

Delivering what matters

Developing Renewables, Energy Storage and the Hydrogen Economy

Damien O'Mullan, Head of Energy, NI Water 15/06/22



Greater control and improved performance to reduce use



Shifting NI Water to more renewable generation

- Our typical annual electricity bill has more than doubled to £75m
- Approaching 5% of NIW's electricity use is currently from self-generation
- c.68% of our harmful operational carbon emissions from grid supplied electricity
- Increasing access to renewable energy benefits our customers, our shareholder, and Northern Ireland overall



Increase solar from 6 to 9MW



Compelling case to build NI Water's own major wind farm



Replace sludge incineration with advanced anaerobic digestion in 2032



Contract for virtual PPPs for renewable price certainty

A pivotal role to play in providing flexibility

Shifting to renewables ties performance of our system to the weather Our future energy system need flexibility to balance supply and demand As our largest electricity consumer we believe we have a pivotal role



Flexing our **consumption** to help NIEN operate the electricity system



Flexing by investing in battery storage



Flexing through hydro pump storage scheme



Flexing our use of electricity to alleviate wastewater constraints

Using our new Intelligent Operations Centre (IOC) to interact with the energy market

Going further in harnessing the power of water:

- Decarbonising our fleet by moving 450 vans to electric
- Recovering heat from wastewater

Using our IOC, enabled with artificial intelligence, to act as pathfinder to demonstrate flexible interaction with the energy market

Part of a common plan with other key players to transform Northern Ireland's energy system





We are in a Green Technology race that can transform our energy system and our economy

At NI Water we must take action and keep pace with our GB water sector peers:

- decarbonise
- lower our energy operating costs
- secure greater price certainty

Our action plan simultaneously enables us to play a pivotal role in creating the NI future energy system to respond to climate emergency and energy affordability crisis.

Using our publicly-owned assets as part of a common plan also creates the well paid Green Technology employment we so badly need in Northern Ireland.



