



SCOTTISH WATER

Water Industry Commission for Scotland (WICS) ANNUAL RETURN 2023/24

OVERVIEW

Note: Minor discrepancies between figures contained in this document and AR24 Tables are due to rounding

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1 Executive Summary of Performance

Our strategic plan, Our Future Together, outlines our three strategic ambitions: Service Excellence; Going Beyond Net Zero Emissions; and Delivering Great Value and Financial Sustainability. This overview reports on our performance and activities in 2023/24, the third year of the 2021 - 2027 regulatory period.

We continue to deliver high quality services to customers and our key performance measures are at similar levels to the previous year.

Service Excellence

Water quality remains high, at 99.92% (Line B10.15b) which is unchanged from AR23 and comparable with pre COVID-19 performance in 2019 (99.917%) (see Table B10 commentary). Overall, our environmental performance remained constant with 96.2% of wastewater treatment works fulfilling environmental license conditions which was the same in 2022/23 (see Table B11b commentary). Whilst the total number of Environmental Pollution Incidents (EPIs) reduced in the year by ten we had eleven of the more serious Category 1 and 2 Environmental Pollution Incidents (EPIs), which was the same as the previous year (see Table B11a commentary).

Over the last 12 months we have faced a series of challenges affecting the delivery of water and wastewater services to our customers. These included hot and dry periods of weather in May and June which put pressure on water treatment works, reservoirs levels, and leakage levels; and significant rainfall events including storm Babet, which caused damage to our assets, power cuts and customer flooding.

Despite the challenges presented by our changing climate the Overall Performance Measure (OPA) score, which scores our performance across a range of activities, increased compared to AR23 to 402 points. We have achieved this through the effective deployment of operational and preventive measures, including stopping abstraction at sites where water levels have been impacted by dry conditions, extending generator stand-by cover to maintain assets operations during storm events and establishing Severe Weather Teams to plan for and monitor situations closely. There are, however, individual elements within the OPA where our performance hasn't been as strong as in AR23.

We can see that disruptive weather is increasing in frequency, and to protect our services as much as possible we are constantly reviewing the sustainability of our operational response. For example, one area we have investigated in AR24 is the expansion of permanent standby power at treatment works and pumping stations and the installation of quick hook up facilities for mobile generators to ensure continuation of our services in the event of power outages.

Storms Agnes and Babet caused widespread issues in October. Ahead of the storms we set up a Severe Weather Team which worked 24/7 to monitor issues and ensure we had teams available to respond. At some sites where the weather impacted raw water quality, we took pre-emptive action by stopping abstraction and bringing in alternative supplies.

A number of our supply systems were damaged by flood water but despite these challenges we maintained customer supplies through pre-emptive planning and on the ground responses, including putting 37 water treatment and pumping sites on standby power to protect services from power outages. In January we experienced a prolonged period of freezing temperatures and snow in the north of Scotland. Then at the end of this cold period a rare red weather warning was issued for Storm Isha due to high winds and heavy rainfall. During this event 42 tankers were deployed

to support over 20 sites and keep customers in supply. The storm also brought a rapid rise in temperatures and a quick thaw leading to a rise in bursts across the network.

Going Beyond net zero emissions

We are one of the largest electricity consumers in Scotland. Our total electricity consumption in 2023/24 was 503 Gigawatt Hours (GWh) compared to 485 GWh in 2022/23 (Line C3.1a) – enough to power around 150,000 homes. Reducing our carbon emissions remains a key priority however our net operational carbon footprint (CFP) for water and wastewater services in 2023/24 was 224,979 tCO₂e¹ a 1.9% increase from 2022/23. (Line C1.29). This was largely due to emissions associated with purchased electricity from the national grid. However, due to previous reductions in our carbon footprint, we have achieved our 2024 emissions reduction target by delivering 27,723 tCO₂e since 2021.

A total of 59GWh², of renewable power was generated on-site in the AR24 period (line C3.2a) an improvement on 51 GWh in AR23. This included 42 GWh generated by schemes owned by Scottish Water core business (38GWh in 2022/23) and 17 GWh generated by schemes owned by Scottish Water Horizons (of which, 10 GWh were generated by schemes embedded in core business assets). We have also achieved 72% of our 2030 renewable target of 1,320 GWh generated or hosted on our land (Line C3.4).

Capital Investment

This was the third year of our six-year regulatory period (SR21), during which we planned to significantly increase our year-on-year investment levels, in line with the expectations of regulators and the Government. The amount of planned investment (Tier 2) associated with enhancement, flooding, growth asset replacement and planned repair and refurbishment delivered in AR24 is £789m (lines G1.77 plus G1.78) compared to £688m³ in AR23 (outturn prices). When we include responsive repair and refurbishment expenditure the investment totals £1,025m (Line G1.58), this is an increase of £146m on 2022/23 (outturn prices).

Financial sustainability

We have increased water and wastewater charges for 2024/25 by 8.8%, an average of less than 70p per week per household with around 50% of our customers receiving a discount, exemption or reduction in their water and wastewater charges. The charges were set after discussions with the Scottish Government, to balance the need for future investment to protect services, with the significant economic challenges faced by many people and businesses across Scotland at the current time. However, as a consequence of previously levying charges below the level permitted in the Final Determination to protect customers during the cost of living crisis, the finance available for investment in the 2021-27 period will be around £0.5 billion (10%) lower than expected at the start of the regulatory period. This will result in significant reductions in investment towards supporting growth, reducing sewer flooding, achieving our net zero targets and resilience meaning that customers in these areas will see investment delivered later than planned.

Transforming how we work

Our transformation programme is well underway with initiatives taking shape and starting to deliver benefits in service delivery, efficiency, and customer experience. For example, we have delivered a streamlined approach to non-complex service delivery (looking at low value, high volume activities such as the replacement, repair and refurbishment of electrical, mechanical and infrastructure assets). This initiative has accelerated the delivery of over 16,000 needs which have

¹ Reported as 225,000 tCO₂e in Annual Report: Performance and Prospects report due to rounding

² The 42GWh reported in the Annual Report: Performance and Prospects relates to the total renewable generation benefiting Scottish Water operational assets that come from schemes owned by the regulated business.

³ The reported AR23 figure of £ 686.5m has been revised for AR24 due to recategorisation of investment

improved services to benefit customers across the country. We have applied technology to improve the efficiency and compliance at our wastewater treatment works, for example by connecting operators' data from smart sensors to optimize treatment processes and reduce energy consumption. This has delivered a 0.5GWh reduction in energy consumption and over £500,000 in annual savings. A new internal insights dashboard is giving us information to help us better understand our customers' needs by giving us a near real time picture of what customers are contacting us about and in what areas. This is helping us determine how these issues relate to our network.

Conclusion

Despite facing difficult operating conditions driven by the changing climate, we have delivered a slight improvement on our OPA measure. We have worked hard to protect services by proactively applying measures to mitigate the impacts of extreme weather events and hot and dry periods of weather impacting our assets. We continue to make progress towards our renewable targets and have increased our year on year investment levels. As we seek to balance the need for future investment to protect services, with the significant economic challenges faced by many people and businesses across Scotland we have continued to transform the way we work to deliver benefits in service delivery, efficiency, and customer experience.

2 Customer Experience - Levels of service and compliance

2.1 UK Customer Satisfaction Index (UKSI)

Scottish Water's Business Benchmark CSI is 77.1 (-0.9) which represents a slight decrease compared to July 2023. However, this decrease is less significant than other water companies, with the water sector average at lowest ever levels (70.7). From the report we believe the decrease is due to increased media coverage of the water industry especially around combined sewer overflows. This is supported by feedback in our Customer Experience Measure covered in section 2.2.

Scottish Water is currently ranked sixth by Scottish respondents; an increase from eleventh position in the last survey. Scottish Water is 5 points behind the top ranked company Booking.com, and 18.2 points above the lowest ranking company, Hermes/Evri.

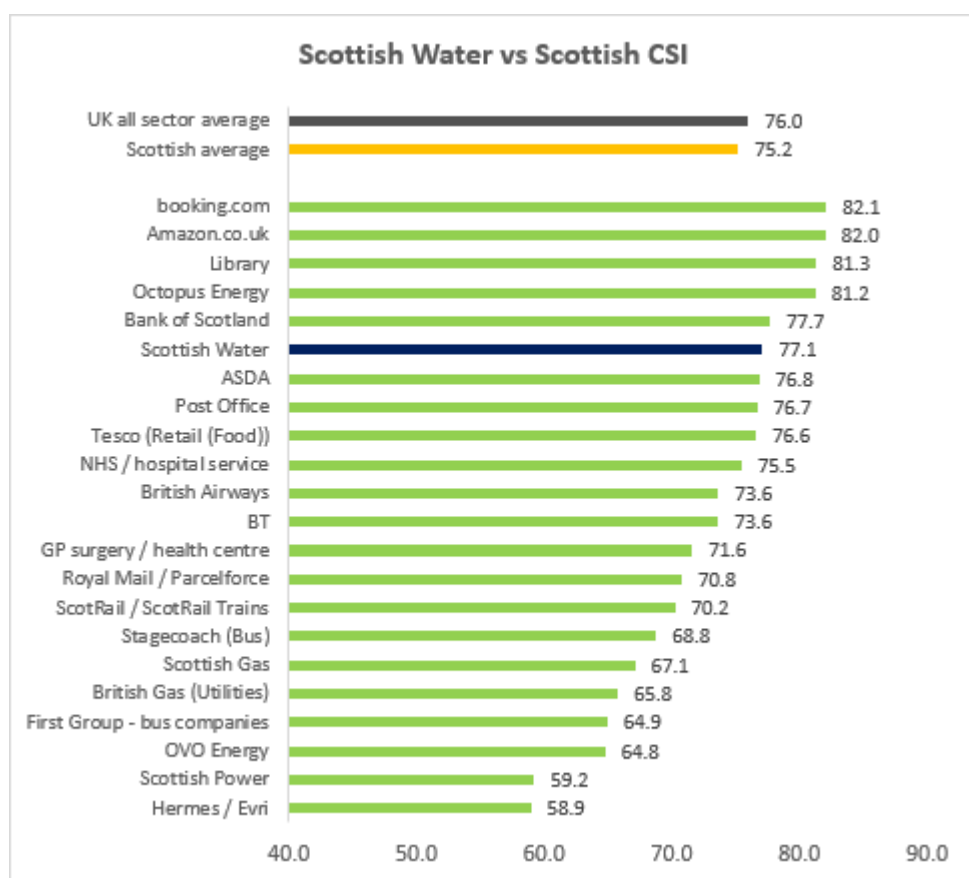


Figure 1: UKCSI Customer Service Index scores

2.2 Customer Experience Measures (CEMs)

Our Household Customer Experience Measure (hCEM) score was 86.6, a slight increase on 2022/23(86.4) (Line B5.1). The improvement was mainly observed on the quantitative aspect of the measure where the majority of elements performed better or remained stable with our AR23 results. Reductions in Service Issue Contacts and Escalations had a positive impact and improved the overall quantitative component although this was slightly offset by an increase in Written Complaints. Of the qualitative indicators only the Customer Experience Survey improved from AR23 (from 92.41% to 93.87% - Line B5.2). Negative issues that impacted other qualitative

indicators included service issues, charge increases, industrial action but also media coverage of Combined Sewer Overflow – including coverage related to England and Wales.

In response to this, various steering groups have been created and an awareness campaign was recently launched with the aim of increasing public awareness of what we do, and that we are a public body rather than a private company.

Our Non-household Customer Experience Measure (nhCEM) score was 89.8 compared to 86.7 in 2022/23 (Line B6.1). On the quantitative side we experienced fewer service issues contacts in AR24 compared to AR23. We are working towards becoming less of a reactive service and more proactive to improve both the customer experience and Scottish Water's efficiency. This includes the monthly reconciliation of market data at the CMA (Central Market Agency) with premises data from the Scottish Assessors Association (SAA) to pro-actively identify changes requiring updates to market data (e.g. conversion of business premises to/from household and reconfiguration of commercial premises to split or merge existing units), as well as fewer Formal Complaints and Escalations. On the qualitative side we observed an increase in Licensed Provider Satisfaction scores and in Business End User Satisfaction scores. AR24 continued the work started in AR23 with initiatives to maintain and improve experience, which included fortnightly team workshops with topics based on the feedback from LPs via the experience survey e.g. if scores were low on the re-assessment process, a review of LP comments took place and a re-assessment workshop created.

Further details for the measures are covered in the commentary for Tables B5 (hCEM) and B6 (nhCEM).

2.3 Overall Performance Measure

The Outcome Performance Assessment (OPA) is a points-based measure that scores our performance across a range of activities essential to maintaining levels of customer service and environmental protection. Our OPA performance for the AR24 period was 402, slightly higher than the previous year's score of 401. This was mainly driven by Category 1 and 2 Environmental Pollution Incidents. Although the total number of 11 was the same as 2022/23 (lines B11a.1 to 7) there were no water related incidents in AR24 compared to 3 in AR23 (lines B11a.9 to 11). As water related incidents cost more OPA points this improvement contributed to a higher OPA score in this category, 40.44 points compared to 37.25 points in 2022/23.

These OPA figures are extracts from Annual Report Performance and Prospects and contained in AR24 - SR21 OPA Reporter's Report).

2.4 Drinking Water Quality

We have maintained performance in many of our key performance metrics at or around the same level as AR23. Our water quality compliance remains high at 99.92% (line B10.15b) and we are committed to building on this solid foundation to increase the reliability and resilience of our water service.

Water quality compliance at customer's taps remained high but decreased slightly from 99.91% to 99.88% (Line B10.14). We have previously highlighted the risk to measured water quality performance at consumers' taps due to the introduction of new drinking water standards. In 2023, there were 23 chlorate failures and 10 Halo Acetic Acid failures. On chlorate we continue to work to improve performance, changing chemical strengths and reducing storage times whilst developing options for cooling and mixing at higher-risk bulk store sites, which could be implemented before summer 2024. Halo Acetic Acid (also known as HAA5 Total) failures are far more challenging to address, most likely requiring WTW enhancement instead of optimisation,

and we are carrying out research with Cranfield University to understand the risks and needs better.

Water Treatment Works (WTWs) performance and performance at Service Reservoirs (SR) in 2023 (99.95% 99.93% respectively Line B10.14) is slightly lower than for AR23 (99.96% and 99.95% respectively). Performance has been impacted by heavy rainfall in July and August 2023 deteriorating the quality of some sources and increasing ingress into treated water storage tanks This prolonged and heavy rainfall has exposed the remaining vulnerabilities in the treated water storage network which we are addressing under the DWQR Enforcement Notices.

There were 8 Cryptosporidium detections not mitigated by ultraviolet (UV) treatment, which is 11 lower than in 2022. Detections also showed a significant improvement with 11 compared to 57 in 2022. This was due to a focus on Cryptosporidium in 2023 that included investment in a membrane team and new water quality instrumentation. One viable detection was from Mannofield WTW and work to install UV irradiation on each RGF outlet was completed in March 2024. Two viable detections were measured at Alexandria WTW in February and December 2023 and a multidisciplinary team is looking at possible causes and developing an action plan to reduce the risk.

We continue to invest at several water treatment works to improve capabilities and maintain the high levels of water quality compliance and treated water storage points (service reservoirs and clear water tanks) carrying out maintenance identified through current inspection and cleaning programme as well as the known backlog of essential maintenance requirements.

2.5 Interruptions to Supply

2023/24 saw a slight increase in properties experiencing unplanned interruptions to supply across all durations over 3 hours as shown in the table below. This overall increase was largely attributed to major weather events (like storms Babet, Isha and Jocelyn) which caused large scale impact to our network resulting in interruptions to supply. Weather related events and in particular damage to pipe bridges contribute to over 50% of the increase in events greater than 24 hours. To provide context, we have considered the unplanned interruptions experienced in AR22 in which we observed weather conditions (e.g. large numbers of storm events) that are broadly comparable to those experienced in AR24.

Table 1: Interruptions to Supply

Line Ref	2021/22	2021/22	2022/23	2023/24	Variance 22/23 - 23/24	% Change 22/23 - 23/24
B2.10	Less than 3 hours unplanned	252943	209640	203311	-6329	-3.02%
B2.11	More than 3 hours unplanned	114815	92460	94899	2439	2.64%
B2.12	More than 6 hours unplanned	6759	5065	5662	597	11.79%
B2.13	More than 12 hours unplanned	1626	541	566	25	4.62%
B2.14	More than 24 hours unplanned	531	26	112	86	330.77%

The number of unplanned interruptions to supply to properties greater than six hours in 2023/24 saw an increase to 6,481 compared with 5,707 in 2022/23 - total weighted properties for OPA purposes (Line B2.29). The impacts of the interruptions on our customers were mitigated by a combination of rezoning our network and/or using tankers to bring supplies back on quickly while we completed repairs.

Up to the end of AR24 period, Scottish Water has committed almost £249m for responsively repairing water mains and activities to reduce the rate of failure, such as mains rehabilitation and transient pressure management.

Further detail on interruptions to supply is contained in the commentary to Table B2.

2.6 Leakage

Leakage from our water supply network has reduced by 58% since 2006 however it remains one of our most important operational issues. As with many aspects of our work, a changing climate and more extreme weather impacts on our infrastructure resulting in leaks which need to be found and fixed as quickly as possible. Despite strong performance on reducing leakage in recent years, AR24 saw an increase in the amount of water lost from the system compared with the previous year and a higher final total than forecasted.

Leakage levels increased to 462 MI/d (line B8.10) compared to 454 MI/d in AR23, although as a percentage of the distribution input it remained consistent at 25%. This is the first annual increase since 2007.

A spell of very cold weather between December and January in 2022/23 saw our leakage rate rise in many areas. We recovered well from these events but were impacted by an unseasonably cold period in March. As a result, we started the financial year 2023/24 at a higher leakage rate than expected. We then experienced an extended warm and dry period in spring/summer 2023 which saw a further increase in losses due to ground movements and the associated pipe bursts. In order to address these challenges we increased our leak repairs by 25% compared with the same period in 2022. Despite our increased activity to manage leakage, the outcome was a higher rate of leakage over the year.

Whilst this winter did not experience as many short, very cold periods of weather the temperature drops were sufficient to impact our network in terms of an increased rate of pipe bursts. We increased leak repairs by 40% in January 2024 as a result to maintain the integrity of our network.

We are responding to the challenge of climate-driven increases in leakage by looking across all areas of our activity and trialing new approaches to return to our long-term trend of reducing leakage year on year. This means for the coming year we are committed to doing even more to reduce leakage, to at least 452 MI/d. A large proportion of the leaks we now have are small in size and nature, so harder to find and fix, and we are deploying a range of approaches and innovations to hunt them down. This includes technology to monitor the network round-the-clock – especially during the night when customer use levels are lower, and anomalies can be easier to detect.

We have also responded to the increase in leakage by creating a Leakage Recovery Mission, chaired by the Customer Services Director. This focus is helping to ensure every role and activity across the business is aligned to deliver the improvement required. We are looking across all areas of our activity and trialling new leakage management approaches to return to our long-term trend of reducing leakage year on year. These include:

- Creating a dedicated trunk main Find and Fix Team to improve leakage reduction in this part of the network. The current reconciliation error points to an increase in leakage upstream of the district metered areas and this team will improve that position

- Working with regional contractors to create a distribution find and fix unit that does both activities at the same time. This is aimed at reducing the total time a leak is running and creating efficiency in the way the activities are delivered.
- Improving detection techniques and equipment, including electronic listening sticks, correlating noise loggers, sniffer dogs and drones with thermal imaging.

Further details on leakage performance can be found in the commentary to Tables B8 and A2.

2.7 Wastewater Treatment Works (WwTW) Compliance

The number of WwTWs that failed the Total Compliance measure in 2023/24 is 22 out of 581 assets listed on the Annual Monitoring Plan (AMP) and sampled under Operator Self-Monitoring (OSM) (Line B11b.29). This is the same number of failing works as AR23 so total compliance remains at 96.2%. Although the number of failing WwTWs reported for both AR24 and AR23 are the same, the Total Population Equivalent served by these sites has improved significantly. The Total Population Equivalent affected for AR24 reporting year was 569,856 (Line B11b.30) (AR23 - 851,013).

Our “Exemplar” technology (wastewater asset technology) is delivering benefits by capturing the end-to-end process of running some of our biggest wastewater treatment works. It is now in operation at 17 sites across Scotland to improve how these assets run. Exemplar uses digital technology and connects operators to data from smart sensors that operate 24/7 that allow the treatment works to be optimised and drive greater efficiency. These sensors provide detailed real-time information into how each works is operating. It allows any adjustments to be made in the treatment process, reducing energy consumption and costs by enabling smarter, proactive and more effective decision making. It has delivered a 0.5 GWh reduction in energy consumption and over £500,000 in annual savings while ensuring we protect the environment.

Further detail on WwTWs compliance is contained in the commentary to Table B11b and B11c.

2.8 Environmental Pollution Incidents

In 2023/24 there were a total of 196 Category 1, 2 and 3 Environmental Pollution Incidents (EPIs), of which 183 were wastewater related (Line B11a.15 minus B11a.9 and B11a.10) and 13 water related (Lines B11a.9 and B11a.10). The total of 196 is lower than the previous year’s total of 206 (AR23 Line B11a.15). The out turn of 13 water-related (water and surface water) EPIs is identical to AR23 although all were Category 3 compared to 3 category 1 and 2 incidents AR23.

There were 11 serious incidents (Category 1 and 2) in 2023/24 which was consistent with our performance in 2023/23. In AR24 all serious pollution incidents occurred in the wastewater category compared to eight wastewater and three water incidents in AR23.

Most of the total incidents are associated with wastewater networks with 107 of the 196 incidents associated with the foul sewer category, notably due to sewer blockages. Where such incidents occur a full analysis of root cause is undertaken to inform any required improvement plans.

As we move through SR21 our focus is on reducing the incidents that occur on our wastewater network through increased intelligence and targeted planned maintenance.

We are focused on reducing the number of incidents which occur on our wastewater network through increased use of intelligence, including real time monitors, and targeted planned maintenance. Progress has been made in AR24 through the Improving Urban Waters project and the emerging insights and intelligence which are being developed will enable operations to become more proactive in our approach in the coming year.

Progress in the past year is set out in our “Improving Urban Waters Annual Update” [Scottish Water \(readymag.website\)](https://www.readymag.website). This includes:

- 230 overflow discharge monitors installed with a plan to deliver 1,000 monitors by December 2024
- 229 further discharge monitors installed through the Wastewater Intelligent Network transformation programme with a plan to deliver 1,500 monitors by December 2024. This will improve monitoring across 180 catchment areas
- through our “Pass Forward Flow” project we are studying overflow discharge frequencies from wastewater treatment works. This will help us identify and develop improvements
- developing our live reporting tool ahead of publishing near real time overflow data by December 2024.

Further investment is also required to promote responsible behaviours and raise awareness of the role the customer and communities play to keep sewers working as they should (our Nature Calls campaign). Network monitoring will support this work by helping to identify where targeted campaigns are required to influence and inspire impactful behaviour change.

Further detail on EPIs is contained in the commentary for Table B11a.

2.9 Sewer Flooding

In 2023/24, we have seen a return to conditions where a number of high intensity short duration storms have occurred, mostly in June-August 2023. However, unusually, a widespread high intensity storm also occurred in early October 2023.

Whilst the number of internal sewer flooding incidents due to sewer overloading is comparable with 2022/23 the number of properties affected has increased, indicating the weather pattern of high intensity storms experienced in 2023/24 leading to higher numbers of properties impacted in each incident.

In 2023/24 we completed 6 investment projects to the value of £8.1m which reduced risk of internal sewer flooding to 10 properties on the at-risk register (greater than 10% chance of occurrence per annum). Risk to a further 8 properties was reduced via projects such as APNRVs with a total cost of £108k.

The total number of properties impacted by internal sewer flooding in the last AR24 period was 404. This excludes the number of properties who experienced Internal Flooding due to severe weather (15). The most significant cause of internal sewer flooding by causes other than overloading continues to be sewer blockages and collapses, with 326 properties affected in the year, compared to 329 in 2022/23. In 2023/24 there were 93 properties affected by internal flooding due to overloaded sewers which is higher than the 48 properties in AR23. However, the number of incidents was similar with 43 in AR23 compared to 40 in 2022/23. This was due to the weather pattern of high intensity storms during the year.

Further detail on sewer flooding is contained in the commentary for Table B3.

3 Beyond net Zero Emissions

3.1 Energy Efficiency and Carbon Emissions

Whilst the AR24 period has thrown up some challenges in progressing activities to reduce our carbon footprint, we have delivered cumulative emissions reductions in the last three years of

27,723 tCO₂e (8,253 tonnes in 2022/23, 7,428 tonnes in 2021/22 and 12,042 tonnes in 2023/24). This was against an internal target of 20,000 tCO₂e by 2024. We will continue to focus on delivery, and we remain committed to reaching our Net Zero target by 2040.

Electricity remains our largest source of emissions and we continue look at ways to reduce the amount we use. Total consumption for regulated operations (503.070GWh) increased by 17.971GWh. The predominant source of electricity consumed is the grid (464.353GWh) which was 9.668GWh higher than the year before. The consumption of former Grampian PFI wastewater assets for a full financial year (compared to just a partial year before) explains 6.391GWh of the variance whereas 3.253GWh were an increase in water operations (primarily the pumping of raw and treated water).

Our net operational carbon footprint (CFP) for water and wastewater services in 2023/24 was 224,979 tCO₂e, a 1.9% increase from 2022/23. (Line C1.29). This was largely due to emissions associated with purchased electricity from the national grid. However, we have achieved our 2024 emissions reduction target by delivering 27,723 tCO₂e since 2021. This relates to a range of our internal initiatives such as peatland restoration or renewable energy projects which can be equated to a carbon benefit. It does not directly relate to Scottish Water's annual Carbon Footprint.

Investment emissions - the embodied emissions in the concrete, steel and other materials we use as well as activities to construct our assets - remain an important and challenging part of our Net Zero commitment. During the AR24 period we increased our work with supply partners to deliver further emissions reduction activities across our investment programme.

An example of this is how one of our partners started to supply hydro-treated vegetable oil (HVO) to small construction sites, which we have now adopted more widely, leading to further emission reductions on construction sites. Another success was our pilot scheme to reduce carbon at control units that manage our pumps and other equipment. We piloted new technology which led to a 60 per cent reduction in carbon and are now setting up a framework to enable wider adoption. We also now have access to low carbon steel reinforcement which we can use in our projects to further reduce emissions. To encourage knowledge sharing, we established a Net Zero Heroes network. This brings over 60 people together regularly from Scottish Water and our supply chain partners to share best practice.

Further detail on energy efficiency and carbon emissions is contained in the commentary for Section C Tables.

3.2 Renewables

We are one of the largest electricity users in Scotland with a consumption of 503 Gigawatt hours (GWh) in 2023/24. A total of 59 GWh, of renewable power was generated on-site in the AR24 period (line C3.2a) an improvement on 51GWh in 2022/23. This included 42 GWh generated by schemes owned by Scottish Water that benefits Scottish Water the core business itself (38GWh in 2022/23) and 17 GWh generated by schemes owned by Scottish Water Horizons (of which, 10 GWh were generated by schemes embedded in core business assets). A further 20 GWh was generated by our PFI partners (excluding those in the Scottish Water Group) from biogases produced by wastewater treatment processes (Line C3.8). Renewable energy sources are a vital part of reducing our operational emissions. The largest contribution (68%) to on-site renewable generation for the regulated business comes from hydro turbines. The 42GWh shown in the P&P relates to the total renewable generation on Scottish Water operational assets

Further detail on energy efficiency and carbon emissions is contained in the commentary for Tables C3.

3.3 Tier 1 Operating expenditure (before LTNC items)

Costs before items subject to LTNC for the year were £752 million £70m lower than the Final Determination. This was the result of lower interest charges of £52 million and lower operating and PFI costs of £18 million.

In our 2022/23 Performance and Prospects, we set out our expectation that planned costs before items subject to LTNC would be £803 million. Actual out-turn was £51 million lower at £752 million. The main contributors were the successful appeal of the 2017 Water Undertaking revaluation resulting in a refund of rates charges totalling £25 million, lower electricity costs and gas prices (which reduce contractual indexation within the Levenmouth PFI contract) compared with the market expectations when we set the plan, and lower interest charges driven by improved interest rates paid on funds on deposit. Reduced PFI costs resulting from folding the former North-East Scotland PFI activities into Scottish Water's wastewater operations in October 2022 also contributed to the out-performance of the FD.

Further detail on Tier 1 operating expenditure can be found in the M tables

3.4 Capital investment expenditure

The Scottish Water investment programme is one of the largest infrastructure programmes in Scotland – delivering the vital assets that enable us to maintain and improve the water and wastewater services people depend on every day - and supporting growth and development to ensure that communities can flourish. Every community in Scotland, be it a town, city or village depends on our pipes and treatment works to deliver essential services.

At the end of Q4 2023/24, we have invested £789m on Tier 2 projects and sub-programmes (sum of Lines G1.77 and G1.78) up from £688m in 2022/23.

During the year we were able to sustain a higher level of investment than in previous years. This is due to a higher demand and improved project delivery performance through earlier gates. We monitored the range throughout the year and adjusted it to £780 - £810m.

- *Please note that due to the timings difference between submitting the IG Progress Report Against the Committed List (IG WG 20-02 Progress Report on Performance Against the Committed List Q4 2023-24), and the production and completion of the G tables, including reaching agreement on the table templates, there are some discrepancies between the reported expenditure for individual investment categories. These are summarised and reconciled in the Executive Summary for the G tables.*

Through our people and partners and by continuing to transform, innovate and work with communities and customers, we continue to deliver year on year growth in investment.

Our investment performance measures, which we introduced for this regulatory period, focus on ensuring the pace of investment is maintained and commitments met on project delivery. These include - Progress to Committed List (PCL) and Indicator of Progress of Delivery (IPOD). PCL allows us to focus on the initiation of work in the system and promotion rates, ensuring there is sufficient volumes of investment flowing through to delivery. The IPOD measure allows us to focus on delivery once an investment project is in delivery and maintain a focus on the commitments made to customers and stakeholders.

Both measures were within the target range as shown in Table 2 below. This indicates that we are promoting sufficient volume of investment across the programme to achieve planned investment in future years (PCL) and the delivery of the overall programme is, on average, 1 month ahead of forecast (IPOD).

Table 2: Capital Investment delivery performance measures

Measure	Performance for year	Target range
Progress to the Committed List (PCL)	117.2%	100% – 110%
Indicator of Progress of Overall Delivery	-0.6 months (889 points)	+/- 3 months (819 to 937 points)

3.5 SR15 Completion programme

On the SR15 completion programme, deep dives continue to be undertaken and opportunities identified to be explored to see where we can advance the projects to meeting the SR15 commitments sooner. However, it is acknowledged that the remaining projects are proving to be the most challenging with 5 projects delivered in AR24 against a forecast of 14. The Investment Planning and Prioritisation Framework (IPPF) mitigates similar issues occurring in this period as projects are only added to the Committed List after conclusion of optioneering.

Regular bilateral meetings are held with DWQR and SEPA where projects of specific interest to these stakeholders including SR15 completion projects are reviewed to give detailed updates on progress on projects and answer any queries.

Further detail of capital investment expenditure is contained in Table G and associated commentary.