

Sustainable Financing Framework
Annual Allocation and Impact Report 2024



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Our purpose

Bringing water to life – supporting the lives of people and the places they love for generations to come

Our values



We want you to bring your best everyday. Be open and inclusive, work together and win as one team. Let your passion inspire those around you. Be authentic, make your mark and be you.



We want you to be the one we all look to. Be trusted. Act with integrity and make good on your promises. Build trust, one relationship at a time. Be rock solid.



We encourage you to be curious and challenge convention. Share ideas with confidence and purpose, and help shape our future. Embrace change. Drive progress. Own the challenge. Be the future.

Contents

Introduction	03
Foreword from Laura Flowerdew	04
Sustainable Financing Framework Reporting	06
Debt raised to March 2024	06
Allocation of funds	08
ESG external benchmarking and metrics	09
ESG performance, initiatives and projects	15
EPA – Our journey to 4★ rating	15
Green First	18
Net Zero	22

Introduction

Pennon is a leading force in the UK's water sector, delivering clean water and wastewater services across the great South West.

We understand that it's not just what we do, but how we do it that truly matters to our customers, communities, and ourselves. That's why we embody our values throughout the Group, every single day.

Our commitment to Environmental, Social, and Governance (ESG) principles ensures that every aspect of our work aligns with our dedication to environmental stewardship and community support. As a responsible employer, we prioritize employee development and maintain a comprehensive health, safety, and wellbeing program. Our actions are guided by a robust governance framework that reinforces our core values across the organization and within our supply chain.

Our strategy

Our strategy is focused on leadership and growth in UK water, investing for sustainable growth for the benefit of all.

Our twin-track approach pursues both organic and acquisitive growth, underpinned by driving performance and efficiency through innovation.

The four priorities of our plan



Water quality and resilience

In the face of changing weather patterns and a growing population, we are determined to continue to transform how we protect and secure water resources with unrivalled water quality across the region that will last for generations.



Storm overflows and pollutions

By 2030, a full decade ahead of governmental mandates, we pledge to have tackled the use of storm overflows at our bathing and shellfish waters. Our approach blends nature-based and engineering solutions, coupled with comprehensive water monitoring and sampling programme, to rebuild trust in our communities.



Net zero and environmental gains

By 2030, we're committed to achieving Net Zero, proving our dedication to minimising our impact on the planet. We'll invest in climate-independent water sources, water reuse, and enhanced transfer networks. We'll repurpose brown field sites, build new reservoirs, and amplify our water resources significantly.



Addressing affordability and delivering for customers

We're tackling monumental industry challenges, and we're delivering on our promises, all rooted in what our customers deem important. We recognise that some customers face affordability challenges due to the cost-of-living crisis, so our plan incorporates multiple solutions and extensive assistance.

Foreword from Laura Flowerdew



As we look back on the year, the fundamentals are strong for a more sustainable future, reflected in record levels of investment, record support for customers and the economic health of the regions we support.

With a strong balance sheet and good liquidity, we retain the agility and ability to respond when it matters most and for the longer term, and in delivering on our strategy focused on UK Water. We are growing sustainably, whether through acquisition or investment, with an efficiently funded and robust balance sheet, growing shareholder value. And this in turn, is ensuring we can make good operational progress, delivering on our four priorities and what matters most to our customers.

Our PR24 business plan is our most ambitious yet and goes further in tackling the biggest challenges in our region, doubling our investment from the previous AMP period, to £2.8bn. We are investing to protect water quality and enhance resilience; tackling storm overflows at our beaches and eradicating pollutions across Devon and Cornwall; and driving environmental gains, wherever we serve. At the same time, we have successfully managed customer bills to be lower than they were 10 years ago, as we pledge to eradicate water poverty.



**Our Business
Plan 2025-2030**

At Pennon, we treasure our beautiful environment across the greater South West and understand the importance of protecting it. We fully recognise that urgent action is needed now to tackle the challenge of climate change and protect our planet for the future. In 2021 we launched our Promise to the Planet, our carbon-busting Net Zero plan, which outlined our ambition to reach Net Zero by 2030. Reaching our target is about reducing energy use, becoming more energy efficient and decarbonising our operations. We want to go greener by championing renewables. We are also leading the way in natural carbon sequestration through peatland restoration and planting even more trees. Our Net Zero strategy is focussed on three pillars:

- **Sustainable Living**, proactively reducing our energy and decarbonising our operations
- **Championing Renewables**, committing to using 100% renewable energy
- **Reversing Carbon**, ensuring well-managed woodlands and healthy peatland to help us reach Net Zero.

We have
**reduced
our carbon
emissions
by 40%**
since 2021

We are making great progress, notably, we have reduced our carbon emissions by 40% since 2021. Alongside this, since 2020 we've planted over 280,000 trees and have led the South West Peatland Partnership, which has restored 1,630 hectares of peatland – that's the equivalent of almost 2,300 football pitches. We have improved 80% of the drinking water catchments we work in, through activities such as tree planting and peatland restoration.

As a Group, we have made a sustainable investment in Pennon Power which will support our commitment to ensuring 50% of our energy needs come from renewable sources as part of our Net Zero ambitions. Pennon Power Limited is a start-up business, wholly



c.£145 million
investment

**On track to
secure c.50%**
of its energy from
renewable sources



**Our Sustainable
Financing Framework**

owned by Pennon Group to generate clean energy and has been formed as an entity to deliver on this element of the Net Zero strategy.

In April 2023, Pennon Power acquired its first renewable energy site for development in Dunfermline, Fife. The site comprises a 45 MWp solar farm, with a 30 MW 2-hour co-located battery storage system, situated on the site of a former open-cast coal mine. The annual generation from this single asset will be equivalent to the entire current Group renewable energy portfolio. Last year, we also acquired three new renewable energy generation projects under Pennon Power, as part of our commitment to long-term sustainable growth in the UK's environmental infrastructure. To date, investment of c.£145 million has been announced by Pennon Power across these four projects across the UK, generating up to 135 GWh once operational, along with a two-hour battery system providing 30 MW of storage. When combined with the smaller scale on-site solar generation roll out, this puts the Group on track to secure c.50% of its energy from renewable sources. This strategy will also benefit the Group by reducing our exposure to future volatility in wholesale power markets that we have experienced in recent years, and will provide commercial returns ahead of those earned from the regulated water business.

We also have several carbon reduction commitments which will help us to deliver against our net zero ambition. South West Water is an official sponsor of the Race to Zero – a UN global campaign to rally leadership and support from businesses, cities, regions and investors for a healthy, resilient, zero carbon recovery. Along with this our emissions targets were very recently approved by the Science Based Targets initiative (SBTi), a collaboration between the Carbon Disclosure Project, The United Nations Global Compact, World Resources Institute and the World Wide Fund for Nature. SBTi is a clearly-defined pathway for companies to reduce greenhouse gas emissions in line with the goals of the Paris Agreement – limiting global warming to 1.5°C above pre-industrial levels.

Our Sustainable Financing Framework, newly updated in July 2024, is aligned with latest ICMA and LMA principles, and includes the option for certain Eligible Projects within selected Green categories to also be classified as Blue, provided they meet the additional eligibility criteria. It sets out our methodology for classifying financing as sustainable and serves as the basis for tracking and disclosing our performance against our commitments. The Framework enables the issuance of:

- Use of Proceeds bonds and other finance instruments defined as green, blue, social and/or sustainable, and
- Sustainability-linked bonds and loans to finance general corporate purposes.

Within this report, we provide information on how the proceeds have been allocated to Eligible Projects. Pennon is of the opinion that sustainable finance is an effective tool to support its integrated approach to environmental, social, and governance matters.

Laura Flowerdew
Chief Financial Officer
Pennon Group plc

Sustainable Financing Framework Reporting

Debt raised to March 2024

Following the launch of our Sustainable Financing Framework in May 2018, we have consistently issued debt aligned with this framework wherever possible.

In 2021, we updated the framework, and a further update was made in July 2024 to enhance its effectiveness and ensure it continues to support our sustainability goals.

To align with best market practices and address the significant increase in funding required until 2030, the framework has been revised in 2024 to provide greater clarity on the use of proceeds from financial instruments. Under the Framework, Pennon Group and its subsidiaries can issue sustainable financing to support investments across the Group's activities.

Investments made by Pennon are targeted at improving a broad spectrum of outcomes in line with the company's sustainability strategy. This Framework supports the financing of our investments across the Group, resulting in environmentally and socially sustainable outcomes.

In October 2023, we submitted our plan for 2025-30, outlining £2.8 billion of capital investment in the areas that matter most, as outlined in the four strategic priorities of our PR24. This is a plan that tackles the biggest challenges in our region as we invest to protect water resilience and quality, prevent storm overflows, eradicate pollution and enable communities to adapt to climate change. We expect the Final Determination to be published in December 2024.

While the Group prioritises minimizing environmental impacts, we also emphasise the significant social benefits delivered through our various projects. Aligned with the 2021 Sustainability Bond Guidelines, the Group will look to promote positive outcomes in both social and environmental areas for Eligible Projects and qualitatively report on these accordingly, on a best-efforts basis.

Pennon is of the opinion that sustainable finance is an effective tool to support its integrated approach to environmental, social, and governance (ESG) matters. The achievement of Pennon's ambitions will require substantial investment and work to be achieved. In addition to Use of Proceeds financing, Pennon also intends to complement its sustainable finance strategy through the issuance of sustainability-linked financing.

Since 2018 we have raised just under £2.0 billion of finance aligned to our Sustainable financing framework. The framework has enabled the Group to sign several facilities linking the funding to our sustainable goals.

We will allocate an amount equivalent to the net proceeds from the issuance of Sustainable Financing Instruments to finance or refinance, in whole or in part, new or existing Eligible Projects meeting the eligibility criteria.

The Sustainable Financing Framework includes both Eligible Green and Social categories. Certain Eligible Projects within selected Green categories may also be classified as Blue, provided they meet the additional applicable eligibility criteria.

Sustainable finance progress

2018	May UK first Sustainable Financing Framework launched
2019	September First Sustainability Impact Report issued
2020	March First allocation completed from Green reserve account
2021	March c.£1 billion raised through framework September First update to Sustainable Finance Framework
2023	March to May SWW Green Private placement
2024	March New green long funding finance leases signed April SWW Green Private Placement July <ul style="list-style-type: none"> • Updated Sustainable Financing Framework published along with independent SPO • Inaugural green use of proceeds public bond market issuance

Communication with our banking group has increased to identify further opportunities within the sustainable financing space, finding mutually beneficial ways to link with the Group's sustainable goals.

Under this Sustainable Financing Framework, the Group may issue finance in many forms to meet its funding requirements including Green financing instruments, Blue financing instruments, Social financing instruments and Sustainability financing instruments (together, "Sustainable Financing Instruments").

Such instruments may include:

- Committed bank facilities
- Public bonds
- Private placements
- Long funding finance leases
- Facilities to support the groups prefunding requirements
- Schuldscheindarlehen.

This has led to the Group securing £825 million of Sustainable financing in the year to March 2024. Therefore, 82% of our total debt raised in 2023/24 was Sustainable financing.

Funding type	Drawn / Undrawn	Amount	Sustainable metric
Plc Term loan	Drawn	£100m	SLC
Plc RCF	Drawn / Undrawn	£50m	ESG Scores / KPI
SWW Leasing	Drawn / Undrawn	£100m	EGA
SWW Private Placement	Drawn	£525m	EGA
SWW RCF	Drawn / Undrawn	£50m	ESG Scores / KPI
Total		£825m	

As financial products are developing, the Group is looking to explore all opportunities whether this is new funding or sustainable deposits.

Where possible the Group will use green and sustainable deposit solutions for the Group's surplus cash. The company will also engage with the institutional liquidity fund providers to understand their ESG criteria and manage the deposits appropriately within the treasury policy.

Allocation of funds

Within the year 2023/24 £625 million of funding was allocated to sustainable assets (2022/23: £85 million). The table below illustrates the allocation of assets toward our key priorities. The £625 million is directed toward projects outlined in the SIPs, as detailed in our business plan.

Additionally, £100 million has been identified within our operational expenses for various projects that support our key priorities under the sustainable finance framework.

Total Capital Expenditure		
£439.7m		
Drinking Water	Wastewater	Net zero & environmental gains
£291.6m	£134.6m	£13.5m

Key priorities	2023 £000s	2024 £000s
Water quality and resilience (Drinking Water)	155,027	291,567
Storm overflows and pollutions (Wastewater)	77,834	134,628
Net zero and environmental gains	16,859	13,490
Addressing affordability and delivering for customers	-	-
Total	£249.7m	£439.7m

Allocated (£m)	Total allocated	Operational Expenditure 2023/24	Capital Expenditure 2023	Capital Expenditure 2024
2022/23 funds to be allocated	85.0		85.0	
2023/24 funds to be allocated	625.0	100.0	164.7	360.3
Carried forward unallocated		0	0	79.4
Total		£100.0m	£249.7m	£439.7m

ESG external benchmarking and metrics

Our ESG strategy and capitals framework has driven positive change in the business as we continue to embed sustainability in everything we do.

During the year, we continued to show strong performance across external ESG ratings, demonstrating our commitment and management of risk across the ESG agenda.

Latest external assessment scores



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Policies and statements

To ensure best practice, we have a number of ESG policies in place that are reviewed annually and approved by the Board. Read our policies at www.pennon-group.co.uk/about-us/policies.

Environment	Social	Governance
<ul style="list-style-type: none">Environmental PolicyBiodiversity StrategyWater Management Policy	<ul style="list-style-type: none">Health, Safety and Security PolicyCommunity Relations and Investment PolicyWorkplace PolicySubstance Misuse PolicyDiversity, Respect and Inclusion PolicyBoard Diversity Policy	<ul style="list-style-type: none">Sustainable Procurement PolicyCode of Conduct for Supply Chain PartnersAnti-Modern Slavery and Human RightsPrivacy PolicyAnti-Facilitation of Tax EvasionConflicts of InterestRegulatory and ComplianceAnti-Money LaunderingPennon Code of ConductGifts and Hospitality PolicyWhistleblowing PolicyAnti-Bribery and Corruption Policy

ISO certifications

Pennon Group plc holds a number of ISO and other management systems standards, where they align to the objectives of operational sections of the Group as well as stakeholder interests.

A number of these have been held for many years, but the Group regularly reviews the standards to which it seeks certification. In 2021/22 Pennon was recommended for certification to ISO55001 – Asset Management for the first time. The following ISO certifications are currently held by our operating companies.

ISO certification	South West Water	Bristol Water	Bournemouth Water	Pennon Water Services	% of Group covered		
					Revenue	Customers	Asset base
9001 Quality	✓	✓	✓	✓	100%	100%	100%
14001 Environmental	✓		✓		79.9%	61.7%	86%
27001 Information Security	✓		✓		79.9%	61.7%	86%
45001 Health and Safety	✓	✓	✓	✓	100%	100%	100%
50001 Energy	✓		✓		79.9%	61.7%	86%
55001 Asset Management	✓		✓		79.9%	61.7%	86%

ESG external benchmarking and metrics

ESG Reporting Frameworks

Our reporting is aligned to best practice sustainability frameworks to help better communicate our ESG performance.

SASB

For the third year running we have aligned our non-financial disclosures to the Sustainability Accounting Standards Board (SASB) reporting framework. SASB provides a set of industry specific standards (Water Utilities and Services industry), which each contain topics which are material to our investors. Our latest reporting to the Water utility and services industry SASB standard can be found in our 2024 Annual Report page 74-77.



Task Force on Climate-related Financial Disclosures

The Task Force for Climate-related Financial Disclosures published its original recommendations in 2017. Pennon has been reporting against the recommendations since 2020. Our latest reporting against the TCFD recommendations can be found in our 2024 Annual Report page 78-109.



UN Global Compact

This year we have built on our support for the UN SDGs, by becoming a signatory of the world's largest corporate sustainability initiative, The UN Global Compact. Becoming a participant affirms our commitment to our ESG targets, as we work to embed the ten principles of the United Nations Global Compact covering human rights, labour, environment and anti-corruption into our ESG approach, whilst communicating our progress against these principles annually.



Science Based Targets

As a Group we have committed to near-term Science Based Targets (SBTs). Our targets were validated and approved by the Science Based Targets Initiative in May 2024 and we will now focus on delivering our targets. SBTs provide a clearly defined pathway for companies to reduce greenhouse gas emissions. Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to 1.5°C above pre-industrial levels. Our SBTs can be found in our 2024 Annual Report page 70.



These Science Based Targets support our water and wastewater greenhouse gas, and embodied carbon bespoke performance commitments:

- The Group commits to reduce absolute Scope 1 and Scope 2 GHG emissions 68% by 2032/33 from a 2021/22 base year
- The Group commits to reduce absolute Scope 3 GHG emissions from fuel- and energy-related activities, waste generated in operations, business travel and employee commuting by 30% over the same timeframe
- The Group commits that 60% of its suppliers by emissions covering purchased goods and services, capital goods and upstream transportation and distribution will have science-based targets by FY 2027/28
- The Group commits to increase annual sourcing of renewable electricity to 100% by 2030.



Outcome delivery incentives: South West Water 2023/24

Water 5/10



Targets met/on track

Clean, safe and reliable drinking water

- ☒ Water supply interruptions
- ☒ Mains repairs
- ☒ Unplanned outage
- ☒ Taste, smell and colour contacts*
- ☒ Efficient delivery of the new Alderney WTW
- ☒ Water quality compliance (CRI)*
- ☒ Efficient delivery of the new Knapp Mill WTW**

Available and sufficient resources

- ☒ Water restrictions placed on customers
- ☒ Leakage
- ☒ Per capita consumption

Wastewater 5/9



Targets met/within regulatory deadband Reliable wastewater services

- ☒ Internal sewer flooding
- ☒ Sewer collapses
- ☒ External sewer flooding incidents
- ☒ Sewer blockages
- ☒ Odour contacts from wastewater treatment works
- ☒ Treatment works compliance*
- ☒ Total wastewater treatment works (WWTW) compliance*
- ☒ Descriptive compliance*/***
- ☒ Compliance with sludge standard*

Customer 7/8



Targets met/on track

Responsive to customers

- ☒ D-MeX
- ☒ Operational contacts resolved first time – water
- ☒ Operational contacts resolved first time – wastewater
- ☒ Customer satisfaction with value for money
- ☒ British Standard for Inclusive Service Provision
- ☒ Overall satisfaction of services received on the Priority Services Register
- ☒ Priority services for customers in vulnerable circumstances

Sub-measures

- ☒ Priority services for customers in vulnerable circumstances –reached
- ☒ Priority services for customers in vulnerable circumstances – actual contacts
- ☒ Priority services for customers in vulnerable circumstances –attempted contacts
- ☒ C-MeX

4/4



Targets met

Fair charging and affordable bills for all

- ☒ Installation of AMR meters
- ☒ Number of customers on one of our support tariffs
- ☒ Voids for residential retail
- ☒ Percentage of customers who find their water bill affordable

Environment 3/6



Targets met/on track

Protecting the environment

- ☒ Biodiversity – enhancement
- ☒ Biodiversity – compliance*
- ☒ Biodiversity – prevent deterioration
- ☒ Pollution incidents*
- ☒ Number of pollution incidents category 1-3 (water only)*
- ☒ EPA*

Resilience 4/5



Targets met/on track

Resilience

- ☒ Resilient water and wastewater services on the Isles of Scilly
- ☒ Resilience in the round – wastewater
- ☒ Resilience in the round – water
- ☒ Risk of sewer flooding in a storm
- ☒ Risk of severe restrictions in a drought

Community 2/2



Targets met/on track

Benefitting the community

- ☒ Bathing water quality
- ☒ Abstraction incentive mechanism**

Outcome delivery incentives 2023/24 – c. 70% on track or ahead of target

☒ 8

Area of excellence

Where performance has significantly exceeded our commitment

☒ 6

Outperformance

Where performance has demonstrably exceeded our commitment

☒ 16

On track

Where our performance has met our commitment or is within tolerance

☒ 11

Marginal underperformance

Where we believe we have plans to quickly return performance to within committed levels

☒ 3

Area of focus

Where significant work is underway to achieve plan commitments, with Executive-led improvement plans overseen by the Board

* Calendar year incentive.

** Two performance commitments have no commitment for 2023/24 but are on track for future years' commitments.

*** Descriptive compliance was not achieved this year, but is within the regulatory deadband and is considered 'on track' for future years.

Outcome delivery incentives: Bristol Water 2023/24

Water

6/11



Targets met/on track

Clean, safe and reliable drinking water

- ☒ Water quality compliance (CRI)*
- ☒ Water supply interruptions
- ☒ Appearance contacts
- ☒ Taste & smell contacts
- ☒ Mains repairs
- ☒ Unplanned outage
- ☒ Unplanned maintenance events on above ground assets
- ☒ Properties at risk of receiving low pressure
- ☒ Turbidity

Available and sufficient resources

- ☒ Leakage
- ☒ Per capita consumption

Customer

4/6



Targets met/on track

Responsive to customers

- ☒ C-MeX
- ☒ Customer satisfaction with value for money
- ☒ % of satisfied vulnerable customer
- ☒ D-MeX
- ☒ Priority services for customers in vulnerable circumstances
- Sub-measures
 - ☒ Priority services for customers in vulnerable circumstances –reached
 - ☒ Priority services for customers in vulnerable circumstances – actual contacts
 - ☒ Priority services for customers in vulnerable circumstances –attempted contacts
- ☒ Total complaints per 10,000

2/3



Targets met/on track

Fair charging

- ☒ Customers in water poverty
- ☒ Meter penetration
- ☒ Voids

Environment

5/5



Targets met/on track

Protecting the environment

- ☒ Biodiversity Index
- ☒ Water Industry National Environment Programme compliance
- ☒ Waste disposal compliance
- ☒ Raw water quality of sources
- ☒ Water Industry National Environment Programme delivery

Resilience

2/2



Targets met/on track

Resilience

- ☒ Customers at risk of severe drought restrictions
- ☒ Glastonbury Street Network resilience

Community

2/2



Targets met/on track

Benefitting the community

- ☒ Local community satisfaction
- ☒ Abstraction incentive mechanism

Outcome delivery incentives – 2023/24 – c.70% on track or ahead of target



Area of excellence

Where performance has significantly exceeded our commitment



Outperformance

Where performance has demonstrably exceeded our commitment



On track

Where our performance has met our commitment or is within tolerance



Marginal underperformance

Where we believe we have plans to quickly return performance to within committed levels



Area of focus

Where significant work is underway to achieve plan commitments, with Executive-led improvement plans overseen by the Board

* Calendar Year Incentive.

Key



Environment



Wastewater



Community



Area of excellence



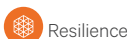
Marginal performance



Customers



Availability



Resilience



Outperformance



Areas of focus



Service



Clean water



On track

ESG performance, initiatives and projects

Environmental Performance Assessment (EPA) – Our journey to 4★ rating

2023 has seen some of the most tumultuous weather on record, particularly in the second half-of the year. Across the South West Region, 2023 was the fifth wettest year on record, with a 34% increase in rainfall from 2022 and we experienced 50% more rainfall than the long-term average in the second half-of the calendar year, peaking at 130% in July, resulting in rising groundwater levels.

The impact of the extreme weather has varied across our operations, with the wetter weather supporting the recovery of our reservoir storage and water resources, but the increased rainfall and high groundwater levels has driven up the use of storm overflows which are used in wet weather as a 'release valve' on the network to avoid flooding to homes and businesses, as well as increasing the number of pollution incidents in the year.

Key ways in which we monitor and track our operational and environmental performance with a consistent, aligned focus on improving our EPA rating.



EPA – Our journey to 4★ rating continued

Pollutions – Networks

Our pollution incident reduction plans over the last three years were based on the historical patterns where around 70% of pollutions were on our network, therefore our activities and investment were more focused on reducing incidents in this area.

- Installed over 12,000 sewer depth monitors, supporting predictive/proactive warning of potential issues to enable early interventions
- Invested in rising mains replacement with 70% of the planned programme complete and 16 kilometres of sewers relined
- Doubled our sewer jetting and cleansing activity and site inspections, with 116 kilometres of sewers surveyed with CCTV
- Focused on identifying and resolving incidents that arise from illegal connections and we have expanded our investigation into sewer misuse, supported by a third-party with dedicated resources targeting homes and businesses which repeat network issues
- We are supporting communities to reduce the use of harmful wet wipes, including government and national campaigns to ban the use of wet wipes.

Our interventions were successful with network incidents remaining stable in 2023 (despite the extreme weather), maintaining the positive gains achieved in previous years, whilst the number of incidents from our networks has reduced by around 40% since 2020.

We have seen the performance of our network remain strong, despite the extreme rainfall and additional flows during the year:

- **Sewer flooding** – we remain sector-leading for internal sewer flooding incidents at 0.76 per 10,000 connections outperforming our target every year of this regulatory period. External sewer flooding has reduced by 8%, although this is slightly elevated from our targeted position. A clear focus on avoiding repeat flooding incidents with an increase of planned cleansing and routine jetting is having a positive impact.

- **Sewer collapses and blockages** – we have outperformed our targets for both sewer collapses and sewer blockages, with 2023/24 our best-ever performance on blockages. Proactive management of our network, including enhanced cleansing removing debris from sewers, an increase in the number of repairs as well as sewer overflow inspections being completed. In addition, a focus on improving compliance of commercial premises who dispose fat, oil and grease into our sewers, as well as other operational change initiatives, have all contributed to this achievement.

Pollutions – Pumping stations and treatment works

The exceptional rainfall and increased groundwater have driven an increase in the flows at our pumping stations and treatment works. We have evolved and rebalanced our pollution reduction efforts at both treatment works and pumping stations. At our treatment works, interventions were linked with targeted improvements in compliance which was challenged during the year and include:

- Increasing the resources for targeted inlet and storm tank cleansing with further training and upskilling of our workforce
- Individual site action plans have been developed and are focused on a dynamic risk-based approach for compliance and targeted enhanced maintenance
- Site visits at all our descriptive works were completed with a specific focus on reedbed surveys at 38 higher risk sites and ongoing refurbishments completed or planned.

We have around 1,250 sewer pumping stations, many of which are small, can be inaccessible with restricted space and therefore cannot have generator back-up power. We have dynamically evolved our plans to focus on these assets which includes:

- Increased site visits with one major and one minor MOT service at all pumping stations
- Enhanced sump cleansing at 288 targeted sites to reduce blockages
- Increasing our power resilience including installation of brownout timers at all sites, installing 'plug-in' points for mobile generators at 165 sites and 12 sites identified for new generators.

Green First

Our approach is a significant change to the way that we will scope and deliver our solutions to water management challenges.

Our decision-making process

With the environment, resilience and affordability being our highest priorities, the principal of Green First assumes that a nature-based solution (NBS) will be considered from the outset. This approach will look for opportunities to work with nature, our stakeholders and communities to reduce the amount of water entering our drainage network by slowing the flow in our catchments.

The strategic intent of our Green First approach is to change how we take decisions about the investments we need to make and broadening our consideration to include alternative approaches.

Adopting a Green First approach will require us to demonstrate environmental leadership.

A decision-support framework is applied to determine how the solution may be adapted and amended from this starting point. The Green First Framework forms the decision-making process that we will apply through the delivery of the programme.



Green First continued

How can it help?

Green First solutions often bring wider public benefits, have a lower carbon footprint and can be, in the long term, better value for money than traditional, engineered solutions.

The European Commission defines NBS as solutions that “provide environmental, social and economic benefits and help build resilience” by bringing “natural features and processes into cities, landscapes and seascapes, through locally adapted, resource-efficient, and systemic interventions.” As a result, NBS benefit biodiversity and support the delivery of a range of ecosystem services.

We refer to three different categories of solutions or process types called Green, Blue or Grey.

A simple definition of these categories is:

Green Semi-natural spaces and assets that use ecologically driven processes to treat and slow or stop rainfall runoff. These options enhance the urban environment in a variety of ways.

Blue Infrastructure includes the ponds, waterways, wet detention basins and wetlands within a drainage network.

Grey Traditional engineering solutions such as tanks for storage of combined and foul flows.

These process types are not standalone and can be used in combination. For full details of the Green First initiative, please see our [Green First Framework](#).



Current alternative solutions

Traditional construction based solutions are often termed as “Grey” or engineered solutions. For example, laying pipes and pouring concrete to create new storage tanks to increase the systems capacity to hold and store the mixture of rainwater and sewage before its safe return into the environment. However, this approach only treats the symptom, rather than the cause, and it cannot adapt to changing pressures on the system resulting from climate change. Further, input flows will increase over time, and we will eventually need to increase the storage capacity of the system again, thus making “grey” solutions less sustainable.

Preferred solutions

“Green” solutions or “Nature Based Solutions”, such as Sustainable Drainage Systems (SuDs), Rain Gardens, Surface Water Separation (SWS), infiltration reduction or property-level storage can offer longer term resilience to the increasing impacts of climate change. In addition, these solutions can also deliver positive outcomes for multiple Drainage and Wastewater Management Plan challenges. Our ‘Green First’ Framework offers four additional benefits over and above primary water management.

South West Water’s Green First approach will help to make the shift and by applying, monitoring and evaluating a range of solutions, such as a multiple solution approach. Risk and uncertainty are likely to reduce changing perception and knowledge on these approaches over time.

For our planning we assume a minimum of 50% NBS surface water flow, with an increase to 75% by 2040.

Our Green First approach will mean we always begin the scoping of each solution by looking at whether Green options would be appropriate. However, there will always need to be a balance of the use of NBS and meeting urgency and certainty for a solution, which means a Grey solution (or hybrid) may be more practical.

By starting at Green, rather than the tradition of starting at Grey, we will come to practical, best value solutions that will always look to provide as much environmental/biodiversity and societal benefit as is reasonably practicable, in addition to resolving the initial need.

We acknowledge this is the start of a journey and we are committed to getting the business ready for the ‘Green First’ approach. We will work closely with a range of suppliers and partners to deliver on our NBS ambitions. We will ensure that our scope of delivery is scaled appropriately, enabling local partners to support us in delivering our programme.

Green First continued

Upstream Thinking

Our multi-award-winning catchment management scheme, Upstream Thinking, applies natural solutions to reduce this agricultural impact on biodiversity and water quality. It does so whilst supporting farmers and the rural economy, by providing long-term resilience to climate change.

Some of the activities include:

- Installing waterside fencing
- Building ponds
- Improving farm tracks
- Increasing slurry storage
- Planting trees and buffer strips to catch and filter water.

Cleaner water, lower costs

Thanks to Upstream Thinking work, by the time water reaches streams and rivers, it is much cleaner. This allows the treatment process to be faster, cheaper, more efficient, and better for the wider environment because it uses less energy and carbon.

Better homes for wildlife

Improved soil quality in farmed fields, more trees planted in the right places, pastures rich in plant species and cleaner water in our streams, rivers and reservoirs, mean a better home for wildlife. Many species have returned to the waterways that we've helped clean up.

More confidence for farmers

Farmers have a huge role to play in keeping rivers and reservoirs clean and healthy, and it's only with their support that we've been able to enjoy the benefits this programme has achieved so far.

Farmers who have engaged with Upstream Thinking have seen many benefits, including more nutrients left in the soil due to less run-off, healthier pastures to graze their animals in, and sponsored upgrades to their farms like fencing and silage storage.

Peatland restoration to tackle climate change

Peatlands are wetland landscapes shaped by waterlogged soils formed of dead and partially decaying plants: peat. They are made up of sphagnum mosses, water-retaining plants which form blanket bogs across the landscape.

Peatlands are important ecosystems that provide immeasurable benefits to wildlife, the landscape, water, the environment and people. Restoring our peatlands is absolutely key to tackling the climate crisis.

Peatlands are excellent at storing carbon and globally they store more carbon than all of the world's forests combined. They take in and reduce the amount of carbon dioxide in the atmosphere, a greenhouse gas which contributes to climate change. However, when peatlands dry out and degrade, that stored carbon is lost to the air or water and makes its way back into the atmosphere. It's previously been noted by the IUCN (International Union for Conservation of Nature) UK Peatland Programme that rewetting drained peatlands is the 'best option' for reducing emissions and should be done as quickly as possible.

Peatlands also have great benefits for our business and are an invaluable part of the water cycle. Peat can hold up to 20 times its own weight in water, helping slow the flow of this water through the landscape and increasing our resilience to extreme weather. Over time peatland restoration should improve the quality of our raw water by reducing the amount of material being washed off the land into our rivers, streams and waterways. This means less treatment costs, which will help to keep customer water bills down.

Historically, the peatland across the region has been damaged by the activity of digging peat for fuel, installing ditches to drain the land, tin-streaming, military activity, deforestation and burning. This has impacted its ability to store water. But it's not just a problem here in the South West, at least 75% of peat in the UK is damaged and releasing emissions – a concerning statistic.



Green First continued

If ever there was a time to invest in our peatlands, that time is now. The IUCN recognises that peatlands in the South West are the most vulnerable in the UK to climate change. And, just last week the Met Office released its State of the UK Climate Report for 2023 which revealed that last year was the second warmest year on record for the UK since 1884. With all this in mind, it is critical we act now to restore and protect our remaining peatlands in the South West and nationally.



We're proud to be collaborating with other like-minded organisations, landowners and farmers to restore our damaged peatlands through the South West Peatland Partnership (SWPP). This is a £13 million project delivering peatland restoration across Cornwall, Dartmoor and Exmoor. SWPP is actively restoring, celebrating and positively shaping the future of the peatlands for people, wildlife and the planet. The partnership is being recognised on a global stage too as has been shortlisted for the Global Good Awards.

Our teams on the ground work to re-wet the landscape by blocking ditches using sustainable materials like peat and wood. Works aim to increase the amount of water being held in the landscape by stopping it from running off the land and straight into watercourses. Since 2020, the partnership has started the restoration process on 1,630 hectares of peatland, the equivalent of almost 2,300 football pitches.

The benefits of the SWPP's work are clear to see. Results have shown that peatland restoration can significantly alter the amount of rainfall that runs off the land. We've seen within deeper peat, flows off the land can be reduced by around 66%. On Dartmoor and Exmoor, we have seen species of birds such as snipe and dunlin breeding numbers increase in the areas that have been restored. Areas of once dry peatland are now covered in blankets of sphagnum moss and pools of water with dragonflies and birdlife, even during the hottest months of the 2022 summer drought.

Now really is a great time to raise awareness of the importance of our peatlands and the threats they face. We will continue to collaborate and work in partnership to stop further damage of our peatlands and promote their restoration for the benefit of wildlife, the environment and our customers.

Before



After



**Peatland
restoration on
Bodmin Moor,
Cornwall**

Net Zero



In 2021, we set our ambitious plans to reduce our operational carbon emissions and hit our Net Zero target by 2030. Since then, we have gone further, adding a Race to Zero commitment to reduce greenhouse gas emissions (GHG) across our entire value chain by 2045.

As a Group we have committed to near-term Science Based Targets (SBTs). Our targets were validated and approved by the Science Based Targets Initiative in May 2024 and we will now focus on delivering our targets. SBTs provide a clearly defined pathway for companies to reduce greenhouse gas emissions. Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to 1.5°C above pre-industrial levels. Our SBTs, presented below, support our water and wastewater greenhouse gas, and embodied carbon bespoke performance commitments.

- The Group commits to reduce absolute scope 1 and scope 2 GHG emissions 68% by 2032/33 from a 2021/22 base year.
- The Group commits to reduce absolute Scope 3 GHG emissions from 'well to tank' electricity and fuels, the delivery of electricity, emissions from waste, and business travel and commuting, by 30% over the same timeframe.
- The Group commits that 60% of its suppliers by emissions covering purchased goods and services, capital goods and upstream transportation and distribution will have science-based targets by FY2027/28.
- The Group commits to increase annual sourcing of renewable electricity to 100% by 2030.

Our Net Zero strategy is driven by three pillars:



1. Sustainable living

- a. Reducing emissions through changes to our operational practices, increasing energy efficiency, and switching to lower carbon fuel sources
- b. Meeting our commitments to reduce leakage and help customers to use less – protecting the environment and saving carbon



2. Championing renewables

- a. Maximising self-generation from renewables at our sites across the South West – working with partnerships and utilising our expertise
- b. Where we cannot generate enough ourselves to meet all our needs, 100% of the energy we purchase will be from renewable sources



3. Reversing carbon emissions

- a. Reversing carbon emissions from our core activities
- b. Working in partnership to ensure our core activities reverse carbon emissions through solutions such as peatland restoration
- c. Supporting the development of innovative solutions to develop low carbon footprint processes through research and development.

Net Zero continued

Our promise to the planet

In 2021, we published our Promise to the Planet – our ambitious plan to reduce our operational carbon emissions to Net Zero by 2030. During 2023/24 we have committed to even more ambitious targets, to go beyond reducing our operational emissions, and set out scope 1, 2 and 3 GHG emission reduction targets, targets to reduce emissions across our value chain, and to increase our use of renewable electricity.

PillarProgress against our three-pillar strategy

1.

Sustainable living



- In 2023/24 our wastewater back-up generators have been switched from using diesel fossil-fuel to using lower carbon HVO (Hydrotreated Vegetable Oil) made from waste oil.
- We are continuing with our programme of pump efficiency testing, pump repair and replacement. We have installed two new pumps at our Roadford Dam site, one low lift pump at Restormel water treatment works in Cornwall as well as one at Longham water treatment works in our Bournemouth region. We have proactively developed a new plan to refurbish our activated sludge processes on our wastewater treatment works as well as plans to replace some of our largest blowers providing air to those processes. We have also conducted site-based energy audits on our Bristol Water sites as part of compliance with Phase 3 of the Government's Energy Savings Opportunities Scheme (ESOS).
- We have embarked on a nitrous oxide (N2O) emissions monitoring trial at our Countess Wear (Exeter) wastewater treatment works, as well as a separate trial to measure fugitive emissions of methane (CH4) emissions at the same site.
- Our transition to electric vehicles continues with over 50 electric vehicles now on our fleet of vans and cars. Whilst the most of our transport fleet is still petrol or diesel fuelled, we plan to gradually transition to a 100% electric vehicle fleet during the next decade.

2.

Championing renewables



- South West Water continues to source 100% renewable electricity (since 2022). We will negotiate to switch Bristol Water to 100% renewable electricity at the appropriate contract renewal time.
- Onsite renewables with third parties are a mix of CHP, hydro, solar and wind. SWW has achieved 9.1% and Bristol 1.1% on-site renewable energy generation.
- We have completed a feasibility study for the installation of floating solar PV arrays at a number of our reservoirs and are progressing to the next stages at one of our large drinking water sites.
- We have made a significant advance in sourcing off-site renewables through the third party owned Rexon Cross 500kW wind turbine, which is now feeding renewable electricity into our Roadford Reservoir site through a private wire. The turbine has the potential to generate 1.5GWh of energy each year which is approximately 15% of the total energy used on the site.

3.

Reversing carbon emissions



- Our catchment management programmes include improved soil management, wetland creation, buffer strips, tree planting and other nature-based solutions. We have pioneered a collaborative partnership approach to peatland restoration across the region, continuing to develop best practice and build capacity to scale up into the future. Over time these interventions store more carbon in the landscape and reduce loss to the atmosphere, whilst retaining water upstream to improve long-term resilience.
- In 2023-24 we have planted 80,327 trees to exceed our annual target of 50,000 trees and restored 493 hectares of peatland towards a total of 1,558 hectares restored so far throughout AMP7. Once completed our peatland restoration programme planned for AMP7 is expected to sequester around 650,000 tCO2e over the next 50 years. Meanwhile the 253,000 trees now planted (AMP7 delivery) are expected to store an estimated 17,700 tCO2e during the next 30 years.
- Looking forward, we have included a range of nature-based solutions in the PR24 Business Plan submission (2025-2030) to increase opportunities to lock up carbon through our activities. We continue to collaborate across the water industry to investigate other land and marine-based carbon sequestration opportunities, such as seagrass restoration and development of a soil carbon code.

Net Zero continued

Our electric vehicle fleet

We continue to strive towards an all-electric car and van fleet by 2030.

The company's first batch of 16 electric vehicles joined the fleet from February 2023 and was boosted by a further 37 vehicles later that year as we work towards our Net Zero goals.

We have ambitious plans to bust our operational carbon emissions and hit Net Zero by 2030. Reaching this target is about reducing energy use, becoming more energy efficient and decarbonising its operations.

Switching from fuel to electric vehicles means that we will dramatically reduce our carbon footprint as zero CO₂ is produced from an electric vehicle's tailpipe, compared to petrol or diesel.

With approximately 80% of our electricity consumption dedicated to pumping and treating both drinking water and wastewater, we have made significant progress toward achieving Net Zero by transitioning to 100% renewable electricity sources.

To support the electric vehicle transition, we have installed charging points across many of our offices and depots throughout the region, which are also supporting colleagues who have, or are looking to, make the switch to electric for their own personal transport.



"We are proud to be doing our part in reducing our carbon footprint by pushing towards our goal of switching to a 100% electric car and van fleet by 2030. By decarbonising our fleet, we will be further championing renewables, building our own renewable energy and only purchasing 100% renewable electricity as a part of our 'Promise to the Planet' initiative."

"We are gearing up our actions to fight the challenges of climate change and do our part to help save the beautiful environment we work in within our region and beyond."



Sustainable Financing Framework

Annual Allocation and Impact Report 2024

For further information,
visit pennon-group.co.uk