Delivering our strategic priorities

360° image of Lough Macrory water treatment works, Loughmacrory, County Tyrone.
Image by Jason Devine

The world in which we operate

Our global world

We live in a resource constrained world and have a responsibility to ensure that our planet earth is sustainable for those who come after us. The United Nations has developed 17 goals to deliver a more sustainable world by 2030 and we are proud to play our part in supporting delivery of at least 12 of these goals:

SUSTAINABLE DEVELOPMENT GOALS

Customer

Delivering an exceptional customer experience

One of our younger customers enjoying a bottle of world class water from the tap

Strategic areas of focus

Right place, right time, right channel

Caring for you

Getting smarter

Protecting you

Sustainable development goals

Principal threats/opportunities

PT1 PT2 PT3 PT5 PT6 PT7 PO1 PO3 PO4

Page 72 Read more about principal threats and opportunities.

Strategic performance indicators

Customer	Unit of measurement	Target 2020/21	Actual 2020/21	Pass/ Fail	Target 2021/22
Reduction in customers reporting service failures	Number	75,000	70,204	Pass	74,000
First point of contact resolution	%	82	90	Pass	84
More customers singing our praises (Net Promoter Score)	Number	15	42	Pass	32

Strategic areas of focus

Right place, right time, right channel

Social media provides us with a fantastic platform to keep our customers informed of the challenges we face delivering great tasting, clean drinking water and recycling wastewater safely back to the natural environment. Our Facebook and Twitter accounts also allow us to reach out to our customers to change how they think about water to help reduce the pressure on our infrastructure and nature.

In our ambition to deliver an exceptional customer experience, we are embracing new ways to meet rising customer expectations. Over 2020/21 we enhanced our social media service, which now covers 08:00-20:00, seven days a week. Followers have increased by around 450 on Facebook and 60 on Twitter per month. We have also introduced live webchat, which customers have embraced. We undertook a review of our website to make it more customer friendly and to encourage greater use of digital channels, such as optimising our automated chatbot to answer even more customer enquiries. We have also upgraded our incident management system to improve the information on our website when our customers experience an interruption to water supply. Further improvements to customer experience will be made as part of our new digital services platform.

Read more at page 35.

Caring for you

Our Customer Care Register offers a range of free additional services for those customers who need extra help, such as an alternative water supply when supplies have been interrupted for a prolonged period. We have worked closely with Health Trusts and Councils to garner support for promotion of our Register and developed ways in which customers can register by introducing online and postal services. Over 2020/21, we introduced the ability for customers requiring additional support to easily register online for our Register. Customers can also provide details of leaks and blocked sewers through this channel. We will continue our engagement with stakeholders to identify other avenues to grow the numbers on our Register.

We have been particularly focussed through COVID-19 on providing support for our non-domestic customers who experience difficulty in paying their bills by working with them to agree repayment plans.

Our Quick Check scheme provides reassurance to members of the public about callers to their door claiming to be from utility companies. Anyone who wishes to check the identity of someone who says they are calling on the pretext of inspecting water, gas or electricity can call the police non-emergency 101 number to verify their identity.

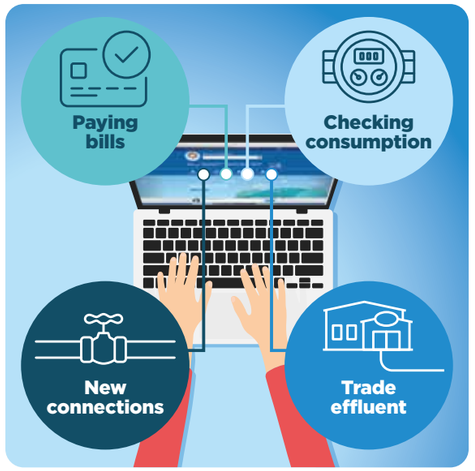
NI Water staff member providing photographic ID to a customer

Getting smarter

In 2020/21 we started work on our new digital services platform. The first phase was completed in March 2021 and focuses on improving how customers can manage their accounts and perform activities such as paying bills or checking consumption.

Our customers tell us they want a modern, interactive web-based platform where they can submit applications for our services, track progress, make payments and digitally sign documents without the need for paper or telephone contact. Over 2021/22, we will offer digital applications for connections to our water or wastewater network for housing developers and applications for trade effluent. The scope of services offered on the platform will continue to grow in future years.

We are also applying digital across other areas of the business. Within PC21 we are implementing a number of innovative strategic planning and business case processes, including combining a number of computer modelling programmes to replicate the outside environment, inside. This is commonly referred to as a 'digital twin' and incorporates our sewerage and storm systems, rivers and streams, overland flow of water and the analysis of how these impact upon our environment. This analysis will allow us to participate in modelling potential multi agency solutions to deliver cleaner water, reduce the risk of flooding and improve local amenity, whilst also increasing biodiversity within our towns and cities, working in partnership with other Government agencies and Local Councils.



Our new digital services platform

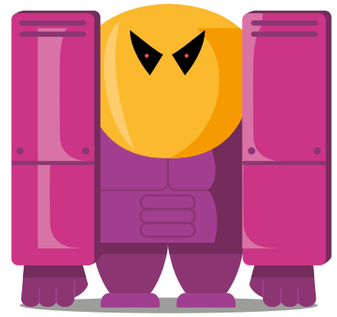
Protecting you

Be Cyber Watertight

Don't let them in

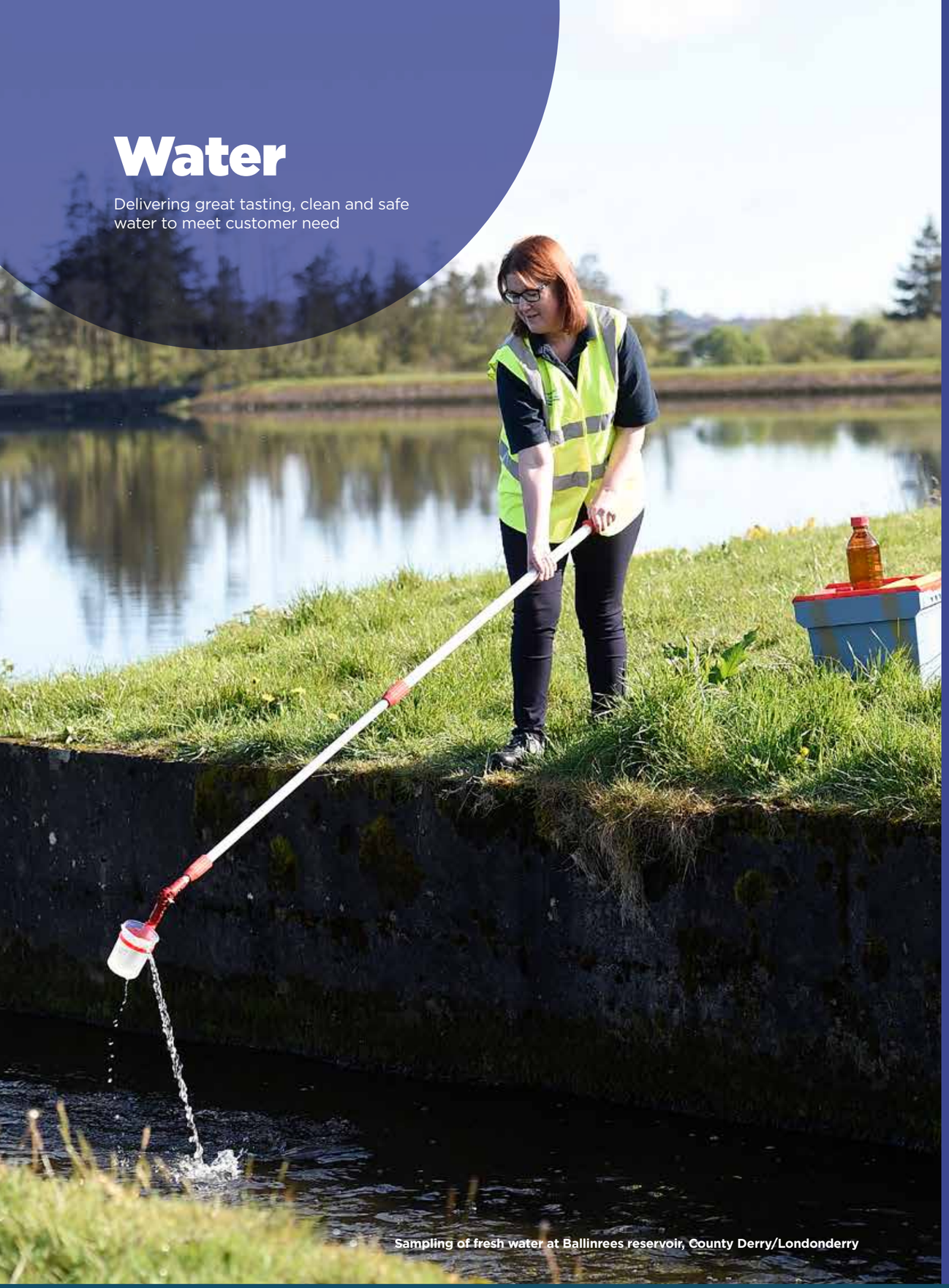
Cyber crimes are increasing in both frequency and in their disruptive potential. These crimes could lead to an interruption in the delivery of our essential services, damage our computer control systems, or lead to a data breach. In 2020/21 we continued our simulated phishing campaigns to test our awareness of phishing email attacks and to help educate users in how attackers attempt to gain access to our systems. In 2021/22 we will continue to liaise and collaborate with the National Cyber Security Centre to keep at the forefront of an ever changing threat landscape and be aware of new methods of attack as they develop.

Read more about managing cyber risk at page 82.



Water

Delivering great tasting, clean and safe water to meet customer need



Sampling of fresh water at Ballinrees reservoir, County Derry/Londonderry

Strategic areas of focus

Improve at source — Enough water for all — Tasty, clean and safe — Drive down leakage — Always on

Sustainable development goals

Principal threats/opportunities

PT1 PT2 PT3 PT4 PT5 PT6 PT7 PO1 PO4

Page 72 Read more about principal threats and opportunities.

Strategic performance indicators

Water	Unit of measurement	Target 2020/21	Actual 2020/21	Pass/ Fail	Target 2021/22
Water quality compliance*	%	99.79	99.94	Pass	99.83
Reduction in leakage	Ml/d (Million litres/day)	153.00	157.71	Fail	155.00
Reduction in supply interruptions in excess of: • 6 hours • 12 hours • 24 hours	%	 0.792 0.146 0.009	 0.205 0.000 0.000	Pass	 0.710 0.130 0.010

*Calendar year target

Strategic areas of focus

Improve at source

NI Water is one of the largest land owners in Northern Ireland. The forests and peat bogs in our water catchments are amongst nature's superstars, providing a range of eco-system services. They provide a natural form of water purification, protect against floods, help reduce greenhouse gas emissions by removing and storing carbon and enable us to restore our biodiversity.

Since 2017 we have been carrying out an EU INTERREG VA Programme funded investment of €5m under the Source to Tap project to improve the Erne and Derg cross border river catchments that are a source of our drinking water, piloting changes in land management techniques such as fencing to exclude livestock and replacing boom spraying of the herbicide MCPA for rush control, with weed-wipers, which helps to reduce the amount of herbicide running off into our rivers and streams. Over 200 farm visits have been carried out to identify where improvements can be made to support both the farm business and the water environment through a land incentive scheme pilot. They will pilot initiatives to trial measures to improve water quality by working with land managers and farmers, which will help the project to deliver its objectives of improving freshwater quality. The project officers also work with volunteers and local communities and raise awareness of the importance of protecting our precious drinking water resources. It is hoped these initiatives will help restore nature and improve the water quality before it reaches our treatment works.

source to tap

Restoring peat bogs - one of nature's superstars

Peatlands store more carbon than all other vegetation types in the world combined. They can improve our water quality, provide natural flood management and support an array of species and provide wild places for people to enjoy. It is crucial for us to restore our natural habitats so they can play their role in the climate emergency and restoring biodiversity.

Peatlands cover 12% of the land area in Northern Ireland. Unfortunately 86% of peatlands have been damaged to make way for farming and construction. As a result, many of our peatlands are net emitters of greenhouse gases. Only about 1% of the peatland area has been restored over the last 30 years.

Peat bogs restoration work under the Source To Tap project in 2020/21 included 30 hectares of formerly afforested land on the Pettigoe Plateau, County Fermanagh. This pilot project involves the conversion of a previous commercial conifer plantation to a functioning bog. The pilot is trialling a technique called cell bunding where low peat embankments are constructed in order to enclose 'cells' of variable shapes and sizes on both high bog and cutover. The aim is to establish peat-forming conditions within each cell by raising the water table within it to support Sphagnum Moss (also known as 'The Bog Builder') development. We will be comparing the recovery of the water table in the bog to other areas where, rather than building cell bunds, only the drains are blocked.

In 2020/21 we commenced a new peatland restoration project on the shores of Lough Bradan, County Tyrone. We are exploring opportunities for EU PEACE PLUS funded catchment projects: the 'IDEALS' Project to build on the Source to Tap project; and Killylane catchment restoration project in County Antrim.

Pilot forest-to-peatland restoration project at Pettigoe Plateau Tullychurry forest, County Fermanagh

Branching out

NI Water takes water from a number of lowland lakes and rivers to supply the wholesome water that we all rely on to drink. It is important for NI Water to protect these areas from bankside erosion and livestock encroachment as much of the water used for our drinking water comes from watercourses. Trees help us to do this. Our 10-year partnership with The Woodland Trust Northern Ireland and other partners has resulted in the planting of over 150,000 trees in some of NI Water's 24 drinking water catchments from Counties Antrim to Armagh. This partnership is helping to restore our forests - Northern Ireland is one of the least wooded regions in Europe, with just 8% woodland cover compared with 13% in the UK and 37% in Europe.

Over 2020/21 NI Water provided resources for a 'wet wood' flood alleviation project alongside the Faughan River, County Derry/ Londonderry. Tree species planted together include Alder, Aspen, Sessile Oak, Downy Birch and Willows. The planting of 2,000 trees and creation of ponds within the private land will improve water quality, remove and store carbon, increase biodiversity by providing new havens for wildlife and have wider health and contribute towards societal well-being. Our ambition over the next decade is to plant 1 million of the right trees in the right place. We look forward to our partnership with stakeholders continuing to grow and flourish, just like the trees.

A 'wet wood' flood alleviation project alongside the Faughan River, County Derry/ Londonderry. Image provided by Woodland Trust Northern Ireland

Enough water for all

Our changing climate is bringing more frequent and severe weather events such as heavy rainfall, heatwaves and extreme cold. These events can affect the quality and quantity of our water sources, placing pressure on our water treatment works.

Low water levels at the Silent Valley reservoir, County Down in May 2020

Demand surge and driest Spring on record

Water plays an essential role in the battle against COVID-19 with regular, thorough handwashing and staying hydrated being advised as two of the main ways to fight it. With many people based at home from early April 2020, we saw a significant increase in household water use during periods of warmer weather. Overall average demand has increased by over 10 million litres per day in 2020/21 compared to the previous year.

In parallel with the first lockdown Northern Ireland experienced its driest spring since records begin with a number of impounding reservoirs (store raw water prior to treatment) at their lowest level since 1995. Demand surges were experienced and on 29 May 2020 alone, NI Water had to increase production of treated water by 120 million litres to over 700 million litres to keep everyone supplied, thus increasing pressure on the network and water treatment works.

Water supply was increased to maximum levels and supported by extensive tankering to vulnerable points in the network. To keep customers engaged the media campaign was wide ranging from interactive videos on social media, to TV and radio advertisements. One strand focused on what each person could do to save water and made saving water sound easy, simple and something we could all achieve. For example, we encouraged everyone to save just 30 litres of water per day with three simple steps. We also developed a live interactive map on our website where a simple click would display where your water comes from and what level the reservoir was sitting at. In addition as part of our Drought Plan, the Drought Order application process was instigated for the first time with a Drought Order implemented for an emergency abstraction to supplement a raw water source. This was despite the impounding reservoirs being full at the start of March 2020. A combination of our response and a period of cooler, wetter weather saw reservoir levels restore from June 2020.

Tankering operations during the high demand event in May 2020

Pumping over £25m into water resilience for the North West, County Down and Belfast

Three key projects totalling £14m are being progressed in the North West to support future resilience of the water supply infrastructure over the next two years. The first project involves the replacement of a 4km water main, which supplies a large rural area outside Coleraine. The second project involving the construction of temporary water pumping stations at Moys in Limavady will help supply additional water from Ballinrees water treatment works in Coleraine to Carmoney water treatment works, which serves the city of Derry/ Londonderry. This will increase the capacity of the water supply infrastructure and provide additional resilience, particularly during emergency situations and extreme weather conditions. The third project involves an upgrade to the existing River Faughan raw water pumping Station at Carmoney water treatment works. This will include replacement of the weir gates to provide extra security and resilience.

Another significant investment is a £13m scheme to improve the security of the water supply at Drumaroad water treatment works, Castlewellan, County Down. This major programme of work will continue until Summer 2021 and involves the construction of a new water storage tank. This treatment works is supplied by water from Silent Valley reservoir and delivers around 140 million litres of water every day to over 200,000 homes in County Down and Belfast. Once complete this will have a positive impact on the lives of up to 540,000 people, a quarter of the Northern Ireland population, who can benefit from increased resilience and security of the water supply, particularly in emergency situations. This will make a real difference to people's daily lives.

New water storage tank under construction at Drumaroad water treatment works, Castlewellan, County Down

Strategic areas of focus

Tasty, clean and safe

Delivery of great tasting, clean and safe drinking water is central to what we do. It underpins the public health and economy of Northern Ireland. The fresh water we use to produce our high quality drinking water is predominantly taken from Lough Neagh, local rivers and a range of upland sources.

Sampling and analysis is carried out 365 days per year to ensure that our drinking water is tasty, clean and safe. Samples are analysed by our scientists based in laboratories at Belfast and Altnagelvin. Overall drinking water quality compliance in 2020 was above the target of 99.79%. COVID-19 has had an impact on regulatory sampling with sample numbers at reduced frequency for all parameters from the end of April to the middle of May 2020. Sampling at customer taps was also suspended, in line with social distancing guidelines, with samples being taken at designated fixed points, service reservoirs (which store treated water) and sampler addresses.

In 2020/21 we trialled a number of pilot studies at Derg water treatment works, County Tyrone, to remove heavy metals, suspended solids (turbidity) and pesticides including using a form of volcanic crushed rock and recycled brown and green glass to filter the water. We are working towards the delivery of treatment process at Derg water treatment works, Co Tyrone, for herbicide (MCPA) removal to be completed by 31 March 2022.

Meenbog landslide

The pollution incident caused by a peatland landslide in County Donegal in November 2020 had a devastating impact on the Mournebeg River in County Tyrone from which we abstract raw water. It is extremely disappointing for all the stakeholders and the local community who have been working hard to improve and protect the water quality in the area. We had to react quickly to this incident in order to protect customers served by the Derg water treatment works. Resilience measures were activated to ensure that the drinking water supply was not impacted. These measures included taking raw water from the Strule River to feed the Derg water treatment works. The alternative water abstraction arrangements and enhanced monitoring will remain in place until it is safe to recommence abstraction of raw water from the River Derg. NI Water plays a key role in the Inter-Agency group which is aiming to remediation work to restore the Mournebeg and Derg Rivers.

Meenbog peatland landslide in Ballybofey, County Donegal

Real time analysis

In 2020/21 we successfully trialled an innovative mobile testing facility at Derg water treatment works, County Tyrone. This pilot provides real time analysis to inform decision making on the optimal type of capital expenditure at the treatment works. The system has been running in parallel with the existing treatment works, using a number of different processes and technologies to improve how we treat raw water, and will be used across our treatment works to reduce energy, chemicals and carbon while maintaining tasty, clean and safe drinking water for our customers.

We are also planning to increase the amount of monitoring and automated flow control at our water abstraction points across PC21. This increase in data will allow us to more sustainably manage how we abstract raw water from the environment, helping us manage our natural capital. We anticipate that this work will support the need for additional environmental measures to be introduced, such as compensation flows to minimise environmental impact of abstraction and fish passes, help us lower day to day running costs and comply with the Water Framework Directive.

Mobile testing facility

Tackling lead pipes

The water leaving our water treatment works and in the distribution systems contains only trace amounts of lead. However, where lead has been used for supply pipes between the water main and the kitchen tap or in domestic plumbing, there is a risk of non-compliance at the customers' tap. So even with the removal of all lead pipes within our network there will be a risk to lead compliance from lead pipe remaining within customer properties.

Over the PC15 period, we replaced over 11,000 lead communication pipes at consumer properties in addition to lead pipe replacement under water main rehabilitation and in response to sample failures. We plan to replace over 11,000 lead communication pipes in PC21. We are also taking part in an UKWIR project looking at the water chemistry of lead. This project is focused on advancing the water industry's understanding of the chemistry that controls the solubility of lead and how to achieve compliance with the proposed reductions in the lead standard. Find out more about reducing the risk of lead at: www.niwater.com/lead-pipes/

https://www.youtube.com/watch?v=9k9Fl0_FcZE

Strategic areas of focus

Drive down leakage

Every day we lose around a quarter or 157 million litres of water (over 60 olympic size swimming pools) from our infrastructure. This loss is a combination of leakage through our pipes, which is caused by natural wear and tear, damage from severe weather, leakage on the customer supply pipe, illegal usage or unknown usage. Reducing leakage is a top priority for NI Water, but with a network of around 27,000km of underground water pipes (long enough to circle more than half way around planet earth) located predominately in rural and remote areas, it can be a complex and costly job finding the leaks.

In 2020/21 we reduced leakage by over 3Ml/d (over one olympic size swimming pool per day) to 157Ml/d. Our leakage teams continued to work around the clock to locate and repair approximately 220 leaks per week. On occasions, this can be very challenging so our highly skilled technicians need to use a variety of leakage detection methods to find the leaks, whether they are on burst water mains or in customer properties. Some of these techniques involve using a listening stick, a tried and tested way of detecting a leak. Another method of detection is using ground microphones.

In 2020/21 we tested a number of initiatives to detect leakage such as acoustic loggers and satellites. Acoustic loggers pinpoint leaks by measuring the noise of escaping water that follows a leak or burst, and then sending an alert together with details of its location, allowing us to focus effort in that area. Satellite technology uses various wavelengths of the visible and invisible light spectrum to locate leaks.

In PC21 we are setting ourselves the challenge of achieving the sustainable economic level of leakage (150Ml/d) which is the point at which the cost of fixing a leak outweighs the benefit.

Customers can also help us if they see a leak on the footpath or on the road, from a trickle of water to a gushing burst by letting us know by using our free Leakline number (0800 028 2011) which is open 24 hours a day, every day; visiting www.niwater.com/report-a-leak-or-burst-pipe/; or using the contact details on the back cover of this report. If you spot a leak, we'll find it and fix it. Approximately a quarter of leakage is on customer properties and we would encourage those with a leak on their property to get it fixed quickly. Even a dripping tap can waste more than 60 litres of water a week.

Water leaking from a burst pipe

Repair to a burst pipe

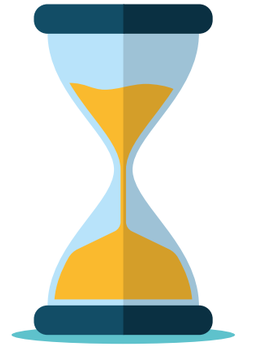
https://www.niwater.com/news-detail/11983/our-leakage-team-driving-leakage-down/

Always on

Every week we repair around 350 customer related bursts that occur on our water network of 27,000km operational distribution and trunk mains. Many of these bursts can result in interruptions to customers' supply or customers experiencing low water pressure.

We have embraced an 'Every minute counts' ethos in response to supply interruptions. We are always looking at ways to improve our performance and are exploring innovative solutions to help us identify problems on our water network before customers are affected.

During 2020/21, we implemented key initiatives such as new planned work procedures and deploying water tankers and laying temporary supplies in order to minimise interruptions during planned and unplanned operations. These initiatives have helped us reduce lost minutes per property for our customers and achieve our supply interruption target for 2020/21. Our PC21 Business Plan includes capital investment to reduce the minutes lost per property by 50%, aiming for zero lost minutes per property by 2050.



every minute counts

NI Water staff repairing supply interruptions

Filling tankers during the high demand event in May 2020

Economy

Efficiently delivering infrastructure to underpin sustainable growth

Construction of new wastewater pumping station at Bangor, County Down

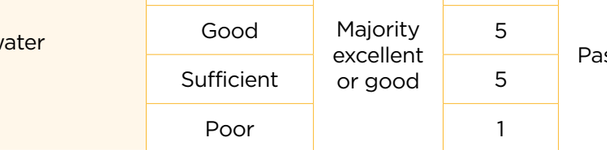
Strategic areas of focus

Funding world class economic infrastructure

Efficient and affordable services

Sustainable growth

Sustainable development goals



Principal threats/opportunities

PT1 PT2 PT3 PT5 PT6 PO1 PO3 PO4

Page 72 Read more about principal threats and opportunities.

Strategic performance indicators

Economy	Unit of measurement	Target 2020/21	Actual 2020/21	Pass/ Fail	Target 2021/22
Increase/(decrease) in customer tariffs	%	2.25	1.8	Pass	0.9
Number of economic constraint areas removed*	Number	n/a	n/a	n/a	0
Number of serious development restrictions removed*	Number	n/a	n/a	n/a	4
Bathing water quality**	Excellent	Majority excellent or good	12	Pass	Majority excellent or good
	Good		5		
	Sufficient		5		
	Poor		1		

* New target for PC21

**Other major contributors to bathing water quality include agriculture, wider industry and consumer behaviour (flushing inappropriate items). Targets for 2020/21 and beyond changed to be 'majority excellent or good'.

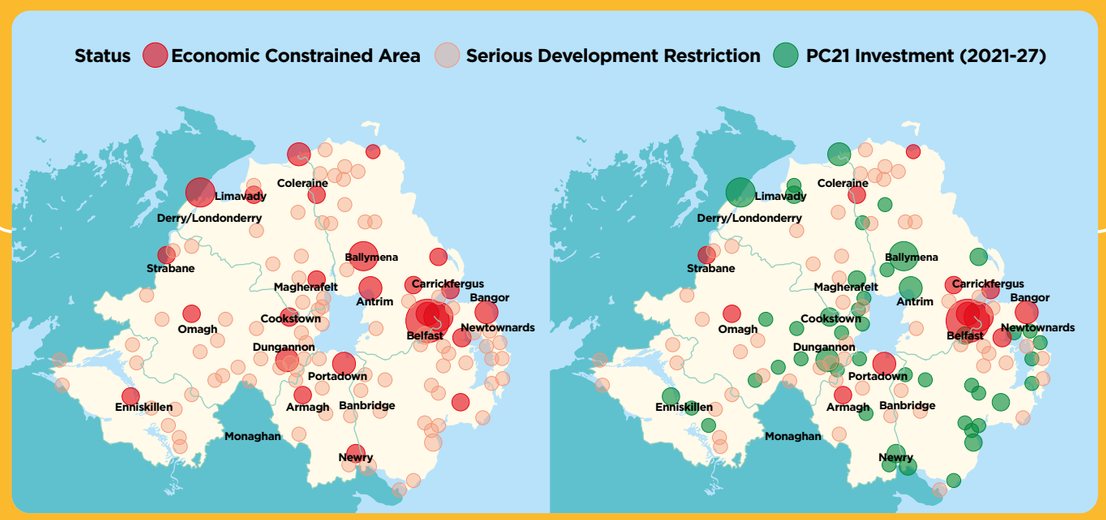
Strategic areas of focus

Funding world class economic infrastructure

Over the past 15 years the public expenditure made available from Government for investment in wastewater services has not been able to keep pace with the investment required to provide increased capacity to facilitate growth or achieve more stringent standards to achieve water quality targets. As a result, many of our sewerage networks and wastewater treatment plants are now having to operate at or beyond their design capacity, limiting opportunities for new connections and constraining economic development in 116 towns and cities across Northern Ireland, including Belfast and Derry/Londonderry.

During 2020/21, we continued our engagement with local councils and other stakeholders on wastewater capacity constraints. We are also developing tools to help us further prioritise and target investment on wastewater capacity constraints across Northern Ireland.

Our PC21 Business Plan sets out the investment required to start to address the wastewater capacity constraints. We anticipate that it will take a sustained increase in investment over the next quarter of a century to solve the problem of development constraints.



Development constraints across Northern Ireland at the start of PC21 (2021)

Development constraints across Northern Ireland at the end of PC21 (2027)

Efficient and affordable service

Since 2007, NI Water has delivered significant improvements to water services. We have reduced operating costs and improved comparative efficiency with water companies in England and Wales, and more than doubled the level of service we provide to our customers. Using new efficiency models developed in conjunction with the Utility Regulator, we have calculated that the gap between us and the most efficient water companies in England and Wales has reduced from 49% in 2007/08 to just 5.7% in 2018/19. We are committed to reducing annual operating costs by a further £13m to eliminate this efficiency gap by 2027.

One of the ways in which we drive efficiencies is by working closely with our supply chain. Over 2020/21 we procured a number of services, including a £14m contract to local firms, Connect, Transform, Sustain (CTS) and Lowry Building & Civil Engineering. This contract will deliver building's maintenance and repair services across our sites, enabling us to work together to continue to efficiently provide essential water and wastewater services to our communities, 24 hours a day, 7 days a week.

Two of our supply chain partners pictured with our Director of Finance and Regulation

Strategic areas of focus

Efficient and affordable service (continued)

The amount by which NI Water can increase customer tariffs is determined by the Utility Regulator. We work with the Utility Regulator to ensure the fairest pricing outcome for our customers. NI Water is acutely aware of its responsibility to strike a balance between our need to generate sufficient income to allow us to continue delivering our services and minimising the impact on non-domestic customers.

In response to COVID-19, the below inflation planned 1.8% increase in non-domestic water and sewerage charges from 1 April 2020 was deferred to minimise the burden on business customers. The 1.8% increase applied from 1 October 2020 to 31 March 2021. Non-domestic water and sewerage charges rose by 0.9% from 1 April 2021 in line with inflation.

Our PC21 Business Plan proposes that average tariffs remain stable in real terms over the PC21 period despite a significant increase in the level of capital investment planned. We hope that this position can be sustained although the impact of COVID-19 could put pressure on this position.

Read more at https://www.niwater.com/sitefiles/resources/news/2021/march/niwsummaryofchargesleaflet21_22.pdf

Sustainable growth

Every aspect of life in Northern Ireland relies on the water and wastewater services we provide, so it is important that any investment we make in our infrastructure is built with the future in mind. In order to improve our long term resilience we need to ensure our infrastructure can withstand pressures such as climate change, growth in the economy and the need to protect and restore nature.

Over 2020/21, we commenced a £2m investment to upgrade the wastewater treatment works and pumping station in the village of Greyabbey, County Down. This investment will help to alleviate development constraints, support local tourism in the area and protect Strangford Lough, Northern Ireland's first marine conservation zone.

Greyabbey wastewater treatment works, County Down

Over 2020/21, we also completed construction of a £1.4m scheme in Armagh to complete a new pumping station and essential sewer upgrades. The improvement work will significantly reduce the risk of out-of-sewer flooding and will bring environmental improvements by enhancing the water quality in the Callan River.

New wastewater pumping station in the west of Armagh City, County Armagh

Nature

Protecting and enhancing the natural environment

Woodburn reservoir, Carrickfergus, County Antrim. Image by Bronagh Coughlan

Strategic areas of focus

More resilient network

Sustainable solutions

Keep it clear

Towards zero carbon

Sustainable development goals

Principal threats/opportunities

PT1 PT2 PT3 PT4 PT5 PT6 PO1 PO3 PO4

Page 72 Read more about principal threats and opportunities.

Strategic performance indicators

Nature	Unit of measurement	Target 2020/21	Actual 2020/21	Pass/ Fail	Target 2021/22
Reduction in pollution incidents - sewage (high and medium)*	Number	23	7	Pass	12
Wastewater compliance (% population equivalent served)**	%	99.16	99.5	Pass	99.18
Reduction in number of properties at risk of out of sewer flooding (cumulative over 2015-21 period)	Number	62	52	Fail	0
Reduction in carbon footprint. Relates to reduction in net operational carbon emissions measured in tonnes of carbon dioxide equivalent (tCO_2e)	%	***	0.64	***	***

*Calendar year target.

**Calendar year target. Based on pre-announced rather than un-announced regulatory sampling at the treatment works and the reported wastewater compliance doesn't incorporate flow compliance for the wastewater treatment works or the sewer network.

*** Target to be set following development of net zero carbon route map in 2021/22.

Strategic areas of focus

More resilient network
Reducing sewer flooding

Flooding and the risk of flooding can constrain economic development, increase the cost of insurance and pollute our natural environment. Most of the urban areas of Northern Ireland, including road surfaces, are served by combined sewers that carry both wastewater and surface water - such a system would never be built today.

Climate change has contributed to an increase in the intensity and frequency of rainfall. Heavy rainfall can cause the sewers to become full of water and the sewage to back up in the system. Many of our traditional systems include 'combined sewer overflows', which were designed to prevent out of sewer flooding/damage to properties by discharging this excess water directly into the rivers or streams bypassing the treatment works.

We understand that internal sewer flooding is one of the worst things that can happen to our customers' properties. We maintain a register which defines properties verified to be at risk of internal flooding as a result of the capacity of the sewerage system being exceeded. We aim to continually remove properties from this register. Unforeseen complexities for one of our sewer rehabilitation schemes in Belfast resulted in the removal of a lower number of properties at risk of out of sewer flooding than targeted over PC15. There are 108 properties on the register and we propose to remove 57 properties from the register through defined projects over PC21.

Reducing the amount of surface water reaching the sewers can help reduce the risk of sewer flooding due to overcapacity. We removed an impermeable surface area equivalent to around 42 football pitches from the sewer network over PC15. The Ravenhill Avenue flood alleviation project commenced in 2021/22 and will remove an impermeable area, equivalent to around 12 football pitches, which discharges rainwater into the Belfast sewerage network. We plan to significantly increase the level of area removed, to the equivalent of around 52 football pitches in 2021/22 alone, and a similar area in each of the five remaining years of PC21.

Trenchless sewer technology

In 2020/21, we commenced a £0.5m programme of essential sewer improvement work in the Dunmurry and wider West and South Belfast areas. This work will mainly be undertaken using underground trenchless techniques to reline the sewers, which significantly reduces the duration and disruption of the works to the public. It is a more environmentally friendly approach as it helps us avoid waste material from digging up the roads. This is part of an overall programme of work to improve the existing sewers in these areas, which will enhance the local sewerage infrastructure and reduce the risk of out of sewer flooding.

Sewer relining technology being used in wider West and South Belfast

https://www.youtube.com/watch?v=gObOphvWWNo

Completing the picture on wastewater compliance

We recognise the need to improve how we measure wastewater compliance. The current regulatory monitoring programme is based on pre-announced rather than unannounced regulatory sampling at the treatment works and the reported wastewater compliance doesn't incorporate flow compliance for the wastewater treatment works or the sewer network. This provides an incomplete picture of environmental compliance and protection. We are working with the NIEA and other stakeholders to reform the wastewater compliance model to improve compliance across the whole wastewater system. This is known as the water regulation reform programme.

The water regulation reform programme involves a review of discharge standards. To assist this, we are undertaking an unannounced sampling programme to get a better understanding of wastewater treatment works' performance. The unannounced sampling programme was paused in the period April to July 2020 due to COVID-19 restrictions, and recommenced from August 2020. We are also installing event and duration monitors on our sewer network to better understand spills from combined sewer overflows and enable regulatory reporting on spills.

There are a number of key projects proposed for PC21 which will improve wastewater compliance and support the water reform programme. These include delivery of capital investment schemes to upgrade wastewater treatment works and parts of the network, doubling the number of event duration monitors to around 650, installing flow meters and improving our environmental models.

Building back better in Belfast

A £10m programme of work commenced during 2020/21 at Belfast wastewater treatment works. The extensive project involves the construction of two new treatment tanks at – equivalent in volume of six olympic-size swimming pools – to cope with current and short-term future wastewater requirements. The two new treatment tanks will provide much-needed additional secondary treatment capacity and will facilitate essential improvements within the associated sewerage networks, ensuring wastewater treatment for Belfast remains compliant, in advance of the Living With Water Programme commencing.


Construction of new treatment tanks at Belfast wastewater treatment works

Strategic areas of focus

Restoring water quality in Carlingford Lough and Lough Foyle

A major cross-border project, aimed at improving water quality in Carlingford Lough and Lough Foyle through enhanced wastewater treatment, has seen the completion of four of its eight wastewater upgrades over 2020/21 as the project reaches the halfway stage. The Shared Waters Enhancement and Loughs Legacy (SWELL) project - which is being led by NI Water working in partnership with Irish Water, the Agri-Food & Biosciences Institute (AFBI), Loughs Agency and East Border Region - was awarded €35m in 2018/19, as part of the EU's INTERREG VA Programme. The four-year project involves the construction of new wastewater treatment works as well as upgrades to sewerage networks at strategic locations on both sides of the border to address wastewater pollution in Carlingford Lough and Lough Foyle.

The four wastewater upgrades included new wastewater infrastructure at Warrenpoint wastewater treatment works and Newpoint wastewater pumping station (Newry) located in the Carlingford Lough drainage basin and at Strabane wastewater treatment works and Donemana wastewater treatment works located in the Lough Foyle drainage basin. SWELL partner, Irish Water will deliver a further four projects in 2021/22 at Lifford, Killea and Carrigans in County Donegal and in Omeath, County Louth.

With match-funding for the SWELL project provided by the Department of Housing, Local Government and Heritage in Ireland and the Department of Agriculture, Environment and Rural Affairs in Northern Ireland, the SWELL project will culminate in the development of an innovative ecosystem legacy model. The model will link various aspects of environmental modelling such as urban drainage models, catchment models, coastal models and ecological models, undertaken within the catchments and the respective loughs over the lifecycle of the project. This will enable tracking the pathways of nutrients and contaminants of wastewater, industrial or agricultural sources to determine their impact on the receiving waters. Importantly, this legacy model will assist the water utilities and regulatory bodies on both sides of the border by identifying best approaches to achieving further improvement of overall water quality in the future.

Completed SWELL wastewater treatment works at Donemana, County Tyrone

Sustainable solutions

Every day we recycle wastewater from 727,000 homes and businesses before safely returning it to the rivers and sea. Traditional treatment works are carbon intensive, requiring a lot of energy, concrete and chemicals to ensure treated wastewater can be safely released back to the environment.

Working with wetlands

In keeping with our ambition to put back more than we take out, we identified a green solution, which uses constructed natural wetlands to treat wastewater instead of traditional wastewater treatment processes. Wetlands do more than you think – they filter our fresh water, absorb and retain carbon, and support biodiversity.

In 2020/21, we upgraded the existing wastewater treatment works in Ballykelly, County Derry/Londonderry by developing a sustainable integrated constructed wetland to enhance the traditional treatment works and reduce energy and carbon. We are also examining the potential of solar power to provide half of the energy needs for the works, lowering our electricity costs and carbon emissions.

We are continuing to invest in replacing our existing treatment assets with lower energy solutions as part of our £47m rural wastewater investment programme. The recently completed Lisnagunogue rural wastewater treatment works in County Antrim involved replacing an existing aeration process with a lower energy process, and with the addition of solar panels, is delivering a 75% reduction in energy consumption at the site. Further work is ongoing to identify opportunities for lower carbon treatment solutions, with a target of seven wastewater treatment sites within our PC21 Business Plan.

Ballykelly integrated constructed wetland, County Derry/Londonderry

Strategic areas of focus

Busy bees

We are now formal partners in the All-Ireland Pollinator Plan, an island-wide initiative to reverse the decline of precious pollinating insects. We already have some beautiful pollinator areas across our land bank such as Ballynacor wildflower meadow, Co Armagh constructed on former sludge lagoons. Hedgerows and grass verges beside our buildings are also important havens for biodiversity, all of which we will be mapping on the Biodiversity Ireland webpage.

Read more at https://pollinators.ie/wp-content/uploads/2021/03/FINAL-All-Ireland-Pollinator-Plan-2021-2025-WEB.pdf

Putting nature at the heart of decision making

The Water Industry Forum, working with Water UK's Environment Policy Advisory Group members including NI Water, has produced a set of principles on using natural capital type approaches in investment decision making. The principles are seen as a best practice guide for water companies and regulators to help design and apply natural capital type tools, ultimately with the aim of making more sustainable investment decisions and delivering better outcomes for customers and the environment. We are piloting the use of multi-capitals decision making on the Living With Water Programme and plan to roll out the new approach across our investment programme to inform our next business plan in PC27 (2027-33).

The full list of principles can be found at http://www.waterindustryforum.com/documents/uploads/WIF_Natural_Capital_Principles_for_the_Water_Industry.pdf

Keep it clear

We deal with around 15,000 blockages of our sewers each year, over 11,000 of which could have been prevented. The most common causes of these blockages is the flushing of items which do not dissolve down the toilet such as wet wipes and the disposal of fats, oils and grease (FOG) down the sink. These combine to form a solid mass in the pipes underground, meaning less waste can pass through the pipe. If enough waste cannot pass through, it leads to flooding in homes, business or our natural environment.

Our 2020/21 campaign employed a COVID-19 related strand due to the increased use of wet wipes. Further customer campaigns focussed on rubble blocking a sewer, historic seabed wet wipes, sewer related debris in Lough Erne, County Fermanagh and fatbergs in Portrush, County Antrim. We continued the seasonal campaigns around bag it and bin it and FOG over Christmas and Easter. This was accompanied with bag it and bin it messages in specific geo-located areas through social media and working with a variety of stakeholders to highlight the issue. This was in turn supported by the work of our education team who engage school children and the community to support and spread the message. Over 2021/22, our campaigns will continue to highlight the reasons behind out of sewer flooding and pollution incidents.

Join the refillution

NI Water is committed to tackling the problems caused by plastic bottles and bottle tops, which block up our drains and rivers, and pollute our seas and shorelines. By refilling a reusable bottle, not only do you reduce plastic waste, you are also helping to drive down your carbon footprint. Our Councils have signed up hundreds of local businesses across their local area who welcome any member of the public on to their premises to refill their reusable bottle with tap water. Over 200 primary and secondary schools have also signed up to become Refill schools, pledging to reduce the number of single use plastic water bottles in school and encouraging all pupils to refill a reusable bottle with world class tap water.

Strategic areas of focus

Towards zero carbon

Operational emissions from the water industry account for nearly 1% of the UK's total carbon emissions. This is because water and wastewater treatment is energy and chemical intensive and transporting water requires a great deal of pumping. Grid electricity accounts for the vast majority of our carbon emissions. We are determined to harness the huge and largely unseen potential for NI Water to address climate change. Not only are we committed to becoming carbon neutral by 2050, we can also play a strategically important role in helping society to decarbonise by planting one million trees; building more renewables on our land; kick-starting our hydrogen economy; and providing sources of warmth for district heating schemes.

There have been a number of significant developments over 2020/21 including the move towards mandatory climate change reporting against the Taskforce for Climate-related Financial Disclosures (TCFD) for large sections of the UK economy by 2025, proposals on a Climate Change Bill for Northern Ireland and the publication of Water UK's net zero carbon route map.

We have undertaken a gap analysis with TCFD and identified a number of actions to take in advance of mandatory TCFD reporting for large companies in 2023/24. Over 2021/22, we plan to develop a climate change strategy in liaison with key stakeholders such as the DfI and the Utility Regulator covering mitigation and adaptation measures. The strategy will outline the governance arrangements, include a net zero carbon route map to 2050 and address climate resilience.

NI Water is Northern Ireland's single, largest electricity consumer

100% electricity consumption from renewables by 2027

Carbon neutral by 2050

Building more renewables on our land

In 2020/21, we increased our electricity consumption from renewable sources such as solar and hydro power to 43%, rising to 100% by 2027. NI Water can help reduce Northern Ireland's requirement for fossil fuel generated electricity and cut society's carbon footprint. This can be done by working with planners and the local community to place renewable generation at a select number of suitable sites.

With third party expertise and funding, this could deliver as much as 200 megawatts of output – equivalent to one third of a typical power station's capacity. The income from leasing the associated land will also generate around £2m of income per annum, helping to keep the cost of water services down and easing the funding-pressure for government.

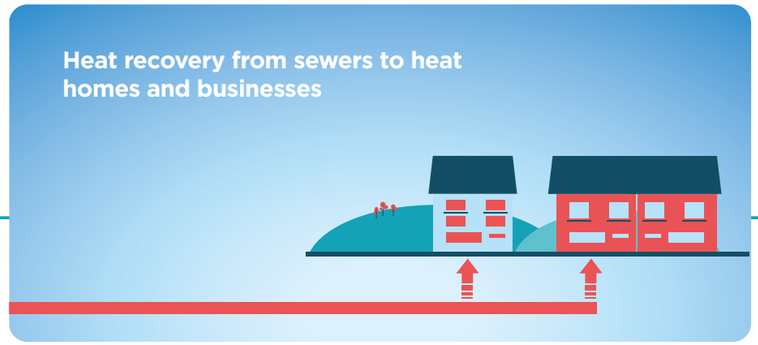
Doubling Northern Ireland's renewable generating capacity

To provide the green power for the increasing adoption of electric vehicles and to start to decarbonise the heating for homes and places of work, Northern Ireland needs to double its renewable generating capacity in the next ten years. To do so effectively will require the intermittency of supply that accompanies renewables to be addressed. This can be done by deploying large scale batteries across the province. The sites selected will need to have major electricity grid connections. These are hard to obtain and expensive to create but the good news is that NI Water already owns over 3,000 widely distributed grid connected sites. The major sites could also be used to deploy batteries.

3,000 widely distributed grid connected sites

Providing sources of warmth for homes and businesses

The heat that comes from the organic matter at a wastewater works combined with hot water from showers, baths, dishwashers, and washing machines, could provide a valuable source of warmth. For example, our Belfast wastewater sites are close to housing, government buildings, the harbour estate and other potential customers with an interest in decarbonising their source of heating. In Great Britain heat obtained in this way is also being used in the agri-food sector to reduce carbon emissions, create jobs and increase resilience by bringing overseas food production to the UK. The electrolysis process required to produce hydrogen also creates heat that can be captured and used to feed a district heating scheme. For example, producing hydrogen at scale for buses and heavy goods vehicles, could supply heating to many of cities' key buildings.



Strategic areas of focus

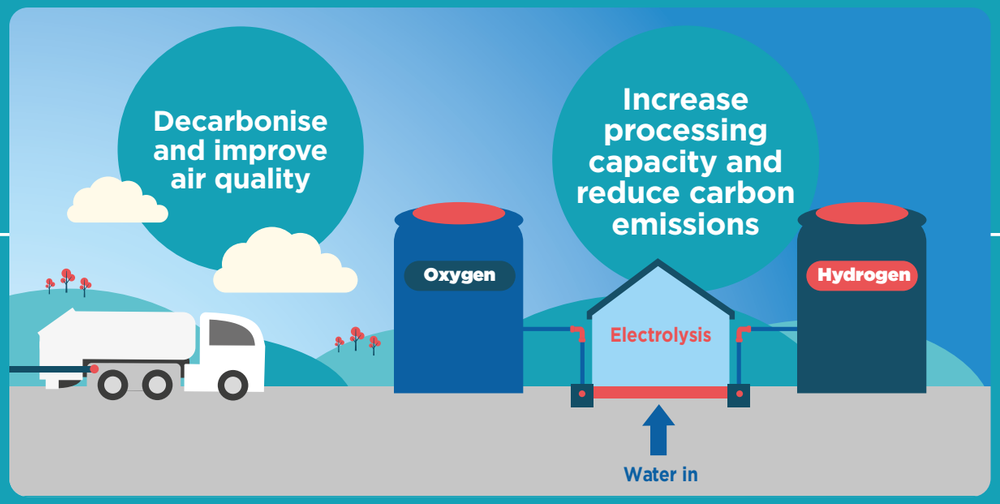
Hydrogen'ius'!!

Producing and storing hydrogen could be central to our decarbonisation journey in Northern Ireland. The key to producing hydrogen is accessing on-site generated renewable electricity during the day and low cost wind farm energy at night when overall electricity demand is limited.
The early production of hydrogen at a wastewater treatment works could help improve processing capacity, reduce carbon emissions and improve flexibility in the electricity grid. Electrolysis splits hydrogen from oxygen and it may be possible to use that oxygen as a replacement or to compliment the aeration process (pumping of air) to provide oxygen for bacteria growth, with a reduction in aeration being required.

Producing hydrogen is also a good fit for our society's ambition to see renewable generation in Northern Ireland double by 2030. 85% of our green electricity comes from wind today and this is likely to remain so as renewable capacity expands. The challenge is what to do at night time when the requirement for electricity is low. Already 15% of wind generating capacity at night is curtailed. This means that expensive wind turbines are turned off. Electrolysis capacity at night time could use this surplus electricity to produce hydrogen more affordably. Rather than paying for the curtailment of wind turbines, electrolysers could be key in building wind farm investor confidence as hydrogen becomes more important.

The supply of green hydrogen from NI Water sites could help the gas network to signal how it might migrate and remain relevant in a decarbonising world. We are assessing how many of our sites are adjacent to the gas network. Natural gas, which is mainly methane, is not green and will need to be phased-out or replaced with a green alternative. Historically, town gas had significant quantities of hydrogen, around 60%, so we know that hydrogen can meet our household needs if the distribution system is configured appropriately. Work is now underway by Keele University to confirm that up to 20% of the gas for our homes could become hydrogen without changing our current gas fittings.

Over 2020/21, NI Water unveiled a ground breaking concept to help kick start the hydrogen economy in Northern Ireland. We were awarded £5m of funding from the Department for the Economy (DfE) to undertake an innovative oxygen and hydrogen demonstrator project that will deploy a state-of-the-art, 1 Megawatt electrolyser at a major wastewater treatment works. This will be the first in the UK and Ireland to demonstrate how electrolysis can help to increase processing capacity, reduce carbon emissions and improve flexibility in the electricity grid.



https://www.youtube.com/watch?v=lEKebw_qjrI

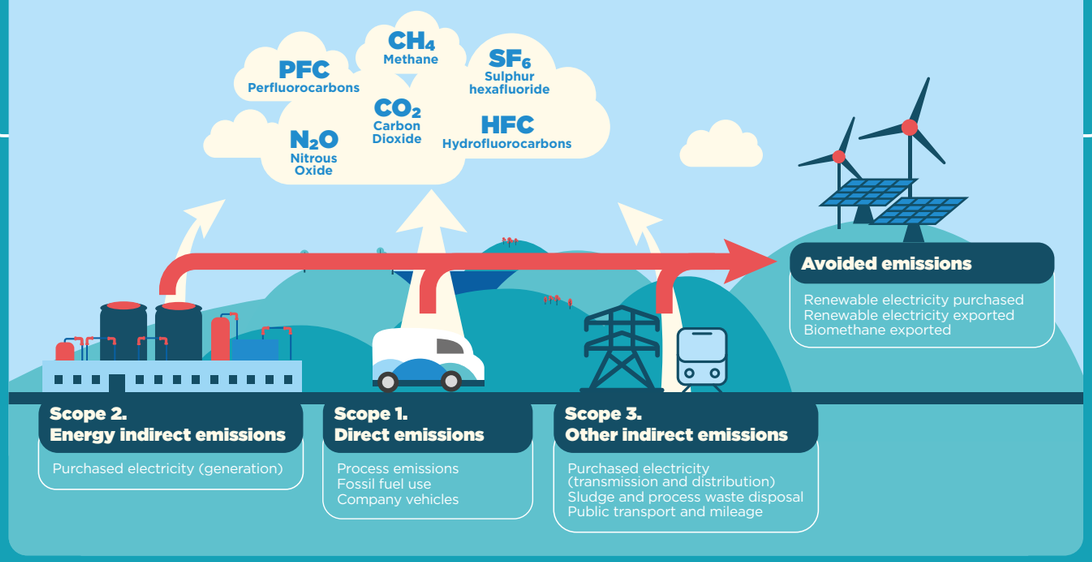
Electrolyser at Kinnegar wastewater treatment works, Holywood, County Down

Strategic areas of focus

Greenhouse gas emissions

Our greenhouse gas emissions are accounted for and calculated using the UK Water Utilities industry Carbon Accounting Workbook. The workbook is updated each year with the most recent carbon emission factors released by government. We follow the 2019 UK Government Environmental Reporting Guidelines including the streamlined energy and carbon reporting guidance and are working towards TCFD compliance. We are liaising with peer water companies to determine how we can capture additional areas in our carbon footprint reporting and embed carbon in our business case decision making. Our carbon footprint doesn't currently capture some emissions from treatment processes, embedded carbon in materials such as carbon dense concrete used to construct our infrastructure or in the carbon stored in our land.

Greenhouse gas emissions by scope



Greenhouse gas emissions (continued)

NI Water greenhouse gas emissions	2020/21 tCO_2e	2020/21 kWh	2019/20 tCO_2e	2019/20 kWh
Scope 1 direct emissions				
Direct emissions from burning of fossil fuels	4,520	19,387,492	7,151	27,978,365
Process emissions from our treatment plants	13,100	*	8,701	*
Transport: Company owned or leased vehicles	2,569	11,019,559	2,733	10,692,997
Total scope 1 direct emissions	**20,189**	**30,407,052**	**18,585**	**38,671,362**
Scope 2 energy indirect emissions				
Grid electricity purchased	69,300	297,246,290	75,111	293,862,324
Total scope 2 energy indirect emissions	**69,300**	**297,246,290**	**75,111**	**293,862,324**
Scope 3 other indirect emissions				
Business travel on public transport and private vehicles used for Company business	68	292,614	216	845,188
Emissions from sludge and process waste disposal	12,400	-	11,841	-
Grid electricity purchased - transmission and distribution	5,960	25,564,039	6,377	24,948,396
Total scope 3 other indirect emissions	**18,428**	**25,856,653**	**18,433**	**25,793,584**
GROSS OPERATIONAL CARBON EMISSIONS	**107,917**	**353,509,995**	**112,130**	**358,327,269**
Avoided emissions from renewable electricity exported	(605)	(2,595,007)	(927)	(3,627,778)
Avoided emissions from biomethane exported	-	-	-	-
Avoided emissions from renewable electricity purchased	(28,490)	(122,201,252)	(31,875)	(124,706,182)
Total avoided emissions	**(29,095)**	**(124,796,260)**	**(32,802)**	**(128,333,960)**
NET OPERATIONAL CARBON EMISSIONS	**78,822**	**228,713,735**	**79,328**	**299,993,310**

NI Water greenhouse gas emissions intensity	2020/21	2019/20
Operational emissions per megalitre of treated water (tCO_2e/Ml)	0.175	0.118
Operational emissions per megalitre of sewage water (tCO_2e/Ml)	0.501	0.386

*Figures have been updated in line with the most recent SECR guidelines.

The net operational carbon emissions reduced from 79,328 tCO2e in 2019/20 to 78,822 tCO2e in 2020/21, a reduction of 0.64%. There was an increase in greenhouse gas emissions intensity as a result of an increase in energy consumption in 2020/21.

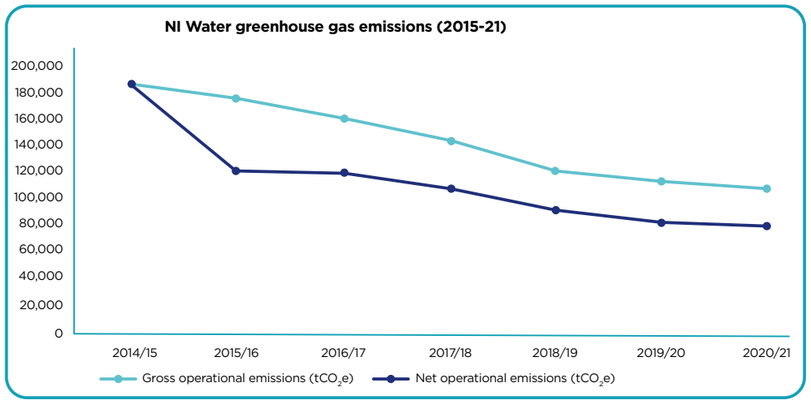
We are developing a net zero carbon route map in 2020/21 which will set out the pathway and targets to reach net zero carbon by 2050. Progress in reducing our greenhouse gas emissions is shown below:

BUSINESS IN THE COMMUNITY

Signatory
Climate Action Pledge NI

NI Water has signed the Climate Action Pledge
We've committed to reducing our greenhouse gas emissions by 50% by 2030.
For further information please visit
niwater.com/climatechange

TCFD TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES



https://www.youtube.com/watch?v=L9XMgsGZJtQ&feature=youtu.be

People

Providing a great place to work

NI Water's Apprenticeship Academy graduates

Strategic areas of focus

Powered by talent

Happy, safe and healthy people

Creating a legacy for our communities

Sustainable development goals

Principal threats/opportunities

PT1 PT2 PT3 PT4 PT5 PT6 PT7 PT8 PO1 PO2 PO4

Page 72 Read more about strategic threats and opportunities.

Strategic performance indicators

People	Unit of measurement	Target 2020/21	Actual 2020/21	Pass/ Fail	Target 2021/22
Employee engagement score	%	65	70*	Pass	65
Reduction in health and safety incidents	Number	7	5	Pass	7

* Based on average completion rate for three COVID-19 pulse surveys

Strategic areas of focus

Powered by talent

Attracting, developing, retaining and partnering with the best talent is fundamental to the success of our business and therefore we are committed to making NI Water a great place to work.

A diverse workforce is good for business, providing different perspectives, encouraging innovation, and fostering a more collaborative working culture. As a traditionally male dominated industry, we recognise the importance of attracting more female applicants into the industry.

In an increasingly competitive talent market, it is important that we address the challenges presented by an ageing workforce and loss of knowledge to ensure there is a future supply of skills coming into our organisation.

In 2020/21 we launched a new Emerging Leaders programme, developing 44 aspiring leaders to fulfil their leadership potential and a new Apprenticeship Academy through which we hired 30 new water apprentices. 13% of our apprenticeship intake are female, enhancing the proportion of females within our industrial workforce. The apprentices will complete a four year combined water and wastewater apprenticeship.

Our 2021/22 plans include the development of an immersive management development programme for all middle managers; a significant programme of work to define and develop our corporate values into everyday behaviours and actions for which we will hold ourselves accountable; modernising our total reward strategy; and the development of a hybrid working for office based staff as we re-invent our workplace.

Read more about our work on diversity and inclusion at page 127.

NI Water apprentice, Erin, who was motivated to apply for an apprenticeship while studying the water quality of Lough Neagh at university

Strategic areas of focus

Happy, safe and healthy people

We recognise the importance of our people in delivering the water that we all rely on to thrive and that's why we are committed to looking after them by eliminating all harm. We are aiming to ensure our business has happier, healthier and safer employees by focusing on training, processes and procedures and developing a more positive health and safety culture.

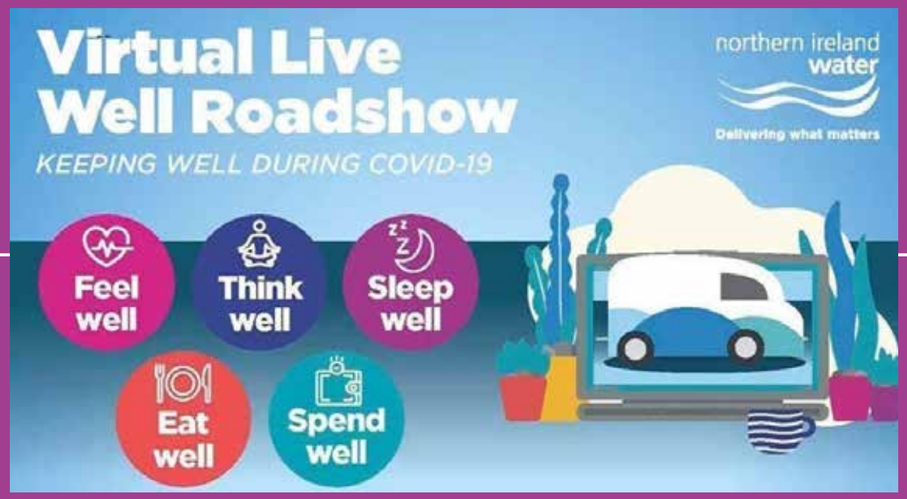
Our award winning health and wellbeing strategy helps staff 'live well' through a range of initiatives to support mental, physical, financial and social health such as our Live Well Roadshow, Winter Wellness Programme and new Spring Forward Programme. Example activities included virtual gym sessions, advice on improving sleeping habits and how to manage personal finances.

We introduced pulse surveys over 2020/21 as a quick and agile way of staying connected with all our people and to understand the sentiment of our workforce throughout the pandemic. Three pulse surveys were issued throughout the year and have been highly effective in identifying clear areas of strength and further focus. Feedback received has been used to inform our ongoing COVID-19 response.

We held our third Microsoft Teams Live broadcast in March 2021. Over 300 colleagues participated in the session. A number of Executive Directors spoke on various topics including how we're continuing to 'deliver what matters' while dealing with COVID-19, stepping up to manage operational challenges, our plans for hybrid working arrangements post COVID-19, highlights over PC15 and plans for PC21.

In 2020/21 we introduced a new health and safety software system called 'Assure', which makes it much easier for all our employees and contractors to report incidents, hazard observations and safety suggestions. Reports can be made via laptop, tough book and mobile phone. Enabling everyone to make it easier to report safety concerns will allow us to more accurately assess key areas of improvement that we need to focus on. Employees can also easily add photos, video and audio files to their records using their mobile phones.

In 2021/22 we intend to go live with both the audit and risk modules on our Assure system. The audit module will help NI Water identify key health and safety trends across all of our sites and activities.



Creating a legacy for our communities

Giving back

We had to put our fantastic Cares Challenge/Little Ripples programmes temporarily on hold over 2020/21. A number of colleagues got involved in digital volunteering, helping local community charities host short virtual training sessions on a digital topic. This included anything from helping an individual set up a Zoom call, to online shopping tips for families. Our volunteers helped the more vulnerable in our communities to feel more connected and confident in a daunting digital age.

We were able to recommence some of our usual volunteering activities. Our people helped Marie Cure deliver essential items to their teams across Northern Ireland. We also supported the Simon Community to deliver Christmas hampers. A number of initiatives are planned for 2021/22 to support charities such as Tiny Life, Simon Community and Age NI, with a view to resuming our full volunteering activities when government advice allows.

One of our digital volunteers

WaterAid

We are really proud to be helping WaterAid in achieving its goal - working towards a world where everyone, everywhere has clean water and decent sanitation. Our partnership with WaterAid continued over 2020/21 by hosting the first virtual fundraising ball in the UK, which raised over £47,000. This will go a long way in helping bring safe water, sanitation and toilets to many people in our link country projects in Malawi.

Water-whizz kids

We are really proud of our unique education programme, which includes the Waterbus mobile classroom initiative. We have educated over 200,000 'water-whizz' school kids about the value of water for health, the economy and nature. We had to adapt our approach over 2020/21 due to COVID-19. We developed a home-schooling pack, in place of face to face learning on our Waterbus, and produced a number of lessons to support over 270 virtual school visits.

NI Water's on-line education presentations