RIIO-GD1 Fourth Year Annual Report

Year ended:
31 March 2017

WALES&WEST UTILITIES

Contents

1.0 Continuing to deliver for our customers

After another year of challenge for the UK energy sector, I am pleased to present our latest annual performance report.

Amidst increasing uncertainty and a rapidly evolving energy system, at the midpoint of this price control period we're continuing to build on our successes to deliver for all our customers. It is again a pleasure to say that we have achieved all the outputs set for the fourth year of this price control. We are also on track to achieve the outputs required over the full eight year period. However we have gone much further than just achieving our regulatory outputs, as the following pages illustrate.

With energy costs attracting significant media and political debate, we're doing what we can to deliver our services efficiently and at value for money. So I'm very pleased that again, our contribution to the average customer bill falls to £128 from £129 last year - and from £145 at the start of GD1 (all in 2016/17 prices so excluding any inflationary impacts).

Our focus on putting customers first has brought significant success as well as helping us meet our outputs. This includes reaccreditation by the Institute of Customer Service at Distinction level, and becoming the first gas network to meet the requirements of British Standard 18477 for the support we provide to customers in vulnerable situations. We are very proud of both of these achievements as we continually seek to further improve the service we provide to customers.

We also continue to focus on building our business for the future. With more than 80% of heat and power demand at peak times met by the gas network, communities rely on us to keep the lights on and to power industry. So we're working hard to ensure we continue to supply affordable and low carbon energy for current and future generations, as part of an integrated energy network. In this way we can not only help meet heat demand, but also underpin the decarbonisation of electricity by enabling flexible, gas fired power generation - that also supports renewable energy and helps power the UK.

We are already thinking about the next price control period, speaking to our stakeholders about the future regulatory environment and what matters to them. We're committed to working closely with all stakeholders to make sure that we continue to deliver the value for money services that energy consumers want and need.

At the heart of our success are our people - from the front line to back office support. The outstanding value for money service we continue to provide is very much down to them. Our values driven culture, recently accredited by Investors in

People - supports and challenges our people to deliver for customers in an effective, innovative way.

Leading Wales & West Utilities remains a great privilege for me. I want to thank colleagues, customers and all our stakeholders for their continued support, and I look forward to continuing to work with you all.

I trust you find this report of interest.

Graham Edwards,

Chief Executive

Wales & West Utilities

2.0 Executive Summary

2.1. Mid way through RIIO GD1

31 March 2017 marked the end of the first four years of RIIO GD1.

"We have delivered our outputs for the first four years of RIIO"

In terms of Output delivery and controllable Totex performance we have delivered **another year of outperformance** which results in **all our outputs for the four years being achieved. We also anticipate** that outputs over the **eight year price control will also be achieved** - resulting in significant customer benefits.

- ✓ Having made a **step change reduction to our cost base in 2013/14**, coupled with continuous focus over the first half of this price control we have been able to maintain Output delivery at this lower cost base.
- ✓ After 4 years, we have already **given £21m back to shippers** via the Totex sharing mechanism and our forecasts highlight continuation of our excellent performance.
- ✓ A **further £25m is forecast to be shared back with consumers by 2021**.

These savings will continue into GD2 due to the two year lag and also the slow money unwinds benefiting future consumers from today's savings. All this assumes that Shippers pass these lower costs onto consumers.

The factors contributing to this saving include:

- ✓ The **cyclical contract negotiations** and settlements with our partners continue to provide **significant cost savings** compared to the historic contracts they replaced.
- ✓ Encouraging our contractors and suppliers into challenging the output and impact of everything they do. This helps ensure that each £ of spend is optimised in a way that delivers the best outcome for the consumer.
- ✓ The **mild winters** experienced each year so far in the control reducing the amount required to be spent on reactive works. This reduction in work saves emergency and repair costs, and enables **spare capacity to be utilised on replacing more at-risk pipes** than we anticipated at this point of the price control. However the fractures which ordinarily occur in colder weather will still be present in the system, so the risk of pipes fracturing at the next spell of colder weather remains.

Further to the savings made against our Totex allowance, **the consumer continues to benefit** from the current price control Annual Iteration Process (AIP) which trues up outturn cost of debt against those initially awarded through the price control. This **protects the consumer** (and if macro-economic conditions reversed

the network companies) from paying a higher cost of debt than the 10 year trailing iBOXX average would otherwise suggest.

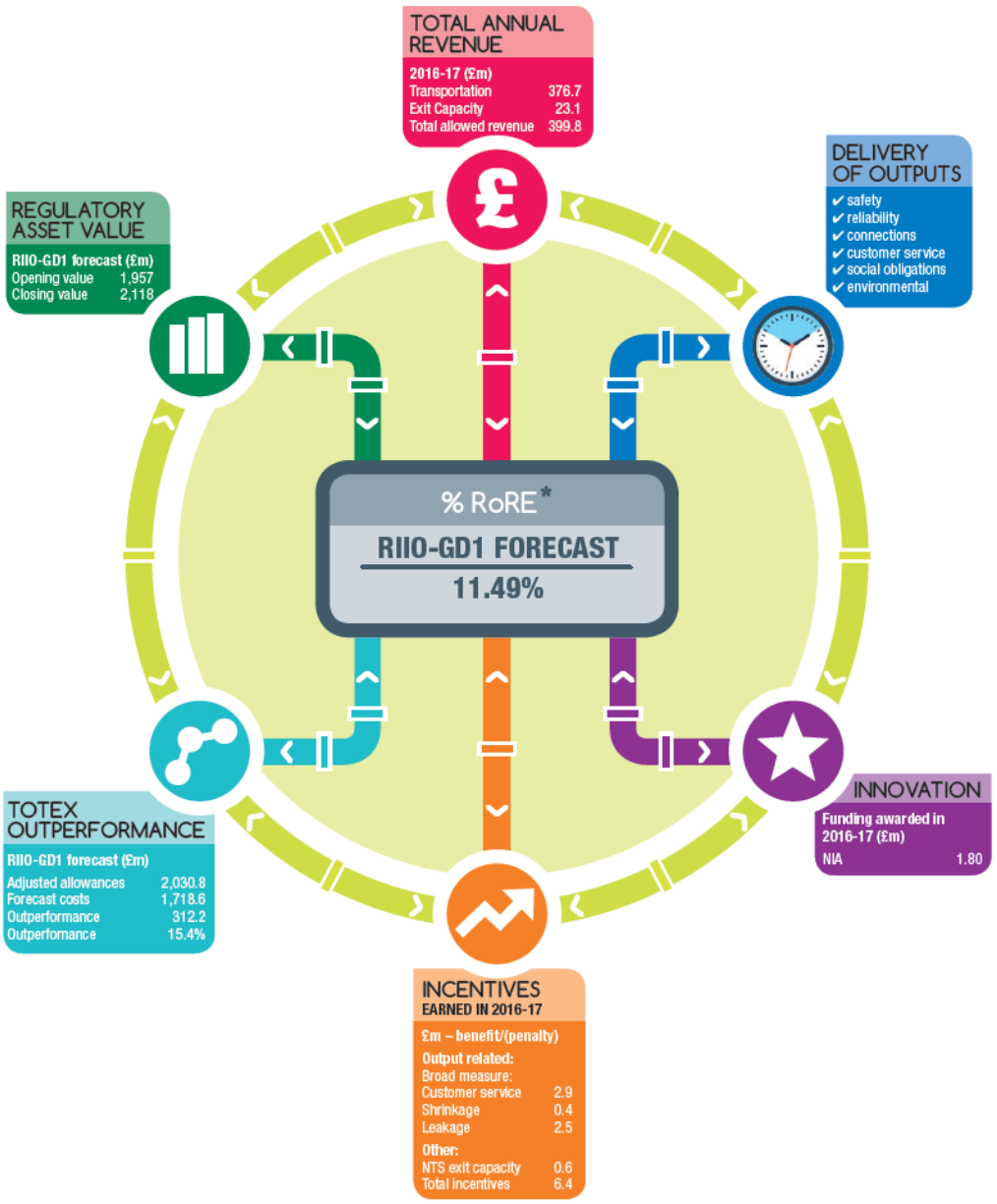
However, it does result in us **incurring debt costs in excess of the allowance received.** This is the result of efficiently borrowed debt being raised in 2010 which was at higher rates than are currently available.

"Returns earned by our equity investors were below the allowance received in the year"

2016/17 Summary performance

* Customer bill impact in constant 2016/17 prices

Forecast Performance



* using the Ofgem measure of RORE which is not reflective of overall company performance

2.2. Other challenges and opportunities

The second half of the current price control will be a pivotal period in many respects, as we continue to develop what the future of our industry looks like.

So **what are the key specific challenges** that have emerged other than those set out above, and what are we doing?

1. Addressing fuel poverty and vulnerable customers

2016/17 has been a difficult year, with a number of changes to government definitions and funding for fuel poverty and vulnerable customers. From a WWU perspective however;

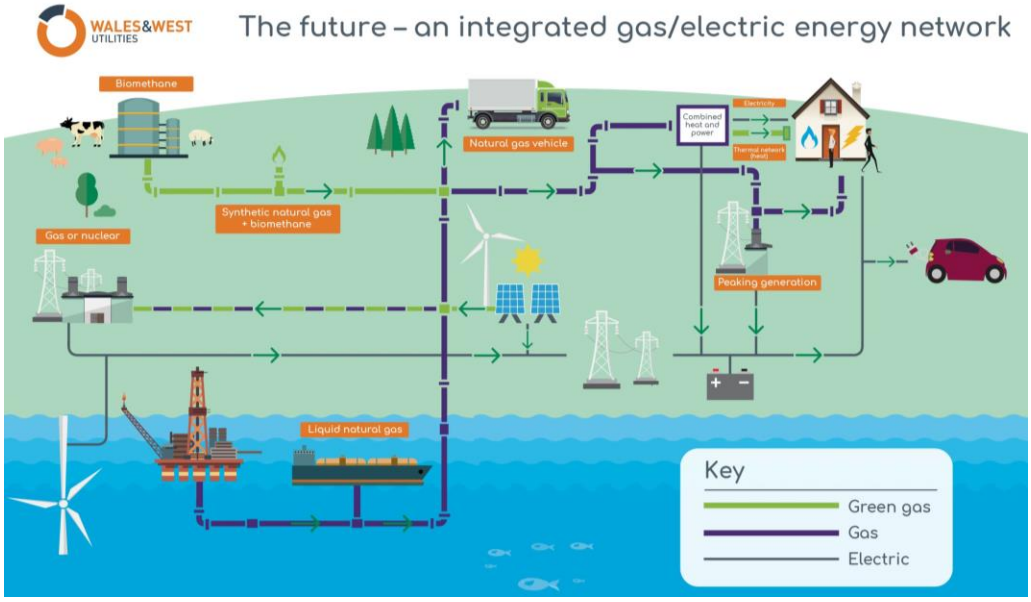
- ✓ We remain **committed to the increase in our commitment of 17% fuel poor connectees** for the 8 year period albeit against the backdrop of a tightening of the criteria (e.g. the removal of the blanket over 70 eligibility). Further changes to Energy Company Obligation (ECO) criteria, if translated to the gas fuel poor scheme, will however make Output delivery even more challenging.
- ✓ We will continue to work with our partners, suppliers and other third party organisations to see how we can **innovatively extract maximum value from the reducing public funds**.

Following feedback from stakeholders at our Vulnerable Customer Forum, we have introduced a number of initiatives to support customers in the most vulnerable situations, such as:-

- ✓ **redesigning our Keep Warm Packs** – used to keep customers in the most vulnerable situations warm during a loss of gas supply – by making sure contact information was more prominent.
- ✓ **increasing the number of partnerships we have** – with organisations such as the Fire & Rescue Services and Care & Repair – to promote the support measures we offer our customers;
- ✓ **undertaking dementia training** with our customer-facing colleagues to make sure they can identify the signs of dementia and adapt the services we provide accordingly.

- ✓ organising the **first pan utility "Stronger together" conference** this year and this, coupled with other inputs has helped shape our work plan for the years ahead.

2. The role of the gas network in an energy system



As the connection of weather dependent generation to the electricity grid increases and coal fired generation reduces, we are seeing the rapid development of small scale gas generation connecting to our network to cover the shortfall.

Our part in this new integrated energy future includes:-

Power generation

- ✓ **Connected 19 peak generating gas fired power stations to date**, directly increasing the role we are playing in power generation.
- ✓ By 2021 we forecast around **50 of these plants** connected to our network.

This is against a backdrop of gas already providing over 50% of the power used in the UK with over 80% at peak times.

Power storage

The lack of ability to store electricity at mass scale is highlighting the value that the gas distribution and transmission systems provide to support the increasing intermittent renewable electricity requirements. **Storage capacity already exists in the gas network** - coping with daily and seasonal fluctuations in gas demand across the UK, from domestic through to large gas fired power stations.

Greener energy generation

We are fully supporting renewable gas utilisation in the network - **we now have 16 biomethane connections sufficient to power some 112,000 homes**.

"The future of energy is already happening - and gas will continues to play a key part in it"

The future of energy is already happening, and for our part we will continue to support the demands from electricity generators.

Future of heat

After a slow start, there is now much interest and activity taking place in the UK around the future of heat. We are very much playing our part in identifying the most cost effective solutions for the future, particularly those of a 'least regrets' nature.

Over the past year we have;

- ✓ partnered with Western Power Distribution, Passive Systems, academia and housing associations to pilot a hybrid heating solution (the Freedom Project). This project could **provide a low cost, low disruption and low carbon solution for consumers**. The project has already attracted interest from BEIS, Climate Change Committee and Welsh Government amongst others, with the potential to be something of a game changer.
- ✓ continued to engage in key energy consultations, conferences and workshops. A number of local authorities are also working with us on their future energy plans, as we support them with our modelling capability. This will clearly be a key focus area going forward, and we will continue to play a key role in these developments.

"We are working hard to identify the 'least regret' approach to future energy provision"

3. The commercial arrangements required to support the changing network dynamics

A backdrop of more complex connections and energy flows, coupled with industry governance becoming more complex as a result, requires a review of the appropriate governance and arrangements for the future.

The industry needs to enable better and more agile working. A good example of this is the implementation of project Nexus, the governance of Xoserve itself, Funding Governance and Ownership (FGO) and the implementation of the CMA recommendations.

The legacy industry codes and governance arrangements that have served us well since network sale in 2005 need to be reviewed to ensure they are fit for purpose to support the further evolution of the industry. This will include revisions to connection charging regimes, the economic test, entry and exit agreements.

4. The continued evolution of stakeholder engagement

The views of our stakeholders played a significant part in determining our business plan for GD1. Since then stakeholder engagement has continued to form an important part of our business approach. In the last year alone we have;

- ✓ **engaged with more than 130 people** from a range of organisations at more than 60 events - including locational workshops, forums on vulnerable customers and future bill payers, our Critical Friends Panel and the first UK Alternative Gas Workshop,
- ✓ **acted on stakeholder feedback** - we reviewed how best to connect alternative sources of gas to our network based on feedback from users
- ✓ **undertook an opinion research programme** - contacting a selection of domestic and business customers to discuss their perceptions of the services we provide.

Our refreshed strategy includes even more partnership working, with outcomes for customers and stakeholders in mind, for example;

- ✓ **we've increased our collaboration** with local authorities, charitable organisations and emergency services that are particularly trusted by the communities we serve.
- ✓ **We've led the introduction of Fuel Poor Hubs** in

"We have refreshed our engagement strategy whilst embeding engagement as a fundamental requirement across our business"

Cardiff and Flintshire - where we invested so workers from the charity Care & Repair can provide energy and financial advice to those who need it most. We're planning to roll out this initiative to other areas across our network.

- ✓ **We facilitated the first multi-utility conference** to focus on customers in vulnerable situations. Alongside Dwr Cymru Welsh Water and Western Power Distribution (who share our Wales geography), we brought together housing associations, local authorities and the voluntary sector to discuss how we could collaborate more and access hard to reach customers in vulnerable situations.

Whilst our strategy has been refreshed, our focus on delivering for stakeholders remains unchanged, as outlined below.

Promoting Carbon Monoxide (CO) safety is consistently top of the stakeholder priority list - and we're increasing our response to this in innovative ways. Our CO interventions are targeted at those most at risk from the dangers of CO - the young and old and those in vulnerable situations.

- ✓ **for the young** - we have developed an interactive online game.
- ✓ **for the older and vulnerable** - our partnership with six Fire & Rescue Services across our network provides them with CO alarms to install during the visits they do to the homes of customers in vulnerable situations.

As we prepare for the next price control period, we will be continue to engage fully with customers and wider stakeholders to discuss their views on the future of energy - and the role gas and the networks can continue to play in the future.

5. Non controllable costs

The RIIO framework sought to better balance risk for network companies and stability of charging for the consumer, and in many respects has worked well in this regard.

However two of the largest costs we are faced with, over which we have very limited control, are Exit Capacity Charges from the National Transmission System (NTS) and business rates levied by central and Welsh governments. We are currently seeing significant increases in both of these;

- ✓ NTS Exit Capacity charges increased from £23.3m in 2015-16 to £32.5m in 2016-17, and are forecast to be £42.4m by 2017-18. The failure of NTS to accurately forecast this increase results in a significant short term cash

shortfall until the T+2 true up, where allowed revenue is adjusted two years after the cost is borne.

- ✓ Business Rates are increasing from £27.5m in 2015-16 to £40.2m in 2017-18. This cost is also subject to a lagged true up which will run into GD2.

The consequence of these changes is that WWU is required to fund over £24m in the short term - creating significant volatility to the cash flows of what is supposed to be a relatively predictable business.

6. The measurement and reporting of Costs and Outputs for the remainder of RIIO-GD1

We fully engaged with Ofgem's review of the GD1 mid point process during the year, and we are working on the MPR+ outcomes identified by Ofgem as part of their review to bring suitable conclusions for the Network Outputs Measures.

This work will continue to absorb much time and effort; however we are committed to setting and delivering Outputs that really benefit our stakeholders.

We will continue to collaborate and also scrutinise changes in Outputs to ensure fairness and consistency of challenge across all networks.

One improvement which is already underway is the **RIIO accounts** work, looking to make the regulatory accounts we are required to produce under our license more beneficial to their readers. One objective of the RIIO accounts will be to adjust network performance for known controllable timing differences - for example adjusting where outperformance/under performance against allowances for a particular year has been the result of phasing of works relative to the timing of allowances, rather than underlying efficiency.

We have been actively engaged throughout the RIIO accounts process and believe this could be a valuable improvement on current reporting. However we remain mindful of the need to implement an efficient and consistent approach.

"We also want to ensure stakeholders have the ability to compare network performance within the RIIO framework"

Whilst the RIIO accounts may go some way to adjusting financial performance, we believe that wider comparability of performance still requires development and we will continue to support these developments.

We will continue with our transparent and collaborative approach, and support the development of a comparative toolkit that can facilitate easier stakeholder understanding of ours and other networks' performance.

7. Changes to the Innovation framework

Noting the pace of change within the energy system - including closer integration of the gas and electricity networks - **innovation must continue to play a vital part in our energy system development**.

"Continued innovation must be encouraged to develop cost effective energy solutions for the future"

The importance of heat to supporting the energy trilemma and keeping customer homes warm, requires more innovation than ever to provide a cost effective, low carbon solution.

RIIO has clearly been successful in encouraging new thinking in the industry - however we are concerned that **funding gaps appear as the RIIO innovation mechanisms are constrained to 'network' issues**.

We are engaging with Ofgem, BEIS and Welsh Government to ensure innovation investment matches energy system ambition - to ensure energy customers get access to secure, low cost and low carbon solutions.

This will require continued innovation to look across the traditional boundaries of gas & electric, transmission & distribution.

8. RORE (Return on Regulatory Equity) measure

The eight year RORE measure does not reflect a number of key inputs that influence overall performance, such as non-controllable costs, finance costs and tax. **It does not therefore reflect an accurate return on equity.**

As stated previously, the return earned by our equity investors has been consistently below the base allowance in the control so far for RIIO-GD1 - even though we are achieving outperformance on Totex and earning incentive income. This is largely the result of the debt allowance being insufficient to cover the efficiently raised debt financing costs of the business.

"Returns earned by our equity investors were below the allowance received in the year"

This measure needs revision for future control periods and we welcome early engagement to make the measure more meaningful.

9. The ramp up of the Smart Meter rollout

There has been delay in the development of the industry systems that underpin the ability to roll out Smart Meters, and we are now faced with a significant volume of meter replacements across our network in the period up to the Government deadline in 2020.

We are engaging fully with all industry workgroups and upskilled our colleagues to play our role in a successful roll out.

We are yet to see the high volume impact of this meter replacement programme but if projections are correct, we will inevitably see disruption to customers. We will explore all feasible options to support customers and suppliers during the rollout minimising the disruption caused.

On a related note we are pleased to report that in 2016-17 we were **successful in a competitive tender to carry out dual fuel smart meter installations**. Achieving non-regulated work of this type helps mitigate the costs we necessarily incur on our regulated activities, further benefitting consumers.

10. The next RIIO regulatory settlement cycle

Whilst half way through the current price control, we have already started thinking about the next control period GD2;

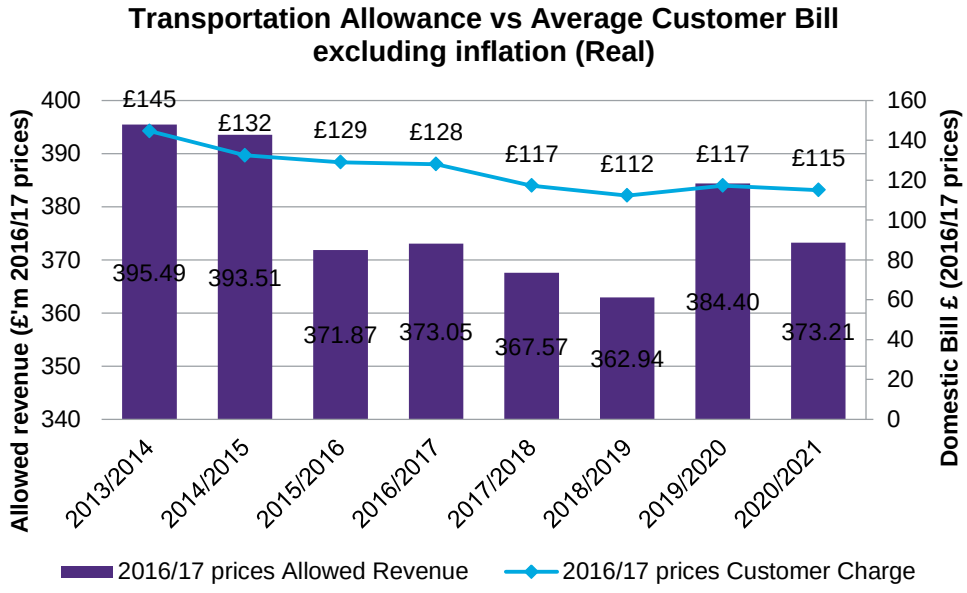
- ✓ we are developing our thinking on the future requirements of a gas network that fully supports a secure energy supply - against the background of increasing intermittent renewable energy
- ✓ we are already starting the engagement process with stakeholders on what the priorities might be for the next control period
- ✓ we need to ensure a regulatory framework that delivers fairness and value to all key stakeholders - consumers and investors.

The **UK needs to retain its reputation for secure and stable regulation if the energy sector is to continue to attract the ongoing funding required against intense global competition**.

2.3. Our impact on the customer

Our customers are charged for the capacity of gas they require during the regulatory year:-

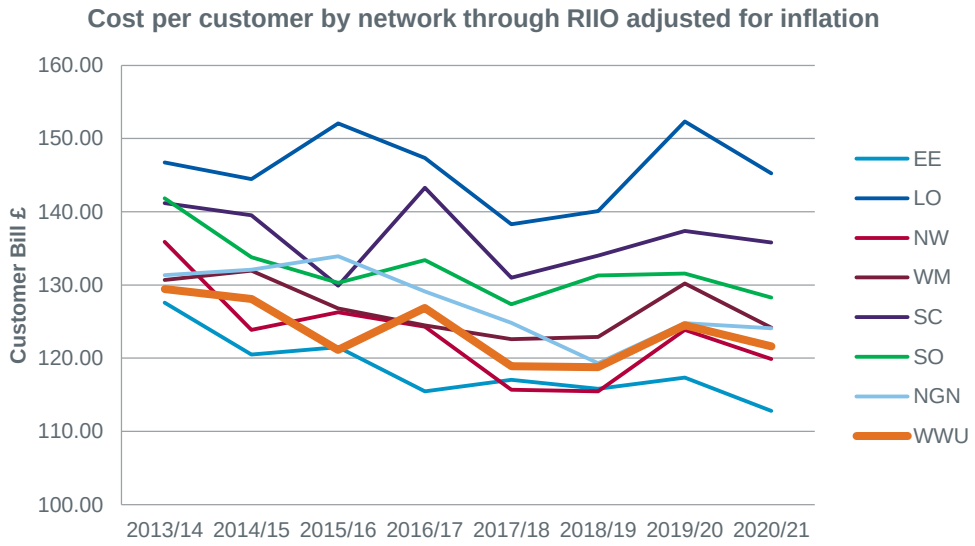
- ✓ For our domestic customer this was **£128 and is forecast to continue to fall until 2019/20**.
- ✓ From 2019/20 onwards the impact of our non controllable costs takes effect, increasing the customer bill, although still at a level below the first four years of the price control in constant prices.



When submitting our business plan as part of final proposals we forecast that over the RIIO GD1 price control the customer bill would increase by £4. We are pleased that currently we are delivering all our outputs whilst remaining below this. Our resulting impact on the consumer, after adjusting for inflationary impacts is a **decrease of £6 by 2020/21**.

Lower bills than we forecast within our Business Plan at Final Proposals

	Number of Customers	Allowed revenue	Cost per customer (£)
2010/11 forecast for the start of RIIO GD1	2,449,633	380.42	155.30
2016/17	2,479,694	376.62	151.88
2020/21 forecast	2,521,046	376.82	149.47



- ✓ Comparing bills across networks highlights that **the cost WWU per customer remains amongst the lowest in the industry**.
- ✓ This continues to be a **significant achievement given our geography** and is reflective of the ongoing work to manage our costs.

2.4. Our regulatory costs

- ✓ In 2013/14 we delivered **a step change in our cost base**.
- ✓ This was achieved through **tough decisions on internal resources and contract negotiations** with our partners who ensured that resources were focussed on delivery of the right outputs, and that costs were appropriately managed for that delivery.
- ✓ This resulted in the first three years of RIIO **delivering our outputs at an average of 87% of the allowance** we received.
- ✓ This **outperformance was repeated in 2016/17** delivering our outputs at 96% of the allowance.

The voluntary severance schemes and terms and conditions for new employees along with our continued focus on productivity has significantly contributed to the success in WWU's cost base step change.

The continuation of the revised contract within our Repex programme is forecast to achieve our outputs at a total of 80% of the allowance we received. Whilst this performance in RIIO GD1, it should be noted that this was the result of the one off restructuring to the way works are delivered, and the contracts in place with our partners.

"We are forecasting to deliver our 8 year outputs at a saving of 24% of the allowance we received"

Similar savings are unlikely to be present in future controls, a reflection of the benefits which the certainty of a longer eight year price control provided the networks in negotiating with their contractors and suppliers.

Forecast costs (2016/17 Prices)	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 F'cast	2019 F'cast	2020 F'cast	2021 F'cast	Forecast RIIO Total	RIIO-GD1 Allowance
Load related capex	26.1	22.2	29.6	25.5	29.7	30.1	25.0	26.4	**214.5**	298.1
Non load related capex	27.6	22.5	20.3	22.7	14.6	13.3	18.8	18.2	**158.1**	161.8
Controllable opex	98.3	92.6	84.8	86.0	91.0	95.0	95.5	95.5	**738.8**	836.4
Non controllable opex	77.6	77.7	77.4	101.2	99.9	104.7	109.4	102.0	**758.4**	619.4
Replacement expenditure	75.9	79.9	78.7	77.2	72.0	76.1	77.5	78.2	**750.0**	774.5
Total funded costs - including uncertainties	**305.5**	**294.9**	**290.8**	**321.1**	**307.3**	**319.2**	**326.2**	**320.3**	**2,485.4**	**2,690.3**
RIIO-GD1 Allowance	346.9	340.5	337.0	333.7	332.3	331.6	335.0	333.2	**2,690.3**	

- ✓ These savings have been achieved whilst **reducing the level of risk on our gas network** (when expressed as Monetised Risk), **exceeding the level committed to in Final Proposals** through targeted asset intervention.

Whilst controllable costs continue to be delivered, WWU is also exposed to a number of costs which are considered outside of its control.

Most significantly WWU has received an additional £24m of cost between 2015/16 and 2016/17 regulatory years. This comprised an increase in Exit Capacity costs which WWU is charged for the capacity provided at each one of its 17 offtakes from the NTS.

The impact of these increased non controllable costs are that the benefits which are being passed back to the consumer through the sharing Totex mechanism are

being eroded by the necessity to pass on the movement in controllable costs (two years after they are incurred).

3.0 Performance against Primary Outputs

3.1. Connections

Exit connections

In year output	Deliverable	Section Reference	2013/14	2014/15	2015/16	2016/17
Connections	Guaranteed standards performance	9.1.10	✓	✓	✓	✓

We have once again maintained our performance in Guaranteed Standards well above the benchmark levels set by Ofgem.

We are committed to providing our customers with the best customer experience at an affordable cost. We have expanded the mediums used to engage with our customers, with a specialist social media resource enabling us to reach a wider audience with relevant up to date information.

We were first awarded the prestigious Institute of Customer Service (ICS) ServiceMark in 2014. Building on that success, we've now been re-accredited at Distinction Level.

Our accreditation followed a rigorous week-long assessment which involved customer surveys, colleague interviews, and analysis of company documentation and processes. The assessment also gave us the opportunity to prepare a plan for further improvement.

We achieved an ICS customer satisfaction score of 90.4 out of 100 which is considerably higher than the utility company average of 73.3 and the all-sector benchmark score of 77.4 (placing us above leading household name known for their service such as John Lewis). This highlights our market-leading customer service performance, not only within gas distribution but also across the wider UK company sector. ServiceMark is granted for three-year periods and is the ICS's most thorough accreditation.

"Market leading customer services"

Once again, this award is a successful outcome recognising our ongoing communication with stakeholders and our commitment to pursue continuous improvement. The accreditation is another reassurance to those we deal with that we are committed to doing our best for the communities we serve. As a direct result, we were invited to jointly host an ICS member event, showcasing our performance and customer initiatives, attended by representatives of 44 organisations.

Jo Causon, Chief Executive at The Institute of Customer Service said:

> "Efficiency, effectiveness and empathy are key components of any great service delivery. At last week's showcase event, Wales & West Utilities' commitment to the service agenda was evident right from the very top of the organisation. They demonstrated through the use of clear and transparent measurement, and genuine commitment from the front line to the CEO, how they provide clarity for employees and customers about what needs to be done in real time, supporting their purpose and delivering for customers.
>
> "Events like these provide a great platform for customer service professionals to share and learn from different industries, ensuring we are all truly striving for best practice and never settling for complacency."

Entry Connections

In year output	Deliverable	Ref	Units	FP Target	2013/14	2014/15	2015/16	2016/17
Connections	Introduce distributed gas entry standards	9.1.10	Total Live connection (#)	N/A	1	2	12	16

We continue to believe in a future integrated energy network and have introduced distributed gas entry standards to support the connection of distributed Biomethane gas. We have also connected a number of peaking generation plants within our network as well as a connection to supply gas for a fleet of city buses. These elements are all demonstrating that the future is already here.

Injecting gas into the distribution network directly, helps both achieve climate change targets (reducing reliance on fossil fuels) and improve security of supply. We continue to support potential and existing connections through the complex accession process to ensure a reliable, clean and safe supply of gas into our network.

We currently have 16 biomenthane gas plants connected to our network, capable of generating enough power for some 112,000 homes. With enquiries for a further 82 potential connections.

3.2. Environmental

In year output	Deliverable	Section Ref	Units	2013/14	2014/15	2015/16	2016/17
Environmental	Shrinkage	8.2.8	GWh	417.4	394.8	381.1	378.5

8 year forecast	Deliverable	Section Ref	Units	FP Target	2013/14	2014/15	2015/16	2016/17
Environmental	Shrinkage (leakage)	8.2.8	GWh	381.2	398.0	376.0	363.0	357.9
	Provide biomethane connections information	7.1.1	Total Connected capacity (Gwh)	✓	5,400	35,208	86,125	108,125

Our primary impact on the environment is gas lost to atmosphere during transportation through our network.

Utilising pressure control systems and reinforcing our network we actively manage system pressures down to a minimum and therefore also minimise emissions. We invested heavily in pressure control systems in previous price controls, saturating our network where it could be justified through cost benefit analysis. This investment has significantly benefitted today's consumers.

We performed this work in advance of the other GDNs and have therefore already realised the opportunity which those other GDNs still have to further reduce emissions through installing new control systems.

Therefore, for us mains replacement is the most significant contributor to reducing emissions, delivering over 90% of the reduction in RIIO-GD1 to date. This equates

to 25,233 tonnes of carbon dioxide equivalent (CO2e) per annum (cumulative) or 3,100,000 tonnes (CO2e) over the life of the programme.

Without mains replacement we would fail to meet our emissions targets.

A further aspect of our role in the environment is in supporting wider decarbonising strategies.

We now have 16 DN entry sites connected to our network, one within Wales and the remainder in the south west These sites produce 'green gas, for use by our customers. Sufficient capacity has been provided to enable the equivalent of 112,000 domestic homes to receive green gas having a direct impact on their decarbonisation without the need for expensive works within the homes.

Our support of new peaking generation plants and changes to the contracts with existing power stations means that power can be generated on a more flexible basis by power stations within our network. This is supporting the decarbonisation of the power grid by ensuring that intermittent sources can be accommodated with no risk to the reliability of those networks.

We are also proud of our environmental achievements and again maintained certification to ISO 14001 environmental management. By utilising and developing industry-wide best practices, we have reduced our environmental impact. Key areas of focus have been climate change, the reduction in disposal of waste to landfill and the use of quarried stone. Protecting the environment is a key focus for us going forward, and we are constantly looking for ways to minimise the environmental impact of our past, present and future activities.

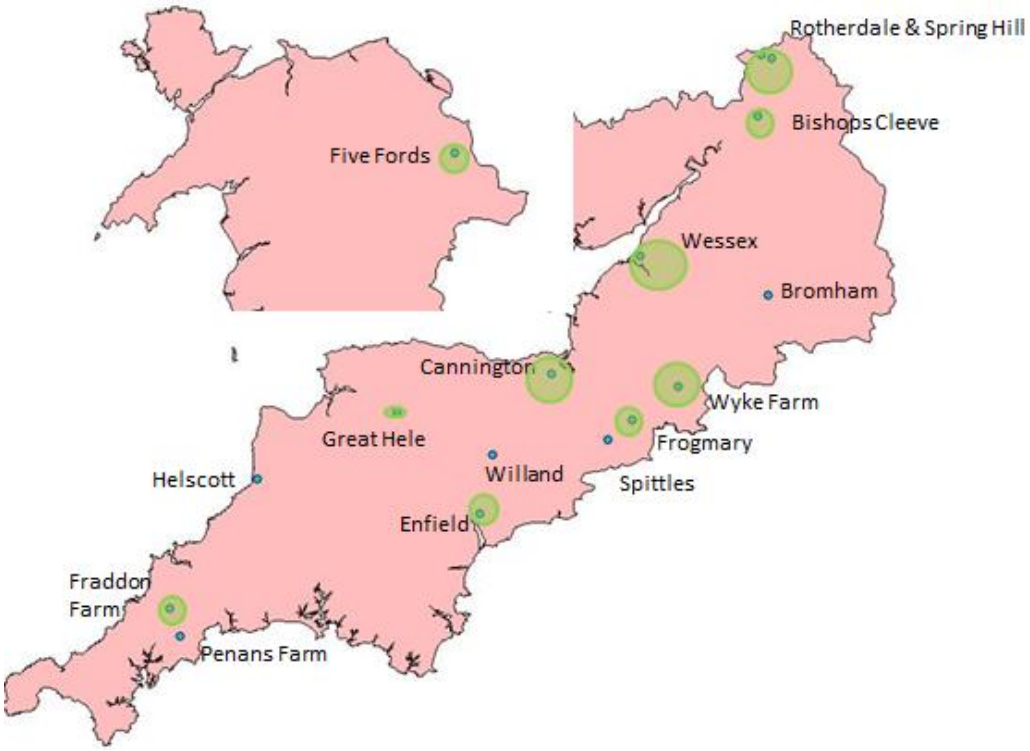


Figure 1 showing location and relative size of connected sites within our region

These sites have the capacity to supply over 112,000 domestic homes, a contributor towards the Governments' 2020 renewable heat targets.

Uncertainty on future biomethane connections has been introduced by the changes to the Renewable Heat Incentive (RHI) scheme for future plants. However we continue to work with potential connectees to support and encourage this growth which we believe is a positive development in the future viability of the energy network.

3.3. Social

8 year forecast	Deliverable	Section Ref	Units	FP Target	GD1 to date	Forecast to end of GD1
Social obligations	Fuel Poor Connections	9.1.8	# connections	12,590	7,448	12,590
	Carbon Monoxide awareness	9.1.9	# alarms distributed	✓	✓	✓

In September 2015 Ofgem approved our revised and increased forecast of 12,590 Fuel poor connections compared to the original business plan of 10,800 with an additional allowance of £2.2m across the eight years of RIIO-GD1. We also expect to connect a small number of district heat schemes over the coming years and to facilitate a small number of connections with the IGTs.

We worked with three Local Authority groups in Cornwall, Devon and Gloucester to deliver 450 connections under the DECC CHF scheme. However, the Gloucester funding only delivered 6 connections against an initial target of 250 despite our efforts to help the local authority consortium. This shortfall in Gloucester represents a significant element of our planned delivery and it will be challenging to backfill given the lack of funding for heating systems going forward.

We completed 1,596 fuel poor scheme funded connections in 2016/17, up from 1,559 in 2015/16 and continue to forecast that our revised target will be exceeded.

Ofgem is currently considering a further downward revision of the Typical Domestic Customer Value (TDCV). In doing so there is a consequential reduction of the voucher value issued to the consumer as this TDCV drives the forecast of future revenue. This may result in properties which are currently anticipated to take up the scheme to withdraw on the basis of the customer contribution required.

We will continue to work with the industry to help make sure those in need are appropriately supported.

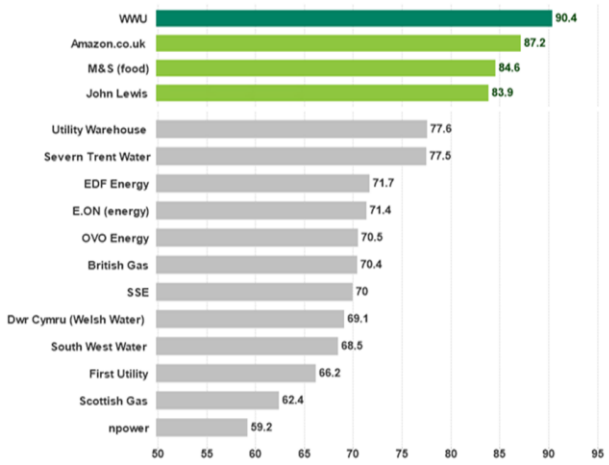
Our award winning carbon monoxide campaign continues. During 2016/17 we evolved the way in which we target the alarms we issue to those considered most at risk by targeting areas of deprivation for example.

3.4. Customer

In year output	Deliverable	Section Reference	Units	2013/14	2014/15	2015/16	2016/17
Customer Service	Planned interruptions survey	8.2.6	Score of out of ten	8.59	8.68	8.72	8.62
	Emergency response repair survey	9.1.7		9.14	9.44	9.55	9.55
	Connection survey	9.1.7		8.34	9.01	8.88	9.17
	Complaints metric	9.1.7		7.39	6.93	4.43	2.83
	Stakeholder engagement	9.1.7	Metric score	6.30	7.05	6.05	6.00

Customers are at the heart of what we do and our UK customer Satisfaction Index puts us ahead of many leading names known for their customer service:

"Customers are at the heart of everything we do"



"We have the lowest interruption duration for both planned and unplanned of all the GDN's"

One significant impact we have on our customers comes from interruptions.

Our average planned interruption time for 2015/16, the most recent comparative information available, was the best of all GDNs at 230 minutes per interruption, compared with an industry average of 325 minutes and the worst performing GDN at 372 minutes. We've held this leading position since 2008/9.

"There is strong support from our stakeholders for Live Insertion on the basis that one interruption is better than two (even if the scenario is one long versus two short)"

Our performance in unplanned interruption times is equally low. Again in 2015/16, our unplanned interruptions average time was 446 minutes per interruption, vs an industry average of 1,320 minutes. These times represent significantly shorter periods without gas, benefiting the customer and their overall satisfaction with WWU as a customer focussed business.

WWU is proud of its performance which continually exceeds the benchmarks set out by Ofgem. In order to maintain these levels of performance we regularly test best practice against our current processes and seeks to continually improve what we do and how we do it.

Unplanned interruptions are typically higher in the winter months when repeated freezing and thawing of the ground weakens pipes. Furthermore, any existing weaknesses are exacerbated by each subsequent freeze and thaw. The presence of mild winters thus far in the price control results in a reduced level of weakening of pipes, but also means that those pipes already weakened are continuing to

function. Therefore, when the first significant winter is experienced during this price control WWU may have to deal with more simultaneous issues than would otherwise happen if each winter was equally cold.

Despite improving our overall customer satisfaction score, we are disappointed with our final position in the league tables. The main area of focus for us now is the customer experience in our planned work. For the next financial year we are focusing on initiatives to improve the quality and timing of communication, site tidiness and developing the customer service skills of our customer facing representatives.

We scored 9.11/10 for overall customer satisfaction this year in the Ofgem surveys. This is an improvement on the 9.05 scored in 2015/16. Largely attributed to the significant improvement in the connections score from 8.88 to 9.17. This is as a result of a number of initiatives including shorter lead times (time from when the customers pays to when they have the work done), training surveyors to provide quotations on site, a greater focus on substantial completion (completing the job on the day we promised) and the changes that have been made in the back office to move towards one point of contact for customers.

Our overall complaint handling score is 2.83 this year compared to 4.43 last year (the lower the better as Ofgem's target is <11.57).

We received 1,708 complaints (7 per 10,000 customers) in 2016/17. This compares favourably with the Suppliers within the industry. Extra Energy has been ranked as the weakest supplier for handling business energy complaints in Q1 2017, recording a ratio of 1,596.6 complaints per 10,000 customers.

The Citizens Advice league table showed this ratio marked an increase in complaints in comparison to Q4 2016, when Extra Energy had 1,231.2 complaints for every 10,000 customers. E.ON Energy topped the table as the best performer with 18.1 complaints per 10,000 consumers, overtaking SSE (23.7) who were ranked as the best supplier for business complaints in Q4 2016.

BS18477: British Standard for Inclusive Service Provision

The BS18477 standard is designed to help organisations identify customer needs and adapt their services to be inclusive and easily accessible.

"British Standard for Inclusive Service Provision (BS18477) First gas network to ever achieve this"

In December 2016, we underwent a five-day audit which involved interviews with more than 40 of our colleagues and the scrutiny of processes in all departments. The outcome was that we were awarded BS18477 and became the first gas network to receive the accreditation.

BS18477 recognises that people have a wide range of abilities, personal circumstances and varied requirements and it highlights that these needs can make some customers vulnerable and disadvantaged. We acknowledge that vulnerability can be caused by many things, including illness or a change in personal circumstances, such as a family bereavement or losing a job.

We've achieved BS18477 in large part because of our engagement with a wide range of groups whose feedback has greatly influenced what we do. We have since made sure that the stakeholders and partner organisations we work alongside are aware that reaching this standard is testament to the effort we commit to engagement and the successful outcomes that we achieve.

BSI Consultant Heather Nowak said:

> Great customer service matters, but few organisations actually deliver above and beyond expectations. Wales & West Utilities are one such company. Their willingness to go that extra mile for their customers is evident from their round-the- clock community engagement, and their dedication has been rewarded with impressive results and business growth.
>
> "They have strategies in place making sure all their colleagues are engaged with the support services the company can provide to the vulnerable in society, while their proactive partnership working with local organisations means they can prioritise customers who may be at increased risk if the gas supply is disrupted

Further to the assurance from the BSI we make sure that our work is in line with AA1000SES, the Stakeholder Engagement Standard. This sets out a framework for the design, implementation, assessment and communication of quality stakeholder engagement – and includes essential characteristics such as inclusivity, meaningful outcomes and effective communication.

Every year we have an independent assessment, so we can maintain the focus required to meet this very high standard.

3.5. Reliability

8 year forecast	Deliverable	Section Reference	Units	8 year FP Target	8 year forecast
Reliability	Duration of planned supply interruptions	8.2.6	Millions of minutes	92	83
	Duration of unplanned interruptions	9.1.4	Millions of minutes	45	45
	Number of planned supply interruptions	8.2.6	#	415,007	379,839
	Number of unplanned supply interruptions	9.1.4	#	81,236	79,472
Reliability (network capacity)	Achieving 1 in 20 obligation	7.1.5	Capacity booked	✓	✓
Reliability (network reliability)	Maintaining operational performance	5.5	To maintain	✓	✓

Whilst the above reliability measures remain under review as part of the suite of work under Ofgem's MPR+ work, they maintain a key focus on how we manage our programme of works.

We continue to use live insertion where appropriate which minimises disruption by being able to undertake work without isolating supplies and therefore keeping the consumer "on gas" for longer. We have sought to share this practice with the other gas networks to help identify if other networks could utilise this technique further which we continue to see as a key success in the way we manage our repex programme.

The mild weather experienced since the winter of 2010/11 is in part contributing to the lower level of unplanned interruptions we are experiencing. Successive freeze/thawing weakens pipes and results in emergency repairs. Where weather continues to be mild the life expectancy of pipes will be extended.

However, the absence of consistent freeze/thawing means that those pipes already weakened underground are more likely to fracture at the next cold winter due to their natural aging. Therefore, there is a potential for us to experience both a significant increase in the volume of unplanned gas escapes and corresponding increases in costs in a future period should the weather revert to colder than recent seasonal normal.

3.6. Safety

In year output	Deliverable	Ref	2013/14	2014/15	2015/16	2016/17
Safety (management of repairs)	GSMR 12 hour escape repair equipment	9.1.3	✓	✓	✓	✓
	Management of repairs (repair risk)	9.1.3	✓	✓	✓	✓
Safety (major accident hazard prevention)	GS(M)R Safety case acceptance by HSE	7.1.1	✓	✓	✓	✓
	COMAH safety report reviewed by HSE	7.1.1	✓	✓	✓	✓

8 year forecast	Deliverable	Ref	Units	2013/14	2014/15	2015/16	2016/17
Reliability (network capacity)	Achieving 1 in 20 obligation	7.1.5	Capacity booked	✓	✓	✓	✓
Reliability (network reliability)	Maintaining operational performance	7.1.4	-	✓	✓	✓	✓
Safety (mains replacement)	Iron mains risk reduction (based on MPRS)	8.2.2	Risk reduction	✓	✓	✓	✓
	Sub deducts networks off risk	9.2.4	#	✓	✓	✓	✓

Royal Society for the Prevention of Accidents (RoSPA)

As may be expected of a company like ours, safety is, of course, our number one priority. The RoSPA Awards are among the most prestigious in the sphere of health and safety.

We were awarded the RoSPA Gold Award for our H&S performance again in 2017; this is our fourth such award in a row. No other UK gas network has achieved this and we are immensely proud of the success. This message of safety achievement is a welcome reassurance to the people, organisations and interest groups who rely on us for a high quality and very safe service.

4.0 Innovation and the future of energy

4.1. Changing shape of the network

With more than 80% of heat and power at peak times met by the gas network, we're planning for the future – to make sure we continue to deliver reliable energy at affordable costs for customers, whilst helping the UK meet decarbonisation targets.

The facts

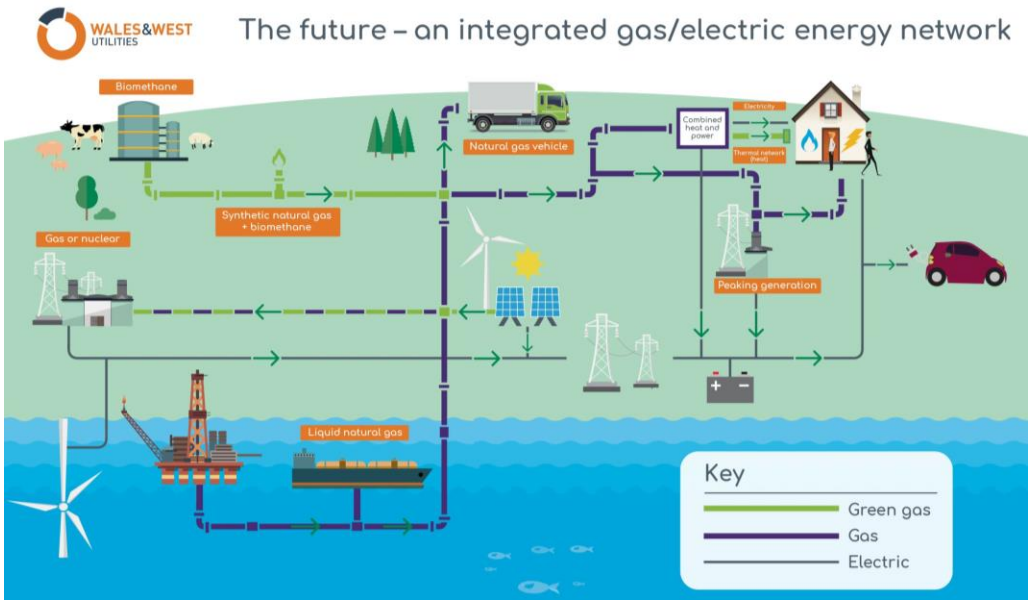
- There has been a shift change in the interaction between the gas and electricity networks – which is set to continue in the move to create a dynamic, flexible, integrated energy system to support a green energy UK.
- Gas and electricity are now increasingly intertwined at distribution level due to CHP, power generation and gas fired heat networks.
- After 40 years of investment we now have a 70% PE network.
- More electric vehicles are charged with intermittently-generated renewables, this creates larger demand swings on the electricity network, affecting demand on the gas distribution system as gas peaking plants respond to maintain capacity on the electricity network.
- Green gas entry has expanded rapidly from concept to practical BAU – further expansion needs investment.
- People are starting to realise that storage is key, not just for minutes, but hours/days/months, and across seasons – gas provides this at the cheapest cost.
- Intermittent renewables are now supported by gas – the energy system would not work without this balance.

Our response to date

- ✓ We have delivered a unique study on the benefits and issues with most heating options that exist today – The Bridgend Study. This study also looked at the willingness and ability of people to pay for changes to their existing systems.
- ✓ We've built a unique energy simulator that models future energy supply and demand – and its conclusions are clear. To make sure we have a secure supply of affordable and sustainable energy for future generations, we must continue to invest in and use the gas network.

- ✓ We are currently testing the network and customer benefits/challenges of a hybrid heat system with smart controls – Freedom Project. This is work is being carried out in collaboration with Passive Systems, Western Power Distribution, Delta EE and other partners.

We continue to pro-actively share the outcomes from our work to ensure it is visible and challengeable. We are delighted that key decision makers within BEIS and Welsh Government are engaging with us on the outcomes and usefulness in their future plans.



Green gas

Green Gas injection in the lower pressure tiers of the gas network have reached a level at which we will have a requirement to compress gas back up through the network, effectively operating parts of the network in reverse. Establishing compression as a workable solution has the potential to remove a number of existing barriers to entry where Green Gas suppliers want to connect to parts of the network where there is insufficient demand available to take their gas.

Embedded power generation

Over the past 4 years we have connected 781MWh of peaking generation from gas onto our network. These small power stations play an important role in offering balancing services to the power networks.

The levels of connection seen to date have not required additional storage investment on our Network.

However, given the continued loss of coal and nuclear generation over the next few years, along with increasing power requirements for new loads such as electric vehicles and interconnectors, we are forecasting that peaking generation requirements will increase and storage investment on our network will become necessary in the near future.

Investing in our future

The Network Innovation Allowance (NIA) allows funding of up to £1.8m (2015/16: £2.0m) for investment into approved innovation projects.

We invested £1.8m (2015/16: £1.1m) on the 34 (2015/16: 33) NIA projects we undertook which reflects an increase in project volumes and a higher average project cost - driven by the investment in project Freedom during this year.

Our annual “Network Innovation Allowance Activity Summary” which details how we, and our innovation partners, have used the fourth year NIA, is available on our website[1].

[1] Website address: wwutilities.co.uk

The key headlines are:

✓We took part in 34 innovation projects
✓21 (2015/16: 22) of these projects have been worked on collaboratively with one or more of the other Network Licensees. We were the lead GDN on four (2015/16: seven) of these projects
✓We maximise our innovation activities through collaboration. We are proud that two thirds of our NIA project portfolio, since 2013, has been delivered in collaboration with one or more network licensees driving our average project cost lower than that of our GDN partners
✓We have participated in projects with over 70 unique partners - since 2013 we have nurtured relationships with over 250 organisations, business of all sizes & academia
✓We have completed a range of research projects to help support the UK's future energy requirements
✓Our projects support deliver of key priorities:
- 12 projects Demanding Safety Always,
- 9 projects Driving Outstanding Service,
- 18 projects Delivering Value for money,
- 16 projects Providing a Reliable Gas supply & Promote Sustainability, and
- 16 projects designing for our Future

Some examples of how we have achieved this are outlined below:

✓Demanding Safety Always
- Our 2 year, SMART Pressure Sensor device is nearing completion. The result of this project will be a mobile device which field operatives can operate through a smart phone app. The benefit of this device and app is capturing system pressure test readings, ensuring efficient and robust demonstration of compliance with the latest standards. This device is known as the 'SMARTester'.

✓Delivering value for money
- The Rapid Steel Pipe Cutter project has concluded and sees the creation and development of a tool that will swiftly, safely and successfully cut through steel pipes without damaging the newly inserted PE pipe. It reduces costs by allowing a reduction in the size of excavations and reduces the level of disruption experienced as a result of our roadworks.

✓Driving Outstanding Service
- Our collaboration project, Optomole, continues into its fourth phase to develop equipment that is able to find the source of leaking gas into other utility ducts quickly and accurately using laser and fibre optic technology.

This real world demonstration is essential in assessing its technological functionality with real users to prove or improve the final product.

- ✓We surveyed colleagues across our business and 47% gave us their feedback on what we could do to continue to improve how we generate new ideas and embed them within the business. The survey gathered valuable insight to the effectiveness of our processes, the impact of our projects and how well project progress information is communicated. We scored good or very good 78% of the time - a great set of results.
- ✓Since 2013, we have completed 47 NIA projects with a total investment of £4.8m our portfolio has a range of technological innovation and future of energy exploration.
- ✓We share best practice and project benefits with others, the Ductile Iron mains cutting tool project has been adopted by three out of the four UK Gas Distribution networks; it has also reached gas networks in the United States of America and Australia.
- ✓We reviewed the gas NIA project portfolio that has matured to the point it is ready for use and highlighted the projects that we want to adopt, the projects that we want to learn more about, and the projects that have limited benefit for our network due to differences that exist, for example in our asset base or in the geography or demographics of our network area.
- ✓We adopted four technology solutions from other networks NIA projects examples include Cadent's Fence Feet, SGN's Osprey Pressure validators and NGN's Stub end abandonment project.
- ✓We identified 10 that have been rolled out by other UK gas networks that we want to adopt. We'll be working closely with those networks to review projects such as SGN's CISBOT that allows a repair to the pipe joints using robotic technology, examine their value for money analysis and consider the benefits they could bring to our customers.

Looking ahead, we plan further investment and research aligned to tackling today's challenges and developing a sustainable future.