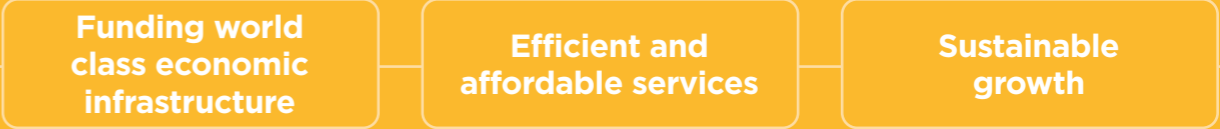




Attending the Power of Water Event at the ICC Belfast were NI Water's Chairman, Dr Len O'Hagan, NI Water's Chief Executive, Sara Venning and Minister for Infrastructure, Nichola Mallon MLA.

Strategic areas of focus



Sustainable development goals



Principal threats/opportunities



Page 84 Read more about principal threats and opportunities.

Strategic performance indicators

Economy	Unit of measurement	Target 2021/22	Actual 2021/22	Pass/Fail	Target 2022/23
Increase/(decrease) in customer tariffs	%	0.9	0.9	Pass	6.6
Number of economic constraint areas removed (cumulative over 2021-27 period)	Number	0	0	n/a	0
Number of serious development restrictions removed (cumulative over 2021-27 period)	Number	4*	0	Fail	0
Bathing water quality**	Excellent	Majority excellent or good	24	Pass	Majority excellent or good
	Good		1		
	Sufficient		1		
	Poor		0		

* We have reprofiled the delivery dates for this target and plan to recover performance by 2022/23.

**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.

From stop-start to multi-year funding



The Organisation for Economic Co-operation and Development (OECD) recommends that infrastructure be underpinned by fiscally sustainable multi-year funding. Recent reforms of infrastructure delivery in the UK public sector have been driven by the need to address the absence of multi-year funding and the adverse impact on infrastructure planning and delivery.



Lack of multi-year funding also creates detrimental effects from cyclicalities as highlighted by HM Treasury’s report on smoothing investment cycles in the water sector. The report noted that the stop-start nature of five year investment cycles in England and Wales can lead to lean periods of great uncertainty, loss of productivity across the five year cycle, redundancies and an environment of uncertainty in which small and medium enterprises are adversely impacted.



The Department of Transport’s Road Reform consultation noted that uncertainty of stop-start funding was having detrimental impacts on the delivery of multi-year projects and the supply chain. Highways England now benefits from ring fenced operational and capital expenditure across five year budgets.



Network Rail benefits from five year funding settlements. Unlike Highways England and Network Rail, NI Water lacks funding visibility. This lack of visibility has been exacerbated by the absence of buffer to deal with financial shocks such as the energy price rises in 2021/22.



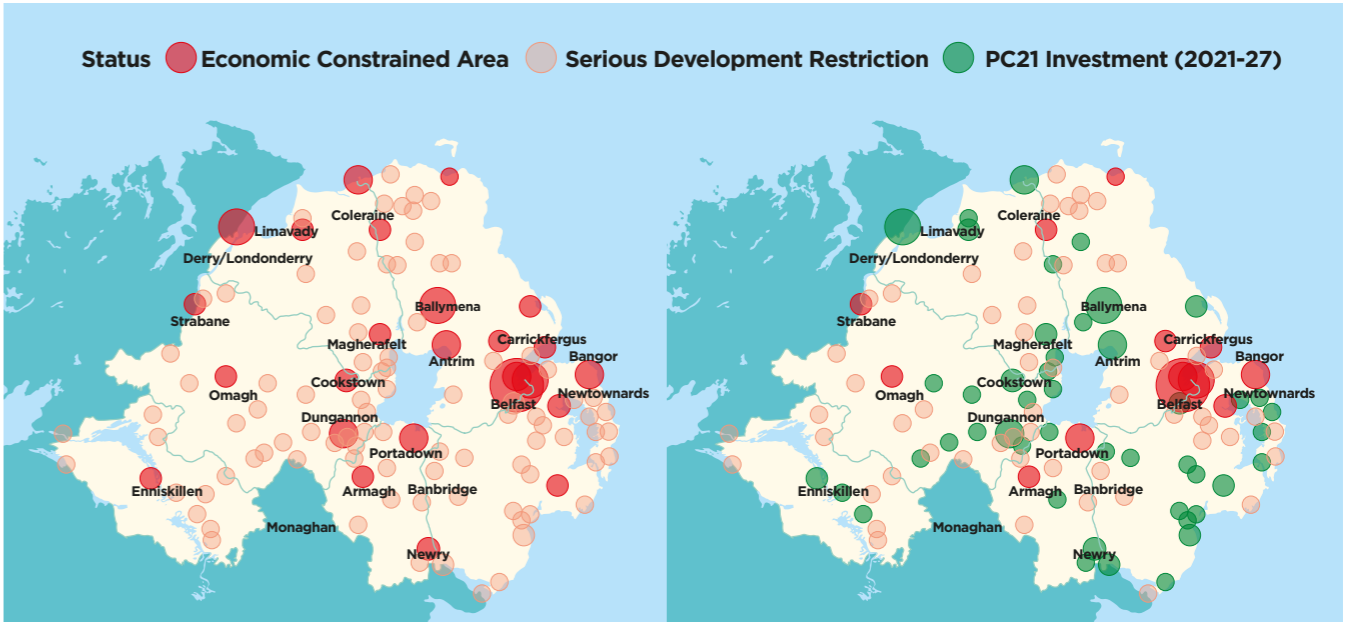
Scottish Water is an example of another Government owned water company with the ability to build up significant cash reserves as a buffer for financial shocks. NI Water’s Non-Departmental Public Body Status limits the amount of cash that can be held in reserve.



The National Infrastructure Commission has also highlighted the need for the UK’s framework for economic regulation of utilities to be updated and strengthened due to the emerging and long term challenges it was not designed to address. This includes reaching net zero, protecting and enhancing the environment and increasing digitalisation. The Commission notes that it is vital that utility regulators have appropriate and coherent duties covering price, quality, resilience, the environment and net zero.



The NI Audit Office is undertaking a review on the funding of NI Water’s infrastructure and plans to publish its report by Autumn 2022. 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/funding-ni-waters-infrastructure>



Development constraints across Northern Ireland at the end of year one of PC21 (2021/22).

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

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 quarter of a century to solve the problem of development constraints. During 2021/22, 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.

£18m boost for Ards Peninsula

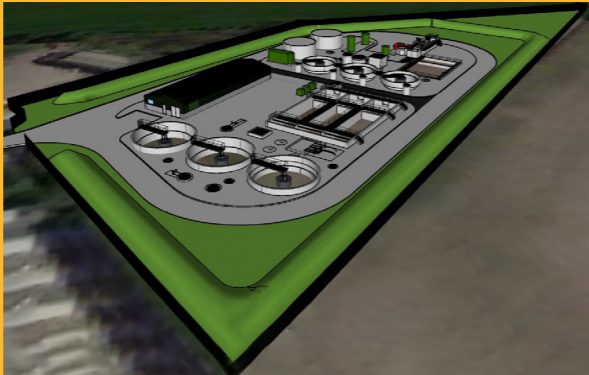
The Ards North Wastewater Improvement Project represents an £18m investment by NI Water to upgrade the existing wastewater collection and treatment systems serving a large part of the Ards Peninsula to bring about social, economic and environmental benefits.

The extensive project involves the rationalisation of the Carrowdore, Ballywhiskin and Ballywalter catchments so that all wastewater flows from these areas are transferred to a new state-of-the-art wastewater treatment works being constructed off the Ganaway Road in Ballywalter.

In addition to these catchments, the new treatment works has been designed to treat wastewater flows from nearby caravan parks and small settlements, which currently have no treatment facilities.

The effluent from the wastewater treatment works will be treated to strict environmental standards and will flow to a new long sea outfall. To achieve excellent bathing water quality at local beaches, the outfall discharges 550m off shore where the treated effluent is dispersed and diluted in 4m depth of seawater.

The new wastewater treatment infrastructure will support long-term economic growth in local development and tourism. Additionally, the investment will deliver environmental improvements, including cleaner beaches and bathing waters, which will benefit all those living, working or visiting this scenic part of the Ards Peninsula.



Outline design for the new wastewater treatment works.



Caravan park on the Ards Peninsula.



Beach on the Ards Peninsula.

Efficient and affordable service

We have reduced operating costs and improved comparative efficiency with water companies in England and Wales. 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.

We recognise the need for innovation diffusion to close the UK's productivity gap with its main competitors. We will play our part in closing the gap by harnessing innovation and embracing new technology in pursuit of ever more efficient and sustainable solutions. We recognise efficient solutions often require changes to culture and collaboration with the supply chain, Universities and others.

We have developed a cost-to-serve tool and new metrics that create a more cost-conscious culture. The metrics include £/million litres of water delivered to customer and £/population equivalent of wastewater recycled. The tool draws together the 250 million operational, financial and asset data points from our core systems and presents this information in easy to use Microsoft Power BI dashboards. The dashboards cover all main operating cost components: labour, electricity, chemicals, materials, contractors and operational capital.



NI Water receiving the Best Procurement Delivery and Highly Commended Team of the Year awards at the GO Awards Northern Ireland 2021/22.



Piloting the production of green hydrogen - NI Water staff showing Alliance Party of Northern Ireland MLA's Andrew Muir MLA and Stewart Dickson MLA the 10kW Electrolyser at Kinnegar Wastewater Treatment Works in Belfast.

NI Water Taps into Local Companies for Innovation in Water and Wastewater Treatment

Four Belfast-based local companies are leading the way in developing innovative technologies for NI Water's Water and Wastewater Treatment Plants and other assets in the water and sewerage network.

Analytics Engines, RPS, Lagan Meica and Advanced Analytics Labs are leading the way in helping NI Water to identify ground-breaking processes and data intelligence techniques to achieve efficiencies in the area of water and wastewater treatment.

These projects are all supported by the Small Business Research Initiative (SBRI), which is a pre-commercial procurement model promoted by Innovate UK, which enables public sector bodies to connect with technology organisations in order to stimulate the development of innovative solutions to specific public sector challenges and needs.

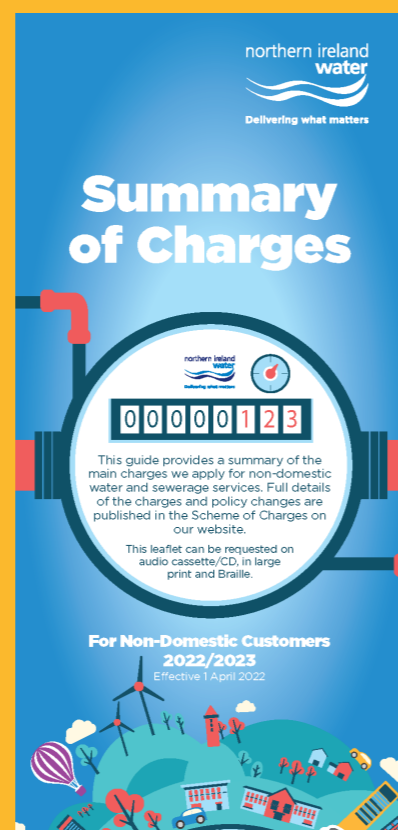


NI Water and supply chain staff involved in the projects.

Customer tariffs

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.

Following approval by the Utility Regulator, NI Water increased its non-household water and wastewater tariffs by 6.6% on average. This came into effect from 1 April 2022. When setting tariffs, NI Water seeks to strike a balance between the conflicting priorities of minimising the impact on customers whilst at the same time ensuring that enough revenue is generated. NI Water is currently facing considerable budgetary pressures which are likely to continue through 2022/23, primarily due to the impact of rising power prices and other unavoidable increases affecting costs such as chemicals. Whilst any increase is unwelcome we have worked hard to ensure our water and sewerage services continue to provide good value for money to our customers. This increase means most of our customers will see their bills rise by less than inflation.



Find out more at <https://www.niwater.com/siteFiles/resources/pdf/WaterCharges/202223/NIWSummaryofChargesLeaflet.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. Energy is at the nexus of this approach.

Power of Water could help the local economy go greener faster

A different type of ICU was the subject at the launch of the NI Water Power of Water Report. Innovate, Collaborate, Urgency – these were the three key messages if we are to decarbonize our energy system. Northern Ireland could be a world leader but we need to act. The Power of Water Report sets out a number of practical examples of how NI Water might be part of a wider decarbonisation agenda.

NI Water can help to integrate more sustainable energy sources into our supply system and reduce the tax payer's subsidy for water services.

NI Water is our largest electricity user. Future electricity generation will be driven by the weather. NI Water will be rewarded by being flexible in our use.



Hydro pump storage schemes store water at height when energy is plentiful to generate electricity later.

The NI energy system will need to store energy when it is plentiful for subsequent use. NI Water will require large batteries for resilience and to operate efficiently.



Find out more at: The Power of Water ([niwater.com](https://www.niwater.com))