Welcome to your CDP Water Security Questionnaire 2023

W0. Introduction

W0.1

(W0.1) Give a general description of and introduction to your organization.

About us

Centrica is a leading energy services and solutions company focused on helping customers live sustainably, simply and affordably. We've been providing energy for over 200 years and serve over 10m residential and business customers mainly in the UK and Ireland, through strong brands like British Gas, Bord Gáis Energy and Centrica Business Solutions. Our distinctive capabilities are across energy supply, services and solutions, energy trading and optimisation, and supported via our 20,000-strong team which includes 7,000 engineers.

In recent years we have reviewed and evolved our strategy which has led us to a move away from most of our carbon intensive assets to provide low carbon services and solutions. This includes the sale of our joint venture oil and gas assets in Norway as well as our adoption of a run-off strategy for those that remain in the UK. We're now well-positioned to create a more sustainable future by becoming a new type of integrated energy company operating across the value chain – whether developing low carbon and transition assets or providing services and solutions that help our customers live sustainably, simply and affordably.

Our impact on water

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

As we continue to move away from our more water intensive upstream activities (power stations and gas production) and focus on the low water intensity customer facing businesses, water is becoming an increasingly non-material risk for our business. For a company our size and within our sector, we consume a relatively small amount of water and less than 1% of water that we withdraw is from water-stressed areas. Moreover, using the World Resources Institute definitions, 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 while ensuring minimal changes to the water's characteristics.

Most of our water-related risks and opportunities lie within our power generation and gas production businesses where cooling and produced water represent 99% of the total water we withdraw. Due to the nature of these withdrawals the risk and opportunities relating to water are not considered to have a substantial impact on our business, operations, or revenue.

W-EU0.1a

(W-EU0.1a) Which activities in the electric utilities sector does your organization engage in?

Electricity generation

W-EU0.1b

(W-EU0.1b) For your electricity generation activities, provide details of your nameplate capacity and the generation for each technology.

	Nameplate capacity (MW)	% of total nameplate capacity	Gross electricity generation (GWh)
Coal – hard			
Lignite			
Oil			
Gas	494	100	2,605
Biomass			
Waste (non-biomass)			
Nuclear			
Fossil-fuel plants fitted with carbon capture and storage			
Geothermal			
Hydropower			
Wind			
Solar			
Marine			
Other renewable			
Other non-renewable			
Total	494	100	2,605

W0.2

(W0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date
Reporting year	January 1, 2022	December 31, 2022

W0.3

(W0.3) Select the countries/areas in which you operate.

Belgium

Denmark

Germany
Hungary
Ireland
Israel
Italy
Mexico
Netherlands
Norway
Singapore
United Kingdom of Great Britain and Northern Ireland
United States of America

W0.4

(W0.4) Select the currency used for all financial information disclosed throughout your response.

GBP

W0.5

(W0.5) Select the option that best describes the reporting boundary for companies, entities, or groups for which water impacts on your business are being reported.

Companies, entities or groups over which operational control is exercised

W0.6

(W0.6) Within this boundary, are there any geographies, facilities, water aspects, or other exclusions from your disclosure?

No

W0.7

(W0.7) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization.	Provide your unique identifier
Yes, an ISIN code	GB00B033F229

W1. Current state

W1.1

(W1.1) Rate the importance (current and future) of water quality and water quantity to the success of your business.

	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Important	Important	Freshwater is important in our direct and indirect operations. Freshwater is primarily used in our direct operations for cooling at power stations; for operational uses at our gas terminals; as well as for office water supply. Our primary indirect freshwater use relates to power generation at non-owned assets that we purchase power from for resale. Third party suppliers of gas and power represent the stakeholders in our value chain with the highest freshwater demand. Despite increasing volumes of renewables and market flexibility in where we source our gas and power, the continued requirement of good quality volumes of freshwater in our direct and indirect operations remains the same and thus, our importance rating remains 'important'.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Direct access to saline or brackish water is important in both direct and indirect operations. Saline or brackish water is primarily used for cooling water at our gas terminals; and our offshore platforms operated by Spirit Energy, as considerable volumes of sufficient quality are required for direct operations. Recycled, produced and brackish water are important for our indirect operations, where we purchase energy from third parties for resale to our customers. Our suppliers will be the primary users of these water sources, in their power generation and gas production assets. As we continue to reduce our involvement in gas turbine power generation and gas production assets, our future water dependency will decline materially. With reduction in direct energy supplies, we become more dependent on indirect power generation and gas production, so availability of these water sources for indirect operations will remain important in future; however, this importance varies depending on technology employed and regional location, so we mitigate risk by diversification of our supply chain.

W1.2

(W1.2) Across all your operations, what proportion of the following water aspects are regularly measured and monitored?

	% of sites/facilities/operations	Frequency of measurement	Method of measurement	Please explain
Water withdrawals – total volumes	100%	Monthly	Across operated sites water withdrawals are measured using a series of water meters on the incoming feeds or through information from the water utility provider at each site.	We measure water input volumes across all our sites which use or consume water and where we have operational control. For Centrica, 'sites' refers to any building or facility that we operate in. Office and downstream assets' water withdrawals are measured at least monthly so that any unexpected patterns are identified and investigated promptly. Withdrawals are measured in this way so that volumes can be tracked through time and to ensure unexpected patterns are identified and investigated promptly.
Water withdrawals – volumes by source	100%	Monthly	Direct monitoring through water meters or through	Centrica measures and monitors water input volumes by source category at all our sites which

			information from water utility providers.	use or consume water and have operational control. Office and downstream asset's water withdrawals are typically measured monthly. Upstream assets are typically monitored more regularly due to higher volumes being withdrawn. This is measured in this way so volumes can be tracked through time and to ensure that unexpected withdrawal patterns are identified and investigated promptly.
Water withdrawals quality	Not relevant			All of our onshore sites are connected to the municipal supply. We do not measure the water quality at these, as the water provider ensures the quality is maintained at an acceptable level.
Water discharges – total volumes	100%	Monthly	Direct monitoring or use calculations based on water withdrawals.	We measure water discharge volumes from all our sites which discharge water, and where we have operational control. Water discharges are either directly measured or calculated from

				water withdrawals. Low water consumption sites, such as offices, are calculated based upon water withdrawals. Office and downstream asset's water discharges are typically measured monthly while at upstream assets this is typically done more regularly. Discharges are measured in this way so that volumes can be tracked through time and to ensure unexpected discharge patterns are identified and investigated promptly.
Water discharges – volumes by destination	100%	Monthly	Direct monitoring or use calculations based on water withdrawals.	Where we measure discharge volumes, we do so by destination. As such, discharge volumes are measured at all of our sites which discharge water and have operational control. Office and downstream assets' water discharges are typically measured monthly while at upstream assets this is typically

				done more regularly. Discharges are measured in this way so that volumes can be tracked through time and to ensure unexpected patterns are identified and investigated promptly. Reporting is also done monthly or quarterly to ensure water withdrawals are monitored regularly and tracked against targets.
Water discharges – volumes by treatment method	100%	Monthly	Direct monitoring or use calculations based on water withdrawals.	By recording our discharge volumes by destination and knowing the asset type, we know how our discharges are being treated. For example, offices are assumed to only discharge to the municipal water system, hence treated at municipal wastewater treatment plants. We measure discharges at all our sites where we have operational control. Office and downstream asset's water discharges are typically measured

				monthly; upstream assets are typically monitored more regularly. This is done so that unexpected withdrawal patterns are identified and investigated promptly. Reporting is also done monthly or quarterly to ensure water withdrawals are monitored regularly and tracked against targets.
Water discharge quality – by standard effluent parameters	100%	Quarterly	Direct monitoring.	Centrica routinely measures the quality of our water discharge at power assets, and gas terminals, where we have a legal or contractual requirement to monitor and/or report pursuant to consented quality limits quarterly. Municipal water from our offices is sent to a third-party wastewater treatment plant where quality measurements are undertaken routinely.
Water discharge quality – emissions to water (nitrates, phosphates, pesticides,	Not relevant			Priority substances such as nitrates, phosphates and pesticides are not of material relevance to our

and/or other priority substances)				sites due to the nature of the site activities. Therefore we do not monitor for these substances in our water discharges.
Water discharge quality – temperature	1-25	Continuously	Direct monitoring through traditional temperature-gauging methods such as thermometers.	We continuously monitor the temperature of discharged water from Whitegate power station to ensure it does not fall outside of any prescribed limits.
Water consumption – total volume	100%	Monthly	Our consumption values are calculated as the volume we withdraw and utilise, but do not return to its original source, or return within a different cycle period after treatment or further use.	We are able to calculate the total volume of water consumption across our business because we measure or accurately estimate our water consumption input from all our sites where we have operational control. Office and downstream assets are measured monthly, while upstream assets are monitored more regularly. This is done so that volumes can be tracked through time and to ensure that unexpected consumption patterns are identified and investigated

				promptly. Reporting is also done monthly or quarterly to ensure water withdrawals are monitored regularly and tracked against targets.
Water recycled/reused	Less than 1%	Monthly	Volumes are calculated based upon the fill and empty rate of the blow down tank.	We recycle boiler blowdown water at our Whitegate power station. Our blowdown water is cooled and sent back to our raw water tank and recycled back through the water treatment system. This helps to reduce water import into the raw water tank. Volumes are calculated based upon the fill and empty rate of the blow down tank. This is measured monthly so that volumes can be tracked through time and to ensure that unexpected patterns are identified and investigated promptly.
The provision of fully-functioning, safely managed WASH services to all workers	100%	Continuously	Direct monitoring by designated supervisors to ensure provision at all times.	As part of our duty of care to our people and through our Health, Safety and Environment assurance activities, we

				ensure and verify that all employees have access to WASH services at their normal place of work.

W1.2b

(W1.2b) What are the total volumes of water withdrawn, discharged, and consumed across all your operations, how do they compare to the previous reporting year, and how are they forecasted to change?

	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Please explain
Total withdrawals	23,951.73	Higher	Increase/decrease in business activity	Lower	Facility closure	Our total water withdrawal volumes have increased by 21% in volume compared to 2021. We qualify a rise in water withdrawals between 10-50% to be 'higher' with the increase being due to increased activity and consequently 60% more water withdrawn by Morecambe Offshore platform as well as a 200%

						increase in water withdrawn by Bord Gais due to Whitegate power station coming back online after being in outage in 2021. We expect total water consumption to fall over the next five years as Spirit Energy assets begin to close.
Total discharges	23,889.66	Higher	Increase/decrease in business activity	Lower	Facility closure	Our total water discharge volumes have increased by 21% in volume compared to 2021. We qualify a rise in water discharges of between 10-50% to be 'higher' with the increase being due to increased activity and consequentl y 60% more water

						discharged by Morecambe Offshore platform as well as a 200% increase in water discharged by Bord Gais due to Whitegate power station coming back online after being in outage in 2021. We expect total water discharge to fall over the next year and next five years as Spirit Energy assets begin to close. We expect total water discharge to fall over next five years as Spirit Energy assets begin to close.
Total consumption	62.07	Much higher	Increase/decrease in business activity	Lower	Facility closure	Consumption is calculated using the above withdrawal and discharge

						values. This value has increased by 300% in volume compared to 2021. We consider volumes that have increased over 50% to be 'much higher' and this can be attributed to Whitegate power station re-opening after an outage as well as offices re-opening throughout 2022 due to COVID-19 restrictions being eased and more in-person office working and events. We expect total water consumption to fall over the next five years as Spirit Energy assets begin to close.

W1.2d

(W1.2d) Indicate whether water is withdrawn from areas with water stress, provide the proportion, how it compares with the previous reporting year, and how it is forecasted to change.

	Withdrawals are from areas with water stress	% withdrawn from areas with water stress	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Five-year forecast	Primary reason for forecast	Identification tool	Please explain
Row 1	Yes	Less than 1%	About the same	Maximum potential volume reduction already achieved	About the same	Maximum potential volume reduction already achieved	WRI Aqueduct	The baseline water stress overlay was applied using the WRI Aqueduct Water Risk Atlas tool which categorises land into 5 water risk areas (Low Risk, Low to Medium Risk, Medium to High Risk, High Risk and Extremely High Risk) to compare to our asset locations. Centrica maintains an updated

								list of all assets with the ability to plot spatially, via address. Our sites were plotted on top of the WRI Risk Atlas to identify locations in areas of potential water stress. Glanford Brigg power station and Easington gas terminal are located in 'low to medium' water-stressed areas; however, the total water withdrawals of these sites contribute less than 1% to Centrica's water withdrawals. This is the

								same as the previous year's submission where our activities withdrew immaterial volumes of water from areas that experience 'low to medium' water stress. Neither do we plan on this changing in the future, nor do we plan on increasing the proportion of water withdrawals in areas of water stress.

W1.2h

(W1.2h) Provide total water withdrawal data by source.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water, including rainwater, water	Relevant	0.83	Much higher	Increase/decrease in business activity	Demolition works for asset removal at

from wetlands, rivers, and lakes					Glanford Brigg power station required water to be sprayed on equipment for the purposes of dust removal. This water was abstracted from the nearby river. Asset removal work is now complete and we do not anticipate fresh surface water withdrawals in the coming years.
Brackish surface water/Seawater	Relevant	23,523.26	Higher	Increase/decrease in business activity	Brackish surface water/sea water is the saline estuary and dock water withdrawn for operational use and it includes the volume of 'open sea' water withdrawn, relating to cooling water for offshore platforms. Our brackish surface/seawater withdrawals have increased by 27% in volume compared to 2021. We consider a volume increase

					between 10-50% to be 'higher' and this can be attributed to increased activity and therefore higher brackish surface water/seawater withdrawal. We expect total brackish surface water/seawater withdrawals to remain materially similar to our 2022 levels in 2023 but expect a reduction in future years as our Spirit Energy offshore platforms are run-down.
Groundwater – renewable	Not relevant				None of Centrica's assets are permitted to extract groundwater or designed to do so, therefore, Centrica does not withdraw renewable groundwater across its operations. We do not expect to use renewable groundwater sources in coming years.

Groundwater – non-renewable	Not relevant				None of Centrica's assets are permitted to extract non-renewable groundwater or designed to do so, therefore, Centrica does not withdraw non-renewable groundwater across its operations. We do not expect to use non-renewable groundwater sources in coming years.
Produced/Entrained water	Relevant	110.72	Much lower	Facility closure	Produced water is the water withdrawn during natural gas production. Our produced water withdrawals have decreased in 2022, with an 89% decrease in volume compared to 2021. We consider volumes that have reduced by more than 50% to be 'much lower' and this can mainly be attributed to Hummingbird

					being decommissioned by Spirit Energy mid-year. We expect total produced water withdrawals to continue to materially fall in 2023 compared to 2022 due to Hummingbird not being in operation for the entirety of the year while this was only the case for around half of 2022.
Third party sources	Relevant	316.93	Higher	Increase/decrease in business activity	Municipal water supply is the volume of drinking-standard water used by a facility, including all water billed by the supplier, whether used, spilt, or leaked. Our municipal water supply from third party sources has increased in 2022, with a 29% rise in volume compared to 2021. We consider volumes that have increased

					between 10-50% to be 'higher' and this increase can be attributed to Whitegate power station coming back online in 2022 after being in outage in 2021. We expect municipal water withdrawal volumes from third party sources to remain materially similar to our 2022 levels in 2023 as well as future years.

W1.2i

(W1.2i) Provide total water discharge data by destination.

	Relevance	Volume (megaliters/year)	Comparison with previous reporting year	Primary reason for comparison with previous reporting year	Please explain
Fresh surface water	Not relevant				Since the closure of our Glanford Brigg power station in September 2020 we no longer discharge fresh surface water at any of our sites.
Brackish surface water/seawater	Relevant	23,523.26	Higher	Increase/decrease in business activity	Brackish surface water/sea water is the direct cooling and

					produced water for operational use and is measured ri. Our brackish surface/seawater discharges have increased by 21% in volume compared to 2021. We consider a volume rise between 10-50% to be 'higher' and this can be attributed to increased activity at Spirit Energy's Morecambe Offshore platform. We expect total brackish surface water/seawater discharge to remain materially similar to our 2022 levels in 2023 but could reduce in future years as our Spirit Energy offshore platforms are run-down.
Groundwater	Not relevant				None of Centrica's assets are permitted or designed to discharge to groundwater sources across its operations. We do not expect to use non-

					renewable groundwater sources in coming years.
Third-party destinations	Relevant	201.79	About the same	Other, please specify Continuation of normal wastewater processes.	Third party discharges include all operational wastewater discharged from sites to sewer irrespective of where it is generated and the method of transmission. Our discharges have risen in 2022 with a 3% increase in volume compared to 2021. We consider volumes that have reduced below 10% to be 'about the same' and this increase can be attributed to the continued use of our offices and upstream assets throughout 2022.

W1.2j

(W1.2j) Within your direct operations, indicate the highest level(s) to which you treat your discharge.

	Relevance of treatment level to discharge	Volume (megaliters/year)	Comparison of treated volume with previous	Primary reason for comparison with previous reporting year	% of your sites/facilities/operations this volume applies to	Please explain

			reporting year			
Tertiary treatment	Not relevant					Tertiary treatment is not relevant for Centrica. We treat wastewater streams to the highest level as determined by our permits and regulations and tertiary treatment is not a requirement at any of our sites where we discharge water.
Secondary treatment	Not relevant					Secondary treatment is not relevant for Centrica. We treat wastewater streams to the highest level as determined by our permits

						and regulations and secondary treatment is not a requirement at any of our sites where we discharge water.
Primary treatment only	Relevant	24.38	Much higher	Increase/decrease in business activity	Less than 1%	Primary treatment is undertaken for our wastewater stream at our Whitegate Power Station. Wastewater at Whitegate undergoes primary treatment in-line with our site permit and regulatory standards. Our primary treatment discharges have increased in 2022 with a 142% rise in volume compared

						to 2021 due to Whitegate power station being in outage for the majority of 2021. We consider volumes that have increased over 50% to be 'much higher'. We expect 2023 discharge volumes to remain materially similar to 2022 levels as well as in future years.
Discharge to the natural environment without treatment	Relevant	23,633.98	Higher	Increase/decrease in business activity	91-99	Our wastewater streams that are discharged to the natural environment without treatment include the cooling water at our offshore

						gas platforms. These waste streams are monitored to comply with site permits and regulatory standards but do not require additional treatment as standard before being discharged to the environment. Our discharges to the natural environment have increased in 2022, with a 21% increase in volume compared to 2021. We consider volumes that have increased between

						10-50% to be 'higher' and this can be attributed to increased activity at Spirit Energy's Morecambe Offshore platform.
Discharge to a third party without treatment	Relevant	201.79	About the same	Other, please specify Continuation of normal wastewater processes.	1-10	Our wastewater streams that are discharged to a third party without treatment includes all wastewater discharged from our onshore assets (other than the discharged water that receives primary treatment at Whitegate power station). This occurs at our offices but the

						greatest proportion is from CSL's Easington Gas Terminal as well as other upstream assets operated by Spirit Energy where our permits and regulatory standards allow us to discharge to sewer without treatment. The level of treatment applied by the third party at the municipal wastewater treatment facility is unknown. Our discharges to third party have increased in 2021 with a 1% rise

						compared to 2021. We consider volumes that have fallen by less than 10% to be 'about the same' and this can be attributed to the continued use of our offices and upstream assets throughout 2022.
Other	Not relevant					All of our discharge streams are treated using the above categories. We have no additional treatment methods at any of our sites.

W1.3

(W1.3) Provide a figure for your organization's total water withdrawal efficiency.

	Revenue	Total water withdrawal volume (megaliters)	Total water withdrawal efficiency	Anticipated forward trend

Row 1	23,741,000,000	23,951.73	991,201.888130836	As we continue to close or convert the majority of our water intensive assets, we expect our total water withdrawal efficiency to increase due to a decrease in total water withdrawals.

W-EU1.3

(W-EU1.3) Do you calculate water intensity for your electricity generation activities?

Yes

W-EU1.3a

(W-EU1.3a) Provide the following intensity information associated with your electricity generation activities.

Water intensity value (m3/denominator)	Numerator: water aspect	Denominator	Comparison with previous reporting year	Please explain
0.02	Total water withdrawals	MWh	Much lower	In our power generation activities, total electricity available for sale rose 980% due to Whitegate coming back online after being in outage for most of 2021. Water withdrawals from our power generation and distribution assets increased by 131% and this was also due to increased activity at Whitegate. Therefore, our water intensity associated with electricity generation activities decreased by 79% compared to our 2021 due to electricity generation increasing significantly more than the volume of water withdrawn. We consider falls of more than 50% to be ‘much lower’. Our strategic direction is to maintain our ownership of one base-load power station and increase the number of reciprocating gas engines. The latter are air cooled and therefore

				reduce total water consumption and the water intensity of our power generation. Consequently, we expect a reduction in water intensity with improvements in efficiency of future power generation technology. However, we do not currently use the water intensity of our power generation as an internal metric because our primary focus is on the carbon intensity of power.

W1.4

(W1.4) Do any of your products contain substances classified as hazardous by a regulatory authority?

	Products contain hazardous substances
Row 1	Yes

W1.4a

(W1.4a) What percentage of your company's revenue is associated with products containing substances classified as hazardous by a regulatory authority?

Regulatory classification of hazardous substances	% of revenue associated with products containing substances in this list	Please explain
Candidate List of Substances of Very High Concern (UK Regulation)	Less than 10%	Centrica Storage Limited (CSL) produces condensate as an unavoidable by-product of gas production which is itself then sold. The condensate contains Benzene, a known carcinogen, but varies considerably in its proportion of hazardous content. Benzene is classified as hazardous in both 'Annex XIV of UK REACH Regulation' and the 'Candidate List of Substances of Very High Concern (UK Regulation)'. There is no method that CSL's Easington Gas Terminal could use to reduce its hazardous content due to it being a naturally occurring hydrocarbon product extracted as part of the gas production process.

W1.5

(W1.5) Do you engage with your value chain on water-related issues?

	Engagement
Suppliers	Yes
Other value chain partners (e.g., customers)	Yes

W1.5a

(W1.5a) Do you assess your suppliers according to their impact on water security?

Row 1

Assessment of supplier impact

Yes, we assess the impact of our suppliers

Considered in assessment

Supplier dependence on water
Supplier impacts on water availability
Supplier impacts on water quality

Number of suppliers identified as having a substantive impact

0

% of total suppliers identified as having a substantive impact

None

Please explain

Centrica defines a substantive impact as one that has a material effect on the water within a catchment area.
Our assessment tools evaluate the resilience of suppliers' current sustainability framework; including water management, consumption rate and measures to reduce pollutants discharged into water. Where a supplier is deemed to have inadequate performance (medium/high risk rating), we aim to work collaboratively with them to develop corrective action plans that improve and embed sustainable behaviours and request them to upload evidence to demonstrate their impact through SEDEX self-assessment questionnaires SAQ)/EcoVadis submissions. The information provided forms a scorecard and a corrective action plan. In 2022, no suppliers were assessed as having a substantive impact on water security within our risk assessment process.

W1.5b

(W1.5b) Do your suppliers have to meet water-related requirements as part of your organization's purchasing process?

	Suppliers have to meet specific water-related requirements
Row 1	Yes, water-related requirements are included in our supplier contracts

W1.5c

(W1.5c) Provide details of the water-related requirements that suppliers have to meet as part of your organization's purchasing process, and the compliance measures in place.

Water-related requirement

Other, please specify

Requirement to adhere to our code of conduct regarding water stewardship and management.

% of suppliers with a substantive impact required to comply with this water-related requirement

Less than 1%

% of suppliers with a substantive impact in compliance with this water-related requirement

None

Mechanisms for monitoring compliance with this water-related requirement

Supplier self-assessment

Supplier scorecard or rating

Response to supplier non-compliance with this water-related requirement

Retain and engage

Comment

If a supplier is classed as medium or high risk, according to our risk rating tool which uses criteria that factor in environmental, social and ethical issues, then we engage and request them to submit a SEDEX SAQ and an Ecovadis questionnaire which both assess impact on water security. 175 suppliers were assessed in 2022 however no suppliers were requested to submit evidence due to water-related concerns nor were any of these suppliers classed as displaying inadequate water-related performance within their SAQ or EcoVadis submission.

W1.5d

(W1.5d) Provide details of any other water-related supplier engagement activity.

Type of engagement

Information collection

Details of engagement

Other, please specify

Supplier's water-related performance is assessed through our supplier onboarding risk management process

% of suppliers by number

1-25

% of suppliers with a substantive impact

Unknown

Rationale for your engagement

Our assessment tools evaluate the resilience of their current sustainability framework; including water management, consumption rate and measures to reduce pollutants discharged into water. Where a supplier is deemed to have inadequate performance (medium/high risk rating), we aim to work collaboratively with them to develop corrective action plans that improve and embed sustainable behaviour through a supplier self-assessment questionnaire supported in 2022 by SEDEX and EcoVadis, which both look at water use and water security with the latter producing a scorecard.

Impact of the engagement and measures of success

The benefits are seen through the insights we gather into benchmarking approaches and utilising KPI tracking to demonstrate year on year improvements and being able to share best practices and participating in peer community networking enables the upskilling of suppliers in their understanding of sustainable water management.
We measure the success of this active engagement with our suppliers through SEDEX self-assessment questionnaire scores and EcoVadis scorecard data.

Comment

W1.5e

(W1.5e) Provide details of any water-related engagement activity with customers or other value chain partners.

Type of stakeholder

Customers

Type of engagement

Innovation & collaboration

Details of engagement

Collaborate with stakeholders on innovations to reduce water impacts in products and services

Rationale for your engagement

Although we are primarily an energy management and services company, we have continued to engage in our key strategic partnerships with Thames Water to offer plumbing and drain services to their customers.

The services of our trained engineers are available year-round to quickly respond to calls from Thames Water customers to fix leaks in their homes and help reduce unnecessary water use.

Impact of the engagement and measures of success

There are no set measures of success for this partnership (volume of water lost through leakage before, during and after partnership for example) however the impact of British Gas and Dyno Rod engineers' work on reducing unnecessary water usage is demonstrated by the reach of their services; around a quarter of the water Thames Water supplies is lost through leakage and in 2021 a quarter of that was lost from the 1.85 million Thames Water customer properties. Through our strategic partnership customers are able to receive leakage finding and fixing services more quickly, contributing to Thames Water's goal of increasing the efficiency of their water supply.

W2. Business impacts

W2.1

(W2.1) Has your organization experienced any detrimental water-related impacts?

No

W2.2

(W2.2) In the reporting year, was your organization subject to any fines, enforcement orders, and/or other penalties for water-related regulatory violations?

	Water-related regulatory violations	Comment
Row 1	No	

W3. Procedures

W3.1

(W3.1) Does your organization identify and classify potential water pollutants associated with its activities that could have a detrimental impact on water ecosystems or human health?

	Identification and classification of potential water pollutants	How potential water pollutants are identified and classified
Row 1	Yes, we identify and classify our potential water pollutants	Prior to the building of our electric utility assets and in order to obtain operational permits, an Environmental Impact Assessment must be completed. This will identify potential water pollutants that could have a detrimental impact on water ecosystems or human health and mitigations of risk. These pollutants will be identified based on the

		materials used and activities to be undertaken on the proposed sites. Thermal pollution, hydrocarbons, biocides and boiler chemicals are all examples of typical pollutants that need to be managed. These can adversely affect aquatic life at low concentration levels and impact humans at higher levels. Facilities from which we discharge to receiving waters are highly regulated assets, subject to water-related permits, licenses or consents. These regulatory control mechanisms identify potential pollutants; set limits on discharge levels and specify monitoring and reporting requirements for us to meet. Water quality monitoring includes automatic monitoring and manually collected samples. The assets have water quality analysis capability and trained staff to undertake monitoring of a wide range of pollutants, where required. We follow an established standard working to the permit requirements and government guidance. In addition, there is a stringent audit program in place, which looks at the permit requirements and scrutinises how these are being met. This is a requirement of BS EN ISO 14001 in terms of controls and checking.

W3.1a

(W3.1a) Describe how your organization minimizes the adverse impacts of potential water pollutants on water ecosystems or human health associated with your activities.

Water pollutant category

Inorganic pollutants

Description of water pollutant and potential impacts

Pollutants from our gas processing assets have the potential to pollute local ground water, adjacent water streams or other water bodies. Contaminated cooling water could reach these water bodies via discharges to streams or coastal waters via storm water drains. Impact is likely to be minor with regulatory standards and monitoring of water discharge in place. Glycol used in closed cooling water systems has the potential to be harmful to water ecosystems, if discharged at high concentration. Leakages on land could also be harmful to the environment.

The inherent risk of impact from contaminated cooling water is medium because it could impact a large area, sensitive ecosystem or require remedial clean-ups. However, with controls in place and high levels of regulatory scrutiny, we believe the mitigated risk is low.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
Resource recovery
Beyond compliance with regulatory requirements
Implementation of integrated solid waste management systems
Industrial and chemical accidents prevention, preparedness, and response
Requirement for suppliers to comply with regulatory requirements

Please explain

Assets ensure compliance through strict adherence to the requirements of the licence issued by the regulatory body. Where applicable, we strive to implement guidance documents issued by the regulator and also seek to follow industry best practice where applicable. We use number of events and water quality discharge as indicators of success. Areas which contain glycol and storage areas are bunded and located inside buildings at our power stations with closed system cooling water to prevent any chance of escape to the environment. This cooling water is not discharged into the water course as it's only used in closed systems. There is a robust maintenance schedule which prevents leaks from occurring, to both water bodies and land. There are also detection systems on the closed cooling systems which notify us of any water loss, this allows for immediate remedy. There are comprehensive emergency response procedures utilising spill kits and isolation valves where appropriate.

Water pollutant category

Oil

Description of water pollutant and potential impacts

Pollutants from our power generation and gas processing assets have the potential to pollute local groundwater, seawater (from offshore platforms) adjacent water streams or other water bodies. Oil and condensate could reach these water bodies via on-site spillages to ground outside of bunded areas, discharges to streams or coastal waters via storm water drains. The inherent risk of impact from these hydrocarbons is medium because it could impact a large area, sensitive ecosystem or require remedial clean-ups however with controls in place and high levels of regulatory scrutiny, we believe the mitigated risk is low.

Value chain stage

Direct operations

Actions and procedures to minimize adverse impacts

Assessment of critical infrastructure and storage condition (leakages, spillages, pipe erosion etc.) and their resilience
Resource recovery
Beyond compliance with regulatory requirements
Implementation of integrated solid waste management systems
Industrial and chemical accidents prevention, preparedness, and response

Please explain

Assets ensure compliance through strict adherence to the requirements of the licence issued by the regulatory body. Where applicable, we strive to implement guidance documents issued by the regulator and also seek to follow industry best practice where applicable. We use number of events and water quality discharge as indicators of success.

W3.3

(W3.3) Does your organization undertake a water-related risk assessment?

Yes, water-related risks are assessed

W3.3a

(W3.3a) Select the options that best describe your procedures for identifying and assessing water-related risks.

Value chain stage

Direct operations

Coverage

Full

Risk assessment procedure

Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment

Annually

How far into the future are risks considered?

1 to 3 years

Type of tools and methods used

Tools on the market
Other

Tools and methods used

WRI Aqueduct
Internal company methods
Scenario analysis

Contextual issues considered

Water regulatory frameworks
Status of ecosystems and habitats
Access to fully-functioning, safely managed WASH services for all employees

Stakeholders considered

Customers
Employees
Investors
Local communities

Comment

Value chain stage
Supply chain

Coverage
Partial

Risk assessment procedure
Water risks are assessed as part of an established enterprise risk management framework

Frequency of assessment
Every two years

How far into the future are risks considered?
1 to 3 years

Type of tools and methods used
Tools on the market

Tools and methods used
EcoVadis
SEDEX
Other, please specify
Supplier segmentation analysis

Contextual issues considered
Implications of water on your key commodities/raw materials

Stakeholders considered
Suppliers

Comment

W3.3b

(W3.3b) Describe your organization's process for identifying, assessing, and responding to water-related risks within your direct operations and other stages of your value chain.

	Rationale for approach to risk assessment	Explanation of contextual issues considered	Explanation of stakeholders considered	Decision-making process for risk response
Row 1	As part of our TCFD disclosure in 2022 we used scenario analysis to identify any water related physical risks on all of our assets using the IPCC temperature scenarios. We used the baseline water stress overlay within the WRI Aqueduct Water Risk Atlas tool to assess flood risk for our UK assets out to 2050 under RCP4.5 & RCP8.5 pathways. We also used the UK Met Office UKCP18 marine projections to assess the risk of sea level rise out to 2050 under RCP2.6, 4.5 & 8.5 scenarios. Through supplier segmentation Centrica has identified critical suppliers exposed to various risks including climate change. We are engaging with these suppliers to mitigate these risks by improving supply chain visibility; supplier governance; and ongoing performance	Water regulatory frameworks 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 relatively large volumes of municipal water, or which abstract from and discharge to freshwater, have the highest potential risk from current and future regulations and financial costs associated with water. We continually review the status at quarterly risk meetings. Our hydrocarbon production assets that discharge into the marine environment must 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 assessments, reporting and	Customers are factored into our organization's water risk assessment to ensure continuity of both gas and power supply. Any material risks to water availability which could impact operational output have the potential to negatively impact our security of supply for customers. We engage with our customers primarily by phone, email, or letter. Employees are included in the organization'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. If this was to change, for example if the water supply was disrupted at an office, employees would be informed through automated text messages and by phone. Employees would be moved to one of our work area recovery sites or told to work from home until the issue was resolved. Investors are factored	Our internal environmental specialists input to risk assessments and management at all levels via methods like quarterly risk reviews and peer review quality checks. Where appropriate, Environmental Impact Assessments (EIA) are used to evaluate potential water requirements of a proposed activity or asset, options for meeting those requirements, possible impacts and mitigations of risk. Risks are identified and mitigation strategies are developed across the business, from asset to enterprise level. Business unit and functional level risk registers are regularly reviewed by senior management. Each identified risk together with related controls, are periodically assessed and reported according to the Group Risk Management Policy, Standards and Guidelines; classified with defined scoring

	monitoring. We undertake regular reviews of supplier resilience capabilities and provide support when events occur that affect our suppliers. Suppliers are assessed using our internal supplier onboarding risk management process and we then use a self-assessment tool, provided by EcoVadis, to assess water-related risks against sector appropriate criteria. Through these methods, a large proportion of suppliers are assessed on their water-related activities but we cannot guarantee full coverage.	monitoring as required.	into Centrica's water risk assessment because any change in future risk exposure, has the potential to negatively impact on revenue and profitability alongside shareholder perception towards the company. Any relevant updates would be shared with investors through public announcements, investor meetings and reports or capital market days. Where a facility uses or consumes significant volumes of fresh water, other stakeholders such as local communities will, if applicable, be engaged to discuss issues through local town hall meetings.	methodology and 'out-of-appetite' criteria.

W4. Risks and opportunities

W4.1

(W4.1) Have you identified any inherent water-related risks with the potential to have a substantive financial or strategic impact on your business?

No

W4.1a

(W4.1a) How does your organization define substantive financial or strategic impact on your business?

Risks related to, or influenced by, climate change are assessed alongside other business risks. A substantive financial or strategic impact on our business is defined through our Risk Assessment Criteria.
In the Risk Assessment Criteria, risks are assessed using potential impact severity alongside the likelihood of materialisation. A 1-5 impact and 1-5 likelihood scale is used, with the overall risk rating (1-25) being the product of impact multiplied by likelihood. The impact score is derived using several criteria including Financial impact.
Financial impact is scored on a scale of 1-5 from negligible to severe and is normally derived through consideration of lifetime or in-year operating cash flow impact. A substantive financial impact on 'in-year operating cashflow' is defined as severity level 4 'Significant' (£40–60m) and severity level 5 'Severe' (>£60m).

W4.2b

(W4.2b) Why does your organization not consider itself exposed to water risks in its direct operations with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	Centrica is not currently exposed to substantive water-related risks. This is primarily because an immaterial proportion of our water withdrawals are in water-stressed areas, assessed using the WRI Aqueduct Water Risk Atlas tool. Using the water stress overlay, Easington gas terminal and Glanford Brigg power station are classified as 'low to medium' risk. We do not consider the water-related risks posed by these assets as substantive due to their water demand accounting for less than 1% of our total water withdrawals. The most significant risk we are exposed to is the availability of water for cooling requirements at our gas production assets, for which the supply of large volumes of water is important. All of our cooling water is abstracted from the open seas, which are sources associated with low risks regarding quantity and quality. Moreover, more than 99% of water we withdraw is used rather than consumed, as it is returned to the same area from which it was withdrawn within the same cycle period, further reducing the risks of supply interruption. This can also be demonstrated by our TCFD physical risk scenario analysis assessment for UK power assets which indicates that flood risk and water availability risk is immaterial across our sites, although this and other risks are still reviewed at quarterly risk meetings with input from environmental managers. Another inherent risk relates to the cost of water to our business. However, this is currently immaterial when compared with other commodity costs such as gas, but nevertheless we review the risk annually. Looking ahead, we do not foresee material tightening of relevant regulations and our risk profile is falling as we reduce our involvement in large-scale power generation and oil & gas operations.

W4.2c

(W4.2c) Why does your organization not consider itself exposed to water risks in its value chain (beyond direct operations) with the potential to have a substantive financial or strategic impact?

	Primary reason	Please explain
Row 1	Risks exist, but no substantive impact anticipated	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. Water related risks also exist in the supply chains of other services and products we procure. Identification of high-risk suppliers occur through our comprehensive supply chain risk management programme including the use of EcoVadis and, to date, no suppliers have been found to have substantive water-related risks. High risk and tier 0 suppliers are asked to complete an EcoVadis assessment every two years or when a contract is renewed, which enables us to re-evaluate risk and, where necessary, implement measures to reduce that risk.

W4.3

(W4.3) Have you identified any water-related opportunities with the potential to have a substantive financial or strategic impact on your business?

No

W4.3b

(W4.3b) Why does your organization not consider itself to have water-related opportunities?

	Primary reason	Please explain
Row 1	Opportunities exist, but none with potential to have a substantive financial or strategic impact on business	Centrica defines substantive opportunities as one that provides a material basis for the corporation to grow or become more efficient. Water is not material to the growth or cost saving opportunities for the business. We assess water opportunities using our annual water spend and its associated financial impact level in our risk matrix. With minimal water expenditure, our water spend has an impact rating of 1 (negligible). This means the cost of water is not currently significant enough to present substantive saving opportunities and we expect this to continue to decrease as we reduce our involvement in water-intensive assets. 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 as they do not provide a material basis for the corporation to grow or become more efficient. As detailed in W1.5e, we have formed a strategic partnership with Thames Water to engage with consumers on water-related issues through the provision of leakage finding and fixing services through our British Gas and Dyno Rod engineers, however the associated commercial opportunity is not yet deemed financially substantive. We hold an annual Board Planning Conference during which opportunities are examined including any related to water in new markets, potential investments, and technologies. Due diligence to assess commercial viability, market landscapes and future regulation is then conducted before strategies are presented to the Executive team who meet monthly. Opportunities to reduce office water consumption have been found and implemented across Centrica offices, for example, waterless urinals have been installed across many of our offices, as well as infrared toilet cubicles and Dyson taps which automate water use. However, as water is not a material consideration at Centrica, this opportunity did not have a substantive financial or strategic impact on the business, nor do any other opportunities.

W6. Governance

W6.1

(W6.1) Does your organization have a water policy?

Yes, we have a documented water policy that is publicly available

W6.1a

(W6.1a) Select the options that best describe the scope and content of your water policy.

	Scope	Content	Please explain
Row 1	Company-wide	Commitment to align with international frameworks, standards, and widely-recognized water initiatives Commitments beyond regulatory compliance	Our Group HSES policy includes a key commitment to protect the environment and the efficient use and effective management of resources, such as water, as well as set measurable objectives and targets in business plans to enhance HSE performance. This policy is expected to be fulfilled by all Business Units within Centrica. However, we do not include

		Reference to company water-related targets	performance standards for direct operations as this level of detail is contained within Business Unit standards and procedures.

W6.2

(W6.2) Is there board level oversight of water-related issues within your organization?

Yes

W6.2a

(W6.2a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for water-related issues.

Position of individual or committee	Responsibilities for water-related issues
Chief Executive Officer (CEO)	The Chief Executive has board responsibility of water-related issues as they are responsible for the Group HSES Policy, which embodies our highest-level water-related commitments. In 2022, the Chief Executive attended the Board Safety, Environment and Sustainability Committee (SESC). The Committee discusses environmental matters, including water-related issues, as required. The CEO chaired the Centrica Leadership Team (CLT) meetings that would cover operational environmental performance in more detail on at least a quarterly basis. Major water-related incidents are reported within 24 hours to the Chief Executive.

W6.2b

(W6.2b) Provide further details on the board's oversight of water-related issues.

	Frequency that water-related issues are a scheduled agenda item	Governance mechanisms into which water-related issues are integrated	Please explain
Row 1	Scheduled - some meetings	Monitoring implementation and performance Reviewing and guiding business plans Reviewing and guiding corporate responsibility strategy Reviewing and guiding major plans of action	The SESC has oversight of environmental matters including water and meets 3 times annually. The committee's duties include reviewing the adequacy and effectiveness of the Company's internal controls and risk management systems in respect of, amongst other things, environmental matters including water. Each meeting will have a standing agenda item, on significant HSE incidents which will include water related issues, as appropriate. A deeper review of environmental performance, which may include water related performance matters, is undertaken annually as presented by the Group Head of Environment. Water performance data is

		Reviewing and guiding risk management policies Reviewing and guiding strategy	captured through our global reporting tool 'MyHSES', approved by the relevant business unit leadership team and presented at the committee by the Group Head of Environment when appropriate.

W6.2d

(W6.2d) Does your organization have at least one board member with competence on water-related issues?

	Board member(s) have competence on water-related issues	Criteria used to assess competence of board member(s) on water-related issues
Row 1	Yes	Our Board and its committees have a range of skills, experience, and knowledge relevant to Centrica and its markets. We assess Board skills and expertise using a Skills Matrix covering 11 core skills criteria one of which is Climate Change and Sustainability. The specifics of this criteria have been developed with reference to Chapter Zero's guidelines including a requirement for deep experience on climate change but also the wider environmental issues or implications, of which water-related issues are prominent. The chair of our Board Safety, Environment and Sustainability Committee (SESC) is the current Chief Executive Officer of a leading UK water utility group, ensuring we have sufficient board level competence on water related issues.

W6.3

(W6.3) Provide the highest management-level position(s) or committee(s) with responsibility for water-related issues (do not include the names of individuals).

Name of the position(s) and/or committee(s)

Chief Executive Officer (CEO)

Water-related responsibilities of this position

Assessing water-related risks and opportunities
Managing water-related risks and opportunities

Frequency of reporting to the board on water-related issues

Quarterly

Please explain

The Chief Executive has responsibility for the Group HSES Policy and has overall responsibility for water-related performance. The Centrica Leadership Team review

operational environmental performance at least quarterly during designated meetings. Major water-related incidents are reported within 24 hours to the Chief Executive.

W6.4

(W6.4) Do you provide incentives to C-suite employees or board members for the management of water-related issues?

	Provide incentives for management of water-related issues	Comment
Row 1	No, and we do not plan to introduce them in the next two years	Water related issues are not a material risk for Centrica and hence we do not provide incentives for management in this area.

W6.5

(W6.5) Do you engage in activities that could either directly or indirectly influence public policy on water through any of the following?

No

W6.6

(W6.6) Did your organization include information about its response to water-related risks in its most recent mainstream financial report?

No, and we have no plans to do so

W7. Business strategy

W7.1

(W7.1) Are water-related issues integrated into any aspects of your long-term strategic business plan, and if so how?

	Are water-related issues integrated?	Long-term time horizon (years)	Please explain
Long-term business objectives	No, water-related issues were reviewed but not considered as strategically relevant/significant	16-20	In 2015 our Board undertook a major strategic review resulting in a fundamental transformation of Centrica with new long-term business objectives; moving the company from a large-scale carbon-intensive asset-based business towards a customer focussed energy services and supply model and development of transition assets. This strategy is based on a world moving towards a low carbon future that

			Centrica are contributing to through the establishment of British Gas Zero within British Gas which we believe will play a significant role in de-carbonising the energy sector. Building on progress made under our Responsible Business Ambitions, we introduced our People & Planet Plan in 2021 and afterwards published our Climate Transition Plan, which sets out our long-term commitments towards helping our customers be net zero by 2050, (28% carbon intensity reduction by 2030) and being a net zero business by 2045 (40% reduction by 2034). Water related issues were considered only insofar as they impact upon our target markets, products and services we aim to offer and capital investment we intend to make. As we transform Centrica, our exposure to water related issues such as access to freshwater is significantly reducing, particularly as we reduce our ownership of water intensive assets so investigating beyond 20 years would be immaterial to our objectives.
Strategy for achieving long-term objectives	No, water-related issues were reviewed but not considered as strategically relevant/significant	16-20	The Board and the Executive have dedicated meetings each year to review and develop strategy. In line with our business objectives, externalities are assessed including market, competitive, technology, regulatory and policy aspects primarily related to energy markets. Water related issues are only considered insofar that they influence energy markets. An example is when we review the individual aspects of energy markets within member EU states. Those with a significant and/or increasing hydroelectric sector are likely to have less attractive markets for low-carbon energy solutions compared with a member state with a largely fossil-fuel based system. Conversely, there may be opportunities for our route to market services for hydroelectric power generators. This will all be assessed through our long-term strategic business planning, however beyond 20 years, the degree of uncertainty undermines the quality of the assessment. To date, no strategically

			significant water related issues have been identified within our target markets.
Financial planning	No, water-related issues were reviewed but not considered as strategically relevant/significant	16-20	Our financial planning and capital allocation are not significantly influenced by water related issues over the long term so investigating beyond 20 years would be immaterial to our objectives. Water commodity costs are not significant for our business and reducing further as we transform. We have invested £1bn into growth businesses which are not associated with significant water risks or impacts.

W7.2

(W7.2) What is the trend in your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) for the reporting year, and the anticipated trend for the next reporting year?

Row 1

Water-related CAPEX (+/- % change)

0

Anticipated forward trend for CAPEX (+/- % change)

0

Water-related OPEX (+/- % change)

-35

Anticipated forward trend for OPEX (+/- % change)

5

Please explain

OPEX:
Our OPEX includes the cost associated with water abstraction, discharge permits and also from withdrawal and discharge costs associated with municipal water supplies. Our OPEX decreased in 2022 due a number of offices closing and a reduction in engine runtime at Glanford Brigg power station, both contributing to a reduction in municipal water supply. Going forward, total OPEX is anticipated to slightly increase as we bring online a number of projects over the next two years such as our peaking plants in Redditch, UK and in Athlone and Dublin in Ireland which will all require municipal water supply.

CAPEX:
This year's water-related CAPEX has remained at 0 as we haven't had any specific water-related project expenditure and we do not anticipate there to be any in 2023.

W7.3

(W7.3) Does your organization use scenario analysis to inform its business strategy?

	Use of scenario analysis	Comment
Row 1	Yes	We have completed a detailed analysis of our primary business, located in the UK and Ireland, against several scenarios ranging from 1.5 to 4 degrees. We used a number of third-party reference scenarios including National Grid's Future Energy Scenarios for transitional risks and opportunities, and the IPCC Representative Concentration Pathways for physical risks and opportunities. This analysis has provided valuable insights into the range of risks and impacts associated with climate change and the energy transition on Centrica's core businesses whilst also highlighting the significant opportunities and potential growth areas that Centrica is already engaged in through its current strategy.

W7.3a

(W7.3a) Provide details of the scenario analysis, what water-related outcomes were identified, and how they have influenced your organization's business strategy.

	Type of scenario analysis used	Parameters, assumptions, analytical choices	Description of possible water-related outcomes	Influence on business strategy
Row 1	Climate-related	We used the WRI Aqueduct tool to assess flood risk that could lead to damage and operational difficulties for all our UK assets. We performed this analysis under RCP4.5 and RCP8.5 scenarios, using asset value as a financial indicator to calculate overall risk impact. We also used the UK Met Office UKCP18 Marine Projections to assess risk of sea level rise which could affect our coastal assets through inundation. We performed this analysis under RCP2.6, RCP4.5 & RCP8.5 scenarios, using asset value as a financial indicator to calculate overall risk impact.	No material risks were identified through this analysis as under all scenarios and asset locations, flood risk magnitude and sea level rise does not exceed current site elevations. As we continue to reduce our portfolio of large-scale energy assets, our risk exposure in this area is materially reducing.	As no material risks were identified, the analysis has had no influence on our business strategy.

W7.4

(W7.4) Does your company use an internal price on water?

Row 1

Does your company use an internal price on water?

No, and we do not anticipate doing so within the next two years

Please explain

We do not have an internal price on water as it does not pose a material strategic or financial risk and we do not operate in any water constrained areas and our discharges are well regulated in the jurisdictions in which we work.

W7.5

(W7.5) Do you classify any of your current products and/or services as low water impact?

	Products and/or services classified as low water impact	Definition used to classify low water impact	Please explain
Row 1	Yes	Power generating assets that use less water per unit of energy produced are considered 'low water impact' relative to traditional power generating assets. We consider water intensity reductions over 10% compared to previous power generation assets to have a lower water impact.	Our power generation and gas production assets have the most material water impact as cooling and produced water represent 99% of the total water we withdraw. They are also suppliers of our core commodities, gas, and electricity. As such, they have the greatest opportunity for low water impact development. In recent years we have continued to close or divest our most water intensive OCGT and CCGT power stations and have moved to reciprocating gas engines that do not require water. As a result, they have a much lower water intensity (water used /MWh of electricity generated). An example of where we have moved towards lower water impact assets is through the closure of the water-cooled Brigg and Peterborough OCGT power station that ceased operations in 2020 and 2021 respectively. We now only operate air-cooled gas engines on site at Brigg and our gas engines currently in development in Redditch in

			Worcestershire and Athlone and Dublin in Ireland are also air-cooled.

W8. Targets

W8.1

(W8.1) Do you have any water-related targets?

Yes

W8.1a

(W8.1a) Indicate whether you have targets relating to water pollution, water withdrawals, WASH, or other water-related categories.

	Target set in this category	Please explain
Water pollution	No, and we do not plan to within the next two years	We have a company-wide goal of compliance with all legal and regulatory requirements. This is detailed in our global HSE policy, global HSE Standard and as a part of our company code. For example, in order to obtain operational permits, an Environmental Impact Assessment must be completed to identify potential water pollutants that could have a detrimental impact on water ecosystems or human health. In these cases, our goal is to ensure ongoing compliance with those limits rather than setting absolute reduction targets.
Water withdrawals	Yes	
Water, Sanitation, and Hygiene (WASH) services	No, and we do not plan to within the next two years	As part of our duty of care to our people and through our Health, Safety and Environment assurance activities, we ensure and verify that all employees have access to WASH services at their normal place of work. Since this is something we continuously upkeep, we do not set quantitative targets.
Other	No, and we do not plan to within the next two years	We currently have no other water-related targets and do not plan to have any within the next two years.

W8.1b

(W8.1b) Provide details of your water-related targets and the progress made.

Target reference number

Target 1

Category of target

Water withdrawals

Target coverage

Business division

Quantitative metric

Reduction in total water withdrawals

Year target was set

2021

Base year

2021

Base year figure

13,304

Target year

2022

Target year figure

15,966

Reporting year figure

15,009

% of target achieved relative to base year

64.0495867769

Target status in reporting year

Achieved

Please explain

Our water-related target in 2022 was for our Group Property function (all UK offices across the Group) to have increased water withdrawals (measured in m3) by no more than 20% compared to 2021 levels. A water withdrawal reduction target for our offices was unrealistic as consumption in 2021 was far lower than usual due to a high proportion of employees working from home compared to before the COVID-19 lockdowns while 2022 office occupancy, and therefore water withdrawals, began to resemble pre-pandemic levels. This target was put in place to ensure our Group Property function was held accountable for monitoring and reacting to any unexpected withdrawal patterns throughout the year which proved successful as although reducing water withdrawals was not possible, we surpassed the target by capping our water withdrawals at a 13% increase compared to 2021, 7% lower than the target (with lower than the target being an indication of success). Moreover, UK office water withdrawal has fallen 77% overall when compared with 2019, the most recent full year when office-occupancy levels were high and therefore more comparable with 2022 levels. This demonstrates our continued commitment to limiting our water-related impact across our offices.

W9. Verification

W9.1

(W9.1) Do you verify any other water information reported in your CDP disclosure (not already covered by W5.1a)?

No, we do not currently verify any other water information reported in our CDP disclosure

W10. Plastics

W10.1

(W10.1) Have you mapped where in your value chain plastics are used and/or produced?

	Plastics mapping	Please explain
Row 1	Not mapped – but we plan to within the next two years	We have a company-wide goal of compliance with all legal and regulatory requirements. This is detailed in our global HSE policy, global HSE Standard and as a part of our company code. Up until this year we have not been mandated to map plastic use (we do not produce plastics) in our value chain however as part of our work to comply with extended producer responsibility (EPR) for packaging, this year we are actively working to implement reporting processes that collect plastic packaging use data from across the business. This will facilitate an overall mapping of where in the business plastics are used and disposed of.

W10.2

(W10.2) Across your value chain, have you assessed the potential environmental and human health impacts of your use and/or production of plastics?

	Impact assessment	Please explain
Row 1	Not assessed – and we do not plan to within the next two years	All of our operations presently meet all legal and regulatory requirements on plastic use however we do not have the capabilities to be able to assess the environmental and human health impacts of the plastics we use to package our products across our entire value chain.

W10.3

(W10.3) Across your value chain, are you exposed to plastics-related risks with the potential to have a substantive financial or strategic impact on your business? If so, provide details.

	Risk exposure	Please explain

Row 1	Not assessed – and we do not plan to within the next two years	We classify a substantive financial or strategic impact to be one that has a material impact on the company's ability to grow or become more efficient and we do not classify plastic-related risks to have such an impact. Due to the immateriality of plastic-related risks on our finances and strategy we therefore do not plan to undertake future risk assessments within the next two years.

W10.4

(W10.4) Do you have plastics-related targets, and if so what type?

	Targets in place	Target type	Target metric	Please explain
Row 1	Yes	Waste management	Increase the proportion of recyclable plastic waste that we collect, sort, and recycle	Although we have no specific reduction target for plastic-use, our recycling targets are plastics-related. We strive to increase the waste recycling rate in our offices and meet the annual targets we set ourselves. With goods made of plastics being recyclable and widely used in offices, ensuring they are properly collected, sorted and disposed of is an important component of our recycling targets. These targets include a 70% UK office recycling rate, maintaining zero waste to landfill and a 90% recycling rate at our distribution centres.

W10.5

(W10.5) Indicate whether your organization engages in the following activities.

	Activity applies	Comment
Production of plastic polymers	No	
Production of durable plastic components	No	
Production / commercialization of durable plastic goods (including mixed materials)	No	
Production / commercialization of plastic packaging	No	
Production of goods packaged in plastics	No	
Provision / commercialization of services or goods that use plastic packaging (e.g., retail and food services)	Yes	

W10.8

(W10.8) Provide the total weight of plastic packaging sold and/or used, and indicate the raw material content.

	Total weight of plastic packaging sold / used during the reporting year (Metric tonnes)	Raw material content percentages available to report	Please explain
Plastic packaging used		None	We are actively working to implement reporting processes that will collect data on the total plastic packaging used in our operations as part of our efforts to comply with the upcoming extended producer responsibility (EPR) measures. To date we have not been mandated to report our plastic packaging use and have therefore not done so with there being a lack of material plastics-related risks and opportunities for our business (hence why the total weight of plastic packaging sold/used during the reporting year is reported as '-', to indicate that this figure is unknown as we do not have the reporting processes in place to capture this data and submit a figure within this disclosure). Therefore, measuring and reporting on our plastic packaging usage has historically not been a strategic priority for our relevant business areas.

W10.8a

(W10.8a) Indicate the circularity potential of the plastic packaging you sold and/or used.

	Percentages available to report for circularity potential	Please explain
Plastic packaging used	None	We are actively working to implement reporting processes that will collect data on the total and type of plastic packaging used in our operations as part of our efforts to comply with the upcoming extended producer responsibility (EPR) measures. To date we have not been mandated to report our plastic packaging use or the type of packaging used. Additionally, with there being a lack of material plastics-related risks and opportunities for our business, measuring and reporting on our plastic packaging usage has historically not been a strategic priority for our relevant business areas.

W11. Sign off

W-FI

(W-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

W11.1

(W11.1) Provide details for the person that has signed off (approved) your CDP water response.

	Job title	Corresponding job category
Row 1	Chief Executive Officer	Chief Executive Officer (CEO)

SW. Supply chain module

SW0.1

(SW0.1) What is your organization’s annual revenue for the reporting period?

	Annual revenue
Row 1	

SW1.1

(SW1.1) Could any of your facilities reported in W5.1 have an impact on a requesting CDP supply chain member?

SW1.2

(SW1.2) Are you able to provide geolocation data for your facilities?

	Are you able to provide geolocation data for your facilities?	Comment
Row 1		

SW2.1

(SW2.1) Please propose any mutually beneficial water-related projects you could collaborate on with specific CDP supply chain members.

SW2.2

(SW2.2) Have any water projects been implemented due to CDP supply chain member engagement?

SW3.1

(SW3.1) Provide any available water intensity values for your organization's products or services.

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please indicate your consent for CDP to share contact details with the Pacific Institute to support content for its Water Action Hub website.

Please confirm below

I have read and accept the applicable Terms