

Infrastructure New Zealand
2024 International Delegation

Place Based Solutions: **Learnings from the UK**

London, England
Manchester, England
Cardiff, Wales

June 2024



Infrastructure®
New Zealand





Central London's financial districts
London, England

Foreword

Phil Goff, High Commissioner of New Zealand to the United Kingdom



It was great to connect with the Infrastructure New Zealand delegation visiting London in June of this year.

On a personal basis, it was good to renew associations with friends and colleagues I have worked with in public life in New Zealand.

The delegation represented a cross-section of people from the business world and local government with strong experience in infrastructure development, keen to learn what has worked well, and what hasn't, in building infrastructure in the United Kingdom.

The value of such delegations visiting here lies in what they can gain from the experience of a country which while much larger is similar to ours in terms of its system of government, laws and market economy.

Transport, water infrastructure, housing and stadiums, among the key areas examined by the delegation, are all issues the United Kingdom has had to confront.

The challenges New Zealand faces are mirrored by those central and local government in the United Kingdom are also having to deal with.

Solutions applied here provide the opportunity for us to avoid pitfalls others have experienced as well as to learn what has worked well.

One broader lesson is that the time it takes to plan and develop infrastructure is considerably longer than the term of elected office of local and central governments. Involvement of opposition parties by government on a bipartisan basis should be considered as a way to ensure the continuity that is needed to successfully develop long-term infrastructure.

Infrastructure development should be evidence-based and I hope that the Infrastructure New Zealand delegation has gained valuable insight from the projects that they visited in the United Kingdom which can in turn be applied to the challenges they are grappling with at home.

Contents

Foreword	1
Delegation Purpose	3
Thank you to our 2024 UK Delegates and Hosts	4
Lessons from England and Wales for New Zealand	6
Key Findings	6
Devolution Deals in the UK	6
The Greater Manchester City Deal	8
Cardiff Capital Region	8
Adapting Devolution Deals to the New Zealand Context	9
Key insights and recommendations for New Zealand	10
Water Regulation, Funding and Models for Water Services Provision in the UK	11
Water Companies in England	11
Wales	11
Regulation	12
Key insights and recommendations for New Zealand	13
Place Based Solutions - Delegation Session Summaries	14
Pre-Delegation Dinner	14
Day One	14
Overview	14
OfWat – From the Regulator: Overview of Water Services Provision and Regulation in the UK	15
Water UK – From the Trade Association: Overview of Water Provision, Privatisation and Regulator Relationship in the UK	16
RPS / TetraTech: Pollution and Geographical Differences	17
RPS / TetraTech: Geographical Differences, Leakage and Thames Water	18
Site Visit: The Doppelmayr Dangleway	19
Dinner with High Commissioner of New Zealand to the United Kingdom, the Honourable Phil Goff CNZM	19
Day Two	19
Department for Levelling Up, Housing and Communities – Administering City and Regional Deals: A View from the Centre	19
CrossRail International and Transport for London – the Elizabeth Line and the CrossRail Project	20
Vinci Highways UK – Hounslow Highways Road Maintenance Partnership	21
Day Three	22
Overview	22
Greater Manchester City Deal – Greater Manchester Combined Authority	23
Transport for Greater Manchester - Transport Investment, Relationship with GMCA and Bee Network Development	24
Simon Light – the UK Infrastructure Challenge	25
Institute of Place Management – Place-Making in Action	25
GHD – A Just and Fair Infrastructure Transition	26
SSE Energy Solutions	26
GHD – Thinking Differently in the Water Sector	28
Day Four	29
Overview	29
ID Manchester – University of Manchester Innovation District	29
Kevin Lavery, Chief Executive Lancashire and South Cumbria NHS Board: Seeing the Wood for the Trees – Adapting City Deals for New Zealand	30
Arup – Unlocking Growth: Applying Value for Money Frameworks to Complex Projects	31
Site Visit: Manchester Etihad Stadium Tour	32
Day Five	33
An Overview of Water in the United Kingdom	33
Dŵr Cymru Welsh Water – The Glas Cymru Model	34
Cardiff Capital Region – A Partnership Model for City Deals	35
Dŵr Cymru Welsh Water – Nature Based Solutions	35
Cardiff Wastewater Treatment Works and Food Waste Treatment Facility and Grangetown Project	37

Delegation Purpose

Aotearoa New Zealand must chart a new course with the way we plan, fund and build our infrastructure. Success will not come from a centrally driven strategy where Wellington alone decides the infrastructure priorities of regions and cities. We must build a revised system of shared responsibility for planning, funding and delivering infrastructure.

There is growing consensus on the need to access new funding mechanisms – and to power up local and regional governments to enable them to create their own destiny by driving and building projects that better meet the economic and social needs of communities. For this to be achieved, local government must be a stable and mature funding and delivery partner for both central government and private partnerships.

We've relied too heavily on central government as the saviour to our challenges for too long – and they have proven they don't have the understanding or sophistication to truly power up in the way our cities and regions need.

Aotearoa New Zealand tends to be inward in our search for models and systems that will assist in improving the faster building of better infrastructure.

Over a number of years, Infrastructure New Zealand has led a series of international delegations focused on what other nations are doing to unlock the opportunities through better funding and delivery partnerships between the different levels of government – and the private sector.

On this trip, our focus was on learning lessons on devolution deals in their many forms, and the state of water regulation, funding and service provision across England and Wales.

We also heard from leaders focused on delivering major projects, organisations committed to local regeneration at place, and took on board lessons from the evolution of the UK's Public Private Partnership model.

We invite you to read our key findings here and continue to engage with the INZ team about how we take these recommendations forward for New Zealand.



London Skyline
City of London, England

Thank you to our 2024 UK Delegates and Hosts

Thank you to our delegates who committed significant time and resources to accompanying our team to London, Manchester and Cardiff.

These insights and recommendations for the future of New Zealand's local and central government relationship, and water service provision are not only a reflection of the input from the speakers and sponsors, but the delegates themselves who brought the full weight of their experience to bear in discussions about lessons learnt from each session. The group has directly contributed to this overview of the trip and will be part of a community of delegation alumni committed to taking these recommendations forward in the months and years to come.

Delegates:

Darrin Apanui, Rangitāne Tū Mai Rā Group CEO and Chair of the Wellington Regional Leadership Committee, Rangitāne Tū Mai Rā Group/Wellington Regional Leadership Committee

Campbell Barry, Mayor, Hutt City Council

Vanessa Blakelock, Partnership Director, Local Government Branch, Department of Internal Affairs

Anna Bridgman, Operations Lead, Water, Stantec

Fiona Carrick, Chief Executive, Te Waka – Waikato Regional Economic Development Ltd

Waid Crockett, Chief Executive, Palmerston North City Council

Matt Greer, Lead Political Adviser, British High Commission

Marty Greenfell, Chief Executive, Tauranga City Council

Angela Harford, Partner, Bell Gully

Tonia Haskell, Chief Executive, Wellington Water Limited

Rupert Hodson, Northern Regional Manager, Beca

Campbell Jensen, Head of Public Sector Advisory, RCP

Christine Jones, General Manager Strategy, Growth & Governance, Tauranga City Council

Nick Leggett, Chief Executive, Infrastructure New Zealand

Ken Macdonald, Sector Director – Water, Tonkin + Taylor

Ceinwen McNeil, Director, Central and Local Government, Aurecon

Linda Meade, Director, Kalimena

Martina Moroney, Advocacy and Strategy Lead, Infrastructure New Zealand

Issy Pasley, Events and Marketing Lead, Infrastructure New Zealand

Bevan Peachey, Partner, Russell McVeagh

Daran Ponter, Chair, Greater Wellington Regional Council

David Simpson, Executive General Manager – Regional Infrastructure, HEB Construction

Sarah Sinclair, Chair and Partner, MinterEllisonRuddWatts

Mike Theelen, Chief Executive, Queenstown Lakes District Council

Nigel Tutt, Chief Executive, Priority One Western Bay of Plenty Inc

Megan Tyler, Director Policy, Planning and Governance, Auckland Council

Andrew Wang, Deputy CEO, ICBC NZ

Greg Wise, Partner, Chapman Tripp

Sean Wynne, Deputy Chief Executive, Crown Infrastructure Partners Limited

Pre-Delegation Dinner	ICBC New Zealand	ICBC 
Day One - London	RPS Group/TetraTech	
Day Two - London	HEB Construction	
Day Three - Manchester	GHD	
Day Four - Manchester	Arup	ARUP
Day Five - Cardiff	Stantec	



Lessons from England and Wales for New Zealand

Key Findings

The UK's commitment to devolution, water regulation, funding and service provision and major project delivery have in common a commitment to long-term vision and have been driven by bold political leadership at multiple levels.

The UK's devolution deals offer up an example of how deep partnership, long-term investment horizons and improved capability for local government to be a real partner for central government can shift the dial on growth for regions. New Zealand must commit to rebalancing the local and central government relationship and to engaging deeply with iwi, civil society and the private sector to drive improved outcomes as it considers the future for regional deals.

England and Wales' experience with water regulation, funding and combined sewer overflows demonstrates the value of designing for the tensions inherent to regulation from the beginning. As New Zealand develops economic and environmental water quality regulation in the coming years, and as councils consider the future of their entity or shared services models, the insights we have gleaned from the discussions with water sector leaders will be invaluable. The Dŵr Cymru Welsh Water model provides a reference point for councils in New Zealand as they grapple with the next stage of water reform.

Devolution Deals in the UK

The UK has recognised that strong political leadership, long-term certainty, flexibility and devolution of activities to local government are key drivers of a region's success. Lagging productivity and regional disparities have driven a conversation about devolution which has led to 64% of the UK being part of a City, Region or Town deal.

The form and function of agencies leading devolution have changed as governments have. Regional development agencies, initially a board-led business model, were replaced by regional governments, such as the Greater London Authority and Greater Manchester Combined Authority, which brought together multiple authorities. The current structures present a menu of devolution options – City, Region and Town Deals. These are long-term agreements between councils or a combined authority and central government which devolve responsibilities to local government, are accompanied by significant funding and are able to evolve and change over time. They have been used as a vehicle for regional coordination at the council level.

Successful deals have had additionality at their heart and brought local and central government alongside the private sector and civil society. The question should be: 'What will a regional deal bring to economic growth and progress, that wouldn't otherwise happen?' This must be defined by central and local government together, not merely local government and it must be at the core of the deal.

Across the UK, combined authorities and partnership arrangements have taken control of education budgets, evergreen investment funds and transport authority powers, among others. Growth functions have been taken seriously and the alignment for administrative borders for public service at place has been a focus of many deals. Local authorities have driven deal negotiations based on the principles of local consent and flexibility, with local priorities front and centre in deal negotiation.

Thirty-year funds have also been a key feature of deals' success. Alongside incentives for growth, regions are able to borrow against the funds to make strategic investments over time. A Single Settlement basis for deals is now being trialled, moving away from individual central government agency chief executives being accountable to Parliament for individual funding allocations. Activity-based capital funds are now moving to a single fund with further devolution of priorities and flexibility to transfer between focus areas. It is being trialled first in Greater Manchester and the West Midlands. Future deals will also include greater scrutiny protocols and stricter criteria, with five-yearly gateway reviews.

Alongside the funds, new funding and financing tools for local governments have played a central role. The retention of business rates has allowed regions to benefit directly from the growth that their investments support.

Whether a City, Region or Town Deal, having a functional economic area is critical, as is understanding what powers are needed to give effect to the deal. Post-industrial place-based regeneration is a key driver of the narratives that drove the unique rationale for many of the agreements. Regions partner with the private sector and civil society actors – including universities, to invest strategically and deliver at place.

This ability to catalyse the private sector to contribute to strategic infrastructure investment decision making also came through in discussions about the delivery of the Elizabeth Line. Market support was essential, with business support from London, private funding for stations, and a business rate supplement introduced by the mayor to fund the project. Businesses across London advocated for a business levy because they saw the value of the investment.

Behind the negotiation of the deals and their successful stewardship post-settlement, a key theme that came through in our time in the UK was the need for strong political and official level leadership. Directly elected mayors in regions with combined authority and other devolved governance models are key players and have the ability to advocate for their regions at the national level. Over time, greater resourcing for administering authorities and partnerships have attracted candidates with greater capability which has improved regions' ability to partner effectively with central government.

In future, we can expect diminishing returns for additional deals – areas with smaller populations and less opportunity for additional economic gain will not generate as much benefit as previous deals. Not every region needs a deal. The unique rationale for negotiation for each region should be data led.



The Greater Manchester City Deal

The Greater Manchester City Deal is widely considered the gold standard for UK devolution deals.

Its success is built on a long history of working together across all 10 districts, and beyond. It was one of only a few city regions across England to take up the option under the Local Government Act 1985 to form the Association of Greater Manchester Authorities, with the leaders of the 10 constituent district councils meeting regularly to develop county-wide policies and services including water, transport, police, fire and civil defence. It is this history of collaboration and shared service delivery that laid the groundwork for establishment of the Greater Manchester Combined Authority (GMCA) in 2011, and the seven City Region Deals that have followed.

The Greater Manchester Deal includes an earn-back mechanism which allows the region to retain a portion of the additional tax revenues generated from economic growth and investment in the region.

The key benefits of the deal have included a resurgence in population growth, property investment and international interest. The scale of the combined authority and the strength of its mayor's reputation has attracted inward investment into the region.

The new Single Settlement funding model is an important next step for the region. It raises the status of the GMCA to that of a government department. The aim is for it to be the default mechanism for both capital and revenue, over a multi-year period. Accountability will be against a new Outcomes Framework. The next stage of the deal evolution will be game changing, including land value capture, integrated transport ticketing, data access, co-branding, a strategic view of the region's railways, harmonised enforcement powers, and the single settlement funding. It will also offer flexibility between capital expenditure and operational expenditure. Regular reviews of Local Transport Plans enable re-baselining and renegotiation of priorities and funding with central government.

Cardiff Capital Region

Our time in Cardiff presented us with another model for regional partnership in the Cardiff Capital Region (CCR).

CCR is a collective of 10 local authorities in South East Wales, a structure that came about in response to region's City Deal. Since formation, the partnership has moved from a collective of councils into a legal governance model for the region. The region doesn't have an overarching combined authority model like we saw in Manchester. The CCR approach represents more of a regional partnership between local authorities who have come together to deliver on the key priority areas included in their City Deal.

They aim to improve prosperity across the 10 local authorities, which are economically disparate and have differing intervention needs. The partnership has a real focus on equity, community wellbeing and distribution of the economic uplift created by the City Deal. The approach to economic wellbeing is more inclusive, future-focused and multi-faceted than we observed in the English models.

The City Deal provided CCR with a substantial amount of funding, of around £1.2 billion. It has used this to fund investment towards key strategic goals and in opportunities to regenerate areas with significant uplift opportunity but it has also ring fenced a significant amount for large strategic investments, with the intention that this fund is evergreen.

The partnership is focused on wellbeing outcomes and an integrated approach to achieving net-zero emissions which informs its investment strategy. During our time in the UK, a focus on climate change and emissions reduction was clearly an integrated part of decision making at the highest levels.

The remit of CCR has recently expanded to include spatial planning and transport infrastructure, which would draw parallels to the devolution seen in other regions of the UK.

Adapting Devolution Deals to the New Zealand Context

The combined authority model of the Manchester City Deal, despite its success, is unlikely to work in the New Zealand context in the same way.

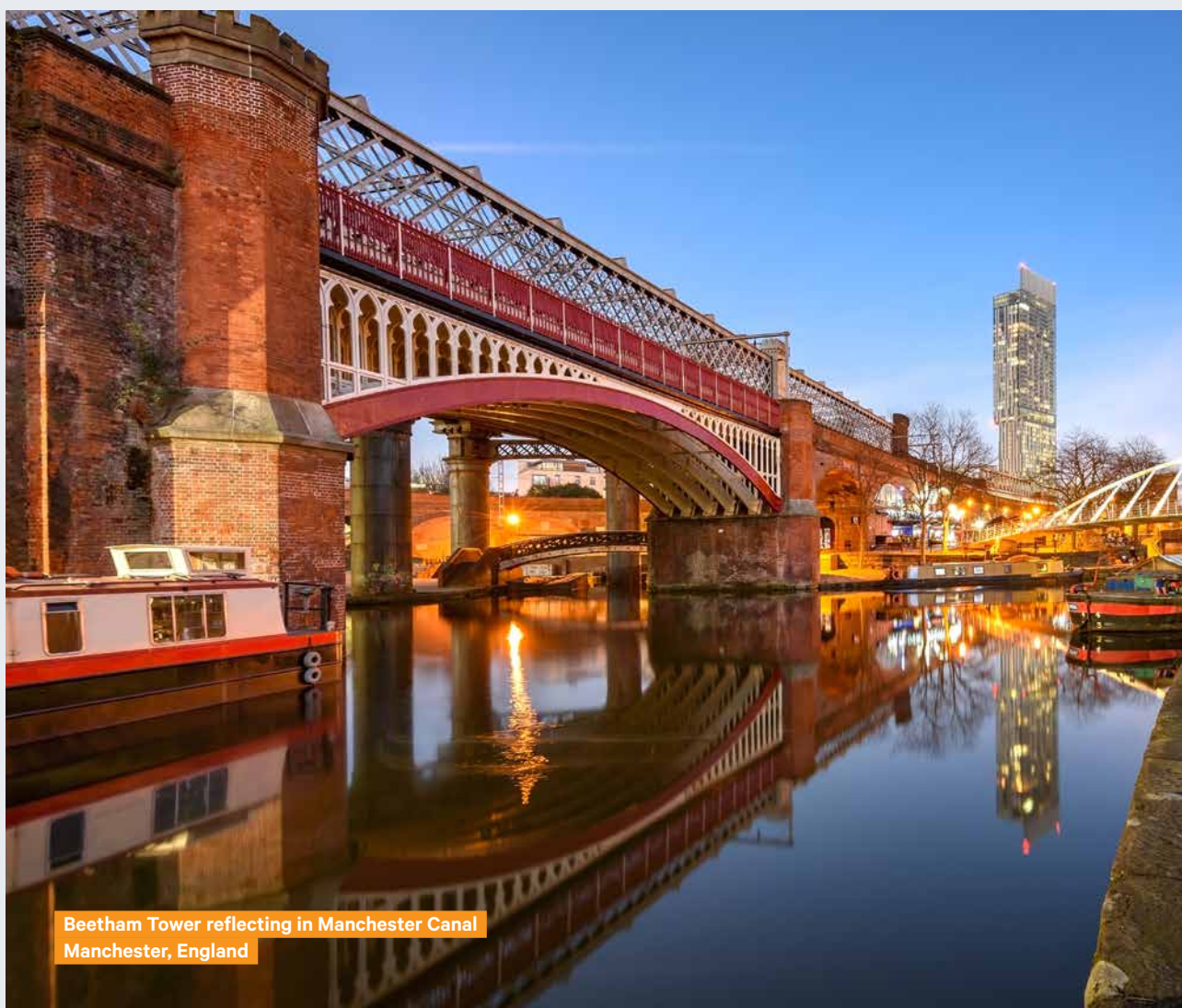
The UK's history of devolution and previous lack of directly elected mayors sets a different scene from where we're starting from in Aotearoa. Adapting the UK's devolution strategies to the local context will be important.

The ongoing discussions about reorganisation and shared services models, especially considering changes in water services present an opportunity to have a productive conversation about the right structure for each region. Presenting a cohesive plan to the government and being willing to look at themselves first is going to put councils in the best possible position for true devolution.

The UK has recognised the need to right-size devolution. Alongside city and regional deals, Town Deals have focused on funding for revitalisation plans for smaller areas. Towns bid for central government funding and crowd in private sector investment. A Town Deal Board includes representatives from across the public, private and voluntary sectors to develop locally led Town Investment Plans.

Value capture, congestion charging and road pricing are important tools that will play an important role alongside strategic investments in land to capitalise on infrastructure development, as part of city and regional deal development. Application of the earn-back mechanism included in the Manchester deal has faced difficulties.

Our discussion about the purpose of deals often focused on a job creation narrative, with a strong focus on asking what each region is really good at before shaping the narrative around the unique selling point for devolution to central government.



Beetham Tower reflecting in Manchester Canal
Manchester, England

Key insights and recommendations for New Zealand:

- **Focus on the principle of additionality** – The focus must always be on: ‘What will a regional deal bring to economic growth and progress that wouldn’t otherwise happen?’ This must be defined by central and local government together, not merely local government and it must be at the core of the deal.
- **Deals must traverse electoral cycles and enjoy bipartisan support** – The ability of a regional deal to live and progress beyond political cycles will be the initial primary test of their success. Deals must become a new way for government to deliver growth, better public services and improved economic and social outcomes for communities in every part of the nation.
- **A 30-year fund** is an important component of many city and regional deals. If central government funding is constrained in the current fiscal environment, consolidation of existing capital funds should be considered to provide greater certainty and less contestability between regions. A Single Settlement approach, which includes flexibility over the priorities within funds, and long-term accountability and reporting horizons can be extended over time to authorities that demonstrated capability.
- **Strong political leadership** at both central and local government, alongside a long-term vision for the region are key success factors in the UK. Deals should be negotiated with local priorities front and centre. Local government needs to come to the table with a clear idea of the opportunities for growth and a clear and data-driven rationale for how they will achieve this, but central government must meet them in the middle to define a vision for the area together.
- **The private sector and civil society** including institutions like universities should be at the decision-making table. In the New Zealand context, iwi should have a substantial role to play. Long-term investment horizons and a commitment to local, place-based delivery are a shared benefit of iwi involvement and the structure of successful devolution initiatives. Place-based regeneration works best when a cross-section of major players are at the table.
- **Structure is important, but it should follow function and New Zealand needs to be flexible in its approach.** Though well popularised, the combined authority model is not a one-size-fits-all option and may not suit the New Zealand context. The Cardiff Capital Region model presents a way for councils to come together to facilitate long-term strategic investment at a regional level.
- **Not every region needs a deal.** There are diminishing returns for some later deals. Areas with smaller populations and less opportunity for additional economic gain will not generate as much benefit as previous deals. The rationale for each agreement should be data led and additionality focused.
- **Private sector support is essential** for major project delivery as well as place-based regeneration.

Water Regulation, Funding and Models for Water Services Provision in the UK

Water Companies in England

The United Kingdom's water company and regulatory settings have their genesis in Margaret Thatcher's 1989 privatisation of England's water supply.

The English model developed to encompass 16 regional entities (11 drinking water and wastewater and 5 drinking water only) companies of varying size. Driven by increasingly stringent European Union regulation and historical underinvestment, privatisation was a response to a sizeable need for investment in the water and sewerage networks. Performance of the water companies has improved since the early 1990s.

The companies act largely as monopolies within their catchments, with competition limited to new appointments and variations, water supply licensing and business retail customers and new major infrastructure. They are either listed or privately owned. The water companies are on the front line of water quality issues for the UK public; while there may be numerous reasons for poor water quality, they bear the brunt of the feedback. One key issue is the legacy of Victorian era combined sewer and stormwater systems.

More widely, the UK water sector has seen mirrored issues across different regions, characterised by significant investment and heightened public interest. A massive investment programme underscores the importance placed on upgrading and maintaining water infrastructure. Despite these investments, there is a recognised lack of future skills in the sector. To address this, there is a push to engage individuals earlier in their careers, focusing on those with critical thinking abilities necessary for long-term water management projects. The focus for future investment are water supply and combined sewer overflows (CSOs) discharging contamination during storm events.

Privatisation is not the answer for New Zealand, but we have a big programme of investment in front of us and can learn significant lessons (about what to and what not to do) from the English and Welsh experiences.

Wales

Dŵr Cymru Welsh Water is a profit reinvestment focused company providing drinking water and wastewater services to around 1.4 million households and businesses throughout Wales and parts of western England bordering Wales.

It is 'a single purpose company to provide better value services to Welsh Water's customers'. Legally, it is a 'Wholly Owned Mainly in Wales' company – meaning that Welsh law applies even to its operations in England. It is financed in private capital markets, through an asset-backed financing structure, with no government support. Most of its revenues come from the wastewater/sewerage part of the business. It provides an estimated £1 billion a year contribution to the Welsh economy.

Although it is a privatised company, Dŵr Cymru has no shareholders and pays no dividends – all profits are reinvested in the assets and operations of the company. The company takes a long-term view of investment and financing on the basis that intergenerational assets should be paid for across generations, through long-term borrowing. The biggest challenge in moving from a for-profit, shareholder model to the current not-for-profit model was a regulatory one. The Welsh Government played a key role in supporting the creation of DCWW.

Through careful fiscal management and creation of a 'virtuous circle' of profit reinvestment, the company has managed to invest in assets, improve services, keep customer bill increases to around inflation, reduce its level of indebtedness, and improve its credit rating thereby reducing the cost of borrowing.

The company is among the best performing of the privatised water companies in England and Wales.

Regulation

The UK's regulatory system is a patchwork of regulatory bodies and rules. Ofwat is the independent economic regulator of the water and sewerage sectors in England and Wales. Its main statutory duties are to protect consumers, enable efficient, well-run companies to carry out and finance their functions and ensure long-term resilience. It is funded by licence fees from the water companies with additional government funding to drive transformation in company performance and address long-term infrastructure delivery.



The Department for Environment, Food, and Rural Affairs sets out the Strategic Policy Statement which the companies take into account when they develop their business plans. Ofwat's work then intersects with the Environment Agency's focus on water quality, and an unavoidable tension exists between customer expectations, economic regulation and environmental imperatives. On the one hand, environmental regulators are telling water companies to invest more to reduce overflows and protect the environment, on the other hand, they are constrained by Ofwat, which sets the prices they can charge customers.

Cross-boundary investment in assets that serve more than one regional company is also needed. With forward investment constrained by five-year asset management plan periods, and the sector facing public perception, workforce constraints and population growth challenges. One of the key benefits of Ofwat has been its ability to take a national view instead of a regional or company-based perspective in strategic planning.

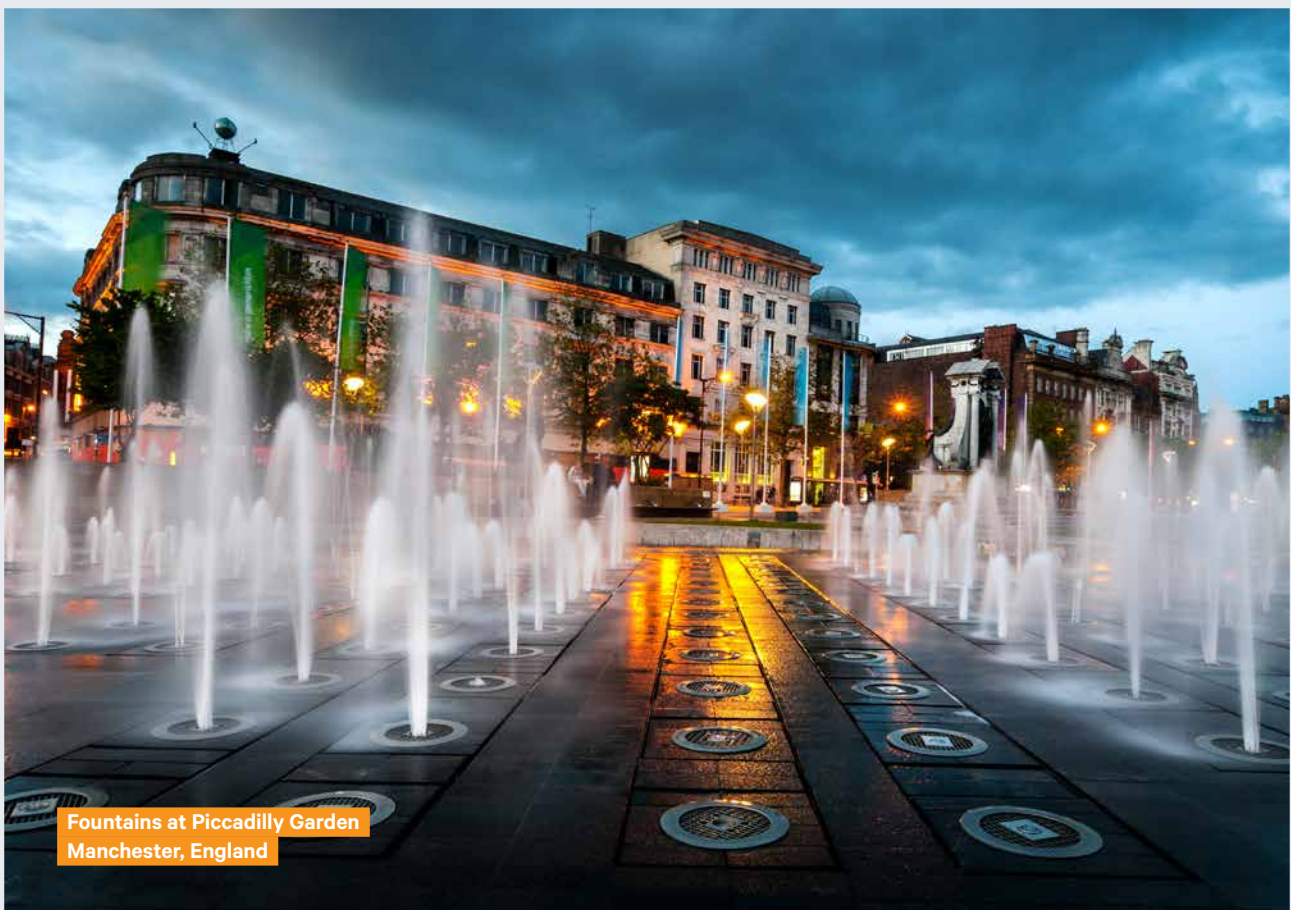
The regulator and the sector have tools to address their prominent issues. The regulator has moved away from output-oriented regulation to an outcome focus, and benchmarking companies against each other has also improved standards across the sector. Investment in digital technologies and quality data has also improved their ability to predict spills and to finding and prioritising effective solutions across the UK. English water companies have been able to better understand the size of spills and their receiving environments, and environmental degradation over time. Investment in data capability and tools has allowed many water companies to soften levels of investment required by better utilising existing assets and improving their ability to predict maintenance and spill mitigation needs. Common open data standards have enabled repeatability, and the ability to understand and compare performance and effectiveness of interventions over time. An Ofwat innovation fund has supported this data standard development work.

Digital technologies are not the only innovative approach being deployed to manage stormwater and wastewater challenges in the UK. Nature-based solutions are increasingly being adopted. This not only benefits water flow management but also provides advantages to local communities by enhancing biodiversity and recreational spaces.

Key insights and recommendations for New Zealand:

As New Zealand establishes economic and drinking water regulatory bodies, there is much we can learn from the UK's experience.

- OfWat is able to take a national view, rather than a regional or company-based focus. Strategic long-term planning has been one of the key benefits of OfWat's role. It also benefits from being a specialised regulator. It is worth questioning in the New Zealand context whether a more general economic regulator is best placed to deal with the technical detail of water quality and consumer value outcomes.
- There will need to be clarity of roles between an economic regulator and Taumata Arowai for drinking water and the Ministry for the Environment and regional councils for environmental water quality. Designing the regulatory environment for conflicting outcomes at the outset will be the key to its success.
- OfWat has benefited from a move away from output to outcome-based regulation, and benchmarking companies against each other has improved standards across the industry. Outcome-based regulation must be met with adequate accountability and oversight.
- Investment in digital technologies and stewardship of open data standards has improved benchmarking, investment management and water quality assessment. Nature-based solutions have co-benefits and are increasingly being used.
- Dŵr Cymru Welsh Water provides a model for councils in New Zealand to consider as they grapple with the next phase of water reform.



Fountains at Piccadilly Garden
Manchester, England

Place Based Solutions

Delegation Session Summaries

Below is a summary of each session across the five days of the delegation, with quotes from delegates about the key lessons and insights they took away from each discussion.

Pre-Delegation Dinner

Hosted by ICBC 

Before delegates left for the UK, we were pleased to be generously hosted by ICBC New Zealand at Shed 5 in Wellington. Thank you to ICBC for hosting us.



Day One 17 June – London

Hosted by  MAKING
COMPLEX
EASY

Overview

Day one of the delegation highlighted the UK's experience with water service delivery, focusing on the regulatory system evolution and Ofwat's intent to view regulation nationally rather than regionally. The UK's privatisation of water services under Thatcher's economic reforms created a complex regulatory landscape.

Key Observation

Tension exists between customer expectations, economic regulation, and environmental imperatives and given this tension is unavoidable, there is a need to manage it in a healthy way. Water UK's presentation demonstrates the importance of a strong industry body to act as a unifying voice, convening a range of interests and viewpoints to work constructively with the regulators to overcome some of the 'messy' rules that are in place.

Matt Greer, Lead Political Adviser, British High Commission

Despite fundamental differences between the UK's privatised model and New Zealand's public ownership, common issues like investment needs, maintenance bills and talent shortages persist.

The cultural approach to water regulation differs significantly, with the UK viewing water as a resource, whereas New Zealand considers its cultural value and importance. The case for a specialised regulator in New Zealand would need careful framing, drawing lessons from the UK but tailored to local perspectives.

OfWat – From the Regulator: Overview of Water Services Provision and Regulation in the UK

The UK and New Zealand share similar challenges in water services, such as looming water shortages, climate change impacts, wastewater overflows, high public interest, customer affordability and significant investment needs.

Eleven of the water companies in England handle both drinking water and wastewater, while five focus solely on drinking water. Thames Water is the largest of these entities, generating an annual revenue of £2.2 billion and serving 16 million customers. In comparison, Portsmouth Water, which only provides drinking water, has an annual revenue of £40 million and serves approximately 700,000 customers.

Ofwat, the independent economic regulator for the water and sewerage sectors in England and Wales, has key statutory duties that include protecting consumers, enabling efficient and well-run companies to perform and finance their functions, and ensuring long-term resilience. Ofwat operates within the framework of published government policies, including specific social and environmental guidance.

The funding for Ofwat comes from licence fees paid by water companies, along with additional government funding aimed at driving performance transformation within companies and addressing long-term infrastructure delivery.

Their regulatory approach has shifted to an outcome-based model, outlining clear expectations of what constitutes good performance. There is an increased focus on payment by results with delivery being rewarded and returns reduced for non-performance.

RAPID, an initiative set up by Ofwat, the Environment Agency and the Drinking Water Inspectorate, aims to facilitate cross-regulatory collaboration on the development of strategic water supply infrastructure projects. RAPID seeks to establish an enduring regulatory framework for these projects, ensuring their long-term success and sustainability.

Key lessons for New Zealand from our session with the regulator include:

- Understanding (and short circuiting) the evolution of the regulatory system – there is a strong move away from output-based to outcome-based regulation
- The value of a national view rather than a regional ‘hyperfocus’
- There will need to be clarity of roles between an economic regulator and with Taumata Arowai for drinking water, and the Ministry for the Environment and regional councils for environmental water quality
- We need to ask whether we need a specialised regulator. If yes – how do we fund it, and how is this framed for the public?
- Tension between customer expectations, the economic regulator and the environmental agency – we will need to design for conflicting expectations at the outset with the objective of managing tension in a healthy way
- Community narrative/engagement is prioritised by the industry body and reduces the dependence on government to create policy
- How do we create incentives and disincentives for publicly held companies? Fines effectively result in less money available for investment. Ofwat considers the Welsh model (private not-for-profit) ‘best of a bad bunch’
- We need to ensure our regulators think about the shared global talent constraints

Tonia Haskell, Chief Executive, Wellington Water

Water UK – From the Trade Association: Overview of Water Provision, Privatisation and Regulator Relationship in the UK

Water UK has represented the water industry since 1998 and met with the delegation to provide insights into the challenges facing the UK water sector.

The UK water industry has a complicated structure and the different parts do not always align. The Department for Environment, Food & Rural Affairs sets out the Strategic Policy Statement. Then, the 11 water and wastewater companies, and five water-only companies, take it into account when they develop their business plans. The water companies are on the front line of water quality issues for the UK public; while there may be numerous reasons for poor water quality, they bear the brunt of the feedback. Their key focus areas for future investment are water supply and combined sewer overflows (CSOs) discharging contamination during storm events.

The industry is changing—we arrived before their election in July, delaying the water regulator’s publication of the draft determinations until later that month. It was expected that these would support a significant increase in investment, almost doubling the spend from Price Review 2019, predominantly to eliminate CSOs and address future water supply challenges. It is likely that there will also be further changes in policy after the election.

One recent success shared was the publication of the National Storm Overflows Hub, an online map combining regional maps of overflows across the UK. All overflows are now monitored and the data can be loaded onto the map within an hour of an overflow occurring, including an explanation of the cause. This initiative is part of water companies’ commitment to the public as they strive to change the narrative for the better.

One of the expected aims of the draft determinations is to remove the 150,000 annual sewage spills by 2030. The water companies have put forward a £10 billion proposal to fund these improvements, including nature-based solutions and modernising the networks.

Like New Zealand, the UK is facing a workforce capacity and capability challenge. It has an ageing workforce—almost 20% of engineers are set to retire by 2026.

Key Observation

We heard that the water companies need certainty from the government. They need OfWat to approve their business plans for significant investment in the assets, supporting the schemes set out.

Companies also need the government to change policies to reduce the likelihood of future spills – for example, new developments’ automatic right to connect to the networks whether there is capacity or not. The water industry needs clarity over the pipeline of work and will know more following the publication of the draft determinations.

Anna Bridgman, New Zealand Operations Leader – Water, Stantec

RPS / TetraTech: Pollution and Geographical Differences

RPS/TetraTech's presentation focused on the value of data and common open standards in the water industry. Quality data assists in understanding the root causes of issues across the sector, supporting the development of evidence based solutions, predicting future events, and informing policy and regulation.

Examples include using data to understand combined sewerage overflow impacts, forecast spills, prioritise opportunities, and trend analysis for proactive maintenance. Common open data standards facilitate industry efficiencies, collaboration, benchmarking, and consistency.

Common open data were also a focus of the presentation. Standards are documented, reusable agreements designed to help individuals and organisations publish, access, share, and use higher quality data. These standards are developed to agree on common models or a common language, ensuring consistent information sharing.

Some industry stakeholders expressed concern that open data standards might lead to a loss of control over data and commercial intellectual property. However, these standards should be viewed as tools that facilitate benchmarking, consistency, and efficient information sharing for multiple purposes.

Key Observation

Projects like 'Stream,' funded by Ofwat, aim to deliver open data infrastructure that will allow data users to search, understand and access open and shared data, and allow providers to publish data openly and share sensitive data securely. The vision is to unlock the potential of water data to benefit customers, society and the environment, and to use data to address key water sector challenges. Being able to collaborate around data is seen as a key ingredient to drive innovation and improve sector performance.

Christine Jones, General Manager Strategy and Growth, Tauranga City Council

By adopting common open data standards, collaboration across all parties, including competitors, is enhanced. These standards enable repeatability and provide the ability to understand and compare the performance and effectiveness of interventions over time.



RPS / TetraTech: Geographical Differences, Leakage and Thames Water

The UK's approach follows a 'monitor, analyse, predict, prevent' methodology, emphasising the importance of extracting data, removing noise, and translating it into useful information for decision making.

Mandatory leakage targets were set in 1997, followed by best practice development for setting economic levels of leakage targets. Legislation passed in 2020 aims to reduce leakage by 50% by 2050, with targets set per population or per pipe kilometre. Sustainable methodologies include carbon, social and environmental practices, with performance commitments made by water companies and geographical comparisons published.

Adaptive plans provide visibility and accountability for long-term strategies, including short-medium term planning and long-term pathways. Plans should include developing Plan B scenarios and identifying review triggers years out. Acknowledging uncertainties and external factors requires numerous scenarios to resolve problems, and cost-benefit analyses on leakage management versus new infrastructure are essential.

Key Observation

Pressure management of water is an effective tool to reduce leakage. Managing the media, public relations and perception of low water pressure is also key to maintaining the support of the community.

Networks using GIS and hydraulic model analysis, supported by pressure release valves and logging points enable specific geographical management of pressure in the system.

Marty Grenfell, Chief Executive, Tauranga City Council



Site Visit: The Doppelmayr Dangleway

The London cable car, also known as the Dangleway, and officially as the IFS Cloud Cable Car, is the cable car link across the River Thames in London. Delivered in time for the Olympics, the line was built by Doppelmayr and cost around £60 million.

The cable car is based on monocable detachable gondola technology, a system that uses a single cable for both propulsion and support and is also used on the Metrocable in Medellín, Colombia.

The line is considered an extension of the tube and is operated by Transport for London. Opened in 2012, the cable car has achieved a 99% reliability rating and can carry a maximum of 2500 passengers per hour in each direction. With 34 cabins on the line, the line can reach a maximum speed of 6 metres per second and has carried 17 million passengers since its opening.

Key Observation

The main takeaway from the session was the value of an event like the Olympics in galvanising delivery and aligning incentives across the supply chain to deliver on time.

*Martina Moroney, Advocacy and Strategy Lead,
Infrastructure New Zealand*

Dinner with High Commissioner of New Zealand to the United Kingdom, the Honourable Phil Goff CNZM

We were privileged to be joined by the Honourable Phil Goff, High Commissioner of New Zealand to the United Kingdom, for dinner at the end of the first night of our programme. Thank you to the High Commissioner for joining us, and for kindly agreeing to provide the foreword for this report.

Day Two 18 June – London



Department for Levelling Up, Housing and Communities – Administering City and Regional Deals: A View from the Centre

Devolution has been discussed in the UK for many decades, with varying acceptance. The form and function of agencies leading devolution have changed as governments have. Regional development agencies, initially a board-led business model, were replaced by regional governments, such as the Greater London Authority and Greater Manchester, which brought together multiple authorities.

Recent research links centralisation with a lack of regional productivity, suggesting that devolution is designed to concentrate public services where they are needed and grow productivity. Agendas and structures of the deals model are designed to endure and are built on footprints that communities identify with, such as travel-to-work areas. A mayoral combined authority, led by a single directly accountable leader (the mayor), serves as an advocate for the region at the central government level, accountable to both the authority and the public.

The deals model is based on local consent and flexibility and reflects local priorities. It requires local buy-in and is driven from local government. Deals are concentrated in the East of England and reflect a focus on the economic drivers of growth. They include areas like housing, planning and education. City and metro mayors have taken control of education budgets and transport authority powers, and have established growth hubs in many areas.

Thirty-year funds – against which authorities can borrow – have been key. This has allowed for investment in key infrastructure. Devolution also exists in the form of incentives for local authorities, including the retention of business rates.

Key Observation

There is about 64% national coverage of deals. The later deals are more difficult and have complicated governance arrangements. Deals can change and mature over time and can be revisited.

A Single Settlement basis for deals is now being trialled, moving away from individual central government agency chief executives being accountable to Parliament for individual funding allocations. This is thought to be a game changer combined with a move to looking at central government outcomes. It is being trialled first in Greater Manchester and West Midlands. Future deals will also include greater scrutiny protocols and stricter criteria, with five-yearly gateway reviews.

*Vanessa Blakelock, Partnerships Director,
Department of Internal Affairs*

Future issues highlighted include local government resourcing, rising service costs for activities like children's services and adult social care, and the potential need for local government reform to deliver services effectively and ensure capacity for deals. The regional government layer may need constitutional inclusion to complete the funding picture, requiring a high degree of consensus. Diminishing returns are expected as deals roll out in less populated areas with less expected additional economic gain. Central government agencies have different drivers, with some focusing on universal coverage and national issues, while others take place-based approaches considering value for money and local implementation.

CrossRail International and Transport for London – the Elizabeth Line and the CrossRail Project

The Elizabeth Line is a transformative infrastructure project that has significantly enhanced London's transportation network. With improved connectivity, reduced congestion and boosted economic growth, the project stands as a testament to effective planning, funding and execution – although it had its challenges.

The conceptualisation of the Elizabeth Line dates back to 1989, aiming to connect existing railways and enhance transport links, including a crucial segment to Heathrow Airport. Despite the long-standing vision, the project faced numerous delays due to economic recessions and political changes. Initial efforts focused on safeguarding land and securing necessary building foundations, setting the stage for future development.

The Crossrail Act of 2008 granted the necessary powers for construction, environmental compliance, land acquisition and operational frameworks. Initially projected at £14.8 billion, the final cost reached £18.6 billion. The funding model combined local and central government contributions, with significant investment from taxpayers and a business rate supplement. Notably, the taxpayer contribution rose from £4.8 billion to £5.1 billion, and additional funding was secured from property development above stations.

A key financial strategy for the Elizabeth Line was the implementation of value capture mechanisms and development agreements related to station areas. Property development above stations contributed significantly to the project's funding.

Enabling works commenced in 2009. The tunnelling phase, a critical component, employed 12 tunnel boring machines, maintaining a remarkable safety record (with one unfortunate fatality). The transition to the operational phase faced challenges, particularly with signalling and commissioning new, complex hybrid trains.

Key Observation

Extensive trials and rehearsals preceded the official opening of the Elizabeth Line. Overall performance has been strong, with around 700,000 passengers daily and a 90% performance rate. This meticulous approach to testing ensured a smooth transition to full operation, minimising disruptions and maximising reliability.

Greg Wise, Partner, Chapman Tripp

The project has produced wider benefits and has prioritised environmental considerations. Constructed wetlands were developed as a beneficial use of land, and the carbon payback period is estimated at between 9 and 13 years.

Lessons Learnt:

The Elizabeth Line project offers several key lessons for future infrastructure projects:

- 1. Maintain a Consistent, Coherent Vision:** A clear and unified vision guided the project from inception to completion, ensuring alignment and focus.
- 2. Focus on Safety and Reliability:** Prioritising safety resulted in a strong safety record, and reliability ensured public confidence and operational success.
- 3. Learn from Best Practices:** Leveraging lessons from similar projects globally helped implement effective strategies and avoid common pitfalls.
- 4. Assemble the Right Team:** The project benefited from a team with the right expertise, ensuring each phase was managed by professionals with relevant skills.
- 5. Engage Stakeholders:** Ensuring that all stakeholders had a vested interest in the project's success fostered collaboration and support throughout the project's life cycle.
- 6. Thorough Commissioning Processes:** Practising commissioning processes thoroughly before going live helped identify and address potential issues, ensuring a smooth transition to operation.
- 7. Operations-Led Integration:** Ensuring that operational considerations led the integration phase helped create a seamless and efficient service.

Vinci Highways UK – Hounslow Highways Road Maintenance Partnership

Hounslow Highways is a Local Roads PPP in the London Borough of Hounslow, which comprises a 25-year contract with Vinci Highways. The contract covers all assets within the road corridor, including pavements, vegetation, street lights, and drainage, with a £100 million investment in the first five years to bring assets up to an acceptable standard. The model relies heavily on good data and strong asset management to ensure appropriate maintenance levels and deliver optimal whole-of-life costs.

The contract funding is provided in a City Deal-like arrangement, with £19.9 million per annum from Transport for London and the London Borough of Hounslow. This is paid to a Special Purpose Vehicle (SPV) consisting of Vinci Highways and 3i Infrastructure, which in turn has an operating contract with Ringway branded as 'Hounslow Highways' to deliver all aspects of the contract scope.

Benefits of this model include the ability to front-load investment in infrastructure upgrades, a single point of management for all road corridor issues, long-term certainty allowing for investment in capability, technology and innovation, and developing long-term relationships with the community for strong engagement and input. The model incentivises the Concessionaire to ensure optimal asset management and investment intervention for best whole-of-life maintenance and operation.



Key Observation

People, politics, community needs, and a number of other factors change over such a long period, so a long term model and relationship is required which allows for:

- Full consideration of the complexity of the contract and the key performance factors which are important to monitor and report on (293 service standards in this case).
- The objectives of the project must align with the wider context within which they sit, which can be complex. A flexible model is needed, with well documented (and used) change processes
- Taking your time to ensure the right people and mechanisms are in place to enable success is key – this project took 3 years of interactive procurement to get finalised.

*David Simpson, Executive General Manager,
HEB Construction*

Learnings from other PPPs highlighted signs of distress which should be watched out for. These included a lack of flexibility, draconian use of pay mechanisms, disagreement on lifecycle funds' use, aggressive payment withholding, misreporting, unclear reporting, overly financial mindsets without clear management, storing issues instead of timely resolution, lack of engagement on recovery plans, relationship breakdowns, and the mental health and motivation impact on individuals exposed to these issues.

Day Three 19 June – Manchester

Hosted by 

Overview

Day three began in Manchester with insights from officials, academics and industry leaders, including the Greater Manchester Combined Authority, Transport for Greater Manchester, Manchester Metropolitan University, and leaders from GHD's infrastructure team. The blend of public, private and academic perspectives provided insights into both the long-term vision enabled by strong leadership and investment strategies used by Greater Manchester partners, as well as the granularity of deals made over the past 12 years.

The Greater Manchester Authority, comprising 10 metropolitan boroughs and led by a directly elected mayor, has responsibilities for economic strategy, transport and law and order, among other areas. The region's collaborative history, economic development focus and investment attraction were highlighted. Prior to the first City Deal in 2012, there was a long history of collaboration and working together to support businesses and communities, and attract investment. This trust and capability building over an extended period is recognised as a strong foundation for the authority and deals. The response to queries about incentives for elected officials to work together was, 'We can't afford to have someone fail', underscoring that the region succeeds when every borough succeeds.

There is a strong focus on economic development and investment attraction, with Manchester serving as a major aviation hub and outbound investment activity. This is complemented by a focus on social investment, emphasising public transport connections, social housing and education.

Investment in infrastructure and place-making was evident in research presented by the Institute of Place Management, focusing on their Business Improvement District (BID) work. This project worked across approximately 150 local authorities, identifying 25 factors influencing long-term vitality and viability of communities. One key takeaway was that communities are often not ambitious enough, and the framework provides a tool for dialogue around what is possible.

Key Observation

It was valuable to hear from a range of stakeholders, and the experiences of Greater Manchester over an extended period of time. There is a level of maturity in the political, executive and private sector that is to be envied. What was most evident was the leadership of not just the current Mayor of Manchester Andy Burnham, but also of past leaders including Sir Richard Leese and the oft quoted late Sir Howard Bernstein.

He talked about 'co-designing' policy and how cities could drive growth. He knew that most of the levers of power were in London and laying even a pinkie finger on them required talking the language of Whitehall. Cooperation was needed, 'rather than spending all our time throwing bombs at each other'.

A timely reminder. A willingness to collaborate, have a long-term vision and calculated risk taking provide a template for motivated regions of Aotearoa to consider what is possible with the current authorising environment."

Key Observation

Manchester has worked hard, consistently and resolutely, for more than 30 years to design, refine and tweak a collaborative governance model that is founded in both alignment of incentives and strong, effective communication. Communication happens at levels:

- Institutional – reporting on policy outcomes, for example
- Official – between leaders, for example
- Informal – more behind the scenes to build relationships

More recently, since the roll-out of Combined Authorities across England, there have been opportunities for these CAs to come together from time to time, to compare notes and share successes. There is for example a "UK Mayors" group for mayoral CAs. Unfortunately, relationships with central government agencies remains patchy. local priorities and central government priorities are not always aligned.

Linda Meade, Director, Kalimena

Greater Manchester City Deal – Greater Manchester Combined Authority

Despite positive changes seen in Manchester over the past 10 to 15 years, the city remains 35% less productive than London, highlighting that much work remains to be done. Closing this gap could generate an economic dividend exceeding £20 billion. Manchester's long history of collaboration across its 10 districts and beyond laid the groundwork for the Greater Manchester Combined Authority (GMCA) established in 2011 and the seven subsequent City Region Deals.

Since 2017, the GMCA has had an elected mayor, Andy Burnham, who takes the lead role on transport and infrastructure, while his appointed deputy, Kate Green, focuses on police, fire and crime. Each leader and CEO in the 10 districts has a portfolio, with a leader from one council and a CEO from another jointly leading a portfolio.

The new Single Settlement funding model raises the status of the GMCA to that of a government department, aiming to be the default mechanism for capital and revenue over a multi-year period. Expected to be approved within the next two years, it will cover five pillars: Local Growth and Place, Housing and Regeneration, Adult Skills, Local Transport and Decarbonisation. Accountability will be against a new Outcomes Framework.

The day after our delegation came to a close, Sir Howard Bernstein passed away. He was a key figure and driver of the success of the deal and is in our thoughts. His legacy lives on in Manchester's growth and prosperity.

Transport for Greater Manchester - Transport Investment, Relationship with GMCA and Bee Network Development

Greater Manchester's transport strategies include the Places for Everyone spatial plan, the Greater Manchester Transport Strategy 2040, and various sub-plans like the bus strategy and Streets for All, alongside five-year delivery plans and 10 local implementation plans. Funding comes from the 10 local authorities that comprise Greater Manchester Combined Authority, central government, bus and Metrolink fare-box, and commercial opportunities.

The proposed Single Settlement deal will bring all central government funds into one pot, offering flexibility between capital expenditure and operational expenditure. Regular reviews of Local Transport Plans enable re-baselining and renegotiation of priorities and funding with central government.

The Bee Network aims to integrate bus, light rail, active transport, and ultimately rail services into one system. Half of the bus services are currently franchised, with continuous expansion of the light rail network. Rail integration is more challenging due to multiple franchised services across the country, with the government considering nationalisation. The programme also includes developing protected cycleways and prioritising cycles at traffic signals.

The Trailblazer Deeper Devolution Deal is expected to be a game changer for Manchester, including land value capture, integrated ticketing, data access, co-branding, a strategic view of the region's railways, harmonised enforcement powers, and the single settlement funding.



Key Observation

We were there the general election was approaching in a few weeks, but there was no significant concern that discussions on devolution will be jeopardised under a new or the same government. This indicates a maturity in the devolution model at both political and official levels.

Similar to water services, there is ongoing discussion about the nationalisation of rail services following their privatisation in the 1990s. Issues under consideration include the complexity of ticketing, high service costs, inadequate plant and equipment, network pinch points, and the lack of electrification across the rail network.

There is a strong understanding of the importance of the transport network in enabling housing and community development. The 10 local authorities have plans for social housing and transport works to ensure an appropriate system is in place.

Currently, over 70% of transport revenue comes from farebox collections, which is unsustainable. Greater Manchester seeks government funding to reduce this percentage, lower prices, and increase services and patronage.

Additionally, Greater Manchester is funding the electric charging network, partly through government grants, and aims to include this funding in the single settlement deal.

Megan Tyler, Director Policy, Planning and Governance, Auckland Council

Simon Light – the UK Infrastructure Challenge

Simon suggested that the three most important themes are making infrastructure projects investible, achieving resilience and improving productivity. There are always trade-offs when making policy and investment decisions, with success depending on getting the balance right between competing objectives and demands.

He spoke about the importance of policy stability to encourage investment and confidence. There is no shortage of money that the private sector can deploy but cities need to convince investors to invest locally. Success also requires a strategy for security and economic performance, not just a focus on housing. For Manchester, that means creating an alternative investment proposition to London or Birmingham. Cities need to take a more sophisticated approach than ‘build and they will come’. They need to demonstrate access to talent and the benefits of an overall strategy and policy settings.

It is essential to set a clear programme for infrastructure projects and to set a timetable that must be achieved. A good example is the new infrastructure for the London 2012 Olympics, which was delivered on time because there was no other option. Other projects like the A303 at Stonehenge and the lower Thames crossing in London have been badly delayed through the planning process.

Key Observation

Simon explained that it is important to frame up projects properly and have the right people in the room for decision making. For example, the HS2 extension was about connectivity and capacity not speed but decisions were made to increase speed at large extra cost.

Bevan Peachey, Partner, Russell McVeagh

He also said that it will be interesting to see what happens under a new government. For example, there might be a major role for GB Energy and the UK infrastructure bank, and a HS2 extension to Manchester may also be on the cards.

Institute of Place Management – Place-Making in Action

The Institute of Place Management (IoPM) plays a leading role in delivering the £8 million High Streets Task Force in England, developed by the Central Government’s Department of Levelling Up. Since 2019, the programme has aimed to build sustainable place-making skills, facilitate national data sharing, and enhance local authority capacity. The presentation provided a national and local Manchester perspective, pre- and post-COVID, on how places need active support to bounce back.

The session highlighted the failure of policy to make change happen in places, including pursuing changes inconsistent with best practices in local development, a lack of task or achievement orientation among leaders, undervaluing relationship-building with businesses and community engagement, and insufficient resources allocated to bring about change.

Key lessons included considering how cities have changed since the 1980s and post-COVID, the planner’s role, and mechanisms influencing change. The vision and strategies for Manchester were discussed, with an emphasis on the ambition for the city and the importance of partnership at all levels.

Key Observation

The role and title of the Greater Manchester mayor has the ability to convene multiple stakeholders together to align driver integrated place-based outcomes supported by community and business leaders. This has been key and there are some important lessons for New Zealand here. Shared aspiration and partnership formed at all levels to help achieve outcomes.

Rupert Hodson, Northern General Manager, Beca

For New Zealand, the discussion raised questions about the prominence and focus on place-making in urban development and urban regeneration and the roles of central and local government. One question that came to mind was whether place-making has the right level of prominence and focus in these constrained times.

There are some good but perhaps limited examples of place-based regeneration in New Zealand – Wynyard Quarter and Hobsonville in Auckland are notable examples. We considered whether the Auckland Council Design Office was a model that could be repurposed for today's context. The session also highlighted the need for mature partnerships between the community, business, business associations, local councils, and political leadership to convene all stakeholders.

Other specific place-making lessons we took away include:

- Think about 'how to be a good ancestor' – adopt a legacy mindset – carry the baton
- Aim for transformative change
- Be people-centred
- Value process
- Look at social value metrics
- Responsibility and the development in partnership



GHD – A Just and Fair Infrastructure Transition

Steve Scott from GHD shared his experience and views on achieving a just and fair infrastructure transition, emphasising the scale of transition needed across all infrastructure sectors to achieve net zero. This transition is more challenging than other sustainability actions, and the need to do it fairly and justly is growing. GHD's Grangemouth Just Transition Plan for the Scottish Government exemplifies this approach.

Steve interpreted just transition as an outcome and process, which embraces multi-disciplinary perspectives and is place-based to ensure that communities benefit. Just transition planning shall centre on co-creation and bringing everyone into a single transparent conversation, underpinned by technical authority and sustainability, but led by evidence insight, collaboration and co-design. He then employed Grangemouth Just Transition Plan for the Scottish Government as an example. GHD used the evidence-led approach to do an industrial cluster analysis, and offered an integrated solution cutting across technology, strategy, public policy, economics and community engagement.

The Grangemouth plan was focussed on transitioning to a more sustainable economy while ensuring fairness for everyone, including those in polluting industries. The plan targeted jobs, skills, economic opportunities, communities and place, people and equity, and environment, biodiversity and adaptation.

Guiding principles for successful delivery of a just transition included systems thinking, iterative co-design, equity and fairness for people, profit and planet. Scott concluded by advocating an applied innovation approach to cultivate an innovative mindset, focusing on community and customer-centric problem-solving, diverse collaboration, curiosity, data-driven decisions, bold and aspirational thinking, and experimenting and iterating.

SSE Energy Solutions

SSE, the largest renewable energy generator in the UK and Ireland, serves over 500,000 business customers across the UK. Its aim is to decarbonise Britain one business at a time, helping businesses grow on the road to net zero. SSE's core businesses include electricity networks, focusing on distributed generation, and renewable generation with assets nearly 4,000MW, including offshore and onshore wind and hydro.

SSE aims to deliver a cheaper, cleaner, and more secure homegrown energy system by decarbonising generation and moving to wind, solar, and battery systems. It focuses on enabling electrification at a local level through distributed generation solutions and maximising cleaner, greener energy for customers, like SSE Airtricity's smart electricity plans and home energy upgrades. These ambitions resonate with New Zealand's focus on transitioning from thermal generation assets to a renewable asset base and ensuring stable energy supply.

Acceleration to net zero is improved through a whole-of-system approach. SSE has a big focus on digital platforms and analytics to support the better use of existing energy infrastructure assets – through smart infrastructure solutions, buildings and platforms. Learning to do more with what we have got is a consistent theme in New Zealand, including through use of digital twins and other digital opportunities.

Maximising renewable energy opportunities includes speeding up grid connections, optimising solar opportunities like floating solar plants on reservoirs, and adopting new digital propositions to adapt to market evolution. Regional collaboration, long-term investments, and public-private partnerships drive positive net zero and economic growth outcomes and impact local communities.

Key Observation

Regional joined-up thinking, long term investments, and collaboration with both the private and public sector drives great outcomes from a net zero and economic growth perspective and also creates positive impacts at a local level:

- Greater Manchester is a great example of the benefits of cross public/private sector joined-up thinking and action. It was the first UK region to produce Local Area Energy plans (which span across the Greater Manchester region), involving collaboration and partnership between the Greater Manchester Combined Authority and many private sector participants, including SSE. This led to a £12 billion Strategic Outline Business Case, and then to a £65 billion investment programme, to deliver on a 2038 net zero target for Greater Manchester through investment in solar and storage, heat networks, public sector decarbonisation, retrofitting and EV charging infrastructure.
- SSE has a strategy to invest, own and operate its renewable energy assets for at least 25 years, creating significant certainty from an employment perspective. This is important given the current infrastructure and energy skills shortage - an issue shared with New Zealand. SSE has invested significant resources in many regional communities, including Greater Manchester, to upskill people for a low carbon economy (including through various community partnerships and creation of local jobs).
- PPPs are actively encouraged, including because of constraints on public sector balance sheets.

A just and fair energy transition is crucial for sustainable cities and communities. This is a theme echoed by the New Zealand Infrastructure Commission, including in its Infrastructure Strategy.

Angela Harford, partner, Bell Gully

GHD – Thinking Differently in the Water Sector

In this session Jessica Kahl provided an overview of the differences in operating environments between Australia/New Zealand and the UK.

The presentation outlined that in highly regulated environments, selecting the right strategy, and in some instances identifying ‘what not to do’ is as important as prioritising what to do. There are often multiple solutions to the complex challenges the water sector presents.

Different types of strategic planning were explored, including:

- Predictive (traditional) type planning where you looked at the current issues and predicted what it might look like in the future
- Scenario Planning, which is more explorative where multiple options could present themselves and you identify a preferred option
- Scenario Planning (normative), which looks at options (many) first to create a singular desired outcome
- Adaptive Planning, where there could be multiple desired outcomes and a pathway is found to achieve this.

Water regulators in the UK now require companies to ensure that they have appropriate strategic planning (including adaptive management planning) in place and that there are actions, and investment, to deliver on these plans.

Key Observation

Overall, Jessica provided some useful tools for us to think about and it was a good reminder on what approaches could be taken when addressing some of our infrastructure deficits. In particular, further thought on how to implement and the use of adaptive management planning is likely to be a key theme in the context of the New Zealand water sector.

Waid Crockett, Chief Executive, Palmerston North City Council



Day Four 20 June – Manchester

Hosted by **ARUP**

Overview

Day four of the delegation focused on urban development, regional governance and sustainability, offering insights relevant to New Zealand. The day began with the University of Manchester's transformative innovation district. Their team outlined plans to create a global innovation hub, integrating large research institutions with start-ups, commercial and research spaces, homes, shops, and public areas. This project aims to create over 10,000 jobs and revitalise historical buildings, highlighting the importance of visionary urban regeneration.

Kevin Lavery then discussed the broader implications for infrastructure of regional deals, using Manchester's journey since its first City Deal as an example. Lavery highlighted the success factors in Manchester's model, including a combined authority, directly elected mayor, and significant authority devolution. For New Zealand, the importance of strong relationships between central and local government, iwi, and the private sector was underscored. He provided a reality check for us in how we would take these lessons forward for New Zealand.

Key Observation

Kevin explained that regional deals must be preceded by in-depth conversations between the parties – a framework is useful to guide these conversations but must not be straitjacket. Other key insights included that regional deals require regions to be match-fit in governance/management, and that local government reform may be desirable as a precursor to joined-up regional development, but is not a necessary pre-requisite.

Daran Ponter, Chair, Greater Wellington Regional Council

Richard De Cani explored the UK's devolution strategies, focusing on economic development, place-making, skills, innovation, and housing. He discussed how deals bring together funding and decision-making powers, enabling infrastructure delivery aligned with local economic strategies. These deals serve as mechanisms for demonstrating commitment to local economic growth and broader devolution.

The day concluded with a visit to Manchester Etihad Stadium, where Pete Bradshaw showcased the transformation of a brownfield site into a sports precinct. This project, driven by sustainability and community outcome integration, illustrates the potential for environmental restoration to enhance urban development.

ID Manchester – University of Manchester Innovation District

The University of Manchester's transformation of the ID Manchester innovation district, in partnership with Bruntwood SciTech, exemplifies a successful partnership between a key anchor institution and a long-term development partner. Inspired by the life sciences hubs in London, Cambridge, and Oxford, and informed by global examples like Sydney, the project aims to create a world-class innovation platform in Manchester. This initiative aligns with Greater Manchester's broader city policies and growth strategies, including recent city deals.

The vision for ID Manchester is to be internationally recognised as a leading applied innovation district, fostering collaboration between business, education, and communities. The development will feature large research institutions and companies co-located with small start-ups and entrepreneurs, offering a mix of commercial and research spaces, homes, shops, and public areas. Key features include the creation of over 10,000 jobs, revitalisation of historical buildings, a new civic square, and sustainable, nature-led public spaces. The development aims to keep and leverage existing graduates and talent, integrate green and outdoor spaces, and rehabilitate the river within the campus.

Key Observation

This innovation precinct brought a genuine place-making approach to deliver a cluster of collated activities including; large, leading-edge research institutions and companies co-located with small start-ups and entrepreneurs alongside a mix of commercial and research space (offices & laboratories). What was also notable was the inclusion of homes, (including affordable) shops and places to gather. The objectives included bringing different groups of people together to build connections, collaborate and stimulate innovation.

Rupert Hodson, Regional General Manager, Beca

The project's success hinges on a careful master plan that fosters connections and collaboration, supported by affordable housing and spaces for start-ups at peppercorn rents. The development model involves a single developer with a long-term hold plan, ensuring sustained investment and outcomes. Early stages have shown promising fundamentals, indicating a project worth watching and learning from.

Lessons for New Zealand include recognising the critical role that universities play as anchor institutions in cities and fostering meaningful partnerships between the public and private sectors, academia, and iwi. Considering city or regional deals as mechanisms to catalyse development, planning better integration of university campuses into cities, and fostering R&D partnerships are essential. These strategies could significantly enhance development outcomes, skills uplift, and long-term productivity and innovation in New Zealand.

Kevin Lavery, Chief Executive Lancashire and South Cumbria NHS Board: Seeing the Wood for the Trees – Adapting City Deals for New Zealand

Kevin Lavery's presentation was timely and provided valuable insights for the group. While previous presenters discussed the pros and cons in water and City/Town Deals from a UK perspective, Kevin grounded the discussion in a New Zealand context – injecting a dose of realism into the conversation.

He emphasised the need to adapt UK strategies to fit the New Zealand context, highlighting the importance of infrastructure alongside broader urban development opportunities. While the Manchester City Deal is often romanticised, Kevin pointed out that the concept of a combined authority does not apply to a New Zealand context. Instead, he suggested considering locally led reorganisation and amalgamation, with a focus on collaborating with the government for true devolution of functions in some areas. Having amalgamation focused on one area would miss some of the broader opportunities, as was the case in Auckland.

Political consensus on infrastructure investment and the role of local politicians were highlighted as crucial factors by Kevin. The advantage of having a regional mayor/leader, as in Manchester and London, who coordinates with local councils, was highlighted as a powerful place-based voice with public backing, capable of advocating strongly to Westminster.

Kevin also discussed strategic investment in land to capitalise on infrastructure development, mentioning value capture as a useful tool for funding projects. He cautioned about the potential unpopularity of value capture, congestion charging and road pricing when implemented – urging consideration when executing in New Zealand.

Key Observation

The ongoing discussions about reorganising in the metropolitan Wellington area present a strategic opportunity, especially in light of changes in water services. By presenting a cohesive plan to the government, and being willing to look at ourselves first, is going to put us in the best possible position for true devolution.

Campbell Barry, Mayor of Lower Hutt

Arup – Unlocking Growth: Applying Value for Money Frameworks to Complex Projects

Richard de Cani illustrated that devolution in the UK represents a significant shift towards localised governance, empowering regions and cities with greater control over their economic and social policies. This approach began with the London devolution model in 2001, initially focusing on transport and economic development, and has since expanded across the country. Devolution involves delegating powers to regional bodies and cities through combined authorities and elected mayors, recognising that a uniform national strategy may not effectively address the diverse needs and opportunities of different regions.

Successful infrastructure development relies on integrating land use planning, decision-making powers, financial resources, and funding mechanisms. This holistic approach ensures local authorities can deliver meaningful economic development and infrastructure improvements tailored to their unique contexts. City and Region Deals play a pivotal role in this process by bringing together funding and decision-making authorities, delivering infrastructure in alignment with local economic strategies, and implementing long-term contracts across political cycles.



Key Observation

UK deals are implemented through diverse approaches that reflect varying degrees of involvement from the public and private sector. City and Region Deals often emphasise collaboration between the public sector, represented by local authorities and government bodies, and the private sector, comprising businesses, investors, and industry stakeholders. This collaboration harnesses private sector expertise, investment capital, and innovation alongside public sector resources and regulatory powers. The scale of these deals varies significantly, ranging from large-scale urban regeneration projects involving major infrastructure investments to smaller-scale initiatives focused on enhancing local business environments or revitalising town centres.

Fiona Carrick, Chief Executive, Te Waka Waikato Economic Development

The deals model prioritises decentralisation by empowering local authorities, enhancing autonomy, and fostering accountability at both city and regional levels. This approach enables cities to lead prioritisation processes for infrastructure initiatives, leveraging local knowledge of needs and opportunities. Ultimately, the common goal of devolution and deals is economic growth, translating into enhanced productivity, increased tax revenues, and expanded housing opportunities on a national scale. Cities seek funding for critical areas like transport, skills development, and education, making locally informed decisions that best suit their specific needs and aspirations. This model of urban governance signifies a shift towards more responsive and effective governance, where local empowerment drives prosperity and community resilience.

Site Visit: Manchester Etihad Stadium Tour

Manchester City Football Club is a premier league football club that has a strong commitment to sustainability, community engagement and regeneration of communities.

Key Observation

The club was founded in 1894 as a community project to keep young men out of trouble and away from alcohol, and has maintained this ethos throughout its evolution. The current ownership and make-up of the club today places community engagement and empowerment at the very top of every agenda. The club's chief executive, Ferran Soriano Compte, emphasises authenticity, honesty and collaboration as the main drivers of the club's success, and applies these values to its global network of 13 football clubs, which follow Manchester as the model.

Campbell Jensen, Head of Advisory, RCP

The club also collaborates with the city council and other partners to promote regeneration and community improvement through sports, and played a key role in supporting the Commonwealth Games in 2002, which boosted the city's recovery after the 1996 IRA bomb. The legacy of the Commonwealth Games includes the construction of the Aquatic Centre and the Etihad Stadium on a closed coal mine site, designed by Arup. Originally built for athletics, the Etihad Stadium was later converted to a football venue and is now being expanded with a hotel and entertainment facilities.

The club's training facility, the City Football Academy, exemplifies its dedication to sustainability. It has 20 years of carbon reporting, aims to be one of the largest producers of renewable solar energy in world football, and targets carbon net zero by 2030. The facility, built on a remediated brownfield site, is self-sufficient for irrigation through stormwater capture and features hybrid grass pitches identical to the stadium pitch. The club also engages in sustainable practices such as working with a local farm to grow food and composting organic waste onsite.



Day Five

21 June – Cardiff

Hosted by  Stantec

An Overview of Water in the United Kingdom

Water management and infrastructure are critical issues in the United Kingdom, shaping the landscape, supporting communities, and ensuring sustainability. The significance of water in the UK cannot be overstated; it is a fundamental resource that affects every aspect of life and industry.

Key Observation

The UK water sector has seen mirrored issues across different regions, characterised by significant investment and heightened public interest. A massive investment programme of \$100 billion underscores the importance placed on upgrading and maintaining water infrastructure. Despite these investments, there is a recognised lack of future skills in the sector. To address this, there is a push to engage individuals earlier in their careers, focusing on those with critical thinking abilities necessary for long-term water management projects.

Nick Leggett, Chief Executive, Infrastructure New Zealand

Innovative approaches like nature-based solutions address stormwater and wastewater challenges. The Clifton Wetland project exemplifies this shift, replacing traditional wastewater treatment methods with nature-based solutions, benefiting water flow management and enhancing local biodiversity and recreational spaces.

Flood resilience initiatives, like those in Hull post-2007 flooding, have spurred significant investments to improve flood protection. Northern Ireland Water's Major Project Framework illustrates the role of private finance initiatives introduced around 25 years ago, with examples like the PPP Sludge site integrating private funding in public water infrastructure projects.

Digital innovations are increasingly important, with a focus on reducing carbon footprints in new builds influenced by advances in digital technology. The promotion of a digital innovation fund, expected to double in the next five years, reflects this trend and promises further advancements in water management and infrastructure.

Regulatory and structural considerations are vital, with the Drinking Water Inspectorate overseeing water quality in England and Wales, emphasising consistency when reorganising a country's water structure. The transition of Welsh Water to the stock market in the late 1990s, moving towards private equity, highlights the evolving landscape of water management in the UK.

The media's scrutiny of water issues has intensified, bringing greater public awareness and accountability to the sector, ensuring transparency and responsiveness to public and regulatory expectations.



Dŵr Cymru Welsh Water – The Glas Cymru Model

Dŵr Cymru Welsh Water, the sixth largest water company in the UK, serves 3 million residents and businesses across Wales and parts of England. It operates as a ‘Wholly Owned Mainly in Wales’ company, financed through private capital markets without government support, contributing approximately £1 billion annually to the Welsh economy. Key infrastructure includes 27,000 km of water mains, 30,000 km of sewers, over 800 sewage treatment works, and 63 water treatment works, with an asset replacement value of £26 billion.

Dŵr Cymru is a private ‘not-for-profit’ business – it has no shareholders and pays no dividends – although it does generate financial surpluses that are reinvested in its assets and services. This model means that bills can be lower than would otherwise be the case and that there is more funding available for investment in the company’s assets, thereby creating a ‘virtuous circle’:



Key Observation

Prior to 2000, Dŵr Cymru was owned by Hyder. When Hyder experienced financial difficulties in 2000, a takeover battle ensued. Glas Cymru – established by existing Welsh Water executives – won that battle and became the new owner of and holding company for Welsh Water in 2001. The executives then spent several years working with the bond markets to secure long-term funding (of around £2 billion) for the company. Mike Davis articulated a critical perspective in this regard, which is that ‘this is a long-term business, therefore the best way to fund it is through long-term debt’. Funding costs account for around 25% of customers’ bills.

Ken MacDonald, Sector Director – Water, Tonkin + Taylor

Dŵr Cymru is heavily regulated by multiple bodies, including OfWat, Natural Resources Wales, the Environment Agency, the Drinking Water Inspectorate, the Consumer Council for Wales, the Welsh Government, Public Health Wales, and the Welsh Language Commissioner. Its board comprises seven independent non-executive directors with Welsh connections, driven by reputational rather than financial motives. Additionally, 67 independent ‘members’ from various backgrounds ensure the company’s operations align with customer and environmental interests.

The company’s long-term vision, “Welsh Water 2050”, aims to provide a world-class, resilient and sustainable water service. Performance benchmarking against other privatised water companies drives high standards. The Glas Cymru model has returned £570 million in value since 2001, supporting social tariffs, river water quality improvements, and maintaining strong credit ratings, facilitating lower borrowing costs. Focused on affordability, Welsh Water offers social tariffs and assistance programmes funded by a cross-subsidy approach, ensuring support for vulnerable customers. The company has shifted from heavy outsourcing to insourcing, enhancing internal capabilities while selectively outsourcing major capital works and services.

Dŵr Cymru’s performance is benchmarked against the other privatised water companies in England and Wales. This is instrumental in driving a high-performing business.

Cardiff Capital Region – A Partnership Model for City Deals

The Cardiff Capital Region model came about in response to City Deal policies. Since formation, the partnership has moved from a collective of councils into a legal governance model for the region.

It aims to improve prosperity across the 10 local authorities included in the partnership, which are economically disparate and have differing intervention needs. Equity and societal impact came through strongly in the discussion, with actions targeted to give effect to The Welsh Well-being of Future Generations Act – requiring a focus on prosperity in the future alongside actions for the present.

The City Deal provided CCR with a substantial amount of funding, circa £1.2 billion. It has used this fund for investments towards the above goals, such as in premises and investment capital, but it has also ring-fenced a significant amount for large strategic investments, with the intention that this fund is evergreen.

In future it expects to expand the CCR's remit to include spatial planning and transport infrastructure, which would draw parallels to the devolution seen in other regions of the UK. It is using the structure created by the City Deal to improve governance and strategic direction of the region.

Key Observation

Two themes were notable in the discussion. Firstly, there appeared to be a real focus on equity, community wellbeing and distribution of the economic uplift created by the City Deal. The approach to economic wellbeing is more inclusive, future-focused and multi-faceted than we observed in the English models.

Secondly, they are prepared to make brave decisions. They have made large investments that will enable long-term shifts in the Cardiff economy and community. The desire to make such significant change carries risk. The leadership commitment to these projects is notable.

Nigel Tutt, Chief Executive, Priority One

Overall, this is an excellent example of a local government unity, strategic clarity and catalyst investments created by a City Deal. The deal and structure has created substantial jobs and investment and is evolving into a devolved and self-determinative model. Cardiff is in good hands.

Dŵr Cymru Welsh Water – Nature Based Solutions

Dŵr Cymru Welsh Water (DCWW)'s approach emphasised in its nature-based solutions presentation is grounded in the regulatory framework under which it operates, including the Well-being of Future Generations Act and the Flood and Water Management Act, which mandates sustainable development and drainage systems to manage surface water runoff and reduce flooding risks.

Several case studies highlight DCWW's application of nature-based solutions. The Llanelli RainScape project manages surface water over 42 hectares, using data to guide future trends and skills development. This project's success has reinforced confidence in investing in nature-based solutions.

The Pontyfelin project addressed storm overflow requirements through a nature-based solution developed with European-tested approaches and regulatory collaboration. This project delivered significant environmental, social, and economic benefits, including approximately £10 million worth of additional benefits and a goal of net-zero carbon emissions over its lifetime.

In collaboration with the council, DCWW also created wetlands to enhance biodiversity and reduce phosphorus, requiring community support and communication. This project aimed to preserve natural habitats and promote overall environmental health.

Key Observation

A number of mechanisms were offered to support collaborative work to develop frameworks, governance, tools and data. An interesting concept is optioneering which could be described as evaluating different options, considering their costs, performance, and compliance against targets. DCWW uses this technique to find green solutions first.

It includes:

- Prioritising and joining up opportunities. This involves assessing various factors such as environmental impact, cost-effectiveness, and alignment with the organisation's goals and objectives.
- Leveraging digital technology and conducting thorough investigations to identify and evaluate the highest impact green solutions.
- Using advanced data analytics, modelling, and simulation tools to assess the feasibility and potential outcomes of different options.
- Adopting a multiple capitals approach, which considers not only financial capital but also natural, social, and human capitals. And
- Producing handbooks and standardisation to create guidelines, frameworks, and processes to ensure consistency and efficiency in decision making across different projects.

By employing these strategies, DCWW aims to find and implement green solutions that are not only environmentally sustainable but are also economically viable and socially beneficial.

Darrin Apanui, Group CEO, Rangitāne Tū Mai Rā



Cardiff Bay Pier
Cardiff, Wales

Cardiff Wastewater Treatment Works and Food Waste Treatment Facility and Grange town Project

The delegation visited Welsh Water's wastewater treatment, food waste treatment and sustainable drainage projects. The wastewater facility's sludge treatment process involves collection, thickening, anaerobic digestion, dewatering, and beneficial use in agriculture, focusing on sustainable practices and compliance with safety and environmental standards.

The Food Waste Treatment facility processes weekly collected food waste from all local authorities in Wales, treating it through anaerobic digestion to produce biogas and fertiliser. The environmentally friendly process transforms waste into valuable products and generates renewable energy.

The Greener Grange town project, a partnership between Cardiff Council and Welsh Water, uses sustainable drainage techniques to divert rainwater directly into the River Taff, enhancing biodiversity and reducing stormwater impact.

Our site visits provided valuable insights into the UK's approaches to water service delivery, infrastructure development, regional governance, and sustainability, offering lessons and considerations for New Zealand's context.

Key Observation

Our delegation was impressed with the scale and efficiency of the treatment facility and its apparent quality of the treated sludge and compliance with safety and environmental standards.

All local authorities in Wales collect food waste weekly and the Food Waste Treatment facility is where this waste is processed. Most of this waste is treated by anaerobic digestion which turns the waste into biogas and fertiliser.

The delegation also took note of the Welsh approach to promoting the separation of food waste from general waste and the environmentally friendly process for its transformation into a product of value and the generation of renewable energy.

Sean Wynne, Deputy CEO – Infrastructure Funding and Financing, Crown Infrastructure Partners





Infrastructure New Zealand

PO Box 7244, Victoria Street West,
Auckland 1142, New Zealand

infrastructure.org.nz