Economy

Efficiently delivering infrastructure to underpin sustainable growth

Ballygowan wastewater treatment works, County Down.

Strategic areas of focus

- Funding world class economic infrastructure
- Efficient and affordable services
- Sustainable growth

Sustainable development goals

Principal threats/opportunities

Page 76 Read more about principal threats and opportunities.

Strategic performance indicators

Economy	Unit of measurement	Target 2022/23	Actual 2022/23	Pass/ Fail	Target 2023/24
Increase/(decrease) in customer tariffs*	%	6.6	6.6	Pass	13.4
Number of economic constraint areas removed (cumulative over 2021-27 period)	Number	0	0	Pass	0
Number of serious development restrictions removed (cumulative over 2021-27 period)	Number	4	6	Pass	4
Bathing water quality**	Excellent	Majority excellent or good ***	21	Pass	Majority excellent or good ***
	Good		3		
	Sufficient		1		
	Poor		1		

* Non-domestic customers only.

** Bathing water at 26 sites is monitored weekly from May to September each year.

*** Other major contributors to bathing water quality include agriculture, wider industry, and consumer behaviour (flushing inappropriate items).

Funding world class economic infrastructure

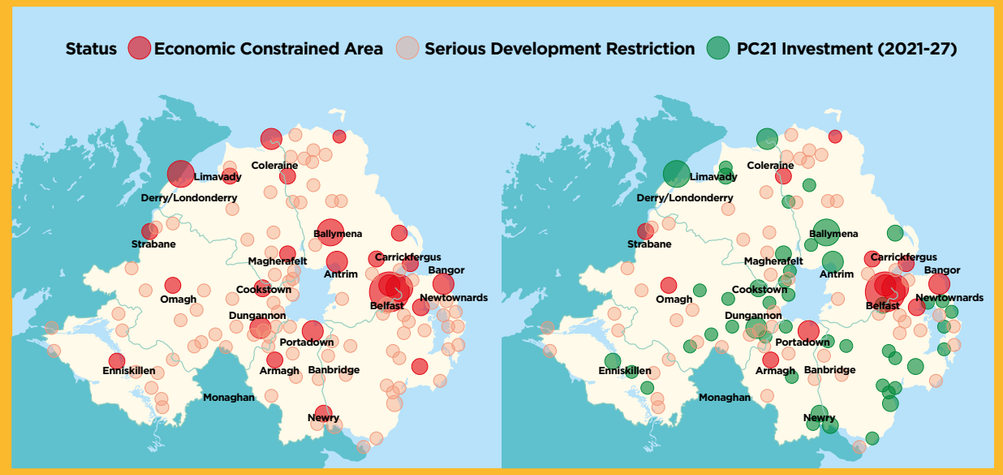
Largely unseen, our infrastructure is the foundation for all economic activity in Northern Ireland as almost every new home and business requires a connection to the public water and sewerage system. We share the government's ambition for Northern Ireland to have the infrastructure that enables everyone to lead a healthy, productive and fulfilling life; supports sustainable economic development; and protects our environment. But this ambition can only be realised if we move from a 'stop-start' approach to delivery as a result of underfunding, to multi-year funding in line with that determined by the independent Utility Regulator, supported by a mechanism to deal with financial shocks.

Unlocking development constraints

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 water quality targets. Many of our sewerage networks and wastewater treatment plants are having to operate at or beyond their design capacity, limiting opportunities for new connections and constraining economic development in over 100 towns and cities across Northern Ireland, including Belfast and Derry/Londonderry. 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 12 to 18 years to solve the problem of development constraints.

During 2022/23, we continued our engagement with local councils and other stakeholders on wastewater capacity constraints. We also revised wastewater system capacity information across all Council areas and engaged with Council's local development planning teams. We are developing decision support tools such as Esri ArcGIS and Power BI to help prioritise and target investment on wastewater capacity constraints. One of the key strategies that NI Water has adopted is the introduction of a restructured pre-planning process to help mitigate where possible site restrictions and facilitate connections to our network.

We are identifying innovative wastewater technologies and optimising existing wastewater processes. This may result in some economic growth in the catchments served by wastewater treatment works across Northern Ireland, which are currently operating at or near their capacity. We have assessed a priority wastewater treatment works at Armoy, County Antrim for process optimisation and potential application of innovative technologies. Going forward, we will conduct innovative technology pilot trials at a test centre situated in Ballykelly (North West) and at other identified wastewater treatment works, which are currently constrained.



Development constraints across Northern Ireland at the end of year two of PC21 (2022/23).

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

£1.2bn framework to boost local economy

In 2022/23, we commenced a £1.2bn Major Project Partnership Framework, which will deliver large projects on water and wastewater infrastructure across Northern Ireland. This framework will include upgrades to major water and wastewater treatment works, pumping stations, and network mains. It will run for an initial four-year period. The framework provides further resilience for NI Water to provide our customers with the best financial, sustainable and environmental outcomes, and provides us with access to some of the most innovative providers within the construction supply chain. One of the first major projects on the framework will be upgrade work at Belfast Wastewater Treatment Works, which commenced during 2022/23.

NI Water staff at the launch of the £1.2bn project partnership framework.

Pumping £9m into Fermanagh and Tyrone

NI Water completed a £9m investment at Killyhevlin water treatment works. This will improve the security of the water supply of around 36 million litres of water per day for the 50,000 customers in Fermanagh and Clogher Valley, particularly during periods of extreme weather. This major upgrade involved the construction of a new clear water storage tank on the existing site, as well as a new pumping station to allow for a future increase in water supply.

Killyhevlin water treatment works Enniskillen, County Fermanagh.

Efficient and affordable service

We continue to promote the need for multi-year funding of the PC21 Final Determination, supported by a financial risk mechanism, through liaison with key stakeholders. Securing government commitment to fund the PC21 Final Determination and provide NI Water with the ability to manage financial shocks remains the highest priority for PC21.

We are preparing for the PC21 mid-term review and received the Utility Regulator's approach in 2022/23. We will make a written submission to the Regulator at the end of September 2023, setting out proposed changes to funding, price limit requirements and revised output targets. The Regulator will publish their decision in December 2023.

The NI Audit Office is undertaking a review on the funding of NI Water's infrastructure and plans to publish its report by Summer 2023. We welcome this review and are assisting the NI Audit Office with its enquiries. Further details are available at https://www.niauditoffice.gov.uk/publications/work-progress-funding-ni-waters-infrastructure

Our Achieving Customer Excellence programme is the major vehicle to deliver operational cost and capital expenditure efficiencies and wider benefits. We are optimising the pace at which NI Water transitions to renewable energy, building the capability and capacity to sustainably deliver in asset investment, digitally enabling the Intelligent Operations Centre to better predict and prevent issues and optimise running of our assets. This is supported by a powerful 'cost to serve' tool giving operators a deep understanding of production line cost performance and developing and extending our capability to continuously drive improvement, value and transformation.

Read more on our governance model and funding at page 80.

Lighting up the way

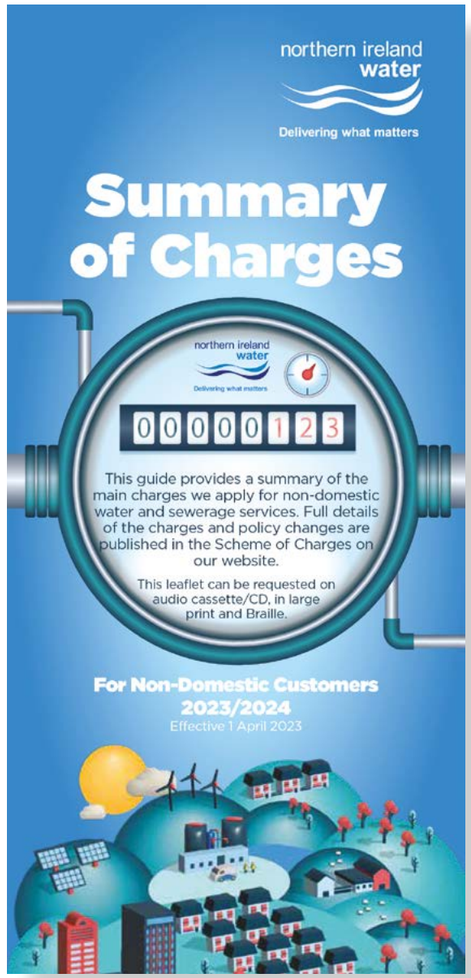
Drumaroad water treatment works is one of our largest sites and produces water for around 25% of our population served. Drumaroad was selected as part of a wider initiative to review sites in terms of energy usage and performance. The LED installation on site will assist in realising energy efficiency of around 107,000kWh/year as well as improving the lighting inside and outside the building, which will result in a safer working environment.

Energy efficiency LED lighting at Drumaroad water treatment works, County Down.

Read more about our ambition on renewables at https://www.niwater.com/climatechange/strategy/

Customer tariffs

We are aware how challenging the environment can be for local businesses within the economy right now. In previous years, we have been able to limit the non-domestic price increase to strike a balance between generating sufficient income and minimising the impact on business customers. Whilst NI Water has again absorbed as much cost as possible, the company is facing significant financial pressures from rising energy prices and other cost increases.



We have worked hard to ensure most of our customers will see their bills rise by less than inflation. Specific bill changes operate according to a formula agreed with the Northern Ireland Utility Regulator. It is well documented that NI Water needs to receive full funding to ensure we continue to deliver a water and sewerage service that represents good value for money. The revenue from bills will help support necessary investment in our infrastructure, benefitting the local economy and environment. However, even with full funding and bill increases, historic underinvestment will take in the region of 12 to 18 years to remedy.

From 1 April 2023, non-domestic water and sewerage charges increased by 13.4% on average. Measured customer bills increased by 12.7%, while unmeasured and trade effluent bills increased by 13.7% and 15.5% respectively. This compares favourably with other utilities across gas and electricity sectors.

Find out more at https://www.niwater.com/siteFiles/resources/pdf/WaterCharges/202324/202324SummaryofChargesLeaflet.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. We believe that our future infrastructure investment can support not only the transition to a more sustainable and resilient business but also help create an affordable, low carbon green economy for Northern Ireland.

Advances in our investment management processes are helping us focus on financial efficiencies in delivering or capital investment programme. These processes are also helping us choose more integrated sustainable solutions to address climate change. Our Investment Planning and Costing tool allows estimates of standardised costs and recommend lowest whole life cost solutions to be calculated for PC21 projects. We are expanding our carbon accounting to capture whole life carbon and land carbon.

Pilot projects are being undertaken over the remainder of PC21 to examine the use of a multi-capitals approach to support our decision making. This approach incorporates the social and environmental costs and benefits not presently captured in market prices.

We are working closely with NIEA on the review of consenting methodologies and source apportionment techniques, which will contribute towards ensuring discharge standards at our wastewater treatment works are proportionate, whilst delivering on the best environmental outcome for the investment delivered by NI Water. We have established an Investment Group, which provides a forum with NIEA to facilitate negotiation of discharge standards, enabling open and transparent decision making, supported by appropriate scientific evidence.

Read more about wastewater compliance on page 54.

Greening our fleet

To reduce our carbon footprint, NI Water's fleet of 600 vehicles will need to move away from their reliance on diesel. By 2027 we aim to replace 200 of the existing fleet with ones that are powered by alternative fuels. As many of these will be electric vehicles, work began during 2022/23 to install electric charging points at key sites. It is planned that further investment in PC21 will move us close to our aim to install chargers at up to 55 sites. These chargers will be for fleet use only. Consideration will be given to enabling staff and visitors to pay to use the charging equipment. Electric vehicles are not only essential in decarbonising NI Water's fleet, but they also present us with the opportunity to financially benefit from returning electricity to the grid at times of higher grid demand.

NI Water's Education Officer and pupils from St Peter's Primary School, Belfast at one of the rapid electric charging points recently installed at Belfast Wastewater Heritage Centre, County Antrim.

Belfast wastewater treatment works, County Antrim.