of our size, a relatively small amount of water is consumed and we 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. Our most significant 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.

Our water use falls into three main categories:

1. Single pass cooling water - Water not consumed but redirected through pipes to cool power generation or gas processing facilities, before returning to the same water source over a short time period. Our cooling water is sourced from seas, rivers and estuaries (more than 99% is saline);
2. Process water - Consumed water which is then subject to on or offsite treatment before being used again or returned to a water source;
3. Office water - Potable water consumed at our buildings.

With worldwide sources of clean water becoming increasingly scarce, we are committed to playing our part in using water both efficiently and responsibly.

0.2

Reporting Year

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

Enter the period that will be disclosed.

Sun 01 Jan 2012 - Mon 31 Dec 2012

0.3

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 equity share and we have operational control.

0.4

Exclusions

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

No

0.4a

List of Exclusions

Please describe any exclusion(s) in the following table.

Exclusion	Please explain why you have made the exclusion

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1.1

Does your company have a water policy, strategy or management plan?

Yes

1.1a

Please describe your policy, strategy or plan, including the highest level of responsibility for it within your company and its geographical reach.

Country or region	Description of policy, strategy or plan	Position of responsible person
Company-wide	<p>At a Group level, our policy on water use is set out within our Group Environment Policy which includes a key commitment to the efficient use of resources such as water. The policy is underpinned by our Group Standard on Health, Safety and Environment against which each business unit is periodically audited to confirm that adequate controls and objectives or targets are in place to ensure the efficient use of resources like water. Owing to the spatiotemporal variability of water use impacts and the diversity of our business activities, we believe that water management plans are best implemented at an individual site level. In particular, our power stations and gas assets have all gone through the process of planning and / or licensing applications which involve the completion of environmental impact assessments in liaison with the appropriate regulators and authorities, and encompassing water impacts in terms of use, consumption and discharge.</p> <p>Within this disclosure, we employ the following definitions:</p> <p>Use - where we withdraw and return water to the same catchment area and within the same water cycle period (e.g. cooling water);</p> <p>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);</p> <p>Discharge - where water is returned to a water source or sent for off-site treatment.</p> <p>Following environmental impact assessments, individual sites will have water management plans produced as necessary and in agreement with the relevant authority. These water management plans can vary in content and format ranging from stand-alone controls such as drought contingency plans, to limits and thresholds relating to the volume or rate of water withdrawal, or quantity and quality of water discharge prescribed within our operating licence. In a small number of cases, our water use and consumption is not considered sufficiently material to have such a water management plan. Our water resources management at each site is reviewed regularly through our Environmental Management Systems.</p>	<p>Other: The Chief Executive has responsibility for the Group Environment Policy. Site water management plans are the responsibility of individual Site Managers/Plant Directors</p>

1.1b

Does the water policy, strategy or plan specify water-related targets or goals?

Yes

1.1c

Please describe these water-related targets or goals and the progress your company has made against them.

Country or region	Category of target or goal type	Description of target or goal	Progress against target or goal
Company-wide	Direct operations	Compliance with our prescribed limits on a site level basis	Where we have limits on the quality of discharge and quantity of abstraction, our target is to ensure compliance with them. This varies from site-to-site. In 2012 we had no incidents resulting in legal action; however there were a number of reportable incidents that were water related, entailing minor leaks or spills of hydrocarbons to sea.
United Kingdom	Community engagement	Reduce office water use by 5% in 2012 compared to 2011	Although we lowered our water consumption by 1% in 2012, we failed to meet our target of 5% reduction compared to the previous year. The reason for the shortfall related to a number of minor water leaks, all of which were subsequently located and repaired. In 2013 we aim to reduce our UK office water use by a further 5%.

1.1d

You may explain here why your company does not have a water policy, strategy or plan and if you intend to put one in place.

1.2

Do you wish to report any actions outside your water policy, strategy or management plan that your company has taken to manage water resources or engage stakeholders in water-related issues?

Country or region	Category of action	Description of action and outcome
United Kingdom	Community engagement	Some upstream assets are on the edge of water catchments that support catchment maintenance activities. Two production terminals on the Easington and Morecombe coasts, undertake beach cleans with local communities. These help protect local aquatic habitats.
United Kingdom	Supply chain	We are implementing a method for identifying, assessing and managing risks in our supply chain, including water risks associated with our suppliers. We have procured the services of a third-party supply chain specialist who is helping us engage with all our high-risk suppliers to fully understand risks and management controls in our supply chain, to raise standards, minimise impacts and improve resilience to water-related risks.
United Kingdom	Direct operations	We have undertaken an assessment of the impacts of climate change on our power generation assets, including the associated risks of flooding and drought. We published a Climate Change Adaptation Report in 2011 and assisted DEFRA's consultation in December 2012 on their proposed approach to the second round of adaptation reporting.
Company-wide	Direct operations	We aim to measure all our water withdrawals through direct measurement. Where this is not possible, we employ calculations using pump rates and operating profiles. We measure quality and volume of water discharges primarily at our upstream assets where fresh water is used. Open sea discharges or discharges from our offices are not measured, but can be estimated based on withdrawal data and type of use/consumption.
Company-wide	Direct operations	We have made changes to technologies used in offices and at selected upstream assets to reduce consumption. Water efficiency audits at our UK upstream assets lead to recommendations for technology and process change. In 2012 our overall water consumption decreased by 26% compared to 2011. This was due to reduced operations at our UK power stations and significant water efficiency improvements at our North American power stations.
Company-wide	Direct operations	We routinely impose limits and checks on water costs at each site as part of normal budgeting processes. These costs are therefore regularly reviewed and where limits are exceeded, processes are in place to trigger investigation and/or change. However, currently the costs of water are considered relatively immaterial to our operations. No investigations occurred in 2012, although on-going reviews still take place to identify opportunities for water consumption and associated cost reductions.
Company-wide	Transparency	We publicly report our water footprint under the categories of office, cooling and process water through our corporate responsibility Report, which provides chartable data. The 2012 report is available at www.centrica.com/responsibility .

Attachments

[https://www.cdproject.net/sites/2013/42/3042/CDP Water Disclosure 2013/Shared Documents/Attachments/CDPWaterDisclosure2013/1.WaterManagementandGovernance/Water and Waste - CR webpage 2013.pdf](https://www.cdproject.net/sites/2013/42/3042/CDP%20Water%20Disclosure%202013/Shared%20Documents/Attachments/CDPWaterDisclosure2013/1.WaterManagementandGovernance/Water%20and%20Waste%20-%20CR%20webpage%202013.pdf)

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2.1

Are any of your operations located in water-stressed regions?

Yes

2.1a

Please specify the method(s) you use to characterize water-stressed regions (you may choose more than one method).

Method used to define water stress	Please add any comments here:
<ul style="list-style-type: none">- Environmental assessment- Internal company knowledge- WBCSD Water Tool	We used the 2012 version of the Global Water Tool and defined 'water-stressed', based on annual renewable water supply per person (WRI 2025 projections).

2.1b

Please list the water-stressed regions where you have operations and the proportion of your total operations in that area.

Country or region	River basin	Proportion of operations located in this region (%)	Further comments
United Kingdom	Thames	11 – 20	Extreme scarcity
United Kingdom	Other: GHAAS Basin 1453	1 – 10	Extreme scarcity
Netherlands	Other: Basin 2371	1 – 10	Extreme scarcity
Canada	Other: Basin 4509	1 – 10	Extreme scarcity
United States of America	Other: Basin 3736	1 – 10	Extreme scarcity
United States of America	Other: Basin 2200	1 – 10	Extreme Scarcity (includes 1 industrial site)
United States of America	Other: Basin 1077	1 – 10	Extreme scarcity
United States of America	Rio Grande (US)	1 – 10	Extreme scarcity
United Kingdom	Other: GHAAS Basin 1944	1 – 10	Scarcity
United Kingdom	Other: GHAAS Basin 112	1 – 10	Scarcity (includes 4 industrial sites)
United Kingdom	Trent	1 – 10	Scarcity (includes 1 industrial site)
United Kingdom	Other: GHAAS Basin 2368	1 – 10	Scarcity
United Kingdom	Other: GHAAS Basin 1407	1 – 10	Scarcity (includes 1 industrial site)
United States of America	Brazos (Tex)	1 – 10	Scarcity
United States of America	Trinity	1 – 10	Scarcity (includes 1 industrial site)
United Kingdom	Other: GHAAS Basin 557	1 – 10	Stressed (includes 1 industrial site)
United Kingdom	Other: GHAAS Basin 1967	1 – 10	Stressed
United States of America	Other: GHAAS Basin 439	1 – 10	Stressed
United States of America	Saint John	1 – 10	Stressed
United States of America	Colorado (Ari)	1 – 10	Stressed (includes 1 industrial site)

2.1a

Please specify the method(s) you use to characterize water-stressed regions.

Method used to define water stress	Please add any comments here:
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2.1c

You may explain here why you are not able to identify which of your operations are located in regions subject to water stress and whether you have plans to investigate this in the future.

2.2

Are there other indicators (besides water stress) which you wish to report that help you to identify which of your operations are located in regions subject to water-related risk?

Yes

2.2a

Please list the regions at risk where you have operations, the relevant risk indicator and proportion of your total operations in that area.

Country or region	River basin	Risk Indicator	Proportion of operations located in this region (%)	Further comments
United Kingdom	Other: Humber	Other: Future drought risk	1-10	As a result of droughts caused by climate change, our Brigg power station has been identified as having medium-risk to freshwater availability in the future.

2.2b

You may explain here why you do not wish to report or why you do not use other indicators to identify which of your operations are located in regions subject to water-related risk.

2.2b

You may explain here why you do not use or wish to report other indicators to identify which of your operations are located in regions subject to water-related risk.

2.3

Please specify the total proportion of your operations that are located in the regions at risk which you identified in questions 2.1 and/or 2.2.

41%

2.4

Please specify the basis you use to calculate the proportions used for questions 2.1 and/or 2.2.

Basis used to determine proportions	Please add any comments here
Number of facilities	This is calculated on the number of sites categorised as having some form of risk as a percentage of the number of land based sites occupied. These include offices, warehouses and industrial sites, none of which are considered a significant risk in our internal risk management processes.

Further Information

Note: Only regions identified as having a greater risk than 'sufficient' have been noted in sections 2.1; and greater risk than 'low' in section 2.2.

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2.5

Do any of your key inputs or raw materials (excluding water) come from regions subject to water-related risk?

Yes

2.5a

Please state or estimate the proportion of your key inputs or raw materials that come from regions subject to water-related risk.

Country or region	River basin	Input or material	Proportion of key input or raw material that comes from region at risk (%)	Unit used for calculating percentage	Further comments
Qatar	Not known	Liquid Natural Gas (LNG)	11 – 20	Other: Million tonnes	LNG from Qatar is purchased for resale in the UK, providing between 11-20% of our total imported gas. Although Qatar is identified as one of the top water-stressed countries by the Maplecroft Index, Qatargas uses desalinated sea water in their production.

2.5b

You may explain here why you are not able to identify if any of your key inputs or raw materials come from regions subject to water-related risk and whether you have plans to explore this issue in the future.

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3.1

Is your company exposed to water-related risks (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

No

3.1a

Please describe (i) the current and/or future risks to your operations, (ii) the ways in which these risks affect or could affect your operations before taking action, (iii) the estimated timescale of these risks, and (iv) your current or proposed strategies for managing them.

Country or region	River basin	Risk type	Potential business impact	Estimated timescale (years)	Risk management strategies
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3.1b

Please explain why you do not consider your company to be exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure.

Physical risks related to water are not currently identified as significant through our internal risk management processes.

Physical water risks associated with our UK power generation were assessed in 2011 under our climate change adaptation programme. While flooding and water availability were identified as potential risks, all were rated as currently low or very low risk. We believe this remains the case.

The cost of water to our business is immaterial relative to other commodity costs, such as gas prices. We do not foresee any tightening of regulations within our areas of operation regarding access to water or limits to our use of it. Of all our operations, Texas is the most heavily regulated on water use, but we do not anticipate significant shifts in regulation within the area. Worldwide, our key regulatory risks are related to carbon and climate change legislation rather than water. We operate high hazard facilities where inherent risks could impact on water. However, we have strong operational systems and process controls in place to manage and mitigate these risks. The consequences of an incident could include litigation and reputation risk, but this is more likely to be related to wider issues than water. Therefore risks in this area specifically related to water, are not currently considered to be material.

3.1c

Please explain why you do not know if your company is exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure, and if you have plans to assess this risk in the future.

3.2

What methodology and what geographical scale (e.g. country, region, watershed, business unit, facility) do you use to analyze water-related risk across your operations?

Risk methodology	Country or geographical scale
1. Environmental impact assessment (facility level) 2. Power station adaptation at business level (National - UK) 3. Invoice validation process (facility level) - As part of our energy/water management systems we monitor water consumption (including using the Group's remote monitoring system to gather real-time consumption data for the larger sites). Any exceptional usage, or upward trend above the site specific consumption targets, is noted and investigated; all water/sewerage invoices are checked against recorded consumption data/meter readings for accuracy, while billing irregularities are investigated and resolved with the supplier where applicable.	Facility

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3.3

Do you require your key suppliers to report on their water use, risks and management?

Yes

3.4

Is your supply chain exposed to water-related risks (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

No

3.4a

Please describe (i) the current and/or future risks to your supply chain, (ii) the ways in which these risks affect or could affect your operations before taking action, (iii) the estimated timescale of these risks and, (iv) your current or proposed strategies for managing them.

Country or region	River basin	Risk type (to supplier)	Potential business impact (to responding company)	Estimate timescale (years)	Risk management strategies (by responding company)
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3.4b

Please explain why you do not consider your supply chain to be exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure.

We are primarily an oil and gas production, power generation and energy utility company. Our integrated approach enables us to be less reliant on purchasing gas and energy for resale, than a non-integrated utility. However, we are not fully self-reliant and still need to purchase gas and power from third parties to resell to customers. These form the most important component of our supply chain and while any water-related risks to these could have the potential to generate a change in our business, it is probable the impact would not be substantive due to the flexibility in our supply.

We purchase power from site specific sources and from the open market, with the majority being purchased from the open market. This enables flexibility on the power generation location and fuel type. Hence, even if a particular third party asset was impacted by water-related risks, the impact on us would not be substantive.

Similarly, we purchase gas from multiple sources, including shipping LNG from Qatar. This flexibility provides security of supply against a wide range of risks that include water-related risks.

We purchase many other services and products, from boilers to offshore gas platforms. Currently however, we do not have detailed information on the potential water-related risks associated with these. While we believe it unlikely that they would have substantive change on our business, we are improving our information on supply chain risks with the roll out of a responsible procurement programme. The programme involves identifying potentially higher-risk suppliers and requesting completion of a questionnaire, which is then assessed by a third party (Ecovadis) to determine supplier risk profiles which are based on various criteria that include the environment. Where there is an unacceptable supplier risk, we work with the supplier to reduce it. This programme is in the early phase of the roll out and we will therefore be in a better position to confirm a position on supplier water-related risk in 2014.

3.4c

Please explain why you do not know if your supply chain is exposed to any water-related risks that have the potential to generate a substantive change in your business operation, revenue or expenditure, and if you have plans to assess this risk in the future.

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4.1

Has your business experienced any detrimental impacts related to water in the past five years?

No

4.1a

Please describe these detrimental impacts including (i) their financial impacts and (ii) whether they have resulted in any changes to company practices.

Country	Impact indicator	Description of impact	Response strategy
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4.1b

Please explain why you do not know whether your business has experienced any detrimental impacts related to water in the past five years and if you have any plans to explore this in the future?

5.1

Do water-related issues present opportunities (current or future) that have the potential to generate a substantive change in your business operation, revenue or expenditure?

No

5.1a

Please describe (i) the current and/or future opportunities, (ii) the ways in which these opportunities affect or could affect your operations (iii) the estimated timescale and (iv) your current or proposed strategies for exploiting them.

Country or region	Opportunity type	Potential business impact	Estimated timescale	Strategy to exploit opportunity
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5.1b

Please explain why you do not consider water-related issues to present opportunities to your company that have the potential to generate a substantive change in your business operation, revenue or expenditure or supply chain.

Water is not considered to be material to the business. The cost of water is not material enough to present significant opportunities in terms of saving. Also our water impacts are not material enough to identify significant commercial or other opportunities. At a local site level, our approach to biodiversity and habitat protection has provided small-scale local engagement opportunities, although these would not be considered 'significant'. Our focus as an energy company is instead on carbon - managing the risks and taking advantage of the opportunities that carbon presents.

A water related opportunity for customers is being delivered through British Gas' partnership with Thames Water. The five-year partnership promotes energy and water saving products, including solar panels, energy efficient boilers, shower savers and dual -flush toilets. While installing insulation in homes of Thames Water customers, British Gas installers will offer to fit water-saving devices to help save more money and use less water. We will also be able to check whether Thames Water customers could save money by switching energy supply to British Gas. This commercial opportunity is however not expected to generate a substantive change in our business operation.

5.1c

Please explain why you do not know whether water-related issues present opportunities to your company that have the potential to generate a substantive change in your business operation, revenue or expenditure.

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6.1

Has your company identified any linkages or trade-offs between water and carbon emissions in its operations or supply chain?

Yes

6.1a

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

Linkage or trade-off	Policy or action
Linkage	Our Group Environment Policy has a commitment towards using resources efficiently. Site specific environmental management systems and regulatory permits ensure an on-going commitment at our operational facilities that enables continuous improvement and employment of the best available techniques. On an on-going basis, we run energy optimisation programmes at our power plants that can lead to the installation of more efficient pumping systems; reducing water consumption as well as energy load. However, in terms of large-scale material linkages, our focus is on carbon risks and opportunities, and we do not relate them directly to water.

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Page: Water-7-Withdrawals

7.1

Are you able to provide data, whether measured or estimated, on water withdrawals within your operations?

Yes

7.1a

Please report the water withdrawals within your operations for the reporting year.

Country or region	River basin	Withdrawal type	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
United Kingdom	Not known	Municipal water	506.33	0	We have sites across the UK which use municipal water, which may originate from multiple river basins.
United Kingdom	Other: N/A	Groundwater	-	-	We do not abstract groundwater in the UK.
United Kingdom	Other: Plym	Rainwater	11.10	0	Langage Power station captures and uses rainwater.
United Kingdom	Other: Noname (GHAASBasin112)	Wastewater	228.53	0	South Humber waste water.
United Kingdom	Other: GHAASBasin4721	Wastewater	0.64	0	Roosecote waste water.
United Kingdom	Trent	Wastewater	4.10	0	Peterborough power station wastewater.
United Kingdom	Other: Noname (GHAASBasin112)	Wastewater	121.12	0	Killingholme power station wastewater.

Country or region	River basin	Withdrawal type	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
United Kingdom	Other: Sea and estuarine	Other: Single pass cooling water	666793.83	0	Single pass cooling water is considered 'other' under the guidelines.
United Kingdom	Other: Noname (GHAASBasin112)	Surface	3459.38	0	Brigg is the only power station that sources from fresh surface water in UK, while Killingholme takes estuarine surface water for non-single pass cooling.
United States of America	Colorado (Texas)	Surface	2854.77	0	Bastrop
United States of America	Trinity	Surface	776.28	0	Frontera
United States of America	Trinity	Groundwater	411.63	0	Frontera
United States of America	Other: N/A	Wastewater	-	0	None in USA
Other: North America	Not known	Municipal water	776.23	0	Multiple sites across North America.
Rest of world	Other: N/A	Surface	-	0	
Rest of world	Other: N/A	Groundwater	-	0	
Rest of world	Other: N/A	Wastewater	-	0	
Rest of world	Not known	Municipal water	2.95	0	Municipal water for Stavanger and Hoofddorp.
Rest of world	Other: Sea and estuarine	Other: Single pass saline cooling water	892.91	0	Only saline water is single pass.

7.1b

Please explain why you are not able to provide data for water withdrawals.

7.2

Are you able to provide data, whether measured or estimated, on water recycling/reuse within your operations?

No

7.2

Are you able to provide data, whether measured or estimated, on water recycling/reuse within your operations?

7.2a

Please report the water recycling/reuse within your operations for the reporting year.

Country or region	River basin	Quantity (megaliters/year)	Proportion of data that has been verified (%)	Comments
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7.2b

Please explain why you are not able to provide data for water recycling/reuse within your operations.

We do not capture data on water recycled and reused in our operations as the volumes involved are immaterial at present. At some of our power stations, cooling and boiler water is re-circulated within closed-loop systems with only top-up water added when needed. We also use waste water from other companies in some instances; reclaiming sewerage water. However, both these forms of re-use are inconsistent with the GRI definitions of recycling.

7.2b

Please explain why you are not able to provide data for water recycling/reuse within your operations.

7.3

Please use this space to describe the methodologies used for questions 7.1 and 7.2 or to report withdrawals or recycling/reuse in a different format to that set out above.

Over 99% of the water Centrica withdraws is used for cooling at our upstream power and gas assets. 98.8% of the water withdrawn is saline water which is returned to the same catchment area within a short space of time and is therefore not consumed, but used. This distinction is key to the interpretation of our data and is fundamental to the understanding of the business' risks and impacts that relate to water. This water is calculated via meter where available, or alternatively it is calculated by multiplying flow rate with pump hours.

Other water sources are typically based on water meters and water bills. In some particular instances however, such as serviced offices, the volume has to be estimated based on FTE's or floor space. This is the case for our offices based in North America.

7.4

Are any water sources significantly affected by your company's withdrawal of water?

No

7.4a

Please list any water sources significantly affected by your company's withdrawal of water.

Country or geographical reach	River basin	Water source	Impact	Company action and outcomes
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7.4b

You may explain here why your company's withdrawal of water does not significantly affect any water sources.

Over 98% of the water Centrica withdraws is single pass cooling water which is returned to the same saline catchment area (sea water) within a short space of time and is therefore not consumed, but used. This water is withdrawn from open seas or estuaries where neither the volumes nor any minor change in the returned water will affect the water source. Surface water abstraction is controlled by regulators to ensure that the extraction will not significantly affect the water source and our efforts are focused on complying with the permit limits set by the regulator. The municipal and recycled wastewater is drawn from third parties who would similarly be regulated in their abstraction quantities.

7.4c

Please explain why you do not know if any water sources are significantly affected by your company's withdrawal of water.

8.1

Are you able to identify discharges of water from your operations by destination, by treatment method and by quantity and quality using standard effluent parameters?

Yes

8.1a

Please explain why you are not able to identify discharges from your operations by destination, treatment method , quantity and quality, and whether you have any plans to put in place systems that would enable you to do so.

8.2

Did your company pay any penalties or fines for significant breaches of discharge agreements or regulations in the reporting period?

No

8.2a

Please describe the location and impact of the discharge that was the subject of the significant breach(es), the associated fines and any actions taken to minimise the risk of future non-compliance.

Country or region	River basin	Impact	Fines and penalties	Company action and outcomes
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8.3

Are any water bodies and related habitats significantly affected by discharges of water or runoff from your operations?

Yes

8.3a

Please list any water bodies and associated habitats which are significantly affected by discharge of water or runoff from your operations.

Country or region	River basin	Water body	Impact	Company action and outcomes
United Kingdom	Other: GHAAS Basin4721	Cavendish Dock	The use of Cavendish Dock as a reservoir for the adjacent gas-fired power station has raised the water temperature within the Dock and created an environment of unique ecological interest. The dock is currently used for feeding throughout the year by wildfowl and mute swans. While significant, this is a positive impact to the receiving water.	The management of the power station continues to work with key stakeholders, including Cumbria County Council, to implement a strategy for the ecological management of the dock. As a result there are plans to create a warm water nature reserve around the dock and its margins to provide a national nature reserve.

8.3b

You may explain here why your company's discharge of water does not significantly affect any water bodies or associated habitats.

8.3c

Please explain why you do not know if any water bodies and associated habitats are significantly affected by discharge of water or runoff from your operations.

Further Information

With the exception of Cavendish Dock (refer above) the single pass cooling water that makes up 99% of our water withdrawals is discharged back into the same catchment in the same time period with minimal changes in characteristics. In addition, the volume of water is negligible in comparison to the water body (the sea). The discharge of water to municipal systems is regulated by the municipal body, who in turn are regulated as to what they can discharge to the receiving environment to minimise impact.

Any discharges from our facilities into inland receiving environments are carefully regulated to minimise impacts and we are careful to ensure compliance with the associated discharge conditions.

Hence, in summary, there is careful control and management of discharges to receiving environments which minimise the risk of significant effects on the water bodies and their associated habitats.

Page: Water-9-Intensity

9.1

Please provide any available financial intensity values for your company's water use across its operations.

Country or region	River basin	Financial metric	Water use type (megaliters)	Currency	Financial intensity (Currency/mega-liter)	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.
Other: UK and Europe	Not known	Revenue	Other: Water consumed	GBP(£)	4.20	This financial intensity is based on water consumed and not water used. Hence it excludes the single pass cooling water, which if included, would distort the value significantly, without adding value to the intensity.
Other: North America	Not known	Revenue	Other: Water consumed	GBP(£)	1.19	As above.

9.2

Please provide any available water intensity values for your company's products or services across its operations.

Country or region	River basin	Product	Product unit	Water unit	Water intensity (Water unit/product unit)	Water use type	Please provide any contextual details that you consider relevant to understand the units or figures you have provided.
United Kingdom	Not known	Power Generated	Other: GWh	megaliters	109	Other: Water consumed	This is the water consumption intensity of the power we generate from our gas powered power stations. It excludes single pass water use and water use from wind farm power generation because wind farm consumption is negligible.
United States of America	Not known	Power Generated	Other: GWh	megaliters	745	Other: Water consumed	In North America, single pass cooling is not used and hence the water consumption volumes are much higher.

Module: Sign Off

Page: Sign Off

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

Jeff Oatham
 Group Head of Corporate Responsibility
 Centrica plc

CDP