

Welcome to your CDP Climate Change Questionnaire 2020

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Severn Trent PLC is a FTSE 100 company and provides clean water and wastewater services in the UK and internationally through our regulated and non-regulated businesses – Severn Trent Water and Severn Trent Services.

Severn Trent Water and Hafren Dyfrdwy are two of the 11 regulated water and sewerage companies in England and Wales and provides high-quality services to more than 4.6 million households and businesses in the Midlands and Wales.

Severn Trent Services is our non-regulated business and provides water services to UK and global municipal, industrial and commercial customers as well as generating renewable energy from food waste, crop, solar and wind as part of our Green Power business, sludge treatment as part of bioresources and property development.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data.

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Reporting year	April 1, 2019	March 31, 2020	No

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

United Kingdom of Great Britain and Northern Ireland

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

GBP

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Financial control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s)	Please explain
Board-level committee	<p>The Board has overall responsibility for ensuring that risk is managed effectively across the Group and that there is an effective risk management framework in place. The Board and Audit Committee continually review our principal risks, and related controls, including the impact of extreme and unpredictable weather due to climate change. Our sustainability framework, including action on climate change, is signed off by the Chair of the Board. The Corporate Sustainability Committee is responsible reviewing the Group's non-financial risks and opportunities.</p>
Board-level committee	<p>The Corporate Sustainability Committee provides an overview of the Group's approach to Corporate Sustainability and provides an oversight of the Group's key non-financial risks and opportunities which includes climate change risks and opportunities. The Committee regularly reviews performance against targets and indicators against our sustainability framework including key environmental performance such as climate-related issues i.e. resource productivity (leakage, water efficiency, waste), carbon reduction, energy management and renewable energy generation. The Committee was also involved in the decision to publish the Group's first standalone Sustainability Report in 2020.</p> <p>During 2019 the Corporate Sustainability Committee reviewed our approach to environmental leadership, including our triple carbon pledge and our plans for climate change adaptation. The Committee also supported the decision to develop science-based targets.</p>

	<p>Both the CEO and Chair of the Board are members of this Committee and it is chaired by a Non-Executive Director, who brings both climate change and wider environmental leadership experience to the Board. The Chair of the Corporate Sustainability Committee reports to the Board on its proceedings after each meeting. Membership of the Corporate Sustainability Committee comprises five Board members (the majority of the Board).</p> <p>The Board Skills Matrix sets out that the Chair of the Board and Chair of the Corporate Sustainability Committee possess significant Climate-related experience.</p>
Chief Executive Officer (CEO)	<p>Our CEO develops and implements the Group's strategy, including our focus on carbon and climate change through our triple carbon pledge.</p> <p>In 2019 our CEO signed, on behalf of Severn Trent, our commitment to develop science-based targets and to support the principles of the Task Force on Climate-related Financial Disclosures (TCFD).</p>
Chief Financial Officer (CFO)	<p>Our CFO manages the Group's financial affairs and supports the CEO in the implementation and achievement of the Group's strategic objectives, including investment in, and managing the financial risk of, climate change, carbon reduction and energy management.</p> <p>The CFO is involved in activity such as the decision in 2019 to purchase 100% of our energy needs from renewable sources – enabling us to meet one of our commitments under the triple carbon pledge 10 years early.</p>
Board Chair	<p>Our newly appointed Chair sits on the Corporate Sustainability Committee. The Chair is responsible for signing off our sustainability framework, which sets out our approach to climate change – both adapting and mitigating against it.</p> <p>To ensure a thorough handover between the outgoing Chair and incoming Chair both Directors served concurrently on the Corporate Sustainability Committee for a three month period.</p> <p>The Board approved the Chair's role specification and one of the key skillsets sought was sustainability expertise. The current Chair possesses such experience and was previously Head of Corporate Social Responsibility in a former role. This experience was confirmed to all Shareholders in the RNS announcing her appointment.</p>
Other, please specify C-Suite committee	<p>The Severn Trent Executive Committee regularly reviews company performance against the business plan, which includes our embedded approach to climate change mitigation and adaptation.</p> <p>During 2019 the Severn Trent Executive Committee agreed the recommendations to develop science-based targets and to purchase 100% of our energy needs from</p>

	renewable sources
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C1.1b

(C1.1b) Provide further details on the board’s oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding business plans Setting performance objectives Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	<p>The Board meets 7 times a year to review strategic matters and in 2019 held a session focused specifically on carbon. Climate change is discussed as a key environmental topic.</p> <p>Sustainability-related discussions take place at all Board meetings. The Chair of the Corporate Sustainability Committee provides a detailed update on sustainability matters at every Board meeting, through a standing agenda item.</p> <p>In addition to the detailed sustainability discussions at every Board meeting, the Board also considered the following sustainability topics as part of the formal business of Board meetings during the year (further detail on page 79 of the Annual Report):</p> <ul style="list-style-type: none"> - Climate Change Adaptation; - Strategy for Environmental Leadership; - Biodiversity; and - Our separate, dedicated Board Strategy day also considered the Group’s carbon and energy strategy. <p>Our Enterprise Risk Management (‘ERM’) process establishes target risk positions for each of our significant risks. The Board formally discusses the progress towards this position and the mitigating actions being undertaken during risk review meetings every six months – a large number, such as resource productivity, are climate related. A dedicated ERM Board workshop was held in March 2020, focused on the ERM process.</p> <p>Our Board skills matrix in the Annual Report (page 83) and Accounts sets out which Directors possess</p>

		<p>sustainability – and, in particular, climate change – experience and expertise.</p> <p>The Corporate Sustainability Committee (a Board Committee) has oversight of Severn Trent’s key non-financial risks. In 2019/20, the Committee’s Terms of Reference were updated to include a greater focus on climate change. Over the year, the Head of Environment presented to the Committee an update on our ambitions around environmental leadership – covering our plans around climate change adaptation and an update against our commitments under our triple carbon pledge. Our Climate Change Lead also presented a recommendation to sign up to developing science-based targets and to support the principles of the Task Force on Climate-related Financial Disclosures (TCFD)– both of which were approved by the Committee.</p> <p>At every meeting, progress against our carbon targets is reviewed by the Committee through a sustainability performance report, presented by the Sustainability Team. In addition, we intend to establish a formal annual review of climate risks and opportunities.</p> <p>The Committee is updated by Executive-led steering groups such as the Sustainability Steering Group and the Energy Steering Group.</p>
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C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Executive Officer (CEO)	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly
Corporate responsibility committee	Assessing climate-related risks and opportunities	Quarterly

Sustainability committee	Both assessing and managing climate-related risks and opportunities	Quarterly
Other, please specify Energy Steering committee	Managing climate-related risks and opportunities	More frequently than quarterly
Other committee, please specify Executive Committee	Both assessing and managing climate-related risks and opportunities	More frequently than quarterly

C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

- **The Board,**
 - The Board, as part of its consideration of Section 172 of the Companies Act 2006, has regards to the impact of the Company's operations on the environment when making decisions.
 - The Board understands clearly the risks we face as a result of climate change and therefore receives regular updates on environmental matters from the CEO and other Executive Committee members.
 - Sustainability-related discussions (including climate-related topics) take place at all Board meetings. The Chair of the Corporate Sustainability Committee provides a detailed update on sustainability matters at every Board meeting, through a standing agenda item.
 - Each year, the Board reports on how the Group is reducing its carbon footprint in the Annual Report (pp. 127-128 of the 2019/20 Annual Report).
 - In addition to the detailed sustainability discussions at every Board meeting, the Board also considered the following sustainability topics as part of the formal business of Board meetings during the year (further detail on page 79 of the Annual Report):
 - Climate Change Adaptation;
 - Strategy for Environmental Leadership;
 - Biodiversity; and
 - The separate, dedicated Board Strategy day also considered the Group's carbon and energy strategy
- **Corporate Sustainability committee**
 - Our overall approach to climate change is overseen by our Corporate Sustainability Committee, which comprises our CEO, the Chair of our Board and two Non-Executive Directors and meets at least once a quarter. As stated in the Committee's terms of reference, the duties of the Committee are to consider and recommend to the Board: The approval of Group policies e.g. Group Environmental Policy; develop and recommend to the Board Corporate Sustainability targets and key performance indicators; and receive and review reports on progress towards the achievement of such targets and indicators. This ensures the creation of environmental standards, particularly those that relate to activities that have the most significant environmental impact e.g. climate change and energy use.
 - The Committee regularly reviews a performance report against key sustainability KPIs. Current climate-related KPIs include water resource

- management, energy management, carbon metrics and biodiversity. The Committee will challenge and make recommendations to the Board if improvement on operational delivery of metrics is required.
- Corporate sustainability committee signs off our external sustainability report which includes our carbon and climate change reporting
 - **CEO and CFO** - develop and implement the Group's strategy as approved by the Board, with climate change being a key strategic focus.
 - Our CEO is also accountable for delivering against Customer Outcome Delivery Incentives (ODIs). These are performance metrics, reported to our regulator that are one measure of the success of implementing the Group strategy. Climate-related issues are monitored through ODIs e.g. leakage and biodiversity performance.
 - **Executive Committee**
 - Our Executive Committee supports our CEO by reporting and managing the group strategy implementation at the business unit level.
 - Assessing and managing climate-related risks and opportunities forms an integral part of our business planning process. Both mitigation and adaptation are integrated into performance objectives and business plans.
 - **Sustainability Steering Committee and Energy Steering Group**
 - These executive-led steering groups were established to assess and manage our performance against our wide-ranging sustainability commitments including climate change commitments – providing an overview of our performance.
 - Membership of these committees include key roles such as Head of Sustainability, Head of Environment, Energy Manager and Climate Change Lead.
 - Steering groups are fed information and data updates by individual work streams across the business, who are best placed to provide the detail
 - Quarterly we track progress against our carbon targets through the energy steering committee

Our sustainability governance structure is set out on page 49 of our 2020 Sustainability Report.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	All of our people share in our success by participating in our all-employee bonus plan, ensuring all employees are aligned with the same measures and rewarded for achieving our key objectives. 35% of this bonus is made up of performance against our customer Outcome Delivery Incentives which, through a mechanism of reward or penalty, measure performance against the areas that customers have told us matter most as well as our broader environmental responsibilities. A large proportion of these key metrics are climate-related, such as leakage, water efficiency and biodiversity.

		<p>The Company's Policy remains to attract, retain and motivate its leaders and to ensure they are focused on delivering business priorities within a framework designed to promote the long-term success of Severn Trent and aligned with shareholder interests.</p> <p>Page 105 in our Annual Report sets out our remuneration framework, illustrating how performance linked pay is linked to our strategic framework.</p>
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C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive	Type of incentive	Activity incentivized	Comment
Chief Executive Officer (CEO)	Monetary reward	Emissions reduction target	90% CEO's bonus and LTIP remuneration is linked to company performance, including a specific target on carbon emission reduction. More can be read on page 51 of our 2020 annual performance report https://www.stwater.co.uk/content/dam/stw/regulatory-library/annual-performance-report-2020.pdf
Chief Executive Officer (CEO)	Monetary reward	Energy reduction target	One example of incentivising energy reduction comes from the PBIT element of CEO's annual bonus (see page 105 of 2020 Annual Report and Accounts). Energy is one of the businesses highest cost units. Our CEO is incentivised to reduced energy costs, improving PBIT and in turn, her annual bonus. The threshold between 0% and 100% outturn of the PBIT element of the CEO's annual bonus is around £26 million. The total cost of powering our operations came to £90 million pounds this year. This creates a highly incentivised energy reduction target.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	1	Short term risks include dynamic risk assessments and assessments during schemes, which are generally limited to a year ahead. We are also assessing our short, medium and long-term climate risks as part of our update of the 2015-2020 Climate Change Adaptation Report.
Medium-term	1	7	This is the range of our business planning period - we set a plan in 2018/19 which will deliver through to 2025.
Long-term	7	100	Generally, our risk assessment approach limits to a 25 year-look ahead - but as many of our assets have asset lives longer than that, risk can be assessed much further in some instances (e.g. scheme design). Specifically, for our WRMP we have tested scenarios forecasting 80 years ahead to identify any gaps or shortfalls in our schemes, which contributes to our decision making when considering future capital schemes.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

We operate a well-established Enterprise Risk Management (ERM) process across the Severn Trent group. Our ERM process assesses and helps manage our significant risks across the risk portfolio. These risks are linked to our corporate objectives, key processes and legal and regulatory obligations.

The largest potential sources of risk, or combination of risks that can seriously affect the performance, future prospects or reputation of the group are reported as Principal Risks and are published in our Annual Report.

The Central ERM team control the ERM process which is underpinned by standardised tools and methodology to ensure consistency. Our ERM framework ensures all risks are scored against the scoring criteria. Risks which are ranked as 'High' scoring (substantive) risks are reported to the Severn Trent Board and formally discussed on a regular basis. The Board keeps the relationship between our strategic ambitions and the management of risk under continual review. The ERM process establishes target risk positions for each of our significant risks. The ERM process is controlled by the central ERM team and underpinned by a standardised methodology to ensure we have undertaken a detailed and rigorous review of all our risks and how they interrelate 'in the round'. These include corporate and financial risks as well as operational risks which were more traditionally the focus.

Climate change is a key factor that influences many of our risks and this is addressed from a system perspective. Extremes in weather pose a multitude of physical climate-related risks to our service. For example, an increase in the frequency and severity of hot weather spells leading to increased customer demand increases the risk of low pressure incidents and supply interruption events. We have operational systems which build in robust levels of resilience to ensure we can continue to provide an excellent service to customers. Just as importantly, this approach considers third-party risks such as power supply failures and puts in place responses to tackle them should they occur. The likelihood of power supply failures is likely to become greater with an increase in extreme rainfall events. Our risk of internal and external sewer flooding is likely to increase with climate change, due to elevated rainfall levels and more frequent intense rainfall events. We also look to work in collaboration, for example with the Environment Agency to manage operational response to flooding as we recognise inter-dependencies.

Our 2015 climate change adaptation report provides a full risk assessment of the risks and opportunities posed by climate change. We have updated our risk assessment methodology this year to align more closely with indexes such as the Taskforce on Climate-related Financial disclosures (TCFD). Each climate-related risk identified has been scored for three different proximities (short-term, medium-term and long-term), using the latest UKCP18 climate projections as a scenario reference. For each risk we have assessed the likelihood of occurrence in any given year at each proximity, and the impact of the risk at each proximity. Our scoring criteria assesses risks on a 1-point to 5-point basis with 1-point being the lowest level of likelihood/impact, and 5-points being the greatest level. Our methodology also lays out different options for our impact criteria, dependent on which areas of the business or business service is impacted by each risk. Relevant impact criteria is selected for each risk, with support from subject matter experts (SMEs), to ensure risk impacts are assessed accurately.

As part of the impact assessment for climate change related risks, we consider factors such as; customer impact, strategic objectives, business disruption, environmental effects, regulation/compliance impact, regulatory impact and media impact.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

We have a fully integrated risk process that covers our entire group. As part of our continuous process the central ERM team works with the individual business units across the organisation to ensure the process is being applied. The Board has overall responsibility for ensuring that risk is managed effectively across the Group and that there is an effective risk management framework in place. The Board, and Audit Committee, continually review our principal risks, and related controls, including the impact of extreme and unpredictable weather due to climate change. Our sustainability framework, including action on climate change, is signed off by the Chair of the Board. As previously mentioned, our Enterprise Risk Management (ERM) process establishes target risk positions for each of our significant risks, which are discussed formally by the Board every six months to review progress towards these positions and the mitigating actions being undertaken for these risks. The Board meets 10 times a year to review strategic matters and in 2019 held a session focused specifically on carbon. The Corporate Sustainability Committee (a Board committee) has oversight of Severn Trent's key non-financial risks. In 2019/20, the Committee's Terms of Reference were updated to include a greater focus on climate change. Throughout the year the Committee discussed our approach to climate change adaptation and approved the commitment to develop Science Based Targets in line with the goal of the Paris Agreement to limit global warming to below 1.5°C. Going forwards we will establish a formal annual review of climate risks and opportunities.

Our significant risks are reported to our Executive Committee, Audit Committee and Board every half year, while specific risk topics are discussed at the Board throughout the year. Assessment of the influence that climate change has on our significant risks form part of our ERM process. As part of our ongoing ERM process, we constantly review the risk landscape to recognise new risks or to reassess existing risks due to a change in the risk landscape. During our business planning process we also engaged with our established network of regional stakeholders to understand the challenges they face over the next 25 years and help inform where we target resources to improve resilience.

Highlighted below are the some of the key steps from our risk management process:

We have a fully integrated risk process that covers our entire group. As part of our continuous process the central ERM team works with the individual business units across the organisation to ensure the process is being applied.

Highlighted below are the some of the key steps from our risk management process

RISK IDENTIFICATION:

Risk Workshops:

Business Units conduct risk workshops to help identify new risks as a bottom up risk Identification technique. The central team conduct risks sessions with the Exec to ensure there is a top down view on risk.

Horizon scanning and Emerging Risks:

On a regular basis a group level a systematic examination of potential threats, risks, emerging issues and opportunities, horizon scanning, is completed and at a more local level emerging risks are identified and tracked as part of the risk management process. We hold this information on our risk system.

RISK ASSESSMENT:

Risk Review and sign off:

All risks on the risk register are reviewed, updated and signed off by the designated risk owner frequently, in accordance with our risk process. The central team monitors and tracks compliance

Independent challenge:

The central team along with a select panel of senior management from different departments provide both independent scrutiny and support of our ERM processes.

Treatment:

The risk response forms a unique plan for each individual risk, however there are 5 distinct groups which the responses falls under: Treat, Terminate, Transfer, Tolerate and Take.

Monitor and Reporting:

Monitoring the reporting are crucial steps in any Risk Management process. Regular meeting are held to monitor progress and different reports are run on a monthly, quarterly and 6-monthly basis all serving designated purposes and for a select audience.

Value chain stage(s) covered

Direct operations

Risk management process

A specific climate-related risk management process

Frequency of assessment

Every three years or more

Time horizon(s) covered

Short-term

Medium-term

Long-term

Description of process

We have participated in the first two rounds of Climate Change Adaptation reporting under the Climate Change Act 2008, and are updating our full risk assessment this year, which we will embed within our risk management process. We are developing a separate climate change risk and going forwards, aim to further understand potential financial implications of climate risk. This will be focus as we continue to evolve our disclosures.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	As a regulated company this is highly relevant to us and we consider risks of regulation, for example that weather events may make us unable to meet current regulatory targets, leading us exposed to regulatory risk under the current system. Our approach to managing climate-related risks reflects our status as a regulated utility providing essential services and operating as part of the Critical National Infrastructure for the UK. The understanding we gain from our ERM process allows us to put in place effective mitigation strategies. We have also participated in the first two rounds of Climate Change Adaptation reporting under the Climate Change Act 2008, and are updating our full risk assessment this year, which we will embed within our risk management process.
Emerging regulation	Relevant, always included	As a regulated company this is highly relevant to us and we consider risks of regulation, for example that future price review methodologies may not take climate change impacts into account. We have issued our sustainable finance framework and sustainable bond which is good practice for issuing debt under EU taxonomy.
Technology	Relevant, always included	As an asset driven business this is very relevant to us, for example the opportunity (which we have pursued over recent years) that new renewables technology will enable us to reduce carbon emissions and generate more renewable energy from our existing feed stocks. We are closing down our current data centres and migrating to 'The Cloud', which will enable us to reduce energy demands through our servers and reduce e-waste. We are exploring carbon capture at our largest wastewater recycling plant (Minworth) which will contribute towards our net-zero target. We have committed to converting to a 100% electric vehicle fleet by 2030.
Legal	Relevant, always included	Legal risks, like current regulations, are compliance risks which we must always consider, for example that cyber threats may change with a changing climate impacting our legal duties on data protection.

Market	Relevant, always included	Market risk exists because of changes in market conditions such as price changes or customer expectations. We monitor energy import prices and renewable energy export prices and incentive rates to help inform decision around potential investment which are considered as part of our business planning process.
Reputation	Relevant, always included	Reputational risks are important for us to consider as a FTSE 100 company. For example, the reputational benefit opportunity of consistently achieving reductions in carbon emissions and holding the carbon trust standard for future years. There will also be a reputational benefit of the company committing to and achieving Science Based Targets. There will be a reputational risk and benefit opportunity of attracting ESG investors.
Acute physical	Relevant, always included	Acute physical risks include those that are event-driven i.e. increased severity of extreme weather events, such as cyclones, hurricanes, or floods. Severn Trent has a 'goal zero' policy on safety and we aim that no one is hurt or made unwell by what we do. Physical risks are considered routinely - such as operating during storm conditions.
Chronic physical	Relevant, always included	Chronic physical risks are longer-term shifts in climate patterns (e.g. sustained higher temperatures) that may cause sea level rise or chronic heat waves. Severn Trent has a 'goal zero' policy on safety and we aim that no one is or made unwell by what we do. Longer-term physical risks are considered routinely - such as operating during hot weather and the risk of freeze/thaw events in the winter.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Failure to meet customer demand due to hotter, drier summers - Increased pressure on our water resources means more risk to service and higher cost to meet customers' needs. Increased customer demand could lead to low pressure or loss of supply during hot weather spells.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

We have not yet been able to give a single figure to quantify the potential financial impact. The impact will influence many costs such as penalty costs for service failure - e.g. penalty/reward rate for 2018/19 was £1.1 million per average customer minute out of supply.

An example of the potential financial impact can be taken from the impact of our 2018 hot weather incident which resulted in £22 million of direct and indirect costs across the business.

Cost of response to risk

22,000,000

Description of response and explanation of cost calculation

We are managing this risk through implementation of our water resources plan.

We use demand management measures to reduce the amount of water we need to put into supply by:

- reducing leakage on our network;
- helping customers to use less water through water efficiency activities and education;
- and
- increasing the coverage of water meters across our network to further reduce

consumption and to improve our understanding of water demand patterns.

While making the best use of our sustainable sources of supply by:

- reducing abstraction from those water sources that have a detrimental impact on the environment;
- making sure our future water abstractions do not pose a risk of environmental deterioration, as required by the Water Framework Directive;
- increasing the flexibility and resilience of our supply system;
- increasing or optimising deployable output from existing, sustainable sources where possible;
- using catchment restoration techniques to improve habitats and ecological resilience to low flows;
- using catchment management measures to protect our sources of drinking water supply from pollution risks; and
- exploring trades in and out of our region to optimise national use of resources.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Increased direct costs

Company-specific description

Exceeding the sewer capacity due to wetter winters and increased storminess - Runoff exceeding capacity of sewer system and storage, causing surface flooding which affects customers and can cause river pollution.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Although we cannot accurately attribute an exact cost this risk provides, we do have an understanding of the financial implications – for example through our Internal and external sewer flooding events which are measured as part of our customer outcome delivery incentives (ODIs). Increases in extreme climate-related weather events, such as storminess or rainfall frequency, could negatively impact our company by increasing the number or severity of sewer flooding events. We face either penalty or reward based on our performance against our ODIs. Increases in sewer flooding would lead to increased ODI penalties. For example, in 2019/20 we faced a penalty of £15.637m due to under-performance against both internal and external sewer flooding targets.

Cost of response to risk

15,000,000

Description of response and explanation of cost calculation

We have a range of management activities which include:

- Doubling the number of sustainable urban drainage solutions. By improving surface water management as part of retrofit solutions we will be able address current capacity issues and improve future resilience in our networks.
- Focusing R&D on technologies to develop resilient drainage solutions for the future
- We use our asset deterioration model to predict pipes most likely to suffer blockages resulting in sewer flooding and pollution of watercourses. The model suggests interventions, such as cleaning or replacing sewers.
- We have a programme of customer education on sewer misuse, aiming to reach 125,000 customers by 2020.
- We are developing a Drainage and Wastewater Management Plan (DWMP), including climate projections and 2D flood risk management modelling. This covers the investments we plan to make over the next five-year period, 2020-25, as well as setting out a long-term (25-year) strategy for how we are going to deliver a reliable and sustainable wastewater service.

Comment

We are not able to give a single figure for management costs. Risks are being addressed within £137m sewer flooding investment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changes in precipitation patterns and extreme variability in weather patterns

Primary potential financial impact

Increased direct costs

Company-specific description

Abstraction restrictions due to hotter and drier summers - Reduced reservoir and river levels results in restrictions on the amount we can abstract from resources, increasing our costs as we use alternative sources and additional resources which can threaten customers' supply.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The financial implications would be influenced by the frequency and severity of hot, dry spells. As an example - Minutes without supply is measured as one of our customer outcome delivery incentives (ODIs) which offers penalty or reward based on performance. In 2018/19 the rate of reward/penalty per minute without supply was £1.10m. Restriction of abstraction due to hotter, drier summers could threaten customers supply, leading to increased supply interruption incidents which would incur increasing penalties. (Page 32 of APR 2019)

Cost of response to risk

Description of response and explanation of cost calculation

To reduce the overall demand for water and to make the best use of our existing water resources. Our strategy is to flexibly adapt over the next 25 years so we can meet future demands for water and be able to better cope with long term uncertainties such as those posed by climate change. We will continue to plan for all of the risks to our supply demand balance together as part of our water resource management plan. We will: Improve the flexibility of our supply system allowing us to move water around our network. During the next five years we will be increasing the deployable output of our Strategic Grid. Improve the resilience and sustainability of our existing water supplies. We are investing to provide new sustainable borehole sources and associated treatment and distribution to address long term abstraction risks at our groundwater sites. Between now and 2025, we will invest £47 million in feasibility work on two options for an interconnector that could deliver an extra 1,500 million litres per day to the South East, developing a 'spade ready' solution by 2025. This interconnector could play a vital role in securing the UK's water sources into the middle of the century. We are working with partners on unsustainable abstraction mitigation measures in 11 catchments, and are piloting abstraction management projects in two catchments in partnership with Defra.

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Increased indirect (operating) costs

Company-specific description

Adverse weather causes damage to power infrastructure e.g. storm/ flooding/ overheating, causing risk to operational failure.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The financial impact would be influenced by the type and severity of adverse weather , as well as the number and type of assets impacted and whether this results in disruption to customer supply.

[Minutes without supply is measured as one of our company outcome delivery incentives (ODIs) which offers penalty or reward based on performance. In 2018/19 the rate of reward/penalty per minute without supply was £1.10m. Increasing adverse weather could lead to an increase in loss of supply events which would incur increasing penalties (Page 32 of ARA 2018/19)]

Cost of response to risk

Description of response and explanation of cost calculation

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Markets

Primary climate-related opportunity driver

Use of public-sector incentives

Primary potential financial impact

Increased revenues through access to new and emerging markets

Company-specific description

We recognise the opportunities from generating both renewable electricity and heat and making best use of heat which we already generate. We already take advantage of renewable energy incentives which are on offer to maximise the income from our renewable energy generation. We will continue to take advantage of these to support our ongoing renewable energy expansion investment schemes. We aim to maximise the conversion of sludge into biogas and other useful resources and ensure the safe disposal of the remaining biosolids .

We will upgrade our technology from conventional digestion to Thermal Hydrolysis Plants ('THPs').

We will explore carbon capture from our AD processes in order to decarbonise our energy generation.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Potential benefits of generating 200 GWh of additional energy - income benefits exceeding £20m pa.

Cost to realize opportunity

192,000,000

Strategy to realize opportunity and explanation of cost calculation

The renewable energy market also has growth potential for us. We see scope to increase our electricity generation from sources such as food waste digestion and solar, allowing us to sell any electricity not used by our regulated business to National Grid. Similarly, we can sell surplus gas generated by our waste treatment works to the grid. We have invested over £190 million of new investment in renewable energy over the past 5 years and in particular in anaerobic digestion and solar technologies. This is taking our self-generation of renewable energy from the equivalent of 33% of Severn Trent Water's gross energy consumption over 2015/16 to around 50% by 2020, providing efficient green energy and a long-term hedge against volatile energy prices. Our 2019/20 figures show that we generated the equivalent of 51% of our own energy needs, and biogas from AD accounted for the majority of this total. Severn Trent remains the sector leader in this area.

Comment

Cost to realise is dependent on associated benefits and can vary with different solutions. We have delivered over £190m of investment in renewable energy specifically over the 2015-2020 period.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resilience

Primary climate-related opportunity driver

Other, please specify
Improved customer service

Primary potential financial impact

Reduced indirect (operating) costs

Company-specific description

If there is an increase in average winter temperatures as predicted, this could have a positive effect by reducing the number of freeze/thaw related bursts in our region. This could help reduce leakage in our region and reduce the number of service disruptions experienced by our customers.

Time horizon

Medium-term

Likelihood

More likely than not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Not possible to put a single figure on this. Influences our leakage targets, costs and associated investment and incentives.

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

This is an opportunity as it should help us deliver our already stretching leakage targets we have set.

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Opportunity type

Markets

Primary climate-related opportunity driver

Other, please specify
Reputational

Primary potential financial impact

Other, please specify
Reputational

Company-specific description

Demonstrating our robust and responsible approach to climate change - both adaptation and mitigation - gives us the potential to differentiate ourselves and achieve reputational benefits as well as reassuring investors that we understand risks and opportunities associated with climate change and are planning and acting appropriately.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Cost to realize opportunity

Strategy to realize opportunity and explanation of cost calculation

Report transparently on our approach and communicate with our stakeholders on a regular basis. This year we reported against the Task Force for Climate Related Disclosures (TCFD) for the first time. We will also be updating our Climate Change Adaptation report for 2021, in line with reporting under the Climate Change Act 2008 and Defra guidelines.

Comment

Not possible to ascribe single figure. Managed within operational costs of the business as part of team activity.

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, quantitative

C3.1b

(C3.1b) Provide details of your organization’s use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
RCP 2.6 RCP 4.5 RCP 6 RCP 8.5 Other, please specify UKCP09	<p>Our latest Water Resources Management Plan (‘WRMP’) was published in August 2019, and is our blueprint for ensuring the longevity of the water sources in our region. This 25-year strategic plan prioritises demand management – including a step change in leakage reduction, water efficiency and metering activity – as well as developing new, more environmentally sustainable water sources.</p> <p>We have a well-established, mature process to include climate change in our WRMP, using the latest climate models to assess a wide range of climate-related scenarios and temperature increases. Our assessment also used the UKCP18 SRES-A1B which is directly comparable with UKCP09.</p> <p>The modelling used to develop this report used the probabilistic projections from UKCP09, combining them with our own water resource modelling capability to produce a range of plausible, climate impacted future scenarios. We have tested the impact of the full range of those scenarios on our investment decision making, and have produced a plan that takes a proportionate approach to mitigating for this future uncertainty.</p> <p>We have carried out some assessments to understand how different RCPs influence our climate projections. We are planning to use regional climate models - which use RCP8.5 – and the England and Wales probabilistic projections for the development of our next set of water resource plans (WRMP24). Using the probabilistic projections will help us to assess the range of uncertainty.</p> <p>Drought has been extensively assessed as part of the WRMP, using historical data sets dating back to 1880 to model droughts of varying durations and severities. Our current asset systems build in resilience to 1 in 200-year events. However, we are working towards a drought resilience level of 1 in 500-year events.</p>

	<p>More intense rainfall and extended dry periods put pressure on our waste water infrastructure, increasing the risk of pollution and flooding.</p> <p>We are developing a Drainage and Wastewater Management Plan ('DWMP') along the same lines as our WRMP that includes climate change projections and 2D flood risk management modelling.</p>
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C3.1d

(C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>1) Resilient water supply Our purpose is taking care of one of life's essentials, so ensuring a sustainable water cycle for the long term is at the very core of what we do. The strain on our water sources and expectations for river quality are both higher than they've ever been, which means we need to work harder to look after our water sources. Climate change presents us with new challenges which we need to address to ensure our rivers, lakes and aquifers are protected and improved for future generations. Our customers are fully supportive of our commitment to a sustainable water cycle and 80% of them tell us that they trust Severn Trent to deliver our water services for future generations.</p> <p>2) Low carbon water We seek to produce and deliver clean water to customers with lowest possible carbon emissions demonstrated through our carbon triple pledge and commitment to develop science based targets. Our strategy combines leakage reduction, metering, customer education, home water efficiency audits, energy efficiency on water production sites and our networks and catchment management. In 2019/20, we reduced leakage by 4%, outperforming our target and putting us on a great trajectory for the next AMP. We've now committed to an ambitious goal to reduce leakage by 15% by 2025, and by 50% by 2045.</p>

		<p>3) Exporting Renewable energy & Bioresources The UK has ambitious plans to reduce its carbon emissions to net zero by 2050, and AD will play a critical role in achieving this goal. In 2019, Ofwat encouraged the development of the bioresources market by creating a dedicated price control, creating the opportunity for us to buy other water companies' sludge and trade waste to be treated in our AD plants. We are exploring carbon capture in our AD plants to help de-carbonise our energy generation.</p> <p>4) Our customer engagement and communication is focused on water efficiency and encouraging our customers to reduce their water usage</p> <p>5) Biodiversity – we have made a big commitment with our great big nature boost to improve 5,000 ha of biodiversity – recognising the damaging impact climate change is having on our environment</p>
Supply chain and/or value chain	Yes	<p>Our commitment to developing Science-Based Targets means that understanding our Scope 3 emissions is a priority. We are currently assessing our baseline position across all Scope 3 categories. This includes our supply chain emissions, where we are assessing ways to establish an effective baseline. This will enable us to work with our suppliers, particularly those with the highest impact, to help measure, report and reduce their emissions. In the next year we'll be engaging with our suppliers on waste, alongside other sustainability considerations, and building waste-related requirements into our supplier selection criteria.</p>
Investment in R&D	Yes	<p>Carbon reduction is central in our innovation strategy.</p> <p>Over the last five years we have invested £5 million in our Spenal Research Centre – the first of its kind in the UK – a vital tool in our ambition to create a circular economy from every element of what is traditionally seen as waste by turning it into a valuable resource. We have partnered and collaborated with other businesses and research organisations through Horizon 2020 projects to develop product recovery and low carbon sewage treatment.</p> <p>In February 2020, Severn Trent and CCm Technologies were awarded an innovation grant of around £1 million from</p>

		<p>the Department for Business, Energy and Industrial Strategy ('BEIS') and the Carbon Trust to convert biosolids from our AD plants into a high-quality fertiliser. The process also captures carbon dioxide from our combined heat and power ('CHP') plants, together with ammonia from our treatment works. The next step is to build a pilot plant to test the technology, a world first for the wastewater sector. If the project is successful, it will substantially reduce our carbon emissions and transportation costs and increase the agricultural markets we can sell to.</p> <p>Additional innovation plans:</p> <ul style="list-style-type: none"> – Upgrade our technology from conventional digestion to Thermal Hydrolysis Plants ('THPs'). We already have two of these plants, which use heat and pressure to treat sewage sludge, enabling the extraction of up to 30% more energy than conventional processes. – Recover other valuable resources from sludge, including nitrogen, phosphorus, nutrients and cellulose. Our Nottingham plant already recovers nitrogen and phosphorus, and our new RRI centre at Sernal will test innovative technologies and processes for extracting even more value from sludge. – Explore carbon capture from our AD processes in order to decarbonise our energy generation. This has already begun, with a trial starting at Minworth in 2020.
Operations	Yes	<p>In March 2020, we were the first water company in the UK to commit to developing Science-Based Targets. This means that we will develop longer-term commitments to make real reductions across Scope 1, 2 and 3 emissions, in line with the goal of the 2015 Paris Agreement to limit global warming to well below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C.</p> <p>Energy efficiency</p> <p>We have been running an energy efficiency programme for the last decade focused on improving the efficiency of our energy-intensive assets. This has been essential to deliver more water to meet rising demand without increasing our total energy use. In order to continue increasing energy efficiency, we are continuing to improve operational behaviours, monitor site energy performance, and maintain and improve our assets and processes. We encourage</p>

		<p>our teams to reduce their energy consumption at work including with recognition for teams and individuals who achieve the best energy saving measures. In the longer term, our focus on innovation in our treatment processes will also bring significant energy savings.</p> <p>Low carbon fleet We have been taking action to reduce our transport carbon emissions for several years, buying low-emission diesel vehicles, trialling electric vehicles and fitting additional particulate filters to our HGVs. In 2019, we joined The Climate Group's EV100 group and committed to a fully electric fleet by 2030 – assuming specialist vehicles such as tankers become available within that time window.</p> <p>Process emissions Methane and nitrous oxide are released during the biological treatment of waste water and unlike energy there are few incentives to reduce this source of emissions. We are proactively funding research into this area in collaboration with other water companies and developing monitoring approaches which will allow us to calculate emissions. We are also funding research into lower-emissions and lower-energy treatment technologies. Our process control of oxygen and biogas in treatment processes will reduce emissions and we are investigating how we can drive these down further, including by making additional investment.</p>
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C3.1e

(C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Capital expenditures Acquisitions and divestments Assets	Investment in renewables - Risks and opportunities in transitioning to low carbon world have influenced our investment strategy in renewables. We have invested in biogas production from sludge, wind, solar, and energy from crop and food digestion. In the last five years we have invested over £190 million in our green energy business to achieve our target of generating renewable energy equivalent to 50% of our electricity demand. In the last 10 years, we have used our expertise in AD to build a second

		<p>standalone business, Green Power, that generates energy from food waste. We buy food waste from local councils and other organisations who collect it and grow crops on land that is not suitable for growing food for human consumption. In 2019, we acquired Agrivert, a market leader in the development and operation of organic waste treatment facilities, giving us greater scale and capabilities. We now operate eight food waste facilities and process around a quarter of England's food waste.</p> <p>Investment in low carbon assets and processes- We have invested £5 million in our Spernal Research Centre to test and develop low carbon sewage treatment processes.</p> <p>Increasing resilience - Long-term water source models show that the UK has enough water, but that it's not located in the areas that need it most. The South East of England is not only dryer than the North West, but its demand for water is higher due to its large population. By the mid-2030s, the South East could be short of around 1,300 million litres per day – the equivalent of 6 million people's average consumption. Along with other water companies, Severn Trent is actively investigating ways of transferring water from the North West to the South East via an interconnector – a series of pipes, rivers and canals that can move water across the country when it's needed. Between now and 2025, we will invest £47 million in feasibility work on two options that could deliver an extra 1,500 million litres per day to the South East, developing a 'spadeready' solution by 2025. This interconnector could play a vital role in securing the UK's water sources into the middle of the century.</p>
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C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Year target was set

2014

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (location-based)

Base year

2014

Covered emissions in base year (metric tons CO₂e)

441,542

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2020

Targeted reduction from base year (%)

10

Covered emissions in target year (metric tons CO₂e) [auto-calculated]

397,387.8

Covered emissions in reporting year (metric tons CO₂e)

327,449

% of target achieved [auto-calculated]

258.3967097128

Target status in reporting year

Achieved

Is this a science-based target?

No, and we do not anticipate setting one in the next 2 years

Please explain (including target coverage)

Our targets for the 2015-2020 period, as stated in our business plan, were to generate the equivalent of 50% of our energy use in Severn Trent Water from renewable sources across Severn Trent plc, and we committed to a 10% reduction in emissions by 2020 along with specific outcome delivery incentives for our regulated water and wastewater businesses. Keeping emissions stable was deemed to be a stretching target given the large array of challenging and mandatory water and wastewater quality and resilience projects and the ongoing adoption of private sewers, which all provided upwards pressures on our energy use and carbon emissions over the period. The figures reported above are the Severn Trent Water regulated business location-based emissions over the period - which shows a 41% decrease in emissions - this is primarily due to a combination of our own renewable energy expansion and decarbonising grid supply using the location-based factor.

Target reference number

Abs 2

Year target was set

2019

Target coverage

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Base year

2019

Covered emissions in base year (metric tons CO₂e)

259,987

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2030

Targeted reduction from base year (%)

25

Covered emissions in target year (metric tons CO₂e) [auto-calculated]

194,990.25

Covered emissions in reporting year (metric tons CO₂e)

% of target achieved [auto-calculated]

Target status in reporting year

New

Is this a science-based target?

Yes, we consider this a science-based target, but this target has not been approved as science-based by the Science-Based Targets initiative

Please explain (including target coverage)

This is our science-based target reduction trajectory - however we have not yet reported this to the science-based initiative and need to include biogenic emissions in the total science-based target baseline. The 25% reduction trend over this period to meet the well under 2 degrees scenario will be set from our baseline when this is reported.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2015

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: energy carrier

Other, please specify

Renewable energy generation as a % of total electricity usage

Target type: activity

Production

Target type: energy source

Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)

Percentage

Target denominator (intensity targets only)

Base year

2015

Figure or percentage in base year

30

Target year

2020

Figure or percentage in target year

50

Figure or percentage in reporting year

51

% of target achieved [auto-calculated]

105

Target status in reporting year

Achieved

Is this target part of an emissions target?

Assumptions on renewable energy production and energy use were consistent with our emissions targets.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

Target related to renewable energy generation across our group and was a continuation of our % renewable target set at 2010. We aimed to increase to 30% renewables by 2015 which we achieved and then 50% by 2020, which we exceeded.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO₂e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	3	50,000
To be implemented*	1	199,635
Implementation commenced*	1	10,000
Implemented*	3	58,677
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in production processes
 Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

10,000

Scope(s)

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

500,000

Investment required (unit currency – as specified in C0.4)

2,000,000

Payback period

4-10 years

Estimated lifetime of the initiative

6-10 years

Comment

Energy efficiency - benefits are broad for commercial sensitivity.

Initiative category & Initiative type

Low-carbon energy generation

Biogas

Estimated annual CO2e savings (metric tonnes CO2e)

12,893

Scope(s)

Scope 3

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

4-10 years

Estimated lifetime of the initiative

16-20 years

Comment

Investment and benefits reported as zero for commercial sensitivity reasons.

Initiative category & Initiative type

Company policy or behavioral change

Supplier engagement

Estimated annual CO2e savings (metric tonnes CO2e)

35,784

Scope(s)

Scope 2 (market-based)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Secure supply of renewable-backed energy for a proportion of our supply - this reduces our market-based emissions

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	We have dedicated capital investment and operational budgets to contribute towards improving energy efficiency i.e. at our treatment works, on a consistent basis.
Dedicated budget for other emissions reduction activities	We have dedicated capital investment and operational budgets to contribute towards generation of renewable energy and optimization of this process.
Dedicated budget for other emissions reduction activities	We have a dedicated budget to help us achieve our target of 100% electric vehicle fleet by 2030.
Employee engagement	All company engagement event run by our CEO in summer 2020- providing an overview of our sustainability ambitions including our ambitious carbon targets and how each and every employee can contribute towards these.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

No

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

April 1, 2009

Base year end

March 31, 2010

Base year emissions (metric tons CO2e)

178,486

Comment

Scope 2 (location-based)

Base year start

April 1, 2009

Base year end

March 31, 2010

Base year emissions (metric tons CO2e)

412,029

Comment

Scope 2 (market-based)

Base year start

April 1, 2018

Base year end

March 31, 2019

Base year emissions (metric tons CO2e)

182,909

Comment

Prior to 2018-19 we purely used the location-based methodology for scope 2 reporting. From 2018-19 we began reporting both market and location-based scope 2 emissions in our annual report - to reflect the fact we were now purchasing a proportion of our supply from renewable-backed sources. We plan to continue to do this in future.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Defra Voluntary 2017 Reporting Guidelines

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

156,014

Comment

Group total emissions in scope 1

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

As part of our efforts to reach carbon neutrality, we are now securing a proportion of our imported electricity from accredited renewable sources. We plan to increase the amount of renewable energy we procure in future to reduce our footprint further. We have therefore been reporting a market-based benefit and net emissions figure in our annual report to represent this since 2018-19.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

199,635

Scope 2, market-based (if applicable)

163,851

Comment

Our market-based figure represents the fact that we secure a proportion of electricity from our supplier backed by renewable energy guarantees of origin. The remainder is at the 'average' location-based grid electricity factor for the UK.

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

17,349.83

Emissions calculation methodology

This includes only total grid electricity used by company (including CHP electricity purchased) – Transmission and Distribution impacts.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

This is calculated from national factors and energy supply data we hold.

Capital goods

Evaluation status

Relevant, not yet calculated

Please explain

We have recently begun to develop a carbon tool which can estimate capital carbon footprint from construction projects - therefore we do not have reliable and complete data to report on this scope 3 area.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

3,187.35

Emissions calculation methodology

These are emissions related to tanker diesel use for sludge tankering by contractors. This does not cover all emissions in this category, but we have consistently collected this as it is a strong area of influence.

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

This is calculated from supplier-provided fuel data.

Upstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Please explain

This area has not been reviewed, inventoried and calculated by our supply chain team.

Waste generated in operations

Evaluation status

Relevant, not yet calculated

Please explain

We generate waste such as scrap metal for third parties to deal with, but our commercial teams do not quantify the emissions impact of its disposal. Where we deal with waste ourselves such as for wastewater and bioresources the emissions impacts are in our direct scopes.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO₂e

1,446.88

Emissions calculation methodology

Emissions from travel on public transport or in employee-owned vehicles for company business

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

This is collected via internal data systems and has been consistently calculated for years.

Employee commuting

Evaluation status

Relevant, not yet calculated

Please explain

We do not collected data on employee commuting, only business travel.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

We do not lease assets.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

All direct emissions for transporting water source to tap and wastewater from sewer to treatment to river are included in our scope 1 and 2.

Processing of sold products

Evaluation status

Relevant, not yet calculated

Please explain

We do not have any data on uses of water by businesses or customers and energy and emissions involved, for example in heating water we deliver to customer properties. This has been broadly estimated at industry level to be large and significant, but we do not meter or collect this data ourselves.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

This would be covered in the category above - processing of sold products.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

This would be covered in the category above - processing of sold products.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

We do not lease our own assets.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

No franchise operations.

Investments

Evaluation status

Not relevant, explanation provided

Please explain

We are not an investment company and own our own assets - emissions from these are in our direct scopes.

Other (upstream)

Evaluation status

Relevant, not yet calculated

Please explain

We rely on complex supply chains for goods and services which our commercial team do not quantify the carbon impacts of.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

This would be covered in the category above - processing of sold products.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO₂.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	183,562	We generate and combust biogas from sewage sludge and food waste to generate renewable electricity and heat in CHP engines. This figure represents the carbon emissions resulting from that activity using Defra's emissions factor for combustion of a biogas. We have not yet quantified and included carbon dioxide from production of biomethane or biogenic emissions of carbon from sewage treatment. These sources are out of scope under the Defra and GHG protocol methodology as they are from a biogenic source.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

141

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

319,865

Metric denominator

unit total revenue

Metric denominator: Unit total

1,844

Scope 2 figure used

Market-based

% change from previous year

3

Direction of change

Decreased

Reason for change

Revenue has remained relatively stable as we recover revenue from customer's bills and these are subject to price limits set over a five-year period.

C7. Emissions breakdowns




C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes


C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).


Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	155,050	IPCC Fourth Assessment Report (AR4 - 100 year)  ₁
N2O	96.82	IPCC Fourth Assessment Report (AR4 - 100 year)  ₂
CH4	3,683.35	IPCC Fourth Assessment Report (AR4 - 100 year)  ₃

₁as per

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/901692/conversion-factors-2020-methodology.pdf

₂as per

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/901692/conversion-factors-2020-methodology.pdf

₃as per

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/901692/conversion-factors-2020-methodology.pdf

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/region.

Country/Region	Scope 1 emissions (metric tons CO2e)
United Kingdom of Great Britain and Northern Ireland	156,014

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
UK Water Business	132,205
Severn Trent Services	917
Severn Trent Green Power (Renewable Generation Operations)	22,892

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
United Kingdom of Great Britain and Northern Ireland	199,635	163,851	779,884.79	110,000

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By activity

C7.6c

(C7.6c) Break down your total gross global Scope 2 emissions by business activity.

Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
UK Water business	199,188	163,830
Severn Trent Services	448	448

Severn Trent Green Power (Renewable Generation Operations) - this business generates and exports, so import is negligible.	0	0
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C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	18,664	Decreased	6	Greater proportion of electricity import sourced for renewable-backed sources via supplier.
Other emissions reduction activities				
Divestment	0	No change	0	no divestment
Acquisitions	17,830	Increased	6	First full year of green power operation and we have included process emissions from biogas processes for the first time.
Mergers	0	No change	0	No mergers
Change in output	0	No change	0	No major change in output
Change in methodology	0	No change	0	No change in method
Change in boundary	0	No change	0	No change in boundary
Change in physical operating conditions	0	No change	0	No major change in physical operating conditions
Unidentified	0	No change	0	All changes identified

Other	0	No change	0	All changes noted above
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C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 5% but less than or equal to 10%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh

Consumption of fuel (excluding feedstock)	HHV (higher heating value)	922,328.94	140,716.81	1,063,045.75
Consumption of purchased or acquired electricity		110,000	669,884.8	779,884.8
Consumption of self-generated non-fuel renewable energy		194,196		194,196
Total energy consumption		1,226,524.94	810,601.61	2,037,126.55

C8.2b

(C8.2b) Select the applications of your organization’s consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	Yes
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Fuels (excluding feedstocks)

Natural Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

44,475.7

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

Emission factor

0.18351

Unit

kg CO2 per kWh

Emissions factor source

Carbon Accounting Workbook v13

Comment

Note this includes some natural gas use for generation of electricity from CHP during the latter part of the year but specific metered data was not available to separate heating from CHP usage - so this has been included together until next year.

Fuels (excluding feedstocks)

Sludge Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

MWh fuel consumed for self-generation of electricity

922,328.94

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

Emission factor

0

Unit

Emissions factor source

This is a biogenic source of carbon, so factor is zero - note that scope 1 footprint includes methane escape from the process.

Comment

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

41,655.09

MWh fuel consumed for self-generation of electricity

20,114.13

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

Emission factor

2.72417

Unit

kg CO2 per liter

Emissions factor source

Carbon Accounting Workbook v13

Comment

Fuels (excluding feedstocks)

Petrol

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

6,112.53

MWh fuel consumed for self-generation of electricity

MWh fuel consumed for self-generation of heat

MWh fuel consumed for self-generation of steam

Emission factor

2.19585

Unit

kg CO2 per liter

Emissions factor source

Carbon Accounting Workbook v13

Comment

C8.2d

(C8.2d) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	377,899	194,196	377,899	194,196
Heat				
Steam	0	0	0	0
Cooling	0	0	0	0

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero emission factor in the market-based Scope 2 figure reported in C6.3.

Sourcing method

Green electricity products (e.g. green tariffs) from an energy supplier, supported by energy attribute certificates

Low-carbon technology type

Low-carbon energy mix

Country/region of consumption of low-carbon electricity, heat, steam or cooling

United Kingdom of Great Britain and Northern Ireland

MWh consumed accounted for at a zero emission factor

110,000

Comment

Rego Backed energy purchased from energy supplier. Certificate as evidence.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	No third-party verification or assurance

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Biennial process


Status in the current reporting year

Underway but not complete for reporting year – previous statement of process attached

Type of verification or assurance

Third party verification/assurance underway

Attach the statement

 Severn Trent Carbon Certification Letter (updated) - Carbon v2.pdf

 Severn Trent Carbon Certification Report (updated) - Carbon.pdf

Page/ section reference

Carbon Trust Certificate

Relevant standard

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Biennial process

Status in the current reporting year

Underway but not complete for reporting year – previous statement of process attached

Type of verification or assurance

Third party verification/assurance underway

Attach the statement

 Severn Trent Carbon Certification Letter (updated) - Carbon v2.pdf

 Severn Trent Carbon Certification Report (updated) - Carbon.pdf

Page/ section reference

Carbon Trust Certificate

Relevant standard

Verification as part of Carbon Trust standard certification

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, but we are actively considering verifying within the next two years

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

Other carbon tax, please specify

UK Climate Change Levy

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

Other carbon tax, please specify

Period start date

April 1, 2019

Period end date

March 31, 2020

% of total Scope 1 emissions covered by tax

5

Total cost of tax paid

149,351.77

Comment

This shows climate change levy on natural gas usage which is included in our scope 1 emissions.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

We continue to weigh up the economics and carbon impacts of the various fuel sources we use for heat and electricity generation and carbon incentives have a direct impact on the economics. We are a supporter of this approach.

We also continue to improve energy efficiency and renewable energy self-generation as a means of mitigating our indirect carbon policy costs and reducing our own carbon impacts together.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Objective for implementing an internal carbon price

Drive low-carbon investment
Stress test investments

GHG Scope

Scope 1
Scope 2

Application

Our water resource management plan includes an internal carbon price which is combined with estimated scheme impacts and considered in the options cost benefit and modelling.

We are also using prices of carbon reduction to compare different potential options across our carbon strategy to get to net zero.

Actual price(s) used (Currency /metric ton)

48.76

Variance of price(s) used

Shadow Price used in water resource management plan.

Type of internal carbon price

Shadow price

Impact & implication

In the case of the modelling for our 2018 water resource management plan, this price has made little impact on the priority order of schemes chosen to meet our supply demand balance of water.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

- Yes, our suppliers
- Yes, our customers
- Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Compliance & onboarding

Details of engagement

Included climate change in supplier selection / management mechanism

% of suppliers by number

100

% total procurement spend (direct and indirect)

100

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

All suppliers are assessed against standard environmental criteria, including climate change at tender. This criteria is tailored for larger contracts to ensure they are relevant and proportionate to the service provided or the goods procured and its associated climate impact. For example, for our chemicals tender, a sector we recognise as being a high contributor to climate change impact, specific tender questions around carbon management and carbon intensity of required products to allow for comparison were introduced. Terms and conditions have also been updated requiring the supplier to measure and report on their carbon footprint, and demonstrate a year on year improvement.

A dedicated Contract Management team ensures supplier performance is monitored and non-compliance addressed to ensure improvements are made.

Impact of engagement, including measures of success

Responses to these questions contribute to the overall score and successful award of contract.

Comment

In 2020-2021 we will review our supplier categories and their associated climate impact to ensure assessment criteria remains effective and proportionate.

Type of engagement

Compliance & onboarding

Details of engagement

Code of conduct featuring climate change KPIs

% of suppliers by number

100

% total procurement spend (direct and indirect)

100

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

We expect all our suppliers and their subcontractors to commit to and deliver against the principles set out in our Sustainable Supply Chain Charter. Compliance with this charter is stipulated in our standard contractual terms and conditions. In March 2020, we updated this to reflect a broader range of environmental and social impacts. This included a greater focus on mitigating climate change and includes the following:

"As a minimum, we ask our suppliers to measure and report on their carbon footprint to us, and to demonstrate a clear commitment to reducing their carbon impact and using energy and fuel efficiently. Innovative low-carbon solutions should be adopted to reduce embodied carbon, and we look to you to increase renewable energy usage and use electric vehicles where appropriate.

<https://www.severntrent.com/content/dam/stw-plc/responsibility/Supply-chain-charter-for-web1.pdf>

Impact of engagement, including measures of success

We currently track active sign-up to our Sustainable Supply Chain Charter and in 19/20 delivered against our target of 300 key suppliers. Key suppliers are determined based on spend and criticality to the business. Active sign-up requires a signature from a senior lead, on behalf of their organisation, to confirm their commitment to delivering against our charter. Our aim is to ensure all contracted suppliers are actively signed-up.

Comment

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Other, please specify

Supplier pledges to drive targeted action

% of suppliers by number

3

% total procurement spend (direct and indirect)

42

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

We prioritise suppliers based on spend and criticality to the business - these suppliers are referred to as our key suppliers. We ask each of these suppliers to commit to and deliver a specific CSR pledge, relevant to their sector, which is tracked monthly.

Impact of engagement, including measures of success

Currently 52 suppliers representing 42% of spend have pledged to drive targeted action. This year we developed a standard set of pledges further targeted to drive action and encourage collaboration across key principles outlined in our charter. This includes the following:

- % Reduction in fuel wastage against baseline. (Journey efficiency, vehicles, plant equipment & telematics).
- % carbon footprint reduction against baseline.
- % reduction in energy usage against baseline.
- % use of renewable energy.
- Best practise engagement session

Specific targets associated with each pledge are set with each supplier.

Currently 35 suppliers have committed to specific pledges to tackle carbon and energy use. For example, a scaffolding supplier delivered a 15% reduction in carbon emissions through improved journey efficiency in comparison to the same month last year (March). Plans are in development to increase the number of suppliers delivering targeted action against climate change through pledges.

Comment

Type of engagement

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change

% of suppliers by number

100

% total procurement spend (direct and indirect)

100

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

This year we have stepped up direct supplier communications and engagement to raise awareness of climate change, our ambitions to tackle this, and identify collaborative opportunities to drive action. We've done this in a targeted way depending on impact and ability to influence.

Impact of engagement, including measures of success

Initiatives include:

- Issued our first Supply Chain CSR Newsletter to all suppliers in June 2020 where we focussed on raising awareness of our triple carbon pledge and identified ways in which our suppliers could support these goals.
- Senior Leaders from over 24 supplier partners attended our supply Chain CSR Forum in July 2019 to share best practise, and identify areas for collaboration across carbon, social mobility, biodiversity and pollution prevention. Our Carbon expert delivered a session on what our triple carbon pledge means for our suppliers and facilitated a session to understand what suppliers are doing already and identify opportunities to innovate and work together in the future. 16 of the 24 suppliers committed to exploring this further, including a dedicated workshop on Electric Vehicles.
- Capital (Construction) Supplier on-boarding events and quarterly supplier days held to share our CSR ambitions and investor insights.
- At a Prior Information Notice (PIN) event for the Waste tender, we ran a dedicated CSR session for prospective suppliers for the first time. New questions were consequently introduced at tender, including delivery of our triple carbon pledge.

Comment

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

100

% total procurement spend (direct and indirect)

100

% of supplier-related Scope 3 emissions as reported in C6.5

Rationale for the coverage of your engagement

We have undertaken a piece of work to establish a baseline for scope 3 supplier emissions and emissions associated with waste generation across our operations. This involved engaging with a number of best practise organisations to understand how they are tackling scope 3 supplier emissions and associated reporting challenges.

We don't currently collect actual climate change and carbon information from suppliers, therefore for scope 3 supplier emissions, we have appointed consultants to use Environmentally-Extended Input-Output Analysis (EEIO) to establish our baseline across purchased goods and services. The output of which will allow us to identify hotspots and target activity to drive reduction with our supply chain.

In March 2020, we engaged with key suppliers to conduct assurance of our ST waste footprint by external providers Bureau Veritas. Using this insight and performance data we are working closely with key supplier partners to identify the most appropriate calculation method to report on our scope 3 emissions associated with waste generated across our operations.

Impact of engagement, including measures of success

In March 2020, we engaged with key suppliers to conduct assurance of our ST waste footprint by external providers Bureau Veritas. Using this insight and performance data we are working closely with key supplier partners to identify the most appropriate calculation method to report on our scope 3 emissions associated with waste generated across our operations.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

10

% of customer - related Scope 3 emissions as reported in C6.5

Please explain the rationale for selecting this group of customers and scope of engagement

We want to inspire a generation to use water wisely and understand its importance to health and wellbeing, so we're taking an innovative roadshow – the Wonderful Water Tour – into playgrounds across our region. Our dedicated team of Education Officers offers every primary school in our region a visit, holding assemblies and workshops that support the Key Stage 2 water curriculum, as well as cross-curricular links to Maths, Geography and Science.

The topic of climate change and 'saving the planet' is incorporated throughout our education programme.

Key topics covered are:

- Using wonderful water wisely (not wasting water)
- Knowing what not to put down the toilet and the sink
- Choosing tap water for a healthy you and a healthy environment (reducing plastics)

We have focussed our education programme on school children in order to inspire a generation to drive behavioural change.

Experts have cited that children aged between 7-11 are the most receptive to learning and embedding behaviours for life – this is support by UKWIR report and Ofwat.

Impact of engagement, including measures of success

We'll work with our customers to improve how water is valued by extending our water education programme to deliver a saving of 19 Ml/d a day by 2025.

Our education programme has an outcome delivery incentive associated with it, and is monitored by Ofwat.

We're looking to stimulate permanent behavioural change. UKWIR research (2009) suggests a change of behaviour factor of 18% is usually at the higher end of the range that has been achieved in our industry. We've set ourselves an ambition to overachieve this by aiming to inspire 27% of those we see to adopt the right water and waste water behaviours for life.

As we are looking to inspire these behaviours for life, the biggest impacts will likely be felt when the children we've educated have grown up and we see the impact in the

future. We therefore see these impacts in the round through a contribution to reducing customers water usage and blockages. From 2020 onwards, we will collect behaviour change commitments around saving water, drinking more tap water for a healthy lifestyle and a plastic-free environment, and avoiding sewer blockages – allowing us to measure the impact of our work more accurately.

Educated 800,000 customers over 2015-2020, so 10% of our 8million customers.

Type of engagement

Collaboration & innovation

Details of engagement

Other, please specify

We plan to increase the proportion of metered households to 65% in 2020-25, with full metering by 2035. This will require us to treble our current run-rate.

% of customers by number

48

% of customer - related Scope 3 emissions as reported in C6.5

Please explain the rationale for selecting this group of customers and scope of engagement

Compulsory metering can still only be undertaken in areas classified by the EAAs seriously water stressed. So, we aim to achieve our targets by installing meters proactively and offering customers the opportunity to switch based on information on what their measured bill would be. We recognise that this is an ambitious target which involves real risk, it is nonetheless, the best option for customers.

The roll out will be undertaken on a water resource zone basis, targeting the zones with the greatest supply and demand challenges first.

Will be 65% customers by 2025 - currently 48% of billed customers have measured water consumption

Impact of engagement, including measures of success

We expect the increase in meter coverage to deliver a demand saving of around 10MI/d by 2025.

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

% of customers by number

33

% of customer - related Scope 3 emissions as reported in C6.5

Please explain the rationale for selecting this group of customers and scope of engagement

Throughout the summer we have trialed a variety of customer engagement methods to encourage customers to reduce their water usage during peaks in hot weather - where we have seen demand increase by up to 40%. We've trialed emails, social media, digital ads, PR and internal comms to talk about water efficiency and leakage. We also provide free and highly discounted water efficiency devices through our partners savewatersavemoney – such as water butts and tap aerators. In the first 6 months of 2020 we have fulfilled over 30,000 orders for free water saving products. We have had promoted our water saving messages across TV, Radio and web – reaching around 2 million people, and our social media reach has been over 130 million people.

In June we ran a series of social posts across Facebook promoting water efficient behaviours and free devices.

We've targeted our communications to particular customers – such as offering metered customers free water saving products with additional outdoor water saving tips depending on audience segmentation for example- swell gels (to reduce water use in gardening) to older generation and paddling pool alternatives to younger customers. We've targeted customer who have a particularly high water use, to offer them devices such as leak detection tablets and free water efficiency audits. We have promoted our environmental grant schemes to farmers to encourage them to create their own back up water supplies.

We are working hard to understand our customer behaviour and are using insights from behavioural psychologists and customer and employee surveys to understand water use during hot weather – and using this insight to ensure our messaging is as targeted and effective as possible to motivate customers to change their water use.

Through our social media interactions we actively engaged with over

Our TV advert focused on taking care of our precious resource and was seen by over 3.5 million people in our region.

33% customers based on a survey of 2,000 customers conducted Qa - researching how many of our customers recalled our water efficiency messaging.

Impact of engagement, including measures of success

It takes a while for these communications to have an impact of customer water usage, but orders for our water saving devices so act as a good interim measure. We have some tracker data on ownership and consideration of water saving devices, attitudes to saving water and climate change. We have recently added questions about usage of hoses, sprinklers, paddling pools etc.

Type of engagement

Collaboration & innovation

Details of engagement

Other, please specify

Customer research to understand expectations around climate change in business planning

% of customers by number

0.06

% of customer - related Scope 3 emissions as reported in C6.5

Please explain the rationale for selecting this group of customers and scope of engagement

In development of our business plan 2020-2025 we undertook large amounts of customer research, consulting with 32,000 customers to understand their views – these focused specifically on supply and demand, resilience and water trading. An output of this engagement showed customer support and awareness for climate change investment.

In additional to these research projects we keep a live dialogue with our customers through Tap Chat, to constantly build our understanding of their views. Tap Chat is our online community of around 15,000 customers. Through this we can conduct customer research. Over the last few years we have used this community to understand our customers views of climate change topics such as carbon and green energy, our triple carbon pledge and their concerns and priorities for the next 30 years. This year we have conducted more than 20 surveys and discussions on Tap Chat, exploring customer views on a wide range of topics from being a purposeful company to managing roadworks better. The community is a valuable critical friend that, together with our ongoing customer tracking research and growing data analytics capability, helps to bring the customer perspective into our daily decision making.

Nearly all of this research is deliberative/qualitative – which is the right approach for topics like this, which customers are not familiar with, or are about events in the future. Only the Water Trading project and triple carbon pledge projects had numerical outputs.

Impact of engagement, including measures of success

Tap Chat our online community helps ensure we keep a live and current debate with customers, giving us the ability to get real time information and opinions.

Impact of engagement, including measure of success:

All of our PR19 research helped to shape our business plan, including our ODIs.

We use our ongoing dialogue with customers via TapChat to influence our strategy and our approach to communication.

Across PR19 research and ongoing research through tap chat we engaged with nearly 50,000 customers, which is 0.6% of 8million customers

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Colleagues - Our colleagues are vital in delivering our climate strategy (developing and meeting science-based targets and our triple carbon pledge). We can only achieve these commitments through the engagement of our workforce. We promote our climate strategy and performance to colleagues through various media. We have dedicated an all company 'team talk' to our triple carbon pledge. Pre COVID our CEO started her all employee engagement tour - focused specifically on sustainability, including our carbon commitments. This was moved to a virtual tour as COVID progressed, ensuring the engagement continued whilst a significant percentage of our workforce worked from home.

UK public through Refill initiative. Severn Trent region has over 2000 refill stations in region. Last summer we also trialled water bars – temporary water provision at events – and due to demand have included these as an option within our community fund offering, so customer can have free tap water provision at events to help reduce plastic. Throughout press releases and local promotion of the refill scheme over 30% of customers recalled the refill initiative

Wider stakeholders - In 2020 we published our first dedicated sustainability report. The sustainability report was designed to be accessible to a wide ranging audience, without technical sustainability knowledge – as we know from our research that our customers and wider stakeholders are keen to further understand our approach to sustainability, and specifically support our climate change investment (evidenced through our PR19 customer research). The report is hosted on our webpage and has been downloaded nearly 400 times. Our customer tracker survey monitors KPIs including satisfaction, trustworthiness, value for money and affordability. It also monitors customer attitudes around water use/saving water and climate change, as well as awareness of our water efficiency work and free and discounted water saving products – these are key metrics we will track in the coming months following publication of our sustainability report and wider sustainability messaging directed at our customers.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify Reduce the volume of water in the sewage network	Support	We are engaging on relevant legislation, regulation and government spending priorities. Acknowledging climate change is a serious risk – mitigation and adaption are necessary	<p>We're generally lobbying for new policy/spending, rather amendments to existing – measures in England.</p> <ol style="list-style-type: none"> 1. Maintain commitment to kerbside waste food collection by 2023 (to be used as renewable energy). 2. Maintain stable incentives framework for renewables, especially AD (to encourage private sector investment). 3. Introduce 'Green Makeovers' for public sector buildings and existing housing stock to encourage decarbonisation and water efficiency. 4. Roll out planting of trees to help with decarbonisation, reduce flooding and improve water quality. <p>We are aiming to reduce the volume of water in the sewage network by:</p> <ol style="list-style-type: none"> 1. Changing building regulations to promote water efficiency. 2. Introducing new water efficiency labelling of household appliances (as per Australia) 3. Ensuring all new developments have separated surface and foul water sewers. 4. Withdrawing the right to make new surface water connections to the sewer network – instead promoting reliance on 'Sustainable Drainage.' 5. Requiring the government to promote retrofitting SUDS.
Other, please specify Nature based	Support	We are engaging on relevant legislation, regulation and	<ol style="list-style-type: none"> 1. Accelerate PR24 investment to improve the health of rivers. 2. Change incentives for farmers: pay for ecosystem services, not pollution.

solutions and biodiversity		government spending priorities.	Healthy biodiversity is good for the planet and helps reduce water bills in the long term
Other, please specify Reducing Carbon emissions	Support	<p>Directly fed into development of Water UKs public interest commitments - include an industry wide commitment to net zero.</p> <p>We directly fed into committee on climate change report on reducing UK emissions - providing evidence of increased household water use during hot weather.</p>	<p>We think the right solution is for sectors and companies to set their own stretching carbon reduction targets and monitor against these in their annual report and accounts as we do.</p> <p>Supportive of committee on climate change finding and the need to further reduce UK carbon emissions - specifically the role that business have to play in the UKs net zero objectives and creation of specific water conservation legislation that will reduce emissions</p>
Other, please specify Electric vehicles	Support	<p>Severn Trent are part of EV100 which is a global initiative bringing together companies committed to accelerating the transition to electric vehicles by 2030. The aim is that the collective power of the companies will help to build demand and send signals to the market as well as influence</p>	<p>Supportive of electric vehicle grants – supportive of collaboration opportunities and supporting signalling to the market demand for electric fleet.</p> <p>Policies are shaped by OLEV (Office for Low Emission Vehicles) and recent policies and schemes have included and we support these, they apply across UK:</p> <ul style="list-style-type: none"> - Electric vehicle homecharge, workplace charging and on-street residential chargepoint scheme - Government vision for the rapid chargepoint network in England - Green number plates - https://www.gov.uk/government/organisations/office-for-low-emission-vehicles

	<p>government policies on electric vehicles.</p> <p>We have worked with an organisation called Cenex, to review and validate our electric vehicles strategy and they have replied to consultations to Government which we have provided input too. Cenex is the Low Carbon and Fuel Cells Centre of Excellence, an independent non-profit research and consultancy that helps private and public sector organisations devise ULEV strategies.</p> <p>We have completed modelling and analysis on the UK commercial fleet to demonstrate the impact of Government grants and how it can help impact on the adoption of electric vehicles, which was shared with government</p>	
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		through our CEOs role as CEO of the council for sustainable business.	
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C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

We have a clear commitment and approach to climate change through our triple carbon pledge and commitment to develop science-based targets. This position is clearly articulated in our sustainability framework which brings together our approach to sustainability.

We have several layers of governance that ensure our approach to climate change is consistent across the business, including an executive level energy steering group who meet quarterly, an executive level sustainability steering committee who provide an overview of our approach to sustainability and our overall approach is also overseen by our Corporate Sustainability Committee; which comprises our CEO, our Board Chairman and two members of the Board and meets at least once a quarter.

The duties of the committee include (but are not limited to):

to consider and recommend to the Board:

- the Group's overall approach to Corporate Sustainability and ensure it is in alignment with the Group Strategy and, if appropriate, recommend amendments to the above policies to the Board;
- develop and recommend to the Board Corporate Sustainability targets and key performance indicators and receive and review reports on progress towards the achievement of such targets and indicators;

to ensure:

- the creation of environmental standards, particularly those that relate to the activities where Severn Trent has its most significant environmental impacts in respect of energy management and climate change, water quality, resource productivity (including leakage and waste) and biodiversity and land use;

Responses to consultations are approved by a company Director, who has an overview of the company engagement strategies. Engagement on climate change issues and company policy are coordinated by our central strategy and regulation team. This helps to ensure consistency in approach between our strategy and our influencing activities.

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

 ST ARA 2020 FINAL.pdf

Page/Section reference

127

Content elements

Strategy
Emissions figures
Emission targets

Comment

Publication

In voluntary sustainability report

Status

Complete

Attach the document

 Severn Trent SR20_FINAL REPORT.pdf

Page/Section reference

22 renewable energy
24-27 mitigating climate change
27-31 TCFD

Content elements

Governance
Strategy

Risks & opportunities
Emissions figures
Emission targets

Comment


Publication

In other regulatory filings

Status

Complete

Attach the document

 annual-performance-report-2020.pdf

Page/Section reference

page 52 - carbon footprint

Content elements

Comment

C15. Signoff

C-FI

(C-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.

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1		

Submit your response

In which language are you submitting your response?

English

Please confirm below

I have read and accept the applicable Terms