

# RIIO-GD2 Year Three Strategic Performance Overview

July 2024



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## Strategic performance overview

### Chief Executive's update

I'm delighted to share this report for the year ending 31 March 2024, which covers the third year of the RIIO-GD2 price control — a year that posed significant challenges for our business. The ongoing cost of living crisis and the war in Ukraine, along with broader economic issues have collectively caused disruptions on a scale we couldn't have imagined just a few years ago.

At WWU we've met these challenges head-on; the business-wide changes we implemented at the start of this price control are well embedded, and we continue to reap the benefits, positioning us well to meet future demands.



We continue to deliver the high standards our customers expect, building on the performance of previous years by again meeting and exceeding all of our regulatory targets. This is thanks to the incredible efforts of our teams; their dedication and hard work keeps our network running reliably, delivering a critical service that our customers rely on, and keeping our homes and businesses warm and safe all year round.

In particular, our emergency standards performance was excellent, earning us a customer feedback score of 9.7 out of 10 - making us the lead network. We achieved 99.3% of uncontrolled escapes and 99.8% of controlled escapes within the target time, surpassing the 97% target for both measures.

Our safety performance remains exemplary, as recognised by the Royal Society for the Prevention of Accidents (RoSPA). This year marks the 11th year in a row where we've been awarded the Gold Award, following on from last years' President's Award, a period unrivalled by any other gas utility company and a real testament to the health and safety culture embedded across the business. These achievements underscore our unwavering commitment to customer satisfaction and safety. As a leadership team we are immensely proud of the efforts and achievements of our colleagues, and we thank them for their ongoing dedication.

## Our priorities

As we entered RIIO-GD2 we updated our priorities with a renewed focus on sustainability and this is now well embedded. Our priorities align with our headline targets and continue to comprise 5 key areas:

### Demanding Safety Always

- **Performance Standards:**
  - Maintained all performance standards set by Ofgem.
  - Responded to over 97% of gas emergencies within the required time.
- **Risk Reduction:**
  - Replaced more than 480 kilometres of old metal gas pipes, further enhancing safety.
- **Awards and Achievements:**
  - Awarded the RoSPA Gold award for the eleventh consecutive year.

#### Demanding SAFETY ALWAYS



We never compromise on the safety, wellbeing and health of our colleagues and customers, always raising the bar and improving standards.

### Driving Outstanding Service

- **Customer Satisfaction:**
  - Ranked 1st out of the 8 distribution networks in Emergency customer satisfaction league tables.
  - Maintained our Institute of Customer Service 'Distinction' status.
- **Inclusive Service:**
  - Retained the ISO22458 Inclusive Service standard.
  - Supported vulnerable customers through the Vulnerability & Carbon Monoxide Allowance (VCMA).
  - Helped over 140,000 households in our region, saving customers over £17.5m, through increased welfare support, grants and energy efficiency savings in RIIO-GD2 to date.

#### Driving OUTSTANDING SERVICE



We strive to exceed customer expectations by offering fair, inclusive, quality services for all, whilst looking after those most in need.

### Delivering Value for Money

- **Cost Management:**
  - Maintained our proportion of the customer bill (adjusted for the cost of Supplier of Last Resort due to energy supplier failures).

#### Delivering VALUE FOR MONEY



We always spend and invest money wisely; working smarter to offer affordable, value for money services.

### Providing Sustainable Energy

#### • **Hydrogen:**

- Playing our part in industry-wide evidence development in hydrogen safety and feasibility, particularly through innovation projects.
- Working with partners to define the options for decarbonisation of industry, power generation and homes, and developing our strategic approach.

#### • **Biomethane Decarbonisation:**

- Connected the 21st biomethane site, decarbonising the annual heating demand of approximately 160,000 homes.
- Developing plans for increasing injection capacity in constrained areas of the network.



### Designing Our Future

#### • **People-Centric Approach:**

- Retained Investors in People Silver Level accreditation.
- Awarded Best Equity, Diversity & Inclusion Initiative in Wales by the UK Chartered Institute of Personnel and Development.
- Focused on cultural change, learning, understanding, and creating a psychologically safe environment for our people.



### **Supporting vulnerable customers**

Against the backdrop of a cost of living crisis, the gas distribution networks, in agreement with Ofgem reallocated funds to the Vulnerability & Carbon Monoxide Allowance (VCMA) to support the most disadvantaged communities across our network, resulting in a total allowance across the 5 year period of £20 million (18/19 prices).

The VCMA enables us to go beyond our usual activities, providing additional support to those in need. We've supported over 70,000 households this year within our region through both company-specific and collaborative projects, resulting in substantial savings to those we've helped.

We're partnering with trusted organisations such as Citizens Advice, National Energy Action (NEA), Scope, Fuel Bank Foundation, Warm Wales, and Care & Repair Cymru. Up to 75% of the funds can be allocated to projects within our network area, while at least 25% will be spent on collaborative efforts with other gas networks in England and Scotland, extending our impact across the UK.

Other efforts include signing people up for the Priority Services Register, installing locking cooker valves, conducting carbon monoxide (CO) awareness questionnaires and distributing accessible CO alarms for those with hearing loss. Furthermore, we've recently awarded over £9 million in funding to nine organisations primarily focused on tackling fuel poverty across our network, and an additional £4 million to support collaborative projects. These projects will support our most vulnerable across the rest of this price control.

As we enter the final two years of this price control, I'm excited to see the positive impact our partnerships will continue to have, including schemes such as:

- Care & Repair Cymru - "Older Not Colder"
- Warm Wales - "Healthy Homes Healthy People"
- Centre of Sustainable Energy - "Warm Homes Advice and Money"
- Healthy Homes Solutions - "Vulnerability Registration Service"
- MyBnk - "Tackling Fuel Poverty through Financial Education"
- Exeter Community Energy - "Healthy Homes for Wellbeing"
- Plymouth Energy Community - "PEC Home Hub"
- Yes Energy Solutions - "A Holistic Wrap-Around Energy"

Together, these projects are forecasted to directly support over 100,000 people, with an average Social Return on Investment of £14 per £1 spent.

Additionally, we are collaborating on several vital projects, including:

- National Energy Action - "Warm Homes Healthy Futures"
- Kidney Care UK - "Safe and Warm: Providing a Critical Lifeline to Dialysis Patients Across the UK"
- Carers Trust - "Alleviating Unpaid Carers from Fuel Poverty"
- Mental Health UK - "Energy Safeguarding and Tackling Fuel Poverty for People with Mental Health"
- Severn Wye Energy - "Reach Out - Energy Support"

These initiatives play a crucial role in supporting our communities, providing services related to income maximisation, energy efficiency advice, debt support, PSR awareness, and CO awareness.

### Climate Change and its Impact on the Future Role of the Network

We recognise most of the gas transported to our customers today is a fossil fuel and that our operations have a direct and indirect impact on the environment. We support the commitment of the UK and Welsh governments to reaching net zero carbon emissions and believe the investments we are making in reducing emissions and decarbonising heat, power and transport can help deliver a net zero energy system.

Delivering a safe, secure, decarbonised energy system will require a range of technologies deployed at scale. Our extensive gas network infrastructure will need to play a major role to deliver a net zero system in time to meet the government's goals. To deliver that, we will need to work closely with our customers, with other networks and with producers of gas as the system becomes more distributed and lower carbon.

Our vision is set out in our Sustainability Strategy, published in 2023.<sup>1</sup> We have set specific targets to support the decarbonisation of the energy system in Wales and Southwest England, and reduce the negative impacts of our activity. This includes taking action to make our network 'hydrogen ready' in areas which could convert to low carbon hydrogen in the future, and investing in research and development around the technologies and options we will need. We look to work in partnership with energy producers, users and innovators who can help support us, and will seek policy and regulatory support for the activity to deliver our vision in future business plans.

### Our Strategic Activity

We expect that low carbon gasses, transported by our network, will play a role in decarbonising a range of end markets. Our strategic projects focus on the major energy users in industrial clusters, while recognising that our network serves thousands more industrial and commercial customers outside of those clusters, as well as homes, power generation assets, and transport users – all of whom will need options to decarbonise.



### South Wales Industrial Cluster (SWIC) & Hyline Cymru

The South Wales Industrial Cluster aims to deliver a 40% reduction in Wales's overall carbon emissions while retaining over 110,000 jobs and creating new industrial and commercial opportunities.<sup>2</sup> Our planned hydrogen pipeline **Hyline Cymru**, is at the centre of the cluster plan. We published our feasibility study for the project in early 2024 and are continuing to work with partners to deliver it.

**NEW ID**  
DATGARBONEIDDO DIWYANNINGOL GOGLEDDI DOWYRAIN CYMRU  
NORTH EAST WALES INDUSTRIAL DECARBONISATION

The NEWID project aims to develop a net zero industrial GHG emissions reduction plan for North-East Wales. Working with local industry in the Flintshire and Wrexham supported by both the regional energy utilities. Initially funded via IUK's Local Industrial Decarbonisation Plan competition: Throughout 2024. Publishing a Regional Cluster Plan (e.g. SWIC / Net Zero North West). Underpinned by a decarbonisation 'Exploitation Plan'. Covering all significant regional decarbonisation pathways: Inc. Electrification, Hydrogen & CO<sub>2</sub> export. Considering energy efficiency and low carbon energy production as well as energy usage emissions reduction. Targeting input from key regional industrial stakeholders. But welcoming engagement from all interested parties.

Lead project sponsor:  
Sponsors: Net Zero Cymru, Net Zero Industry Wales

Project partners:  
SP Energy Networks, uni per, BANGOR UNIVERSITY, NET ZERO NORTH WEST

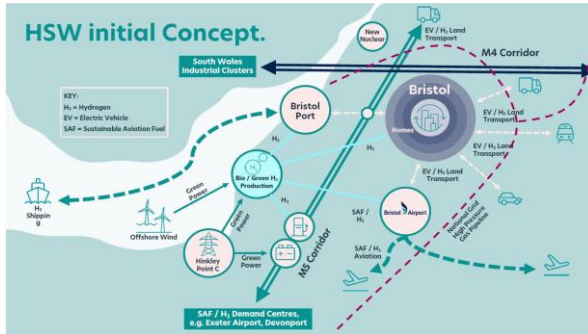
### North East Wales Industrial Decarbonisation Plan (NEW-ID)

We are working with Net Zero Industry Wales, SP Energy Networks and partners in North Wales, to develop an integrated plan for Flintshire and Wrexham.<sup>3</sup> This includes identifying the potential for hydrogen production and demand in the region, and potential opportunities and links across North Wales and with North West England.

<sup>1</sup> [www.utilities.co.uk/media/4824/sustainability-strategy-2023.pdf](http://www.utilities.co.uk/media/4824/sustainability-strategy-2023.pdf)

<sup>2</sup> [SWIC | South Wales Industrial Cluster](#)

<sup>3</sup> [North-East Wales Industrial Decarbonisation cluster \(NEW-ID\) – Net Zero Industry Wales \(nziw.wales\)](#)



### Hydrogen South West (HSW)

As founder members of Hydrogen South West,<sup>4</sup> we are supporting the development of a vision for hydrogen in a distributed energy system across the region. We lead HSW’s infrastructure group, and are working with partners to identify the infrastructure required for hydrogen, and the role our network can play.

### Delivering Now

We’re investing in network assets to be ready for low carbon gasses. Our iron mains risk reduction programme not only reduces risks and carbon emissions from the network now, but also converts over 400km of pipes per year to hydrogen-ready polyethylene. We have connected 21 biomethane production sites across our network already, and are supporting future developments and investment to increase capacity.



Working in partnership with a range of organisations, we are seeking to rapidly demonstrate the potential role for low carbon gasses, and understand their implications for the network and our customers. This includes NextGen Electrolysis, supporting the development of a new hydrogen production technology which could reduce costs and improve environmental impacts, and Cartrefi Hydrogen Homes, which aims to demonstrate hydrogen heating in a real-world setting. In early 2024 we also successfully trialed a hydrogen van in normal operations in South Wales.

While looking to the longer term future, we work hard to improve the impact of our operations now. Progress against our Environmental Action Plan is reported annually<sup>5</sup>, including data on carbon emissions, resource use and local environmental impact.

In late 2023, the government confirmed its intention to support blending of up to 20% hydrogen in gas distribution networks, thereby encouraging the growth of a hydrogen economy and incrementally reducing carbon emissions from the use of gas. WWU is collaborating with industry partners to plan and implement the necessary changes.

<sup>4</sup> [Hydrogen South West](#)

<sup>5</sup> [annual-environmental-report-2022-23.pdf \(wwutilities.co.uk\)](#)



### Supporting evidence and changes

We actively participate in industry-wide research and development around the role of decarbonised gasses in a net zero energy system, and the transition of existing gas network infrastructure. This includes innovation projects on the feasibility of hydrogen, the safe management of the network, and supporting industry trials.

We anticipate this work will provide evidence to support policy makers in setting the future direction for the energy sector. It provides the fundamental basis for developing industry-led policies and procedures which will help us to manage a safe, secure and low carbon gas system.

Our innovation and net zero delivery activity is summarised in our annual innovation report<sup>6</sup> which also sets out the routes for collaborating with WWU on new project ideas which could support the energy system transition.

### Planning for RIIO-GD3 and beyond

We're now developing our business plan for the next price control period, RIIO-GD3 which will span from 2026 to 2031. This plan will build upon the high standards we currently deliver, with a primary focus on investing in the network to ensure safety, resilience, and meeting the performance expectations of our valued customers.

**Graham Edwards OBE - Chief Executive**

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<sup>6</sup> [network-innovation-allowance-annual-summary-2022-23.pdf \(wwutilities.co.uk\)](#)

### Board Statement

We are pleased to share our Annual report, which covers the third year of the Ofgem five year RIIO-GD2 (Revenue = Incentives, Innovation and Outputs) regulatory control period. A year which has continued to embed the organisational changes implemented in the prior years, changes that ensure we have a sustainable, resilient and fit for purpose organisation, and an exciting year that marked the start of the RIIO-GD3 forward looking planning process.

As a Group we continue to strive towards our ambition to be *'Trusted to expertly serve customers and communities with safe, reliable and affordable energy services today, whilst investing wisely to create a sustainable, greener future.'*



### Leadership and Governance

We believe that effective governance is realised through leadership and teamwork, and collaboration across all levels within the Board structure drives a culture of continuous improvement. During the year, we established a new Risk Management and Compliance committee to complement the existing five principal committees. This new committee ensures completeness between our business risks, compliance and subsequent opportunities.

Our Board was further strengthened by the appointment of Mike Davis as an independent non-executive director. Operating performance continues to be managed on a daily basis by the local Executive Team, under the guidance of Graham Edwards OBE, who constantly strive to ensure the committed Price Control Deliverables within the current period are met. One key milestone successfully completed in the year was the effective re-financing and debt raising, as overseen by the Treasury committee.

### Resilience and Sustainability

Our ongoing investment in the mains replacement programme and the resilience of our network assets are key aspects of our strategy to ensure the network continues to operate safely and is ready to support a transition to low carbon fuels over the decades to come.

### Looking Ahead

With the exception of the planned Hydrogen blending, the Group does not envisage any significant changes in the business operations of the Group in the remainder of this regulatory control period. We expect to continue to safely maintain and develop the Gas Distribution Network for the benefit of stakeholders in accordance with the Gas Transporters' Licence granted by the Regulator, and maintain our good record against the key performance measures and aims to maintain this position into the future.

**Andrew Hunter – Chairman**

**Performance Summary**

Our key deliverables for customers are set out below and discussed in further detail in the supporting sections.



The customer bill impact quoted is in 18/19 prices (excluding SOLR and Exit Capacity)

### Our Year Three Totex Performance

In year three we have under-performed the allowance by £30.8m (12.2%). Our year three under-performance is as expected, as our outperformance in the first two years of RIIO-GD2 was due to either one-off benefits or phasing differences between allowance and costs across the five year control. Our forecasts set out in “Our RIIO-GD2 Totex forecast” show an under-performance that will worsen in the final two years of this control, due to insufficient allowances, and in particular Repex allowances.

Our key messages for the year three performance are:-

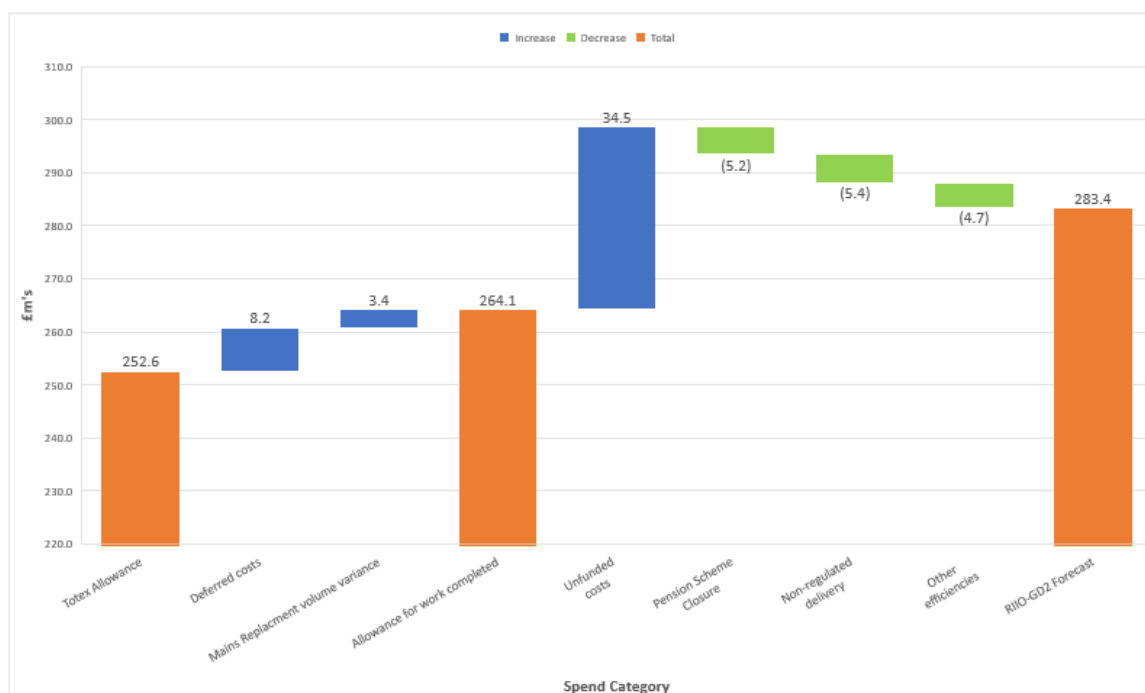
- We have the appropriate resources to continue to achieve our standards of performance and deliver our price control regulatory outputs
- Utilisation of our workforce on non-regulatory work has reduced Opex costs to the benefit of customers
- Our Capex underperformance is largely driven by the phasing of purchases along with rising market prices for vehicles
- Underlying Repex costs continue to underperform due to insufficient allowances set at Final Determination, validating our appeal to the Competitions and Markets Authority (CMA).
- We have assumed that re-opener submissions to Ofgem are allowed in full.

The allocation of allowances across Opex, Repex and Capex activities included in this document are as agreed with Ofgem, but adjusted for regulatory movements such as PCD's and reopener applications. In this commentary we have aligned the categorisation of reopener application allowances to where the costs are reported to provide a clearer view of performance (this will differ to the Price Control Financial Model where allowances are split across Totex on a pre-determined basis, which is different to where the actual/forecast cost is reported; an example of this is the pipeline diversions and development claims reopener).

£m 18/19 prices	Actual	Allowance	(Out)/Under	%
Opex	81.0	97.9	(16.9)	(17.3%)
Capex	82.7	70.5	12.2	17.3%
Repex	119.6	84.1	35.5	42.2%
<b>Totex</b>	<b>283.4</b>	<b>252.6</b>	<b>30.8</b>	<b>12.2%</b>

### Our underlying position

The waterfall below shows our Totex position for year three; a £30.8m under-performance, due to insufficient allowances and spend phasing.



**Deferred costs (£8.2m)**, as reported in previous RRP commentaries, represents costs incurred in year three where the associated allowances were in prior years. In particular, the global supply chain issues and purchasing lead times that impacted vehicle deliveries has now eased and our backlog of vehicle orders has been fulfilled in year three.

*(Ofgem category: External factors 100%)*

**Mains Replacement volume variance (£3.4m)** due to a recruitment drive in year two and retention of resources through year three, we are now cumulatively ahead of the average Mains Replacement workload required.

*(Ofgem category: Provision in the price control settlement 100%)*

**Unfunded costs (£34.5m)** represents specific areas of Totex spend that are outside of our Totex allowance. This includes:

- A significant adverse price variance on mains replacement given the price increases and cost pressures we have experienced, which are in excess of the allowances awarded. We have referenced these cost pressures in the next section.
- The cost we are now incurring for our revised property build strategy which was not part of our business plan. This ensures we have suitable operational depots as workload moves around the network.
- An increased cost base above allowances of delivering our strategic investment in IT.

*(Ofgem category: Provision in the price control settlement 100%)*

**Pension Scheme closure (£5.2m)** is the estimated savings of closing the Defined Benefit section of the pension scheme to future accrual in July 2021 with the existing Defined Contribution section of the scheme now operational across the organisation. This is an annual saving achieved for all five years of this price control.

*(Ofgem category: Efficiency 100%)*

**Non-regulated delivery (£5.4m)** represents non-regulatory work (metering and third party work) where we have targeted the productivity of our workforce, especially our Emergency First Call Operatives (FCOs) who are required to maintain a headcount sufficient to manage the demand of an emergency service, requiring sufficient FCOs to be employed to support “on call” availability 24/7/365 in case they are required to respond to an emergency at any point and at any time across our network. FCO’s are delivering metering work, Mains Replacement purge and relights and surveys to ensure the necessary but unproductive element of their role is utilised on value adding activities wherever possible. Third party contracts are short term and end within the RII0-GD2 period.

*(Ofgem category: Efficiency 100%)*

**Other efficiencies (£4.7m)** includes incremental cost reductions across Totex where we continue to utilise our workforce across all activities to reduce the expenditure and reliance on external contractors while ensuring we maintain an efficient and skilled workforce.

*(Ofgem category: Efficiency 100%)*

### Repex - cost drivers, cost pressures and mitigation

As can be seen from our Totex overview, Repex is the area of our business that continues to significantly underperform against allowances, due to insufficient allowances being awarded to compensate our efficient costs.

In 2021 we appealed to the Competition and Markets Authority (CMA) inter alia over the insufficient Repex allowances set by Ofgem in the Final Determinations. This followed recognition of escalating costs highlighted by the prices submitted by suppliers in our extensive external tender event, demonstrating that our Repex allowances were set too low. Our position remains unchanged; we continue to feel the impact of the price rises we set out in our CMA appeal, and in fact our CMA request did not go far enough in its request for equitable allowances given the ongoing challenges we continue to face. The following explains the areas that are causing our cost base to increase year on year, separated into (i) cost drivers, where the number and type of activities we need to undertake to complete the Repex work is changing and (ii) cost pressures, where the underlying cost of those individual activities within Repex is increasing; together with (iii) the available mitigating measures we're undertaking to minimise these increases.

It is noted that the Iron Mains Risk Reduction Programme (IMRRP), also known as the 30/30 programme, which drives the vast majority of the Repex work we undertake, is a mandatory programme directed by the HSE. Since the inception of the IMRRP in 2002 the HSE has changed the focus and prioritisation of that programme at successive controls, rightly re-focusing each control on the riskiest pipes. Many pipes in our network did not meet the required replacement criteria in place for those prior controls. They are therefore the residual lower risk pipes that now need replacing by 2032. The pipes left to replace in the remaining programme are fixed and the result of those previous policy decisions and direction from the HSE.

**Cost drivers** are the attributes of work that lead to more or less time spent to complete an activity. Using Mains Replacement as an example, the number of excavations on a 100m length of main will determine time taken, materials required and therefore cost to complete the works; 10 excavations will be more material intensive, time consuming and therefore more costly than 1 excavation on a 100m main. Thus, length is not a driver of cost, although this is used by Ofgem in its regression analysis.

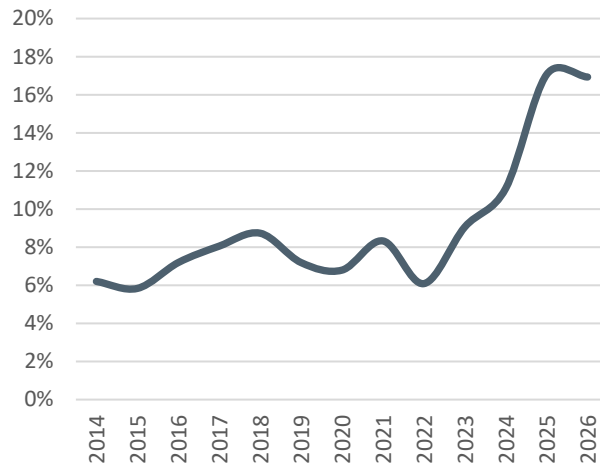
As we progress through RIIO-GD2 we are seeing underlying cost drivers changing resulting in increased cost per unit of Repex completed.

These cost drivers include:

**Technique:** 'Insertion'; where a new pipe is inserted into the existing pipe this requires single excavations at either end of the pipe length replaced and the pipe is then pushed through the old metal pipe from one excavation to the other. 'Open cut' is where a full-length trench is required as the existing pipe is unable to be used. The open cut technique is far more expensive because it requires more time to dig, more materials to backfill holes, and a greater surface to reinstate to original condition.

We are experiencing a greater proportion of open cut works as we continue through RIIO-GD2 and as we head into RIIO-GD3. This is in part due to residual pipes remaining, and as a result of the capacity constraints on the network from progressively replacing existing mains which now limits the ability to insert into existing pipes.

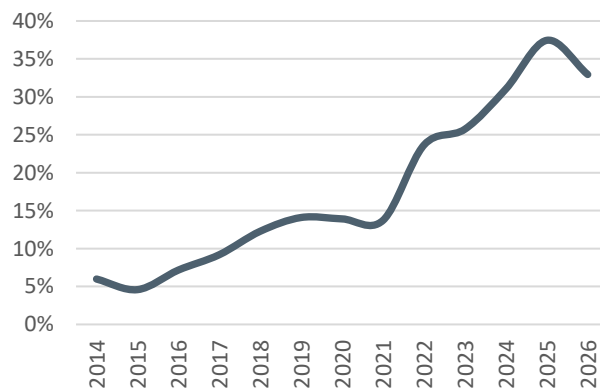
Mains Replacement Open Cut %



**Material:** whether the main is ductile iron as opposed to cast/spun iron. Ductile iron mains take longer to break open the existing main, requires specialist tools and larger excavations to work on the main.

As forecast, we are experiencing a greater proportion of Ductile Iron as we continue through RIIO-GD2 and expect this to continue. Ductile Irons are not as prone to fracture in the same way as Cast and Spun Iron, so historically other mains scored more highly in all risk prioritisation regimes, these mains now form a greater proportion of the programme than in the past.

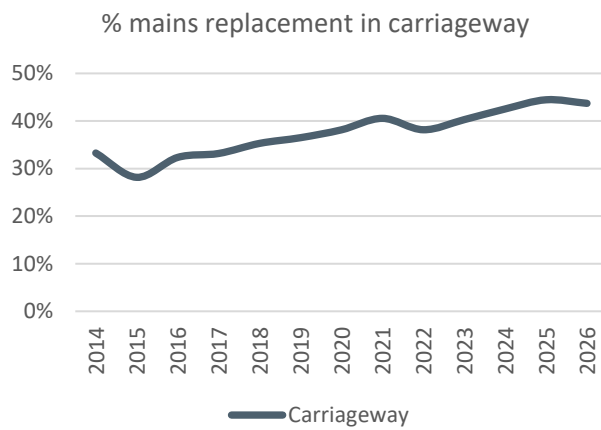
Mains Replacement Ductile Iron %





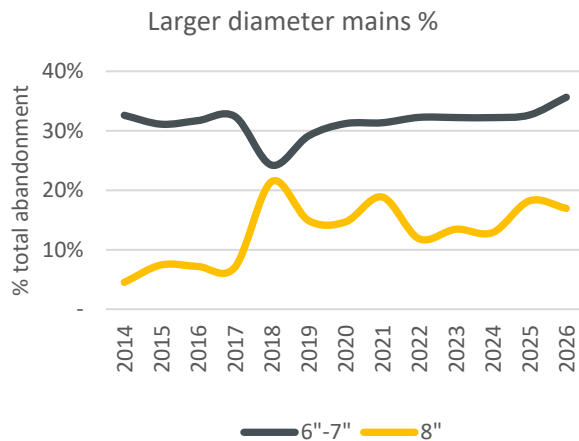
**Location:** whether a main is in the carriageway, footpath or verge impacts the activity required to replace that main (such as traffic management, reinstatement type, backfill and spoil requirements, site setup and ease of working environment) and the associated cost can differ drastically.

We are experiencing a shift to carriageway working which adds complexity; traffic management, road closures/noticing etc. These mains are further away from properties, so historically other mains scored more highly in all risk prioritisation regimes, but these mains now form a greater proportion of the programme than in the past.



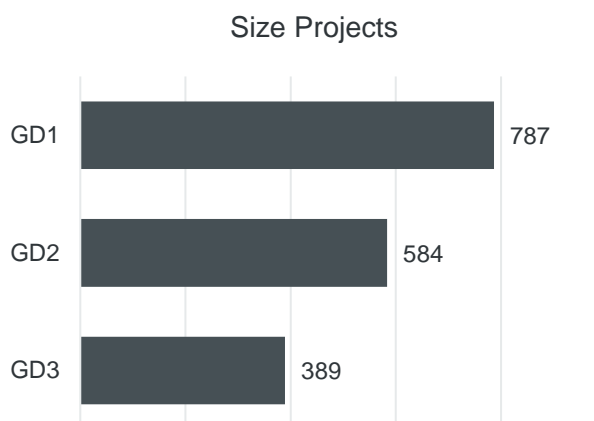
**Diameter:** the diameter of the pipe being replaced affects costs. For instance, an 8" diameter main requires larger excavation sizes, more expensive pipe on a linear metre basis and more specialist plant and equipment compared to 4" diameter mains.

We are experiencing an increase in delivery of larger diameters as we progress through RIIO-GD2, particularly 8" Tier 1. This is phasing across the control as we forecast to deliver total 8" Tier 1 length as per our Business Plan.



**Size of projects:** Smaller projects increase the unit cost on those schemes because of fixed project costs; these include more frequent mobilisation and de-mobilisation of sites, increased connection volumes, and more frequent noticing and consultation with Highway Authorities. They also incur more overall disruption during the project including greater travel time to and from depots.

The strict top-down risk reduction regimes of the first 10 years of the IMRRP (2002 – 2012) has contributed to many pipes being 'stranded'; small in length and isolated away from other replacement pipes. Following this, (2012-2026) direction has rightly been focused on risk reduction. The programme being delivered through RIIO-GD2 and RIIO-GD3 is the result of those previous policy direction, making schemes smaller and less efficient.



We have shown the above as comparators across RIIO-GD1, RIIO-GD2 and future RIIO-GD3 because projects do not neatly fall into individual years.

**Cost pressures** are the price increases experienced on the individual activities we undertake to complete the Repex work. Using the same example as above, if the cost of materials required to backfill 1 or 10 excavations doubles, then the overall cost of that work doubles.

We continue to experience cost pressures across many of our key cost categories with a particular impact on our Mains Replacement activities. These include:

- **Traffic Management and streetworks** – Our traffic management costs have again increased by 23% (c.£0.5m p.a. increase) year on year, 133% increase since 2021/22 (c.£1.7m p.a. increase). This includes price increases but we also continue to experience external pressures, such as an increasingly onerous stance being taken by Highways Authorities on the requirement for manned traffic management lights, and in particular manning lights for 24 hours and weekend cover. This is across our network with a focus on areas with a permit regime in place such as Bristol, with the costs for these schemes increasing substantially. We are seeing more and more local authorities reviewing the introduction of permit schemes.
  - We also continue to see streetworks costs significantly increasing in the tourist hotspots in our network, especially Cornwall and North Wales. The restrictions imposed on us in these areas are magnitudes higher than ever experienced or forecast, and they show no sign of abating.
- **Contract Labour** – contract labour now only constitutes around a quarter of our Build and Repair workforce following the insourcing of our primary Mains Replacement contractors workforce in 2021. The contractor labour market continues to be turbulent and in year three we continue to see a 23% turnover rate in this contract labour headcount. Our contract partners are not only

being approached by other GDNs who have significant recruitment drives underway to recover backlogs in their own work, but also by other industries (including nuclear, electric, water and telecoms). We also have an aging population of contractors, who are skilled and experienced but beginning to reach retirement. Their financial demands continue particularly those that work within the M4 and M5 corridors or close to the Hinkley Point C nuclear power station construction site. We continue to closely manage the risk of losing contractors, focusing on maintaining strong relationships with locally based contractors. As planned, the delivery from these teams has been ahead of the average in year 3 particularly in Mains Replacement.

- **WWU industrial staff** – we experienced a 7% churn of industrial staff, down from a peak of 13% in previous years. This level of turnover in a skilled workforce that takes years to build competency continues to be a skills-drain. Our agreed long-term five-year CPI-H linked pay deal with the unions provides us and our employees with certainty over pay for the whole of RIIO-GD2, acting as a mitigation to churn. However, this comes at a cost considering the efficiency applied to our allowances (1% p.a. compounded).
- **Vehicles** – the global backlog of new vehicle availability has eased somewhat and we are now seeing vehicles on order being delivered, however these are at a higher unit rates due to market prices increasing. Only towards the end of the year have we been able to begin off-hiring the expensive hired vehicles that we have required over the last couple of years.
- **Pipe and fittings** – we continue to contract on a 12-month basis given the price fluctuations over the last few years. Following record increases in prices in 21/22 and 22/23, in 2023/24 there was a c.6% reduction in our contracted prices compared to the prior year; cumulatively the CPIH and Real Price Effects (RPE) allowance adjustment mechanisms do not cover the increases experienced since the start of RIIO-GD2. There are very few pipe and fittings producers/suppliers, limiting our competitive opportunity to keep costs down.
- **Reinstatement** – the labour and material price increases incurred by our contractors continue from last year. Only 6 months after starting new contracts in year one of RIIO-GD2, we had to change the way in which we compensate our contractors for the work they deliver. We now pay “cost plus” to one contractor for a large geographical area as we’re unable to secure any other arrangements within the geography in which we operate. With our other four reinstatement contractors we had to review cost increases outside of the contract mechanisms in place which include labour, materials (e.g. slabs, kerbs, edging, cement, sand) and tipping costs (e.g. hardcore, subsoil, tarmac); only now as inflation eases are we able to utilise existing contract arrangements however the real price increase on the full cost base remains. We maintain a good commercial relationship with our reinstatement contractors and do not foresee operational risks as a result of these pressures.
- **Materials** – in the current economic environment it has been well reported that raw/building material costs have seen unprecedented increases. In year 2 we experienced a year-on-year increase of c.16% cost per metre laid (inclusive of services) well in excess of inflation. In year 3 the increase has continued with a year-on-year increase of 21% cost per metre (inclusive of services), again well in excess of inflation and RPEs.

The key cost drivers identified above being number of connections, technique, diameter and location along with service frequency will all have a significant impact on the material cost per metre as well as the underlying price increases.

### Cost mitigation

These cost pressures continue to increase despite the significant steps we've taken over the last three years to attempt to mitigate them, including:

- Full review and rationalisation of the organisational structure right across all areas: the back office, operational support and front-line management structures. For instance, a one-off voluntary redundancy scheme was carried out in the readiness for this tough price control, and the inclusion of best practice and compliance First Line Managers in the new operational organisational structure is providing tangible benefits
- Transitioned to an in-house managed Mains Replacement programme. With a larger directly employed workforce and increased control of all spend categories, we now have greater visibility and flexibility to tackle issues as they arise. This also reduced the cost of contractor fees and associated costs by c.£4m per annum.
- The introduction of a financial incentive scheme across operations, focused on driving and rewarding our staff for incremental operational productivity and efficiencies.
- Agreed a CPI-H linked five year pay deal with the unions covering RIIO-GD2.
- Continued commercial retendering and negotiation of key contracts that drive our cost base including reinstatement, pipe and fittings, traffic management and plant hire. In the current adverse economic climate we are only contracting for a maximum of 12 month at a time.

The net impact of the cost pressures, despite our ability to mitigate them where possible, is an increasing cost base above inflation, and we anticipate this to continue. We note that these are not seeing an equivalent increase reflected in the Real Price Effect ('RPE') allowance adjustment because we are required to undertake more activities, as set out above, to achieve the same output (both cost drivers and cost pressures) which RPEs do not wholly account for.

### Our RIIO-GD2 Totex Forecast

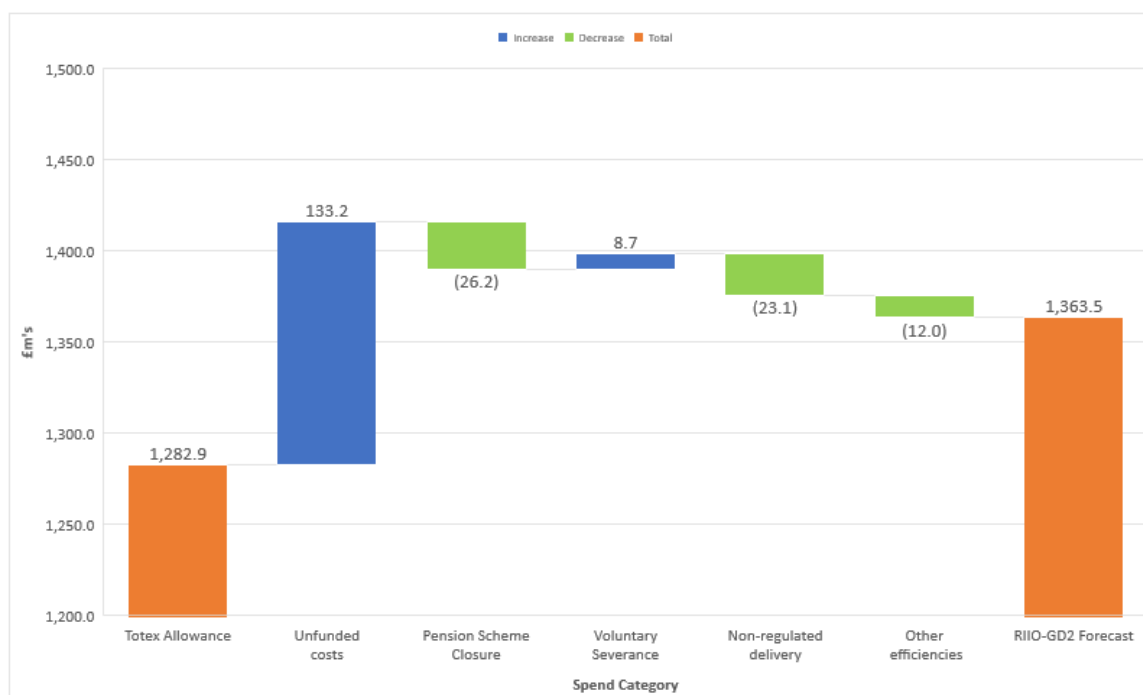
Many of the RIIO-GD2 outputs are deliverable over the five year period, and as such the cost and allowance forecasts for the full price control show the true underlying performance. The section sets out our forecast for the full price control.

Our key messages with this five-year forecast are:

- We are well set to achieve our Standards of Performance and are on track to achieve all of our Price Control Deliverables.
- Expenditure deferred from the first three years will be spent in the final two years; for instance, the cost to deliver the HN039 pipeline project.
- We continue to experience cost pressures in excess of the RPE uplift and expect these cost increases to continue.
- We are forecasting to overspend the 5yr allowances by £81m (6.3%); £76m of this is in Repex due to insufficient allowances.
- Allowances are reflective of the base allowances including RPE's adjusted for forecast performance on Price Control Deliverables (PCD's) (Totex forecast and Allowances include Net Zero "Use it or Lose it").

£m 18/19 prices		Actual	Actual	Actual	Forecast	Forecast	Total
		2021/22	2022/23	2023/24	2024/25	2025/26	
Opex	Forecast	84.6	88.1	81.0	114.8	116.4	484.9
	Allowance	102.1	98.6	97.9	106.4	113.7	518.7
	<b>Variance</b>	<b>(17.5)</b>	<b>(10.5)</b>	<b>(16.9)</b>	<b>8.5</b>	<b>2.7</b>	<b>(33.8)</b>
Capex	Forecast	56.8	51.3	82.7	90.8	93.7	375.2
	Allowance	61.7	59.5	70.5	64.7	80.2	336.5
	<b>Variance</b>	<b>(4.9)</b>	<b>(8.2)</b>	<b>12.2</b>	<b>26.1</b>	<b>13.5</b>	<b>38.6</b>
Repex	Forecast	71.8	98.2	119.6	107.2	106.7	503.4
	Allowance	89.5	87.1	84.1	83.4	83.5	427.6
	<b>Variance</b>	<b>(17.7)</b>	<b>11.1</b>	<b>35.5</b>	<b>23.8</b>	<b>23.2</b>	<b>75.8</b>
Totex	<b>Forecast</b>	<b>213.1</b>	<b>237.6</b>	<b>283.4</b>	<b>312.8</b>	<b>316.7</b>	<b>1,363.5</b>
	<b>Allowance</b>	<b>253.3</b>	<b>245.2</b>	<b>252.6</b>	<b>254.5</b>	<b>277.4</b>	<b>1,282.9</b>
(Out)/Under Perf.		<b>(40.2)</b>	<b>(7.6)</b>	<b>30.8</b>	<b>58.3</b>	<b>39.3</b>	<b>80.7</b>
% Perf.		<b>(15.9%)</b>	<b>(3.1%)</b>	<b>12.2%</b>	<b>22.9%</b>	<b>14.2%</b>	<b>6.3%</b>

Below is an explanation of the main variances included in our 5 year forecast:



**Unfunded costs (£133.2m)** represents specific areas of Totex spend that are outside of our Totex allowances. This includes:

- A significant adverse price variance on mains replacement as allowances set in this price control are insufficient for the efficient costs we are incurring. This has been exacerbated by the cost driver changes and cost pressures we have experienced since RIIO-GD2 Final Determinations. We have referenced these cost pressures in the section above.
- The cost of new property developments replacing aged existing sites
- An increased cost base above allowances of delivering our strategic investment in IT

*(Ofgem category: Provision in the price control settlement 100%)*

**Pension Scheme Closure (£26.2m)** the estimated savings of closing the Defined Benefit section of the pension scheme to future accrual in July 2021 with the existing Defined Contribution section of the scheme now in place across the organisation.

*(Ofgem category: Efficiency 100%)*

**Voluntary Severance (£8.7m)** the cost incurred in 2021/22 of carrying out a voluntary severance exercise, resulting in 126 employees leaving the business.

*(Ofgem category: Efficiency 100%)*

**Non-regulated delivery (£23.1m)** represents non-regulatory work (Metering and third party work) where we have targeted the productivity of our workforce, especially our Emergency First Call Operatives (FCO's) who are required to maintain a headcount sufficient to manage the demand of a 24-hour emergency service, requiring FCOs to be on call 24/7/365 in case they are required to respond to an emergency at any point and at any time across our network. FCO's are delivering Metering work, Mains Replacement purge and relights and surveys to ensure the necessary, but unproductive element of their role is utilised on value adding activities where possible. Third party contracts are short term, not guaranteed contracts which end within the RII-GD2 period.

*(Ofgem category: Efficiency 100%)*

**Other efficiencies (£12.0m)** includes incremental cost reductions across Totex where we continue to utilise our workforce across all activities to reduce the expenditure and reliance on external contractors while ensuring we maintain an efficient and skilled workforce. It also nets the additional underlying cost we are experiencing from a reduction of connections work, which is leading to stranding of back-office resources.

*(Ofgem category: Efficiency 100%)*

### Variant Allowances

The level of variant allowances in this price control is significantly higher than previous price controls. This section explains the variability under each regulatory mechanism; Reopeners, Volume Drivers & PCDs.

### Reopeners

The below table summarises our current view of the areas where reopeners have been submitted (awaiting Ofgem decision) or we are likely to make future re-opener submissions. Any reopeners already approved are not in the table below.

Reopener	Likelihood	Status	Date
Cyber Resilience IT	●	Submitted	Jan - 24
Cyber Resilience OT	●	Submitted	Jan - 24
Pipeline Diversions (non-rechargeable) and Loss of Development Claims	●	Submitted	Jan 24 and July 24
New large load connection(s)	●	Submitted	Jan - 24
Physical Security (PSUP)	●	Submitted	Jun - 24
Net Zero Pre-construction and Small Projects	●	Triggered – To be submitted	Sep - 24
Specified street works	●	To be submitted	Sep - 24
HSE policy changes (including fatigue)	●	To be submitted	Sep - 24

#### High likelihood reopeners

**Cyber resilience IT and OT non-baseline** – we submitted a reopener application and are awaiting draft and final determination from Ofgem.

**Pipeline Diversions (non-rechargeable) and Loss of Development Claims** - we submitted a reopener application in January 2024 and, as directed by Ofgem, resubmitted in July 2024. We await draft and final determination from Ofgem.

**New Large Load Connections** – we submitted a reopener application for large load connections that meet the criteria as set out in the reopener submission guidance. We are awaiting draft and final determination from Ofgem.

**Physical Security Upgrade Programme (PSUP)** – maintaining and improving the physical security of our critical national infrastructure assets is extremely important given the ever-heightening security threats. We intend to continue to upgrade security at our sites and have therefore submitted a reopener in June 2024 to fund these necessary improvements. We await draft and final determination from Ofgem.



**Net Zero Pre-construction and Small Projects** – on a quarterly basis we share with Ofgem the details of our net zero projects, within which there are several pre-construction hydrogen projects that would be funded through this re-opener. These include initial feasibility and studies costs associated with potential hydrogen pipelines including the HyLine Cymru pipeline in South Wales. The request to Ofgem to submit via this reopener was triggered in July 2024 and the reopener submission is due in September 2024.

**Specified street works** – as explained in the cost pressures section above, we continue to experience significant year on year increases in the costs of working in the roads in our network. These are driven largely by the enhanced requirements imposed upon us by Highways Agencies – in particular manned lights. We are working on compiling the full impact of this across the price control and working with other GDN’s on a consistent methodology that will result in a reopener submission in September 2024.

**HSE policy changes (including fatigue)** – the HSE is currently reviewing working practices of the industrial workforce specifically in relation to fatigue management. Given the ongoing dialogue and consultation between the HSE and GDNs, we continue to assess the additional and more onerous requirements that the HSE have, and expect to, placed on GDN workforces. We have not included any indicative figures within RRP’s, but we continue to compile the full impact of this across the price control, working with other GDN’s on a consistent methodology to submit in September 2024.

**Volume Drivers**

There are three areas where our allowances increase/decrease dependant on the volume delivered. These are:

Volume Driver	Likelihood of allowance reduction
Fuel Poor Network Extension Scheme	●
Domestic Connections	●
Tier 2A Mains Replacement	●

● Low    ● Medium    ● High

**Fuel Poor Network Extension Scheme (FPNES)** - with ECO4 not supporting new gas heating systems, and the end of the National Grid Warm Homes Fund, connections under the Fuel Poor Network Extension Scheme totalled just 63 in 2023/24 and we are forecasting continued low volumes across the rest of RIIO-GD2. We have worked with Ofgem and agreed the FPNES will continue with a lower output with unspent allowances transferred to the Vulnerability and Carbon Monoxide Allowance (VCMA). The Ofgem target of 2,181 FPNES connections is unlikely to be met, missing by an estimated 593 connections, triggering the FPNES volume driver.

We are using the £13.2m of allowances transferred from the Fuel poor Network Extension Scheme to the VCMA in Licence changes, to do even more to tackle fuel poverty and support our most vulnerable customers during the remainder of RIIO-GD2. We expect to achieve the revised outputs agreed by Ofgem.

**Domestic connections** – the volumes of domestic connections continue to reduce year on year; requests for new connections to domestic properties were 21% down in 2023/24 compared to 2022/23. We forecast to see a steady drop in volumes through the remainder of RIIO-GD2 with current incentives for low carbon heating, and developers continuing to reduce the requirement for a new gas connection to new build homes. The allowances within this commentary already account for the allowance reduction resulting from the significantly reduced forecast volumes, therefore the risk to further allowance reductions is only if domestic connections reduce further. Due to the volume driver mechanism in place, we have already accounted for a £22.7m allowance reduction compared with those set at Final Determinations.

**Price Control Deliverables (PCD)**

The following are the PCDs where WWU could experience an adjustment to allowances:

PCD	Likelihood of allowance reduction
Tier 1 Mains decommissioned	●
Tier 1 Services delivered	●
Capital projects	●
Commercial fleet	●
Cyber resilience OT & IT	●
Net zero	●

● Low      ● Medium      ● High

**Commercial Fleet PCD**

We are now forecasting a reduction to the Commercial Fleet variant allowance as there are currently no suitable electric alternatives to the majority of our diesel commercial fleet vehicles. This is largely because the current electric only vans available in the market have insufficient payload and/or range capabilities for our operational requirements and geographically sparse network.

We continue to proactively review and test new vehicles as they become available and look for alternative solutions that would meet the operational demands on these vehicles (i.e. hydrogen fuelled vehicles), which we are trialling currently. Our current estimate is that we will fall short of the PCD target and will result in an allowance decrease of £2.0m over the price control.

### Workload Forecast

As mentioned in the Totex annual performance section all workload forecasts need to be looked at in conjunction with the five year workloads and deliverables.

Our key messages with this five year workload forecast are:-

- Our workload forecasts are broadly in line with our Price Control Deliverables which we plan to achieve for RIIO-GD2.
- Our in year delivery of Tier 1 mains length and services brings us cumulatively back on track
- We continue to see a reduction in service connections to new and existing housing, and the reduction in Fuel poor connections continues.
- We have the capacity and are well set to deliver against our associated output commitments in the remaining two years of RIIO-GD2.

	Unit	Actual 2021/22	Actual 2022/23	Actual 2023/24	Forecast 2024/25	Forecast 2025/26	Total	Average
Mains condition reports	No.	4,105	4,541	4,482	4,399	4,399	21,926	4,385
Service condition reports	No.	5,779	5,803	6,397	5,638	5,638	29,255	5,851
No. of holders removed	No.	0	2	1	0	0	3	1
Mains reinforcement	Km	15.4	14.9	10.0	22.8	22.8	86	17
New housing services	No.	3,008	2,466	1,608	1,367	1,162	9,611	1,922
Existing housing services	No.	3,628	2,579	2,376	2,020	1,717	12,320	2,464
Fuel poor services	No.	1,177	245	63	56	47	1,588	318
Governor intervention	No.	5	3	4	4	4	20	4
T1 length decommissioned	Km	282.1	312.5	337.1	318.0	318.4	1,568.0	313.6
T2a length decommissioned	Km	2.5	0.0	0.3	0.0	0.0	2.8	0.6
T2b length decommissioned	Km	10.9	27.1	28.8	10	10	86.8	17.4
T3 length decommissioned	Km	0.1	1.8	0.1	2.7	0.0	4.7	0.9
Diversions decommissioned	Km	24.5	7.0	11.6	0.0	0.0	43.1	8.6
Steel length decommissioned	Km	58.6	72.9	73.2	49.7	51.1	305.5	61.1
Other length decommissioned	Km	33.8	23.8	41.7	15.5	15.5	130.3	26.1
No. of services transferred	No.	12,195	14,523	17,794	16,561	16,525	77,598	15,520
No. of services re-laid	No.	18,070	17,693	20,169	15,111	15,078	86,121	17,224

We are undertaking a review of our length decommissioned five year forecast with specific focus on non-Tier 1 work; recognising that we are finding a higher level of  $\leq 2$ " steel mains associated with the mandatory Tier 1 programme than expected, something that is unavoidable. The NARM mechanism provides the ability to trade risk across asset groups. We forecast achieving our RIIO-GD2 NARM output target by utilising the trading methodology to manage movement of work between asset groups. We will discuss the outcomes of this review with Ofgem in due course.

### Outputs Summary

The following table sets out our view of delivery of outputs by the end of the price control.

Our key messages for the five year outputs forecast are:

- We are on track and forecasting to meet all outputs apart from Fuel Poor Connections (as agreed between Ofgem and GDNs).
- Our resourcing strategy, to largely run with an insourced model, employed since the start of RIIO-GD2 has ensured we are well resourced to meet our outputs.

Output	Output	RIIO-GD2 view
Meeting the needs of consumers and network users	Consumer vulnerability minimum standards	●
	Fuel poor connections (no.)	●
	Complaints metric	●
	Guaranteed standards of performance	●
	Emergency response - 97% controlled gas escapes	●
	Emergency response - 97% uncontrolled gas escapes	●
	Loss of supply – number of unplanned interruptions	●
	Loss of supply – duration of unplanned interruptions	●
	Loss of supply – number of planned interruptions	●
	Loss of supply – duration of planned interruptions	●
	Planned interruptions survey (score out of 10)	●
	Emergency response and repair survey (score out of 10)	●
Maintaining a safe and resilient network	Repex – Tier 1 mains replacement	●
	Repex – Tier 1 services	●
	Capital projects	●
	NARMs	●
Delivering an environmentally sustainable network	Shrinkage and environmental emissions	●
	Biomethane connections information	●
	Environmental action plan and annual environmental report	●
	Business Carbon Footprint (BCF) reporting	●
	Carbon monoxide awareness	●
	Introduce distributed gas entry standards (scmh connections)	●

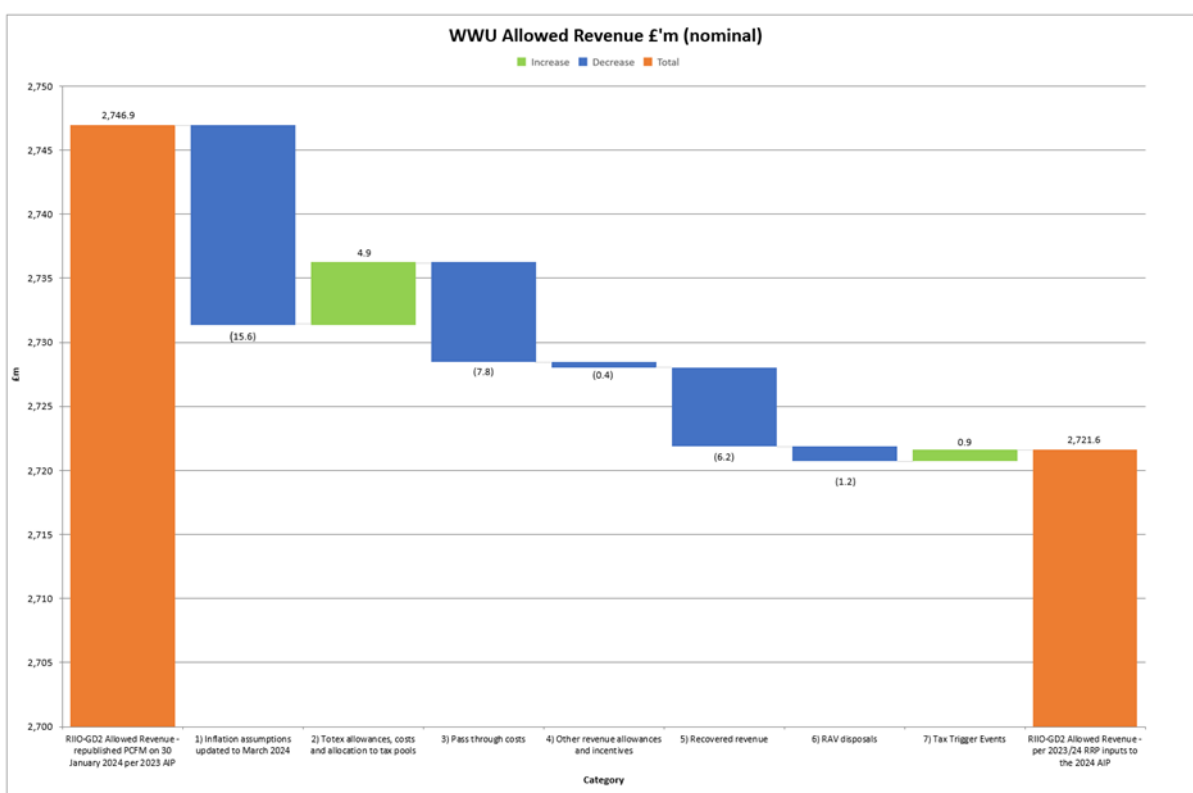
● On track   ● At risk   ● Not on track

**Fuel Poor Network Extension Scheme (FPNES)** – as noted previously, working with Ofgem, volumes have been revised downwards and allowances transferred to VCMA. Delivery of fewer services will be dealt with through the Volume Driver mechanism. We are seeing slightly lower services than the revised agreed volumes.

## Financial Performance

### Allowed revenue versus allowance

Our Allowed Revenue performance for RIIO-GD2 is set out below. This shows the difference in RIIO-GD2 Allowed Revenue between the re-published PCFM as at 30 January 2024 following the 2023 AIP and the latest PCFM that has been prepared based on the 2023/24 RRP inputs that will be used for the first Dry Run of the 2024 AIP. This shows a nominal decrease in allowed revenue of £25.3m across the price control.



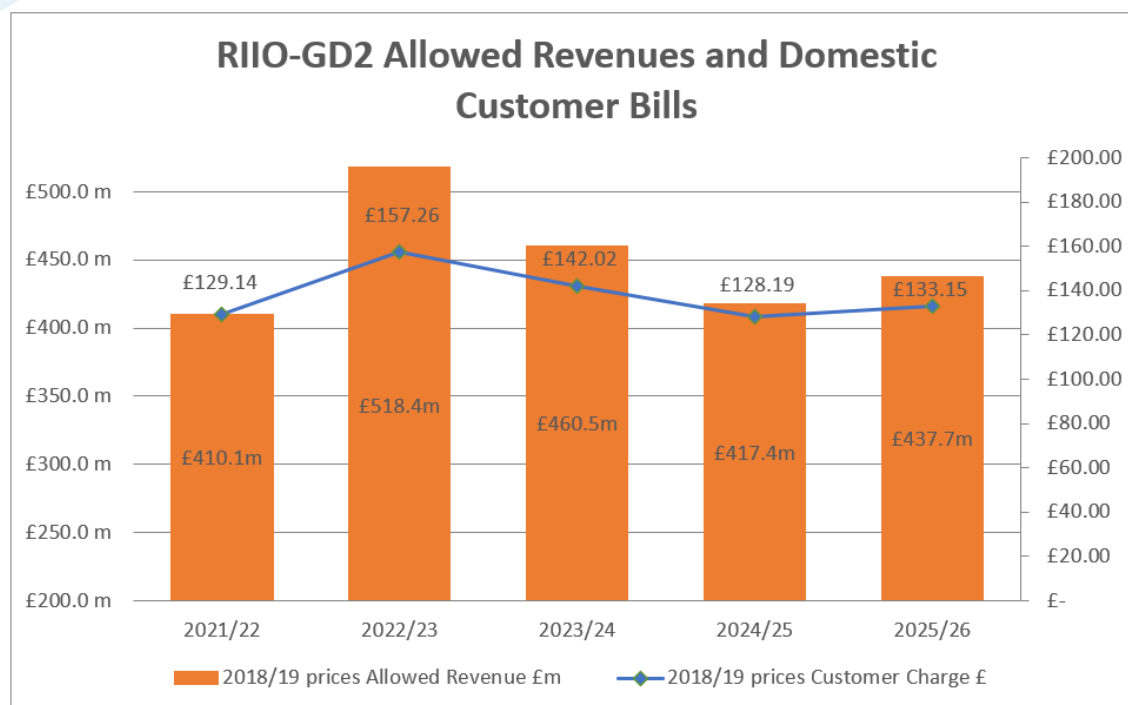
- Inflation** - £15.6m decrease to Allowed Revenues arising following updates to the inflation assumptions; including actuals to March 2024 and revised OBR predictions to March 2026.
- Totex** – Updates to variant Totex allowances leading to increased Allowed Revenue of £7.2m and a £2.5m Allowed Revenue increase arising from updated actual and forecast Totex costs. These have been partially offset by a reduction in Allowed Revenue relating to the allocation of Totex to tax pools for the purpose of calculating the notional Tax Allowance of £4.8m.
- Pass through costs** - £7.8m Allowed Revenue reduction predominantly as a result of reduced Shrinkage costs. Gas price volatility has reduced since the 2023 AIP and latest forecast prices are now lower than market data previously indicated. The total reduction for Allowed Revenue due to Shrinkage is £9.9m which is offset slightly by an increase in Licence and NTS Exit Capacity costs increasing Allowed Revenue by £0.9m and £1.3m respectively. The Exit Capacity increase predominantly relates to updated rates published by National Gas Transmission on 31st May 2024 effective from 1 October 2024.

4. **Other revenue allowances and Incentives** – The decrease of £0.4m in Allowed Revenue is mainly as a result of decreases in RIIO-GD2 Customer Satisfaction Survey allowances which has caused Allowed Revenue to reduce by £1.3m. Customer satisfaction scores increased in 2023/24 from 2022/23, however the scores were lower than reported in the 2022/23 RRP. Forecasts for the final two years increase from 2023/24 but are more inline with actual performance to date. This has reduced total allowance by £0.72m in 2018/19 prices. This is offset in part by an increase in the Shrinkage Management ODI allowance increasing Allowed Revenue by £0.6m based on revised planned spend and a small increase in the RIIO-GD2 Network Innovation Allowance increasing Allowed Revenue by £0.3m.
5. **Recovered Revenue** – Allowed Revenue decreased by £6.2m mainly due to additional Exit Capacity bookings experienced in 2023/24 and currently predicted for 2024/25 increasing Recovered Revenue billed basis. This is combined with bad debt recovery of £1.1m and £0.4m in each respective year further increasing Recovered Revenue.
6. **Disposals** – Updated RAV disposals have been included based on actual outturn to March 2024 and result in a reduction to Allowed Revenue of £1.2m.
7. **Tax Trigger Events** – Allowed Revenue increase of £0.9m following updates to reflect revised Totex impacting the latest general and special rate pool First Year Allowances and consequential opening balance adjustments.

#### Company view of customer bills

Customer bill movements fall into two elements; (i) movements in our “Allowed Revenue” and (ii) changes in customer numbers and the aggregate capacity booked by Shippers. e i.e., if there is an increase in the number of customers, then the revenue to be collected from each customer will decrease, all else being equal.

As the annual quantity of customer numbers and volumes is expected to remain broadly consistent across RIIO-GD2, the change in estimated and actual customer bills is mainly due to changes in Allowed Revenue such as changes in Supplier of Last Resort Payments, exit capacity costs, wholesale gas prices and legislation.



All values shown are in 18/19 prices

Customer bill estimates are forecast to decrease by £13.83 from £142.02 to £128.19 between 2023/24 and 2024/25. This represents a decrease of £7.29 in respect of SoLR and Exit Capacity costs which are non-controllable. The balance, a decrease of £6.54, is primarily driven by a reduction in 2024/25 Allowed Revenues that have arisen as a result of other non-controllable costs decreasing. This is largely explained by shrinkage due to wholesale gas prices turning out lower than expected. Business Rates were also lower than anticipated following the Valuation Office Agency review.

Customer bill estimates are forecast to increase by £4.97 from £128.19 to £133.15 between 2024/25 and 2025/26. This represents an increase of £3.62 in respect of Exit Capacity costs which are non-controllable. The balance, an increase of £1.34, is primarily driven by a small increase in forecast 2025/26 Allowed Revenues that have arisen due to updated Totex allowances and forecast and actual Totex for the 2025/26 regulatory year.

Below is a walkdown of customer bills over the period excluding SoLR costs and Exit Capacity costs.

Walkdown of domestic customer bills excluding SoLR and Exit Capacity (18/19 prices)	2021/22	2022/23	2023/24	2024/25	2025/26	RIIO-GD2 Average
Total domestic customer bills	£129.14	£157.26	£142.02	£128.19	£133.15	£137.95
Exclude SoLR element	£0.00	£-24.78	£-7.29	£-0.23	£0.00	£-6.46
Exclude Exit Capacity costs	£-6.22	£-11.04	£-5.91	£-5.69	£-9.54	£-7.68
Customer bills excluding SoLR & Exit Capacity	£122.92	£121.45	£128.81	£122.27	£123.61	£123.81

### Future of Energy and Innovation

Our ambition is to be trusted to expertly serve customers and communities with safe, reliable and affordable energy services today, whilst investing wisely to create a sustainable, greener future. Our innovation and delivery work on the energy system transition is focussed on building evidence on future technology options; understanding the implications of the transition for our network and customers; and supporting progress on decarbonisation.

Our key messages within this section are:

- We are undertaking a range of activities and projects to deliver a Net Zero energy system and support customers through the transition.
- We participate in national programmes to support key activities such as research and trials of hydrogen, alongside work focussed on options for the communities we serve.
- We work with partners across the industry and use our strategy and priorities to guide our activity, and ensure it delivers value for money.

### Strategic Priorities

Delivering a safe, secure, decarbonised energy system will require a range of technologies deployed at scale. Our extensive gas network infrastructure will need to play a major role to deliver a net zero system in time to meet the government's goals. As there is uncertainty on the mix of technologies that will be used in the long term, our innovation and net zero aims to help understand how our gas distribution network will change in the coming decades, and what this will mean for our customers. This includes our work in industrial clusters throughout the network, which is summarised earlier in this document.

#### Connecting and managing green gas on our network

We are continuing to work with biomethane producers to manage green gas on our network and connect new sites. We currently have 21 plants connected to our network, with enough capacity to meet the annual demand of approximately 160,000 homes. We are working with green gas producers in our network to explore and deliver options for expanding capacity to meet future demands. This includes using technologies such as reverse compression and smart pressure control which have been developed through our innovation activity, in collaboration with industry partners and other networks.

#### Innovating and delivering for the energy system transition

In 2023/24, we:

- kicked off 18 projects,
- invested £2.8m across our innovation portfolio, including £1.9m of Network Innovation Allowance (NIA) funded projects and the rest funding via Strategic Innovation Fund (SIF),
- used Net Zero and Re-opener Development Fund use-it-or-lose-it allowance (NZARD UIOLI) to support the development of industrial clusters and demonstration projects,
- worked collaboratively on 61% of our NIA projects with other licensees,
- worked directly with 22 unique partners on our projects, and
- disseminated learning and sought new ideas through the Energy Innovation Summit, Energy Innovation Basecamp and other industry events.

A further summary of our innovation activity for 2023/24 will be published in our annual innovation report, available via <https://www.wwutilities.co.uk/about-us/innovating-for-our-customers/>.