

Capital Markets Event

United Utilities Group PLC

 **United
Utilities**
helping life flow smoothly

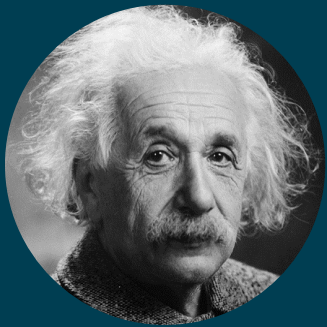


Steve Mogford
Chief Executive

Introduction



The paradigm shift



“If you always do what you always did, you will always get what you always got.”



Focus on customer service



Significant transformation programme

Systems Thinking



Invested in our people

Graduate and apprentice programmes and external recruitment

United Utilities is leading the way



United Utilities is now a leader among the WASCs



We have a clear vision and a long term strategy

The industry faces many challenges



Environmental



Affordability



Maintaining shareholder returns

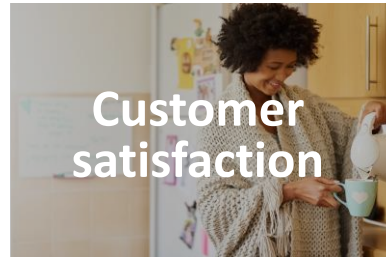


Reputational

United Utilities is ideally placed to meet these challenges and our innovation capabilities are at the heart of this.

Today will demonstrate how innovation and our Systems Thinking approach is central to our strategy and will deliver long term value for customers, the environment and shareholders.

What we mean by leading



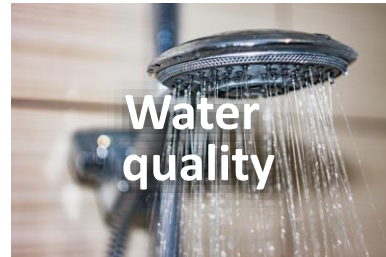
Customer satisfaction

Ofwat's SIM measure
UK CSI
CCWater customer satisfaction research
Recognition cross sector



Environmental

4* industry leading status with the Environment Agency



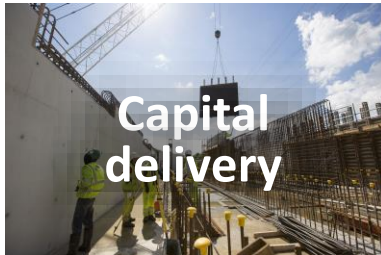
Water quality

DWI recognition
Industry leading approach to resilience



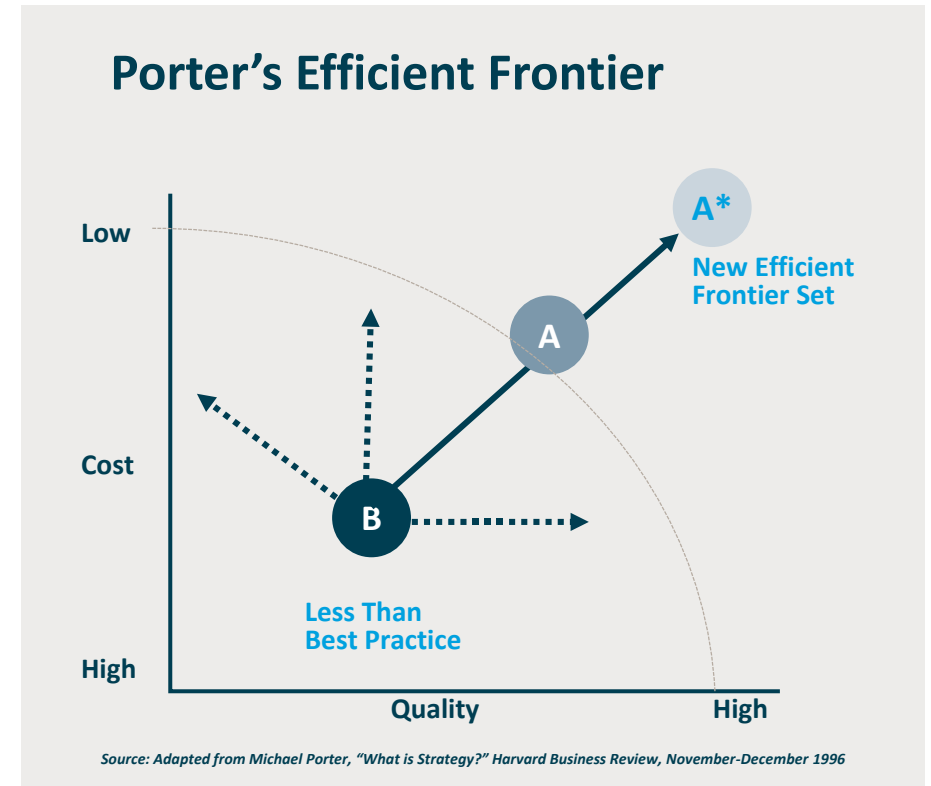
Innovation

Holistic Systems Thinking
Innovation Centre
Embedded culture



Capital delivery

More efficient delivery
Using competition



Agenda

Overview

11:10 – 11:30



Steve Fraser

Chief Operating Officer

Steve joined United Utilities in 2005 from the power and utilities service provider Bethell Group, where he was Operations Director. Steve, a member of the United Utilities Group Board, is currently the Chief Operating Officer responsible for the regulated water and wastewater business, having previously worked as Managing Director of the wholesale business and, prior to that, as Managing Director of the energy & contracting services division of United Utilities.

Systems Thinking & Innovation

11:30 – 12:00



Simon Chadwick

Central Operations Director

Simon joined United Utilities in 1997 and since then has held a variety of roles in the wholesale and retail areas of the business. Simon now heads up Central Operations at United Utilities, focusing on transforming the business through technology led innovations.

Engineering and Capital Delivery

13:00 – 13:25



Richard Ratcliff

Engineering Delivery Director

Richard has worked as a process engineer throughout the world for 24 years. He joined United Utilities in 2015 as Head of Engineering and Technical disciplines. In 2017 Richard took on the role of Engineering Delivery Director at United Utilities, managing the engineering and delivery aspects across the regulated water and wastewater business.

Customer Service

13:25 – 13:50



Louise Beardmore

Customer Services & People Director

Working as Customer Services & People Director at United Utilities, Louise has held a number of senior positions at North West Water, Norweb Plc, Vertex and United Utilities, leading business in operations, customer services and HR in the UK and internationally. Louise is a huge advocate of the power of employee engagement to drive improved customer service and is a Non-Executive Director of Engage for Success as well as a Vice President of the Institute of Customer Service.

Steve Fraser
Chief Operating Officer

Overview



Strength in financial risk management



Maintaining a **stable A3 credit rating**

61%

Appropriate gearing aligned with Ofwat's notional structure



One of the **lowest financing costs** in the sector



Stable IFRS **pension surplus**



No longer in catch up; now a leader

AMP4

- Operational laggard
- Sale of non regulated business

AMP5

- Refocus on operational performance
- Catching up with leading performers

AMP6

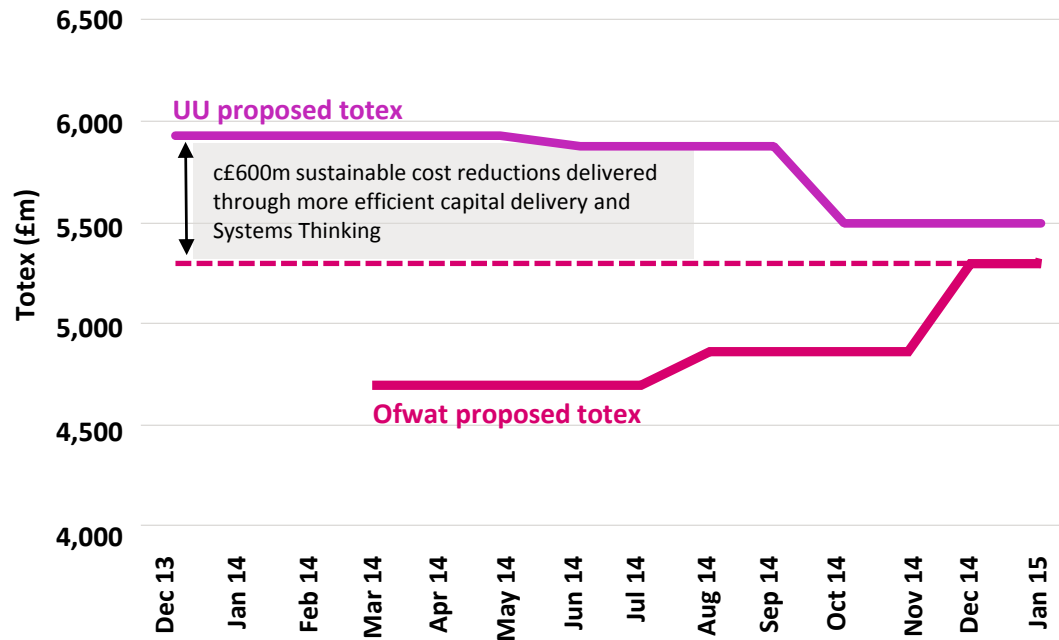
- No longer in 'catch up' mode
- Upper quartile against most operational and customer service metrics
- Five year lead on Systems Thinking
- Regulatory outperformance biased towards financing

AMP7

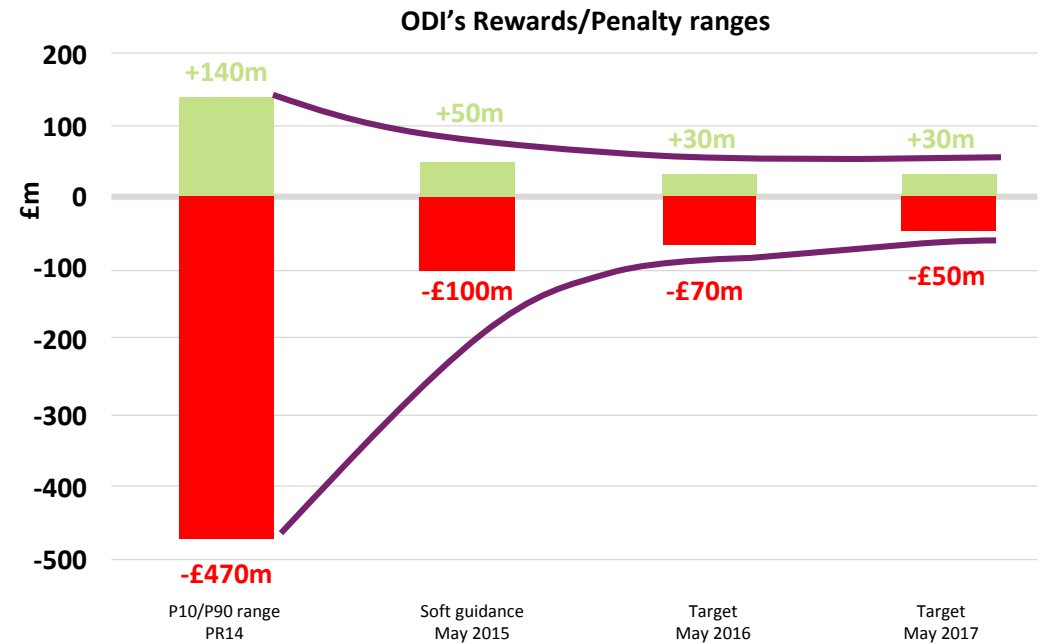
- Evolution of regulatory regime
- Reset of ODI and totex mechanisms with increased opportunity for reward
- Extending the lead on Systems Thinking
- Aiming for more balanced regulatory outperformance



PR14; a challenging settlement



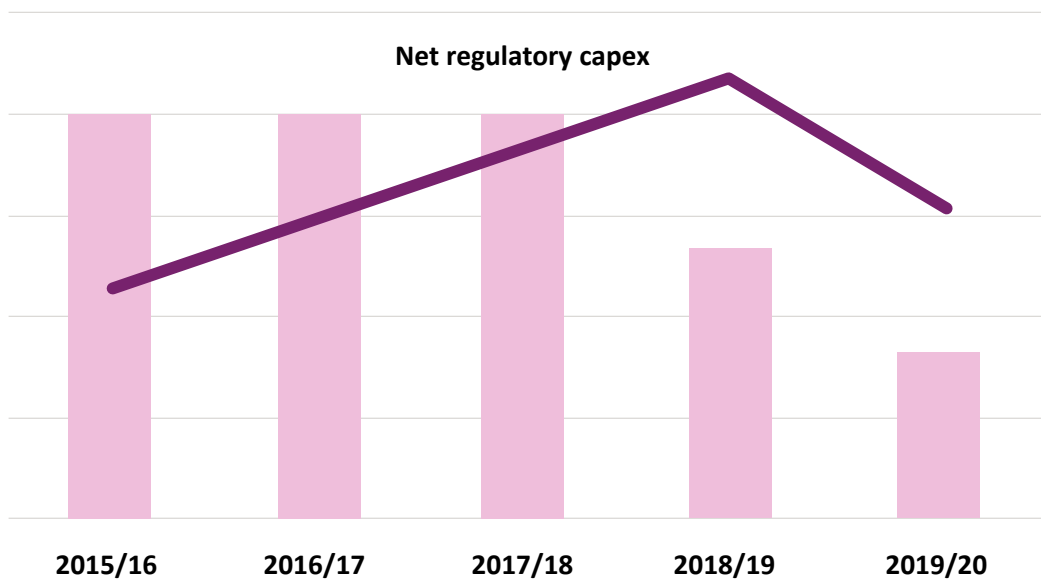
£600m efficiencies vs. original business plan



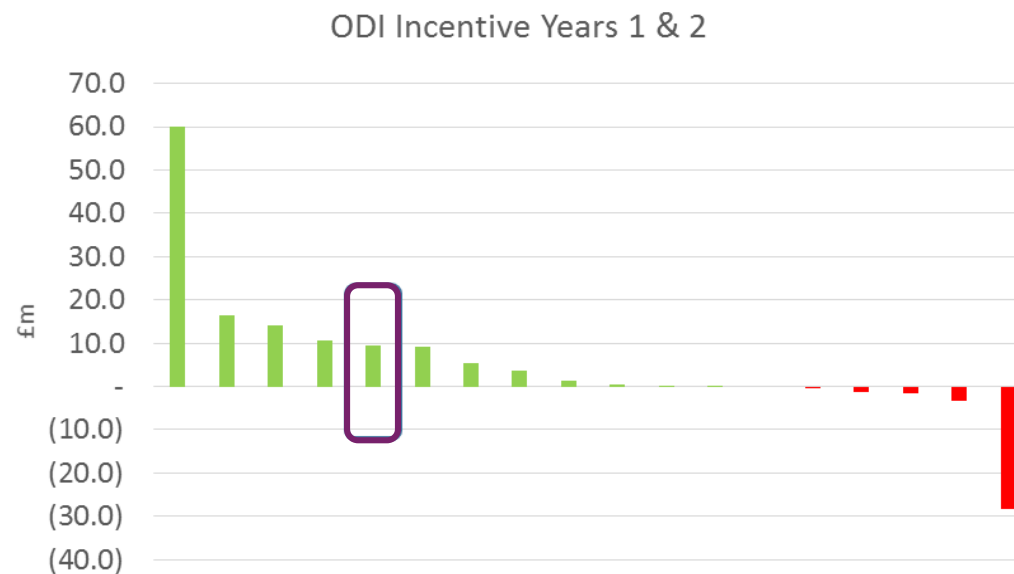
ODI package heavily skewed to the downside



Delivering our strategy for AMP6



Planned acceleration of capital programme



Net cumulative ODI reward in years 1 and 2



Sustained improvement

Water performance measure ¹	5 year improvement to 2016/17
WTW Coliform infringements	+67%
WTW Turbidity infringements	+67%
SR Coliform infringements	+47%
DWI Category 3 or above events	+29%
Total number of water quality infringements	+34%
Customer Contacts Discoloured Water	+22%
Customer Contacts Taste and Odour	+10%
Leakage (Ml/d)	+3%
SIM Qualitative	+6%
SIM Quantitative	+56%
Written complaints	+24%
Stage 2 complaints	+73%

Wastewater performance measure	5 year improvement to 2016/17
Cat 1-2 pollution	+75%
Cat 3 pollution	+53%
Failing Flow to Full Treatment	+18%
Bathing water failures	+100%
Maintenance - proactive / reactive	+29%
SIM Quantitative	+22%
SIM Qualitative	+10%
Written Complaints	+34%
Stage 2 complaints	+55%
Internal flooding - other causes	+25%
Sewer blockages	+43%

¹ DWI Measures are calendar year



Heading into AMP7 as a high performing company



We've come from being a laggard to catching up to **now leading the industry.**



We're delivering on our AMP6 strategy; **delivering more for less** and sustainable year on year improvements.



Our Systems Thinking approach is a **competitive advantage** and is 5 years ahead of the rest of the industry.



This is delivering our current leading performance and we also have further applications that will **help extend our lead.**



This gives us confidence heading into AMP7 and beyond.

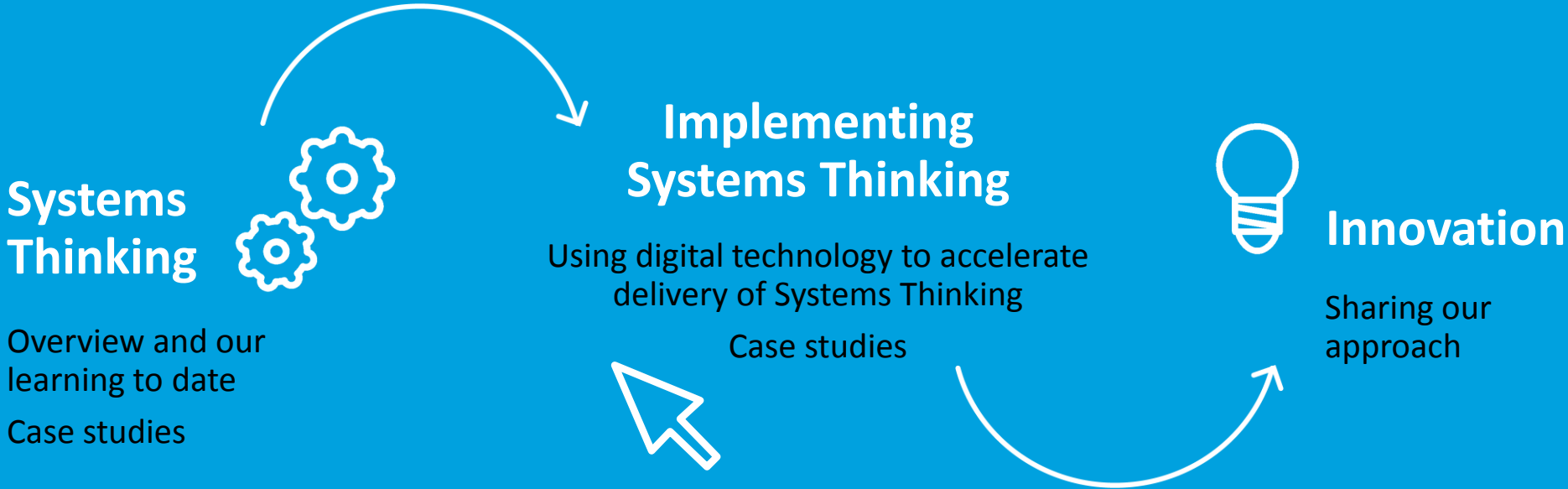


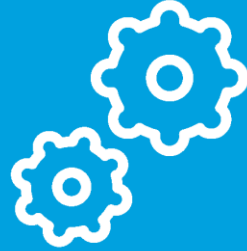


Simon Chadwick
Central Operations Director

Systems Thinking & Innovation

Innovation in United Utilities





Systems Thinking

Innovation in our
operation strategy

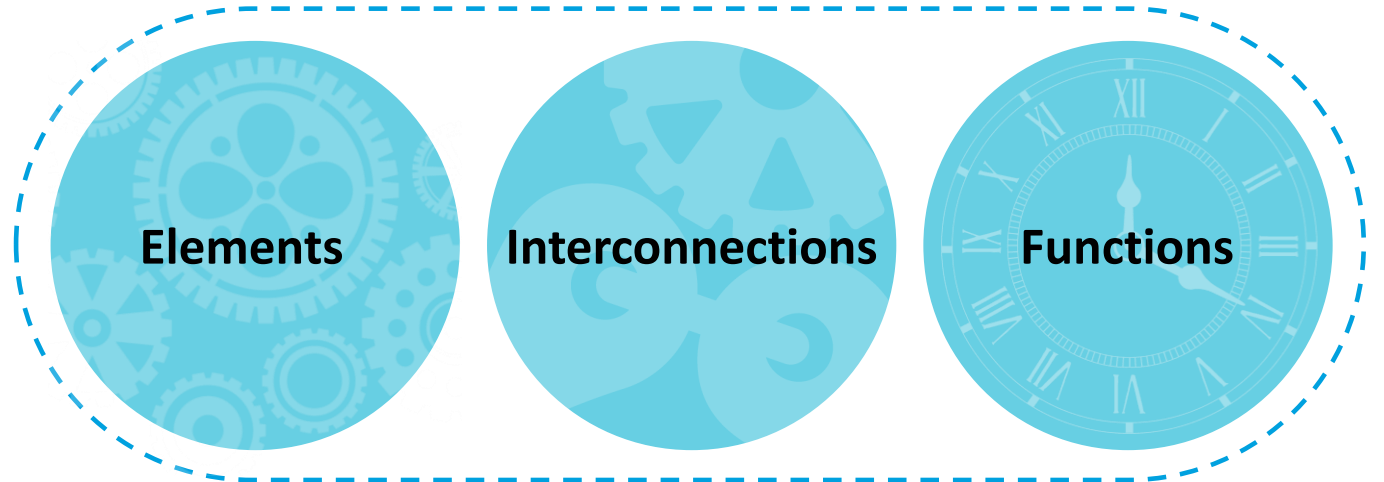
An introduction to Systems Thinking

Traditional analysis focuses on the individual pieces of what is being studied

Systems Thinking focuses on how the things being studied interact with the other constituents of the system.

Instead of isolating smaller and smaller parts of the systems being studied, Systems Thinking works by expanding its view to consider larger and larger numbers of interactions as an issue is being studied.

Components of a system



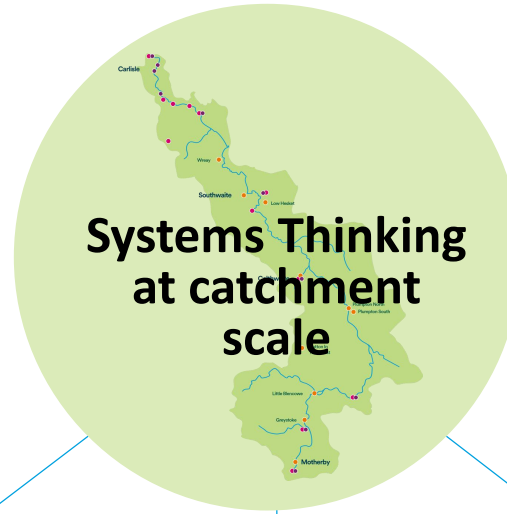


Integrated catchments

A Systems Thinking approach to
catchment management

Systems Thinking in an environmental catchment

The Petteril integrated catchment case study



Holistic risk assessment

- Enhanced modelling
- Intensive monitoring
- Benchmarking
- Stakeholder engagement

Innovation

- Innovative permitting approach
- New low tech asset for Phosphorous removal
- Natural capital pilot
- Nutrient trading



Partnership

- Co-delivery of catchment interventions
- Match funding opportunities
- Petteril steering group
- Community engagement



Multiple benefits

- Targeted asset + catchment interventions
- Match funding opportunities
- More for less
- Flooding and water quality improvements
- Added natural capital value
- Long-term benefits to the catchment



56% reduction in totex

Original (traditional) solution

£17.878m Capex
£0.266m/yr Opex

£23.198m Totex

Systems Thinking solution

£6.308m Capex
£0.164m/yr Opex
£0.508m One off Opex

£10.096m Totex

£1.7m additional NATURAL CAPITAL BENEFIT

Carlisle

Flooding and quality interventions
Green infrastructure
Customer engagement

Southwaite M6 services

Work with Highways & Moto
Load impact on Wastewater
Treatmentworks

Blackrack Beck

Septic tanks investigations & EA partnership

Calthwaite Beck

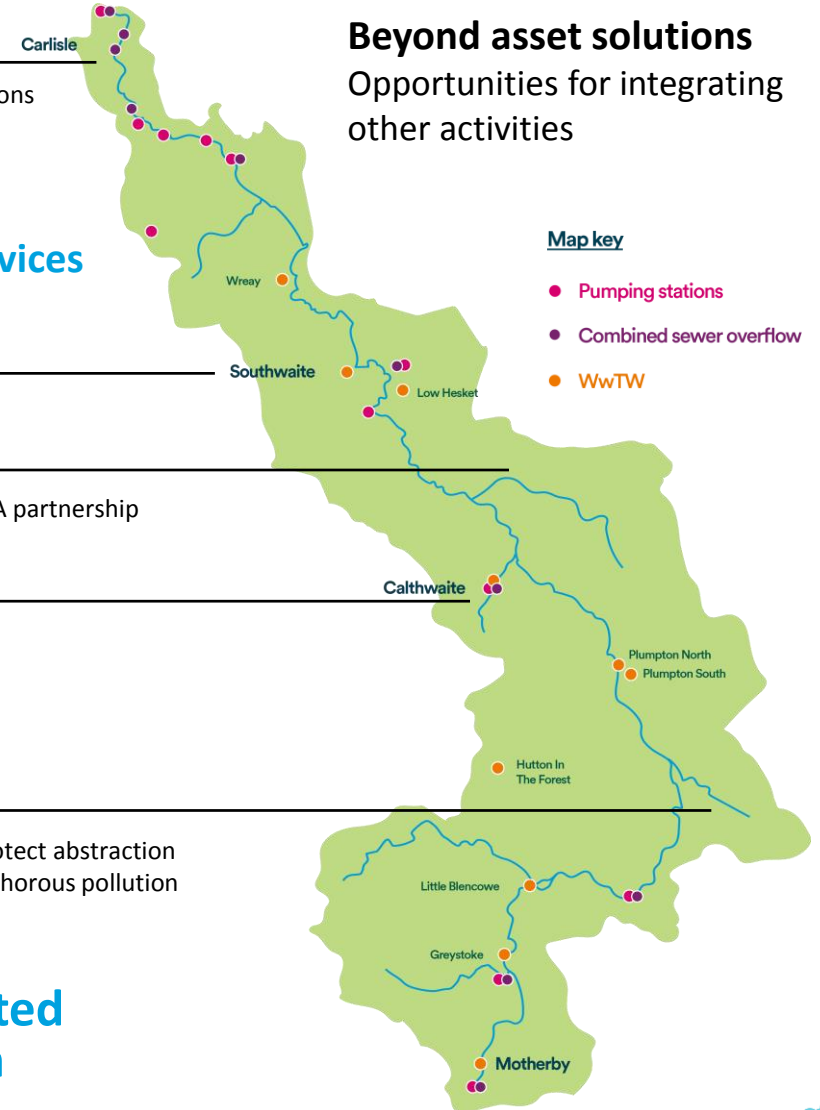
Catchment interventions as
additional measures to tackle
P (beyond asset solution)

Bowscar

Catchment interventions to protect abstraction
point and reduce diffuse phosphorous pollution

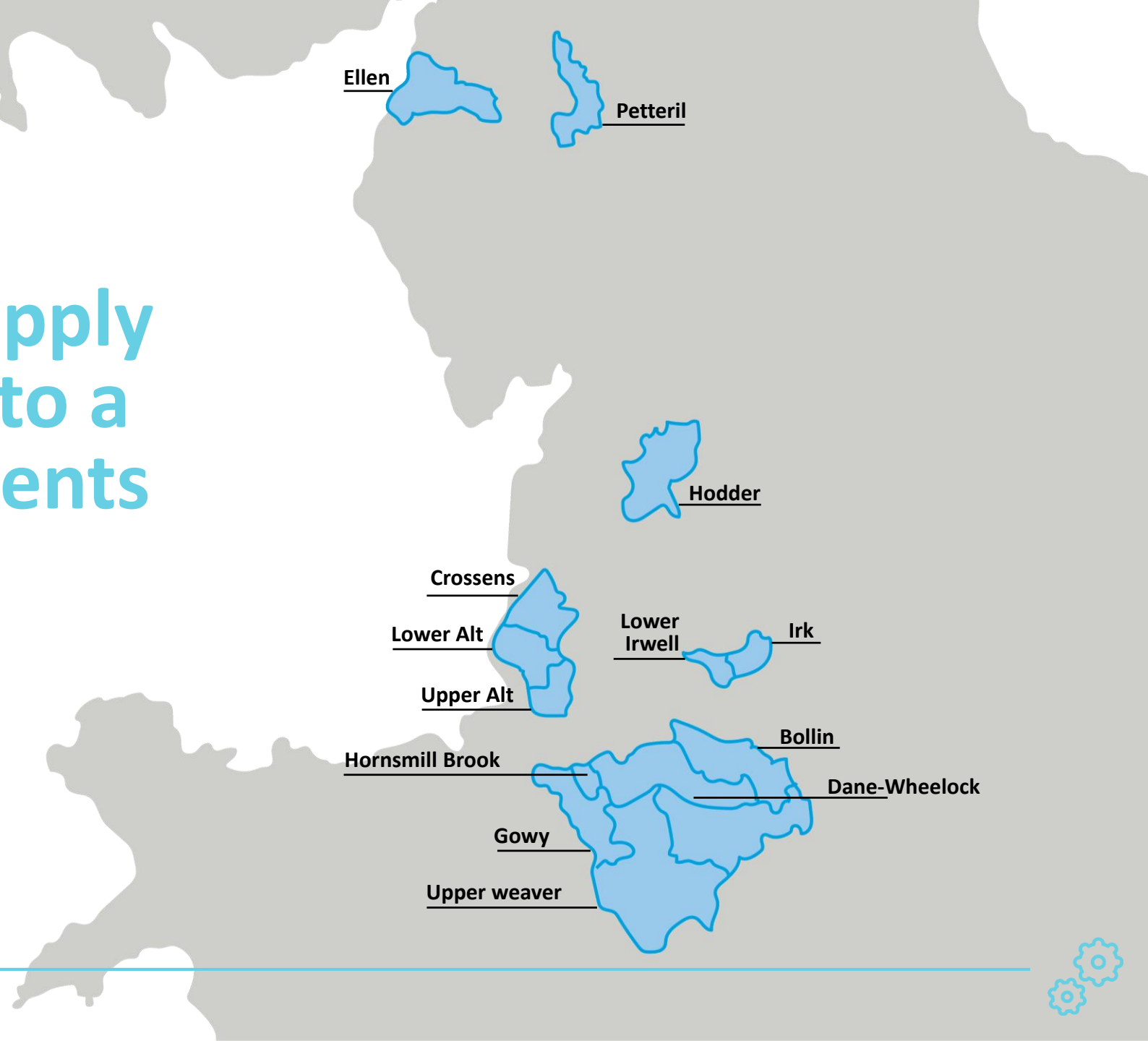
Petteril integrated catchment plan

Beyond asset solutions
Opportunities for integrating
other activities



In AMP7 we will apply Systems Thinking to a further 13 catchments

These 13 catchments have been identified across our region as part of our AMP7 programme.





Wastewater network management

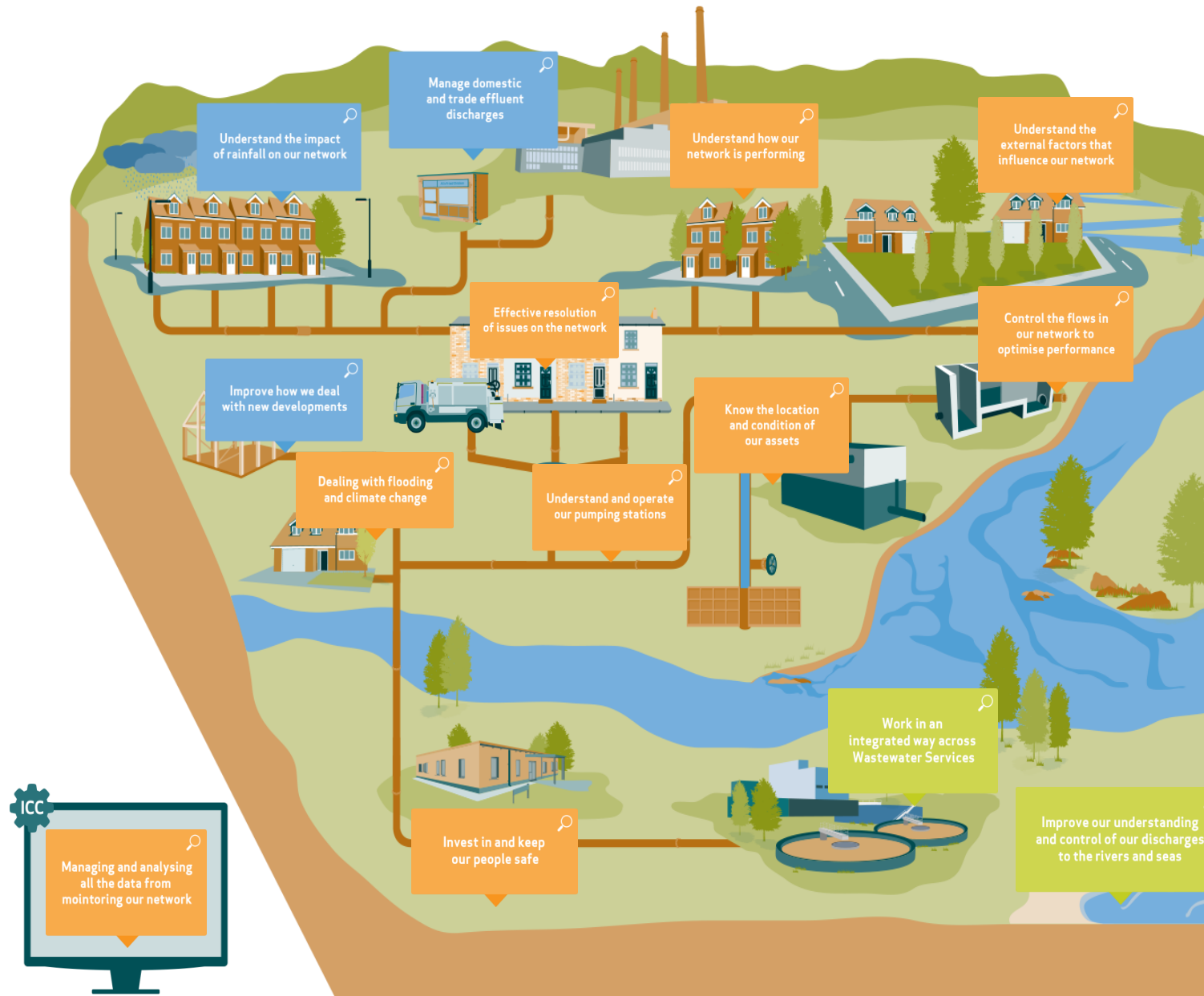
A Systems Thinking approach to network management

Wastewater Network

A trailblazer for Systems Thinking

The project is looking at how the holistic drainage system can be **optimised to reduced totex and improve service.**

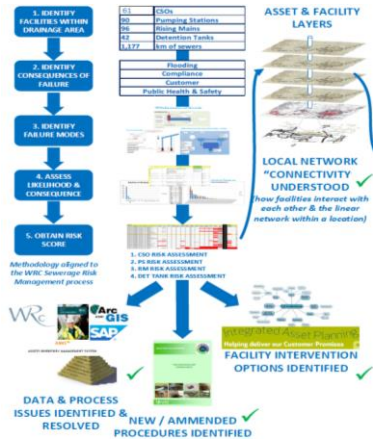
The underlying principle is to **understand the network** and how it delivers services to customers, as **part of a broader system.**



Implementing Systems Thinking

STEP 1

Facilities & Asset Assessment



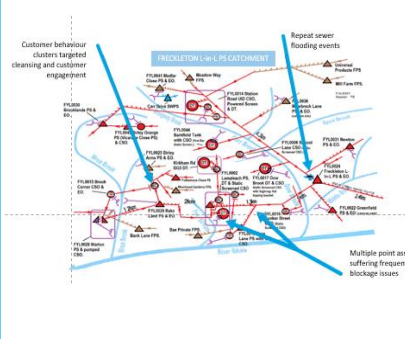
STEP 2

Area information



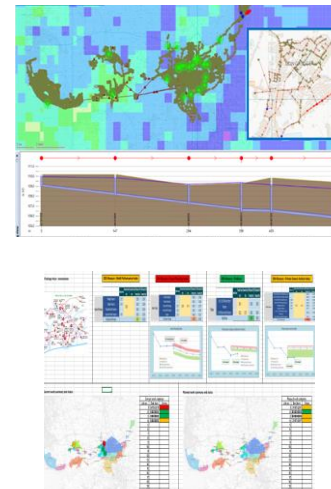
STEP 3

Connecting the components and relationships



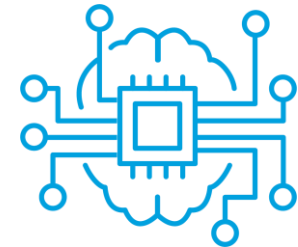
STEP 4

System monitoring and control



STEP 5

Next evolution is an A.I. running the system

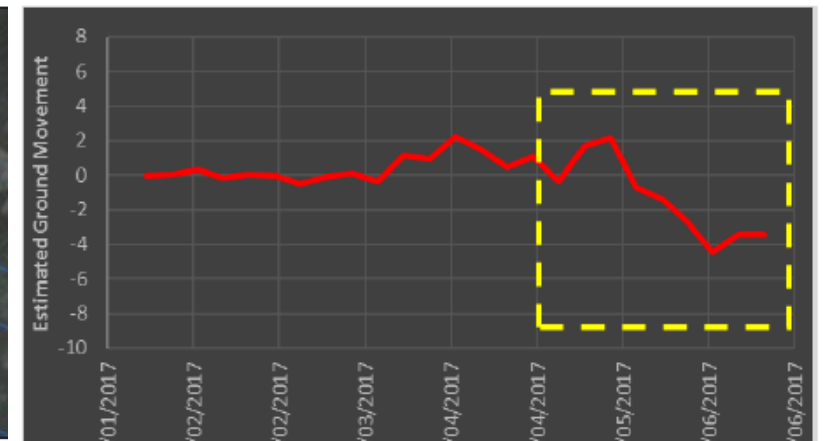


Pilot Results: 89% saving in cost to repair

Through Systems Thinking we can identify areas where service performance is susceptible to external factors

We are using satellite data processed through advanced image analytics to identify ground movements that indicate the risk of sewer collapses.

The **potential benefits are significant** in terms of cost and customer disruption.



Reactive repair

£550k

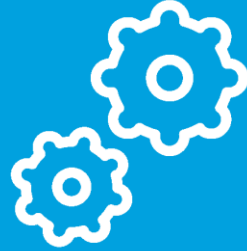
6 week road closure

Pro-active repair

£60k

3 day lane closure

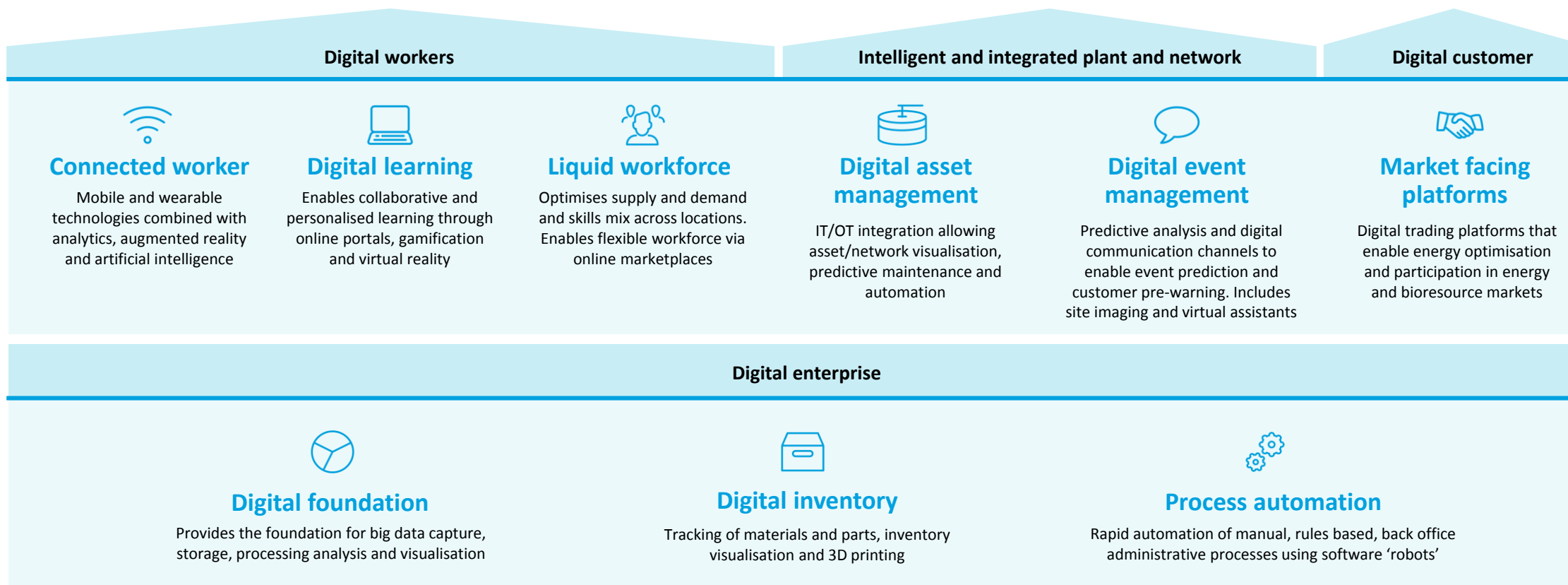




Systems Thinking

A framework for implementation

We have scanned different business sectors for advanced technology to accelerate our implementation of Systems Thinking



Robotics is an example technology to accelerate implementation of Systems Thinking

Our research identified areas of digital opportunity

Rapid automation of manual, rules based, back office administrative processes using software 'robots'.



Business process automation

Based on software tools to automate specific manual processes (BPA)



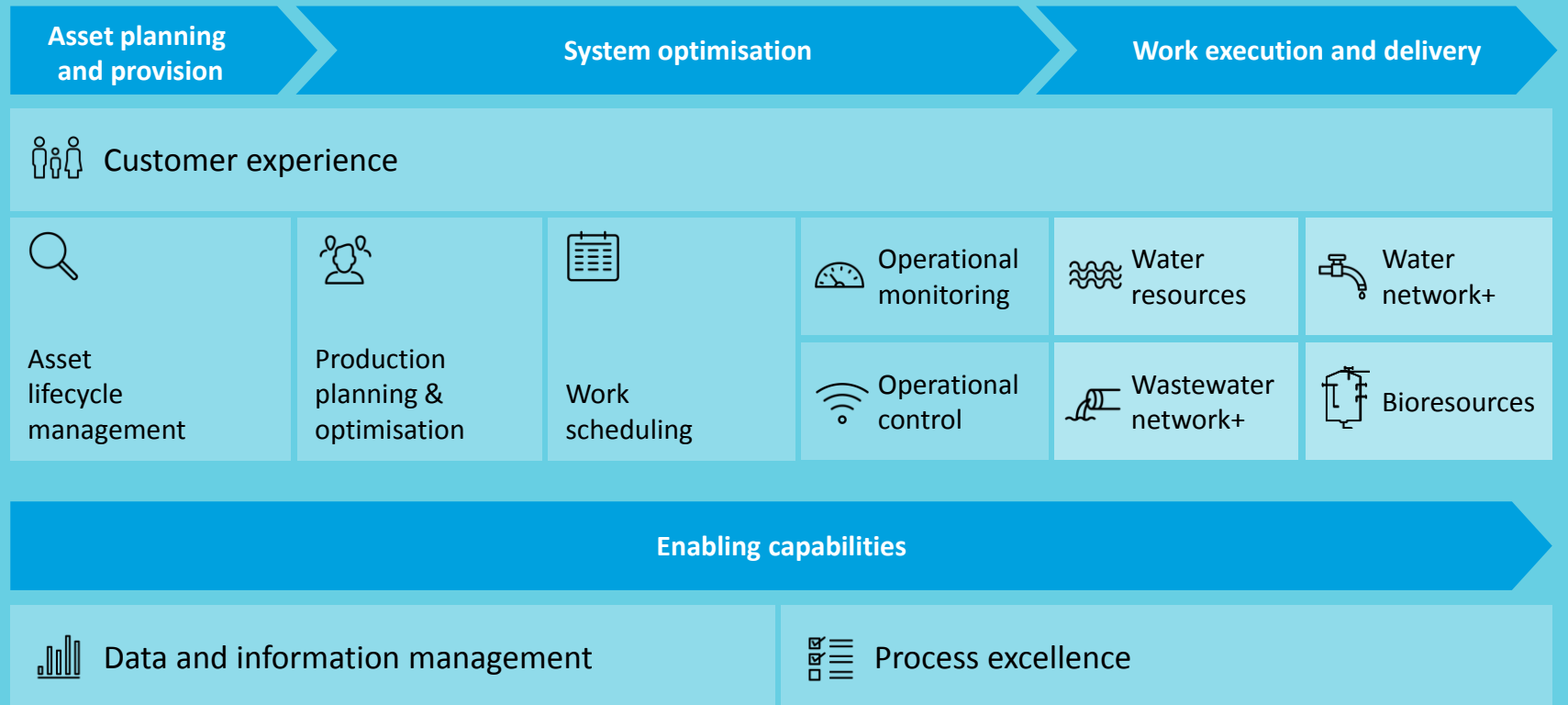
Robotic process automation

Automation of manual (even complex ones) processes in corporate functions of field operations



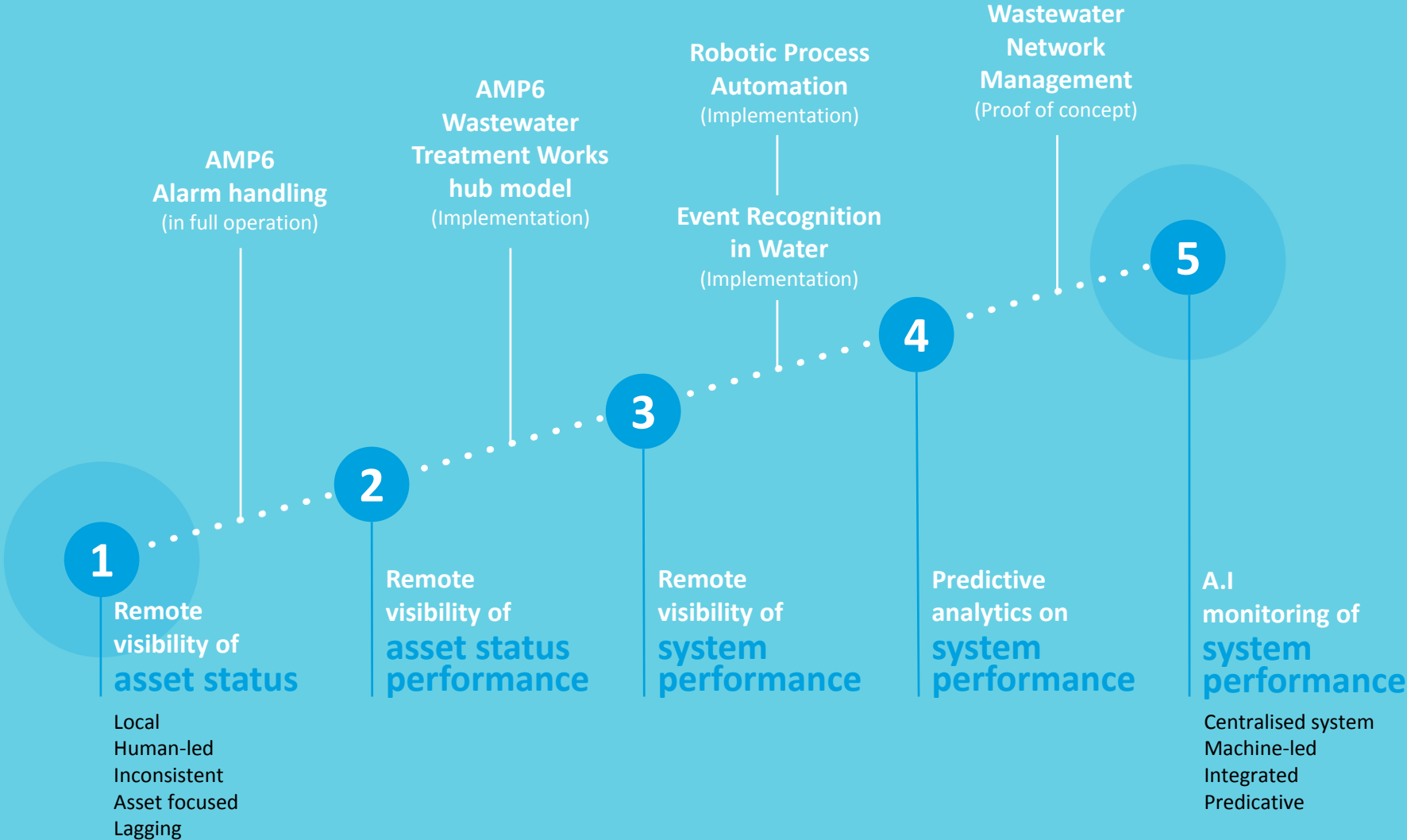
Capability model design

Our capability model defines the set of capabilities required to deliver our Systems Thinking operating strategy – it has been informed through our digital research



Bringing the capability model to life

The operational monitoring capability maturity model





Systems Thinking

Maturing our capability

Example projects thus far

Event Recognition in Water Network (ERWAN)

The Power of Advanced Technology

Machine Learning

ERWAN (Event Recognition in Water Network)



We have **200 million** readings per year through our advanced sensor network.



Obtaining insight from this data is **key to predict and respond** to network changes that could impact customers.



ERWAN is **the first example of Machine Learning** and is a self learning system that learns the 'normal' system signature within our water network and sends an **alert** as soon as it sees a deviation in.



ERWAN

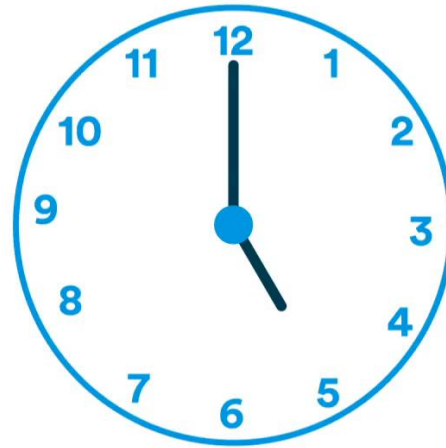
CASE STUDY

Reactive scenario

Wednesday 31 May
there was a failure of a
450mm diameter main
on the Formby bypass.

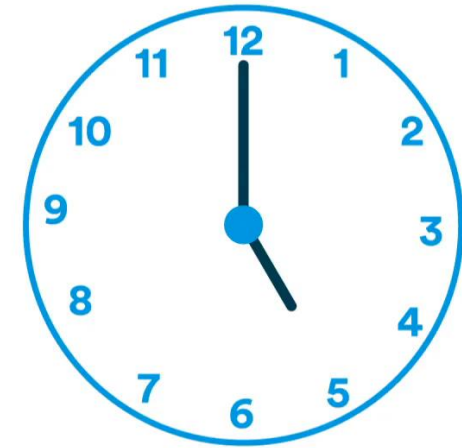
This affected
10,600 properties.

Process **without**
ERWAN & ICC



261 minutes

Process **with**
ERWAN & ICC



151 minutes

This **reduced the duration of the supply interruption** to customers **by 42%** from 261 minutes to 151 minutes and provided an **ODI benefit of £602k**





Systems Thinking

Maturing our capability

Example projects thus far

Robotic process automation (RPA)

Robotic process automation (RPA)

RPA is new technology to use machines to undertake task previously done by humans it can:

- Improve operational performance
- Reduce totex

This is an emerging technology area with the potential for significant benefits.

We already have the first robots working for us...



Wastewater tracker

Taking inputs from **multiple systems to create a schedule** update report



Process now in production



Currently takes 8 people c.11 hours per day



Appointment reminder text message

Schedulers **provide appointment updates** to customers and update the **customer interaction record** in the customer management system



Process now in production



Currently takes 8 people c.8 hours per day



Free meter applications

Staff **work through customer online applications**, look up customer average consumption information and **calculate Free Meter eligibility** based on estimated savings



Process now in production



Currently takes c.5 hours per day



Robotics process innovation

Meet the robots

Our next phase will save 18,989 hours of manual work

And we'll deliver 8 production processes through the next implementation phase of Robotic process automation (RPA)

Business Area	Process	Overview	Complexity	Benefit Level	Hours back p.a.
Central Ops	Alarms (WW)	Manual check and reset of alarms in the strategic telemetry systems	High	High	7280
Central Ops	Water Site Control & Data Acquisition Tours for 58 sites	Automate telemetry readings	High	High	3362
Central Ops	Clean Water Tracker	Collation of data in Click	Medium	Medium	2000
Commercial	Goods receipting Email reminders	Send chaser emails for goods receipts	Low	Medium	2000
Developer Services	Meter Releasing	Create work orders for meter installations through to delivery partner	Medium	Medium	2000
Domestic Retail	Automated Speech Recognition Transactions	Text customers who have had a failed transaction	Medium	Low	347
Wastewater Services	Water samples	Scheduling Engineers to take water samples	Medium	Medium	2000

TOTAL
18,989
hours back to the business p.a.





Innovation

Our approach

Innovation overview

Cheaper, faster, better, safer

Our Strategy



Accessing the innovation ecosystem

Triage

Idea scouts

Innovation Lab



Prototyping breakthrough technology

Dedicated team

Trial zones

Adapting



Working with academia

Stimulating research

Applying research

Leveraging funding



Inspiring innovation

New entrants

Employees

Value

Innovation Centre

Harnessing and exploiting good ideas – big and small - to improve performance and reduce totex





Innovation lab

Encouraging new entrants
Accelerating technology development

Innovation lab

The first ever innovation lab in the water sector

New procurement



Innovative partnership procedure



in partnership with



Our first 5 problem areas



Connected water and customer



Proactive customer actions



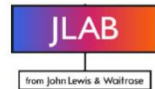
Predictive asset maintenance



Safe and healthy worker



Future of water



20 programmes launched to date



Innovation lab



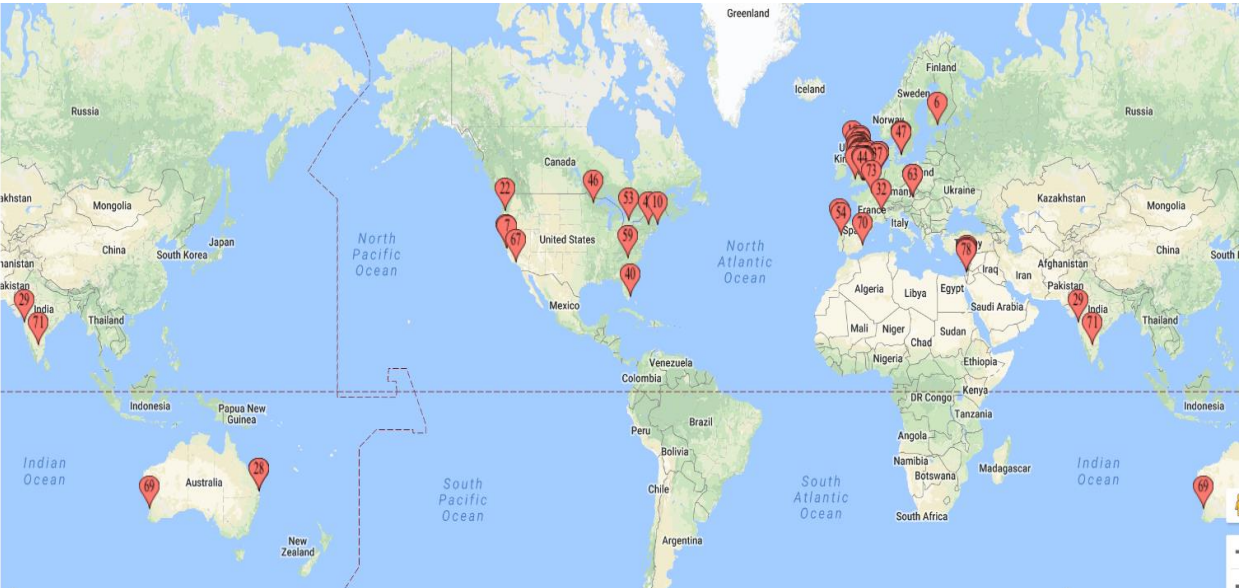
1500 suppliers

80 applied

55 new to UU

22 presented

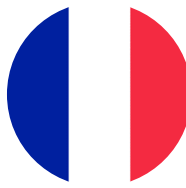
7 to join the lab



UV LED treatment



Pipes with built in sensors



Water efficient showerhead



Motor condition monitoring



AI for water management



Sewer condition



Drones for safety



One of our magnificent 7

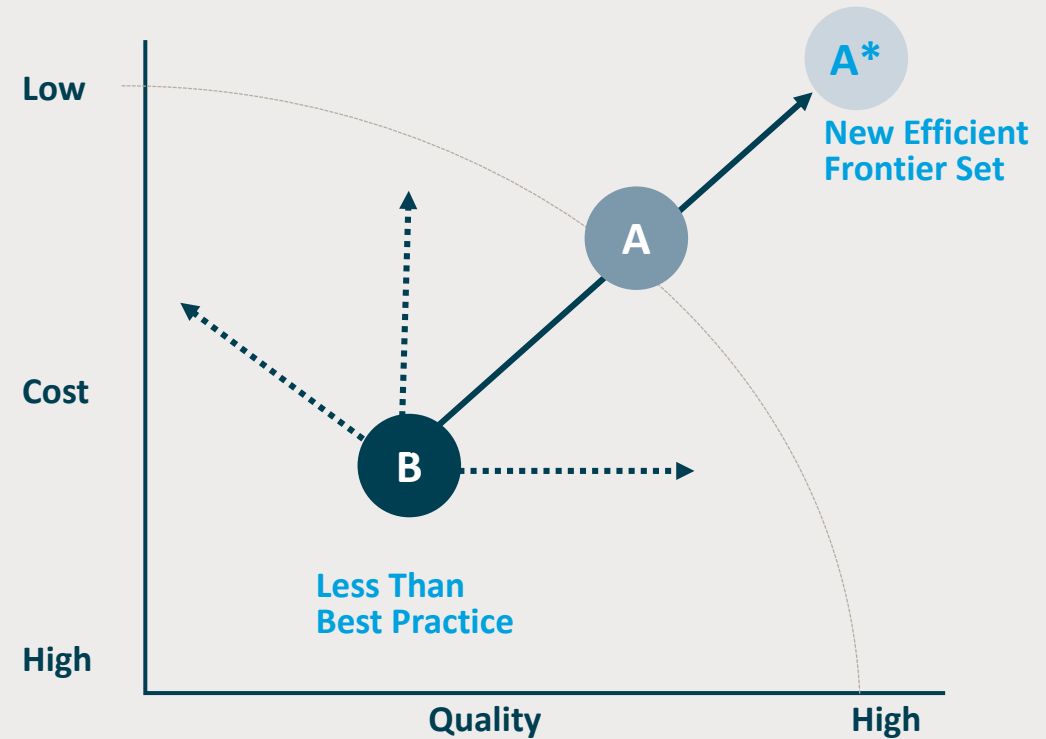
Worlds first utilities scale UV LED Water treatment systems

- Effective against biological contaminants including chlorine resistant microorganisms
- Effective against organic pollutants, pesticides, pharmaceutical residuals, hydro carbons
- Applicable for both clean and waste water treatment



Punching through the efficiency frontier

Porter's Efficient Frontier



Source: Adapted from Michael Porter, "What is Strategy?" Harvard Business Review, November-December 1996



A close-up photograph of a person's hand pouring coffee from a silver pitcher into a white cup. The scene is set on a tray with stacks of white plates and other silver pitchers. The background is blurred, showing a busy environment. The text "Lunch Break" is overlaid in large white letters.

Lunch Break

Integrated Control Centre (ICC) tours

Group 1

12:00 – 12:20

Rikard Dahle
James Brand
Stephen Hunt
Maurice Choy
Gavin Kennedy
Anna Mills

Group 2

12:00 – 12:20

Richard Hughes
Michael Stiasny
Chris Laybutt
Iain Turner
Dominic Nash
Steve Smith

Group 3

12:20– 12:40

Verity Mitchell
Guy MacKenzie
Rui Dias
Jeremy Wiseman
Fraser McLaren

Richard Ratcliff
Engineering Delivery Director

Engineering & Capital Delivery



What does TCQi stand for?

Time, Cost, Quality index

The three elements of TCQi **contribute equally to the overall score.**



Time

We will deliver a project to the regulatory standard within the required time frame.



Cost

We will deliver a project within the approved original budget.



Quality

The projects we deliver will add quality and be of benefit to customer.

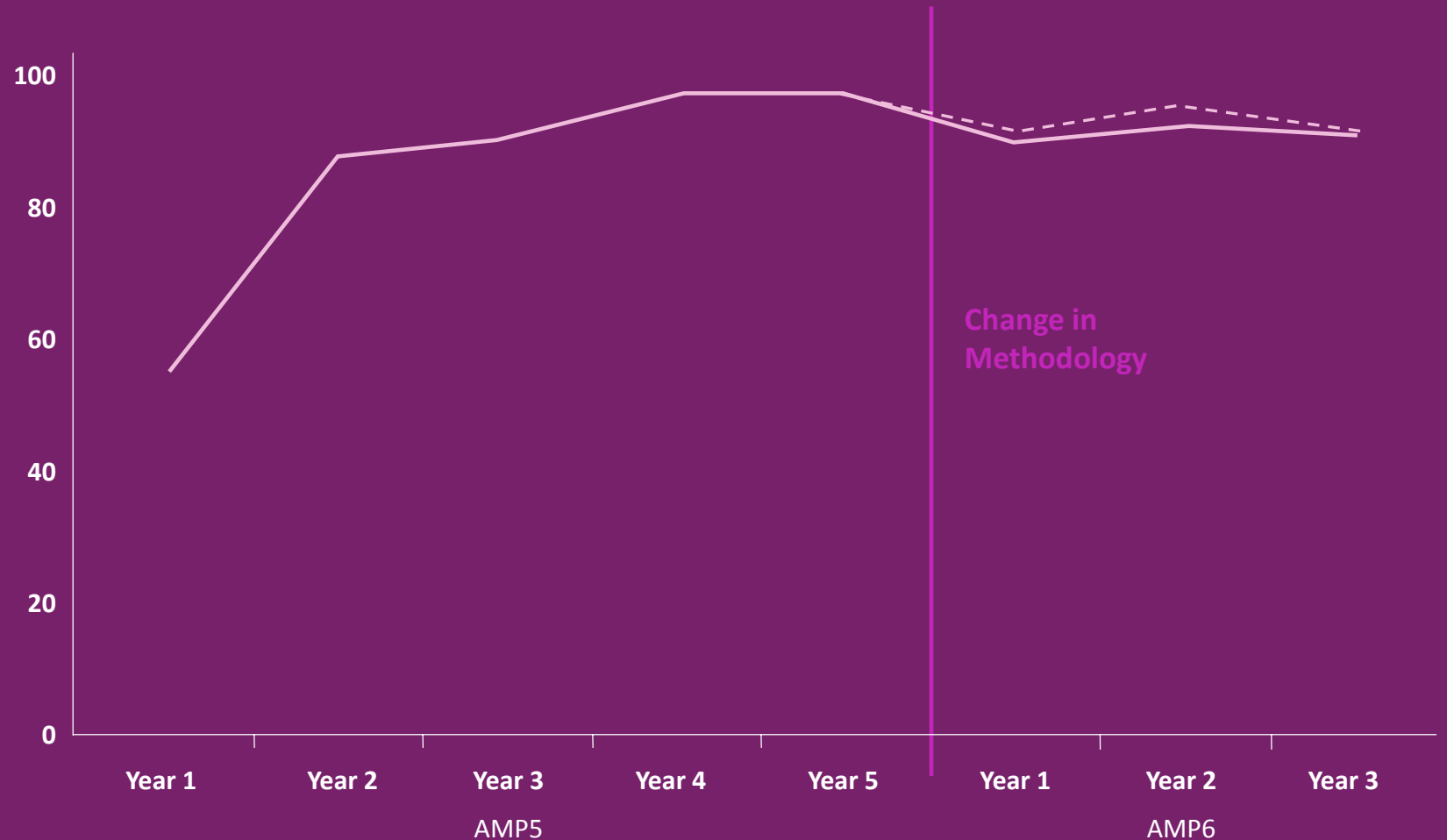


AMP5 and AMP6 TCQi performance

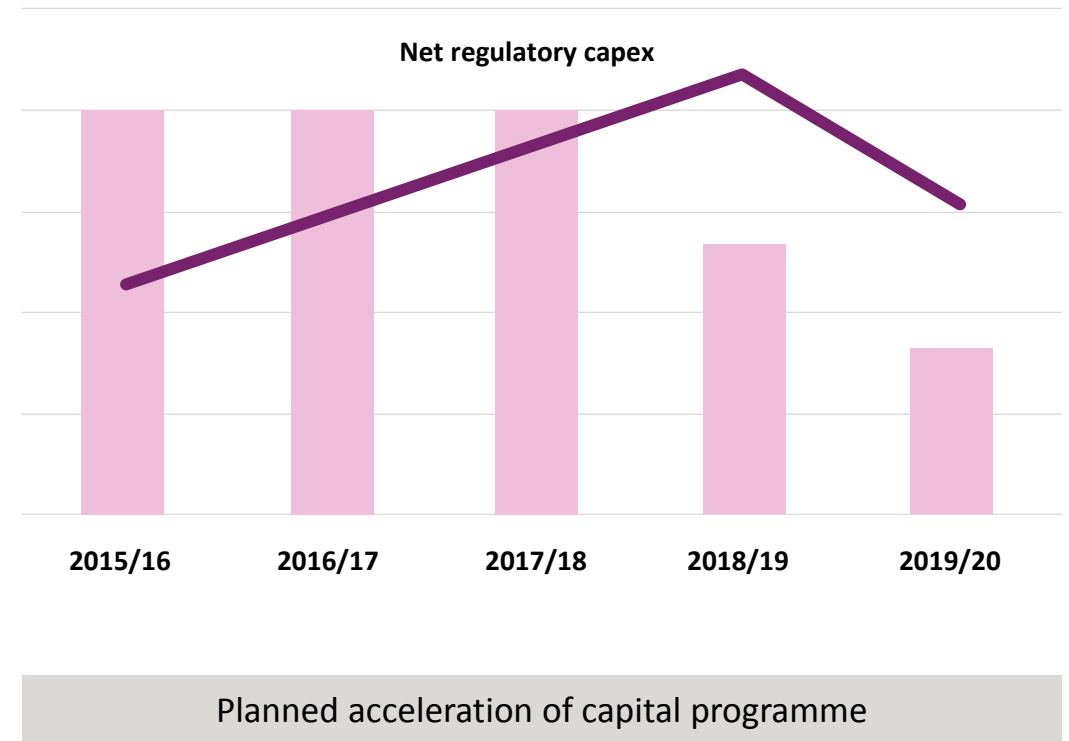
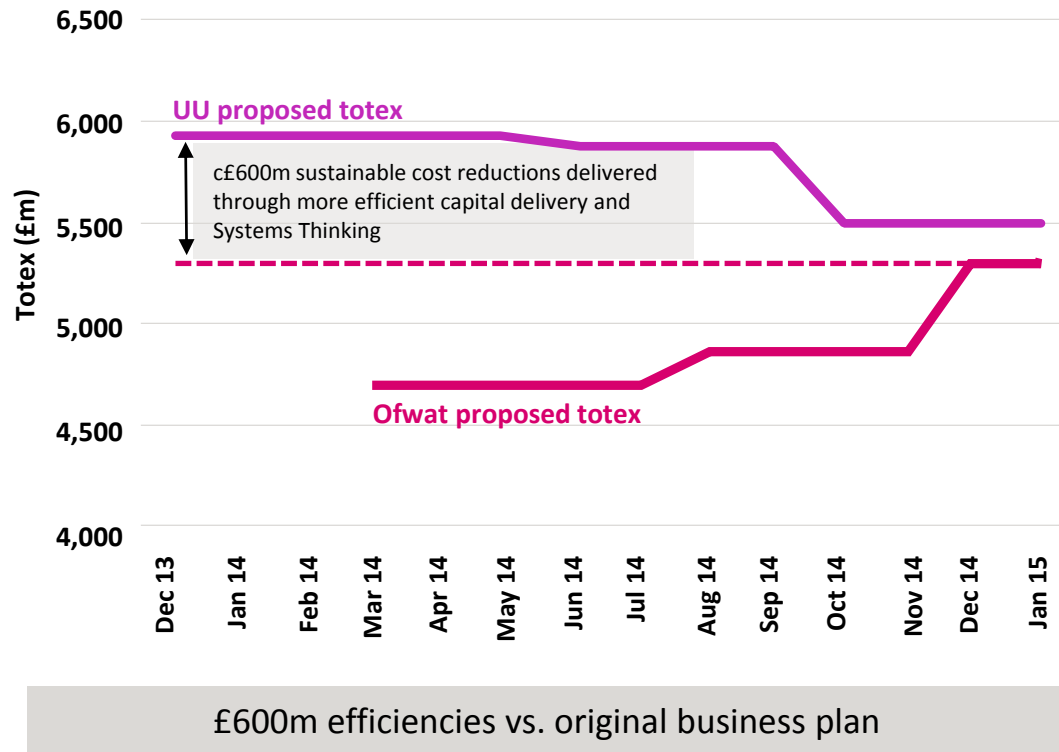
Achieving and maintaining industry leading TCQi performance

- TCQi Reported Position
- - - Equivalent to AMP5 Methodology

AMP5/AMP6 TCQi Historic Performance



Closing the gap and accelerating the capital programme



Driving £300m of efficiency into the major capital programme (£2.3bn)



Based on 40% of the programme


Embedding risk and value £34m


Competitive tender and batching (20 35%)


Delivering innovation £60m

New Processes - £20m
 Continuous innovation - £20m
 DfMA - £20m


Reducing time related costs


Changing delivery model £66m


Driving a "best athlete" approach £55m

BIM
DfMA
Collaborative Planning

Changing to Design & Build
and expert client



Driving holistic solutions through Risk and Value

Embracing totex and shifting from a capital bias through the tools that we use and pervasive engineering



Risk & Value has been about establishing a mind-set, to ensure that we keep challenging and validating both the need for our projects and the way we deliver them. The principal of R&V is to maximise value, but we have also been successful in creating CAPEX efficiency with significant potential to drive further benefits.

What have we achieved so far, and how much is left to do?

121	£24m	£10m+	>200	87
RV Studies held across the programme	LBE Reduction through R&V	Further Opportunity Forecast	Opportunities discovered and being developed	Workshops still to deliver in AMP6

What is next?

Set up for AMP7 success – R&V has already been used as a key function of PR19, and we aim to fully establish within our AMP7 delivery framework



AMP6 Design & Build delivery model

Driving towards industry best performance

- Changing from Alliance based model to Design & Build model has reduced indirect construction costs (AMP5 £0.41 to AMP6 £0.35) to align with industry best performance.
- Change to Design & Build model has enabled UU to better industry average overall performance and drive to industry best performance.

AMP6 (Year 1)	AMP6 (Year 2)	AMP7	Industry Average Performance	Industry Best Performance
UU labour/non labour and capital overhead costs				
£0.41	£0.36	£0.25	£0.32	£0.25
Indirect construction costs				
£0.35	£0.35	£0.35	£0.41	£0.35
Direct construction costs				
£1.00	£1.00	£1.00	£1.00	£1.00
£ in the ground				
£1.76	£1.71	£1.60	£1.73	£1.60





Innovating the way we deliver
our capital programme

Nereda

To date Nereda has saved £15m of CAPEX, will save £1.9m of OPEX per year and set up four sites for Systems Thinking



Kendal WwTW

Estimated £1m CAPEX saving compared to conventional solution

Future OPEX saving of £308k per year

Lower risk solution due to reduced existing assets offline in construction

Largest UK reference when built



Morcambe WwTW

Estimated £6.3m CAPEX saving through use of Nereda

Future OPEX saving of £54k per year

Reduced need to acquire new land / build tidal storage

Programme improvement as no EIA required compared to conventional



Failsworth WwTW

Lowest Whole Life Cost

Future OPEX saving of £240k per year

Future proofed for phosphorus removal and product recovery



Blackburn WwTW

Estimated £7m CAPEX saving compared to conventional solution

Future OPEX saving of £1.3m per year

Future proofed for phosphorus removal and product recovery

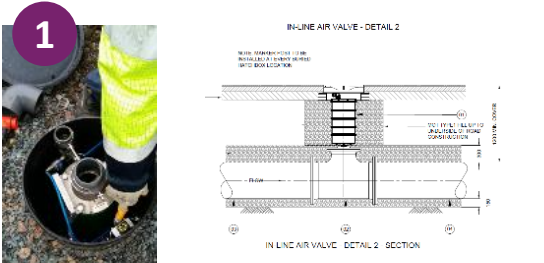
Largest reference in Europe when built



DfMA and standard products move from innovation to BAU

To date £20m of CAPEX savings have been achieved, time related costs are additional.

Advance



1
Valve in a bin installed on Windermere Project.



2
WPL prefabricated treatment system critical enabler on the Halton East project.

C2V+



1
Chorley Settlement tanks design.



2
Hesketh Bank Shay Murth / Dutchland post tensioned tank one of the first of it's in the UK.

MMB

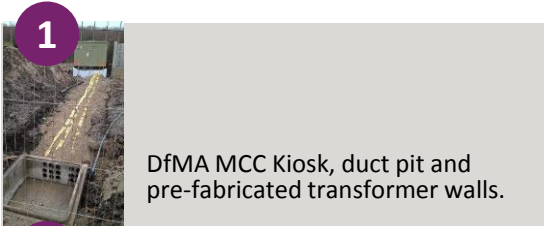


1
Jackson Edge service reservoir



2
Preston storm tanks.

LiMA



1
DfMA MCC Kiosk, duct pit and pre-fabricated transformer walls.



2
Pipex DfMA distribution chamber and DfMA MCC kiosk.

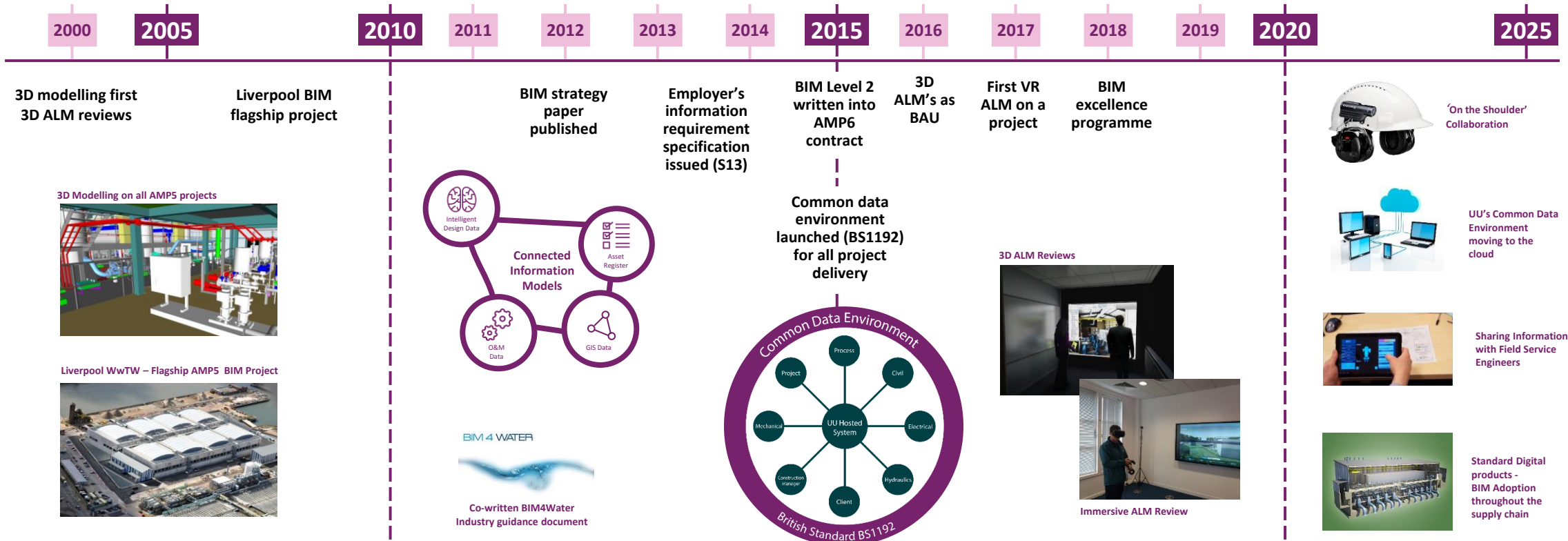


3
Pre-assembled pipe bridges.



Embracing the digital world

Building Information Modelling (BIM) driving asset centric data into an operational world and delivering CAPEX time related savings



Embracing the digital world

We are the only water company to have

- Written BIM into the AMP6 contracts
- Provisioned a client owned Common Data Environment
- Documented our Information requirements (S13 specification)
- Our own BIM professionals in house
- Made 3D modelling and intelligent schematics the default way of working
- Achieved BIM Level 2



Why are we doing this?

- Improve resilience of our infrastructure
- Optimise the lifecycle performance of our assets.
- Reduce risk and improve health and safety performance.
- Reduce cost and time to deliver projects e.g.
 - Liverpool – Savings £1m
 - Davyhulme – saved 11,000 working days on site.
- Ensure that UU remains at the forefront of digital working and are ready to exploit future opportunities.



Kendal
"3D Print"



Kendal
"VR ALM"



West Cumbria strategy

Driving programme innovation through planning, procurement and stakeholder management

Project Driver

- European Habitats directive
- Infraction proceedings
- Ennerdale Environmental drivers, (compensatory measures)
- Examination in Public
- Long term resilience for West Cumbria
- EA want us to stop using Ennerdale water by 31st March 2022

ODI 's

- Only project in the UU programme with its own set of distinct ODI's
- 16 ODI's in total, 5 achieved, remaining on target to outperform
- Incentive of £22.5 million



Project Particulars and status

- £300 million scope, current LBE significantly beating budget
- Project currently in implementation, year 2 construction
- Regulatory PIU 31st March 2022, target 31st March 2021
- 9 year duration, (5 years construction on site)
- 95km pipeline, (33km of twin 900mm, 62km single 800mm / 600mm)
- 80 MI/d water treatment works
- 3 service reservoirs, 2 pumping stations
- Renewable energy, (hydro and solar)
- Planning achieved, unanimous decision from all planning authorities

Delivery through innovation

- Project task team approach and early engagement
- Extensive stakeholder management
- Early contractor involvement
- Contract strategy
- Collaborative planning
- DFMA, 3 / 4 d modelling and virtual visualisation
- What's in it for Cumbria



Sharing Outperformance

Delivering industry leading long term water resilience.



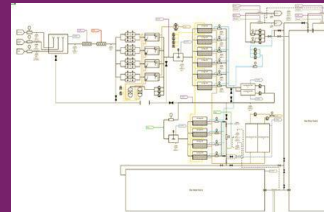
Covering of all filters & chambers downstream of first stage filters



Installation of Shut down and Start up facilities at ALL WTWs



UV installed at WTWs and ability to deploy it everywhere underway



Engineer lead HAZREV completed at highest risk sites, with ALL WTWs on track for completion



Robust service reservoir assessments & repair



Haweswater Aqueduct

The need for more resilience



It is UU's most significant supply asset built between 1930 -1955.

Serving over **2 million** people.



It carries treated drinking water over **93km** from the Lake District to Manchester, supplying parts of Cumbria and Lancashire along the way.



£235 million investment enabled the HA to be taken out of supply and inspected.

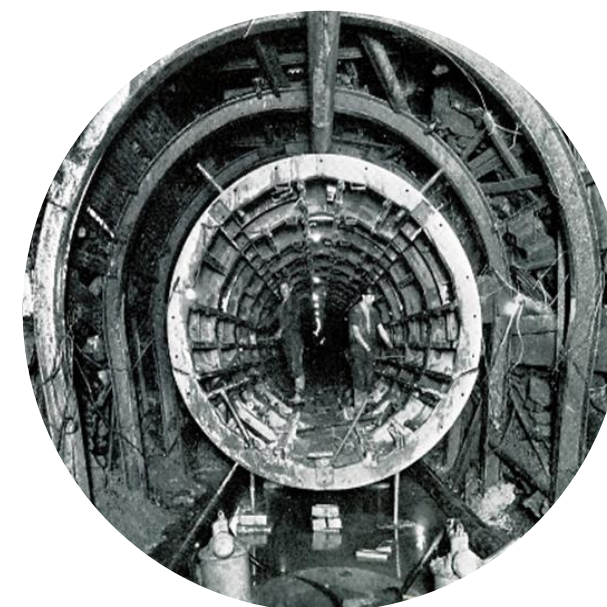
Recent inspections of the HA discovered issues with tunnel lining in places, some targeted remedial works have been completed but there are still a number of areas requiring additional work.

Due to the age of the HA, there is an increasing risk of service failure to customers served: **water quality problems and/or supply disruption.**

Medium term fixes are underway, but there will remain a substantial risk unless long term investment is made.

We have identified five options which we are consulting customers and stakeholders on.

We are preparing a special factor claim and potential direct procurement submission as part of PR19.



Louise Beardmore
Customer Service and People Director

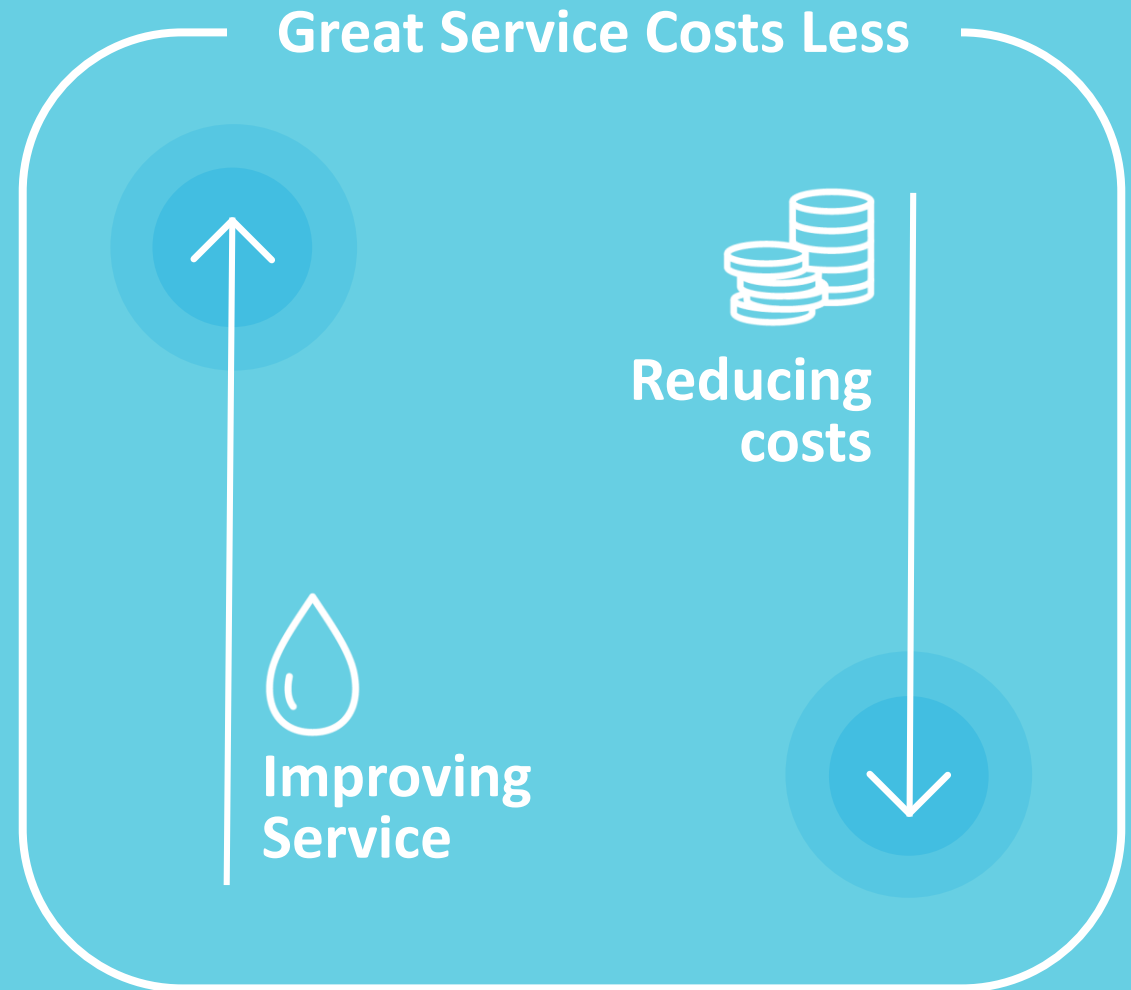
Customer service



Customer Service Strategy

We have a clear strategy in place delivering new services and capabilities to position us now and in the future...

...and at the same time we are responding to the unique demographics of our region.



Customer Service

We have improved service, building trust and demonstrating our ability to respond to the needs of our region



Speed

Customers don't have opening hours



Friendliness

Building trust with our customers



Complaints

Service recovery in place for when we get it wrong



Results evident in our UK Research



Industry leading digital capability

Informed by customers

Our digital channels have grown in scale and sophistication.

We have engaged our 7,500 strong customer panel as early adopters of new capability.

Launched the sector's first truly integrated mobile app.



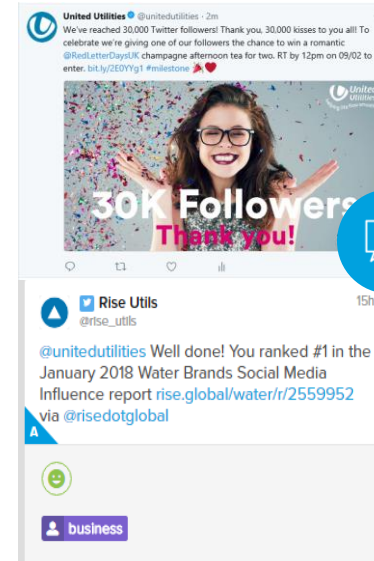
Ethnographic research identified potential for the App.

Piloted with customer panel and launched in May – first fully integrated app in sector.



More than 750,000 customers now registered for our online customer portal, My Account.

Further customer feedback has prompted the trial with Advizzo which will deliver home usage reports for metered customers. The only digital trial at scale of water consumers in the UK



Driving Priority Service offering for our customers and the Utility Sector

Learning from all our insight and customer experiences, we identified the need to review and enhance the services offered to customers in vulnerable situations and to engage multi-agencies and the third sector in the identification of these customers.

Registrations remain **strong and embedded** within core customer touchpoints

There are now more than **50,000** Priority Services customers registered

Launched industry pilot with Electricity North West to share priority services data

Engagement with agencies and third sector organisations such as Public Health England, Local Authorities (county, district, unitary), MPs, Citizens Advice Bureau, Red Cross, AgeUK, Salvation Army who gave us some insightful feedback. They told us:

- The old Extra Care brand was **confusing** for customers with vulnerable needs
- The sign up process was **complicated** and **intrusive**
- Organisations **didn't believe that the benefits** of schemes were clear to the customer.
- The scheme was **one dimensional** and focussed on physical vulnerability

The new Priority services proposition has been shaped by insight...



Physical



Mental health



Life events



Language



Financial

← A complete and dedicated service when our customers need it most →

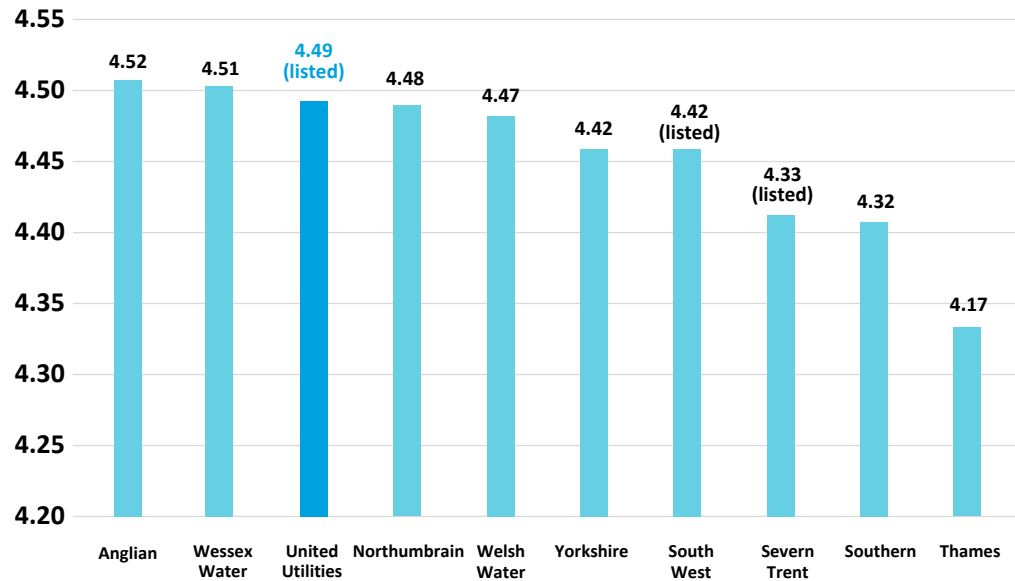
Working with partners, stakeholders and charities to drive registration. Training for employees to spot and support those customers who are 'suffering silently'



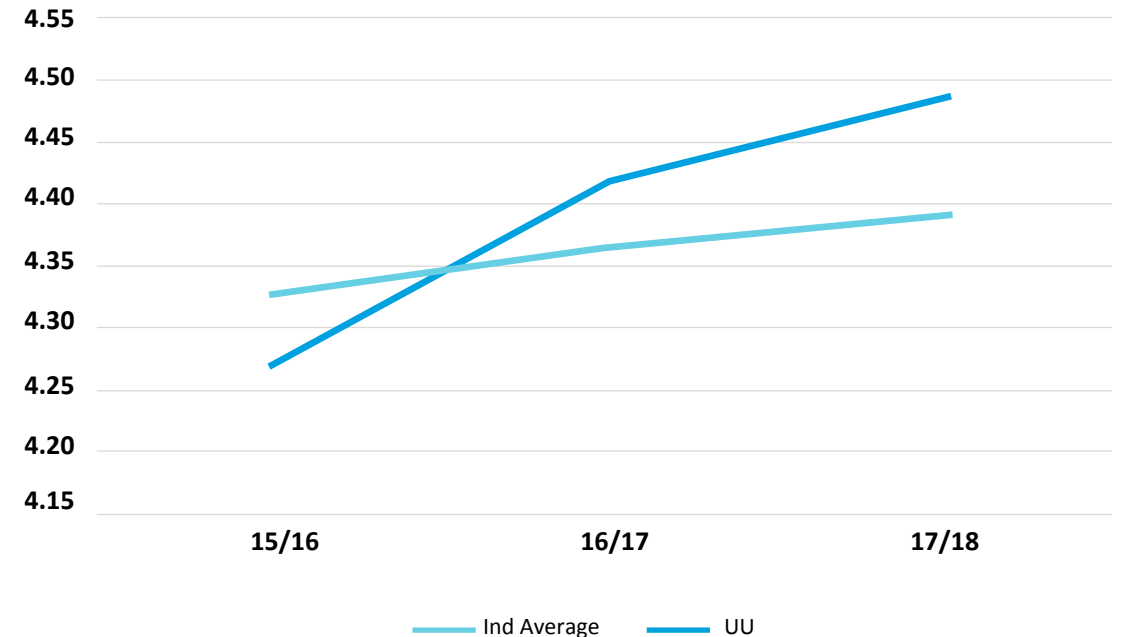
SIM Qualitative Performance

Year to date against the WASC's we are seeing strong performance and encouragingly are significantly ahead of the other two listed companies

SIM Qualitative
WASC Positioning 2017/18 YTD

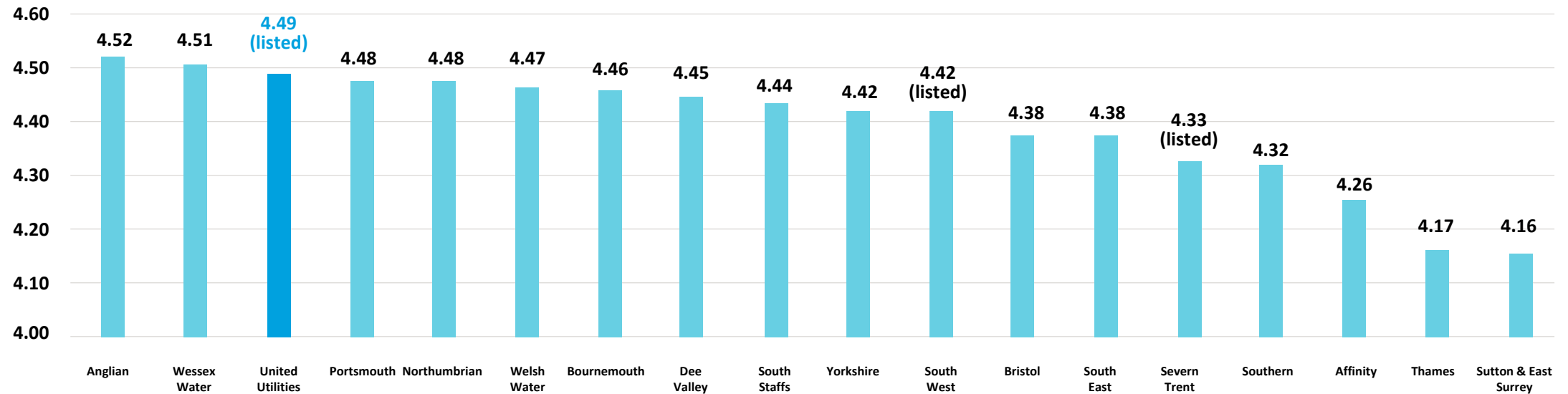


UU Qualitative SIM score vs Industry average



SIM Qualitative All Companies - Upper Quartile

SIM Qualitative
All Company Positioning 2017/18 YTD



SIM Quantitative Performance

How are we performing?

We have set ourselves challenging targets on service recovery and continue to see a declining number of complaints across all areas.

Complaints – Stage 1

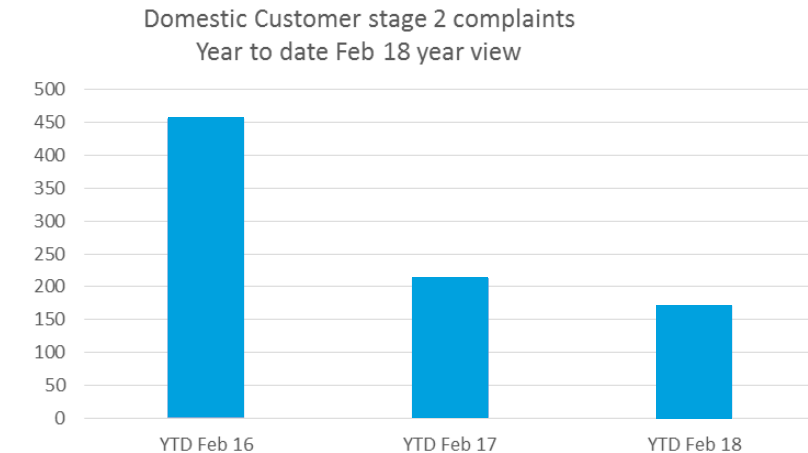
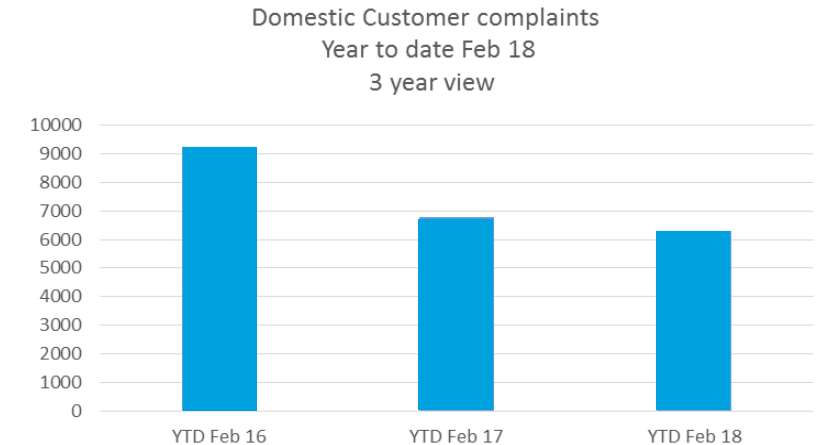
We have made significant improvements – reducing complaints by over **32% in 2 years**

Complaints – Stage 2

Stage 2 complaints have reduced by **62% over 2 years**

We are running at 2% repeat rate which is in line with industry best performance

CCW reported up to end September they have seen a 44% reduction in complaints directly to CCW which is the largest decrease of any of the WASCs



Not just water leading

Institute of Customer Service UKCSI results

We have made significant progress in the latest UK Customer Satisfaction Index, 2nd of the 10 WASCs.

Organisation Ranking	Jan-18	Jan-17	Change
UK all-sector average	78.1	77.8	0.3
Utilities	74.4	74.4	0.0
OVO Energy	81.5	82.5	-1.0
Utility Warehouse	78.9	78.4	0.5
Bristol Water	77.4	N/A	N/A
M & S Energy	77.4	77.0	0.4
Yorkshire Water	77.4	80.1	-2.7
United Utilities (water)	77.3	69.9	7.4
Scottish Water	76.9	74.1	2.8
First Utility	76.8	77.4	-0.6
Wessex Water	76.7	79.5	-2.8
Anglian Water	76.4	77.0	-0.6
Dwr Cymru (Welsh Water)	76.4	75.3	1.1
Affinity Water	76.3	N/A	N/A
Severn Trent Water	76.0	78.0	-2.0
Power NI	75.9	76.9	-1.0
Northumbrian Water	75.6	76.1	-0.5
British Gas	75.1	75.4	-0.3
The Co-operative Energy	74.8	70.0	4.8
EDF Energy	74.3	74.1	0.2
Scottish and Southern Energy (SSE)	73.8	75.3	-1.5
Scottish Gas	73.8	74.0	-0.2
Essex and Suffolk Water	73.1	N/A	N/A
South West Water	73.0	75.8	-2.8
E.ON (energy)	72.5	75.0	-2.5
Thames Water	71.5	71.8	-0.3
Scottish Power	70.5	68.0	2.5
Southern Water	69.7	72.5	-2.8
npower	69.5	67.5	2.0

We are the most improved Utility company against a backdrop of declining performance for many

One of the most improved of all brands



Leading the sector on Service

Ofwat SIM Survey 2016/17
Annual Report

Qualitative + Quantitative performance **trending significantly above** industry average

United Utilities is now a leader amongst all companies

Best listed performer



Step change in ranking and performance
+ 7.4 point increase in 12 months

The most improved Utility company

Most improved



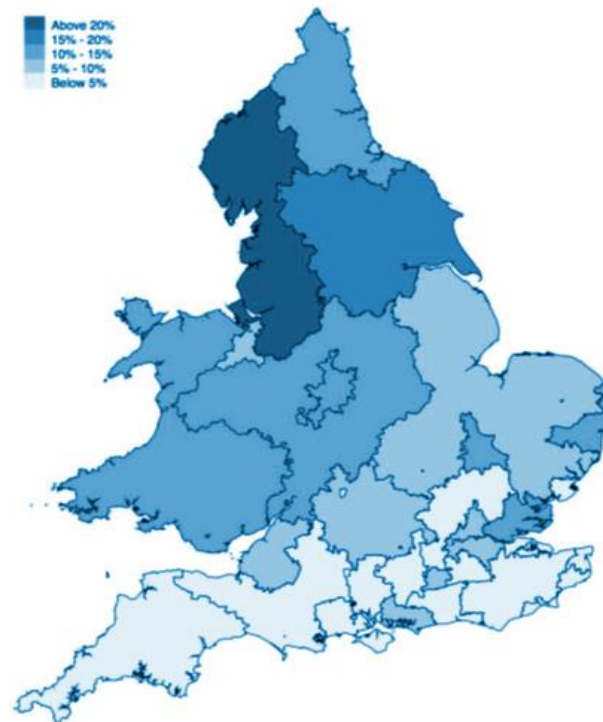
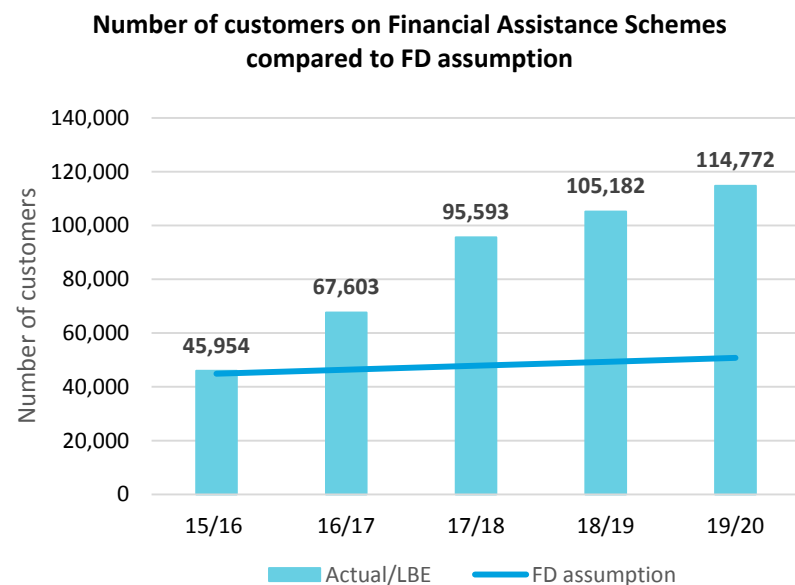
Leading listed water company for CCWater customer satisfaction research

Best listed performer



Affordability is a challenge

We have increased the reach of our financial assistance schemes more than double the number of customers we had originally forecast in our FD.



Households in the North West sit in the top decile of arrears risk according to external data from Equifax

Regional Levels of Deprivation

	1% most deprived	5% most deprived	10% most deprived	20% most deprived
North West	52%	35%	28%	22%
North East	12%	10%	9%	8%
Yorkshire	17%	18%	17%	14%
East Midlands	5%	17%	6%	7%
West Midlands	9%	2%	17%	15%
East of England	2%	7%	3%	4%
London	0%	4%	12%	19%
South East	3%	4%	4%	6%
South West	2%	3%	4%	4%



Our Industry leading approach to Can't Pay customers

We have fundamentally changed our approach to help those that can't pay, redesigning and introducing new schemes and taking them out to customers who need them most

Town action planning

45k visits – **100k visits**

50% contact

Able to agree payment plans **there and then**

75% still on track

Specialist advice on the doorstep

Sustainable payment plans

Town action focused

"Weight off our shoulders"

"Guy was brilliant, really helpful"

"Lovely, absolutely brilliant, so nice, helpful"



Winner of **Responsible Approach to Consumers Award**

CICM British Credit Awards 2018

Winner of **Excellence in Treating Customer Vulnerability**

The Credit Awards 2017

Shortlisted for **Best vulnerable customer support team**

U&T Awards 2017



Engage the wider debt community

Our first ever North West affordability summit – launched on ‘blue Monday’

United Utilities
North West Affordability Summit 2018
Monday 18 January | St. George's Hall, Liverpool

We came together on Blue Monday 2018 as a willing community to focus on poverty in our region here in the North West and what we could do to make a difference. We have five themes of activity that will be sponsored by members of our community and over the next 12 months we will turn your ideas into solutions that will make a difference. We will keep you updated every eight weeks on progress and with details of how to get involved along the way. Next year on Monday 21st January 2019, we will come together again and celebrate the progress we have made and make the next Blue Monday a Bright Monday.

<p>1. NW Community Advice Hub</p> <p>Empowering advice community to access all the support available for their clients</p> <ul style="list-style-type: none"> Website that will provide access, support and case studies of schemes available across the North West Hosted by UU, but open to all organisations and communities to promote and advertise their content and support and help Community driven with a focus across our five regions <p>Salford CC Debt Advisor Steve Quinn</p>	<p>2. Metering Makes A Difference</p> <p>Change the perception about meters in the North West and dispel the myths and links to prepayment meters</p> <ul style="list-style-type: none"> Regional advocate to promote the benefits (Our Martin Lewis) Focus on the £ note savings and generate our case studies Roll out lowest bill guarantee across the region <p>Step Change Mark McElvanney</p>	<p>3. Early Intervention</p> <p>Proactively approach and target customers before they fall into debt</p> <ul style="list-style-type: none"> Use external data to target customers before they fall behind with payments Linking with other community initiatives focussed on early intervention activities <p>UU YourVoice Chair Bernice Law</p>	<p>4. Just About Managing</p> <p>Provide solutions and options for customers before they fall into debt</p> <ul style="list-style-type: none"> Payment holidays to support customers when they experience times of difficulty Seasonal payment plans to support zero hours and seasonal workers Support to help "rebuild" credit scores removing the need to turn to pay-day loans <p>Disability Partnership Dave Thompson, MBE DL</p>	<p>5. Community Education</p> <p>Educating our most deprived communities on budgeting and money management</p> <ul style="list-style-type: none"> Linking into regional education sector and volunteer networks to provide education programmes and scale support Educating the next generation in our most deprived areas on how to budget, save money and manage effectively <p>Age UK Mark Norris</p>
---	--	--	---	--

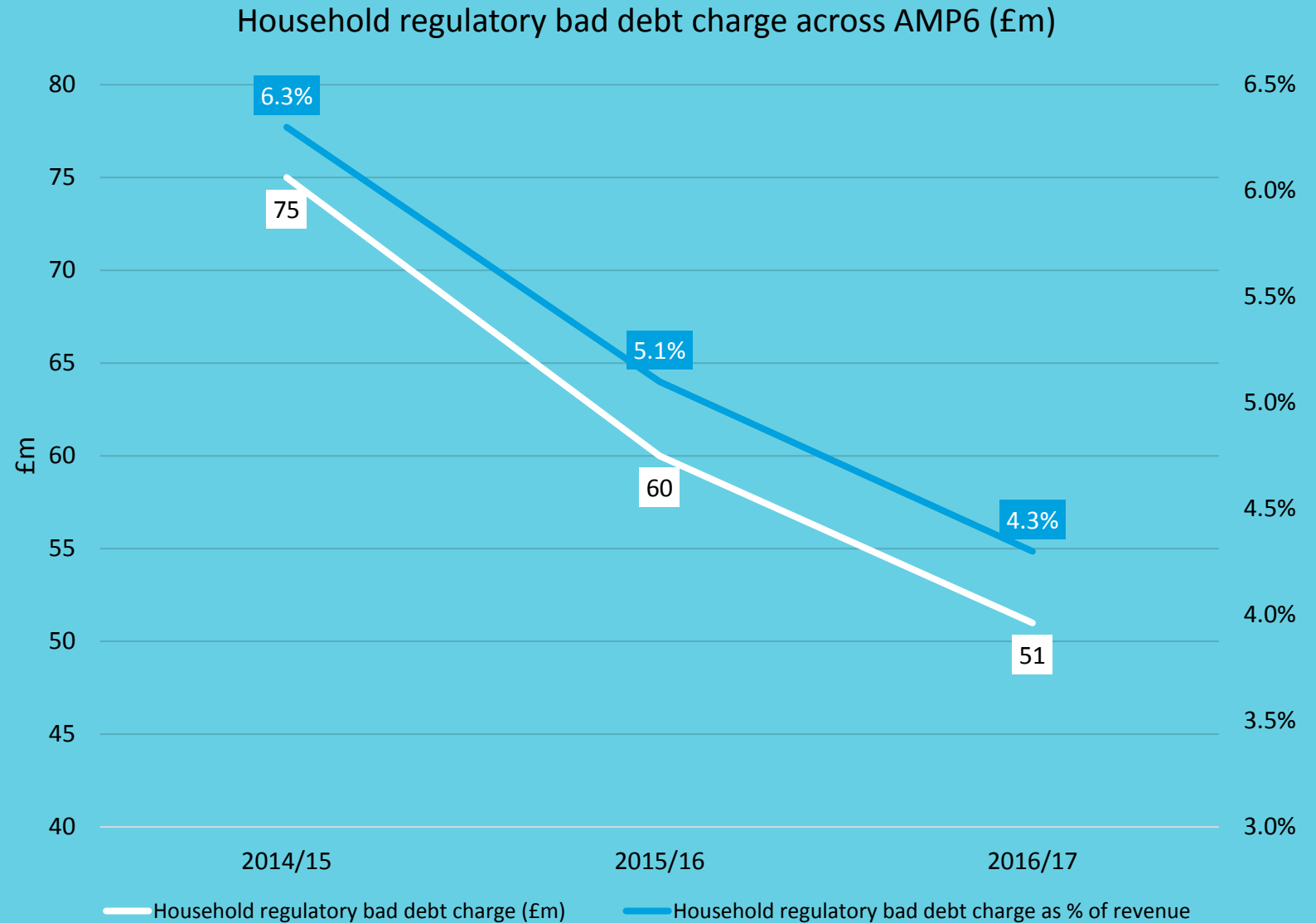
Stakeholders

- Charities
- Foodbanks
- Citizens Advice
- StepChange
- DWP
- Credit unions
- Debt agencies
- Housing associations
- Councils
- MP/ House of Lords
- Other utility companies
- UU Board members



Tackling customer bad debt

We have delivered substantial reductions in regulatory bad debt charges and bad debt as a % of revenue. Since 2014/15 we have reduced household regulatory bad debt by £24m/yr.



Addressing the AMP6 Cost to Serve challenge

Reducing Cost to Serve continues to be a main area of focus. In the last three years we have effectively reduced Cost to Serve per a customer from over £50/Hh to £39/Hh.

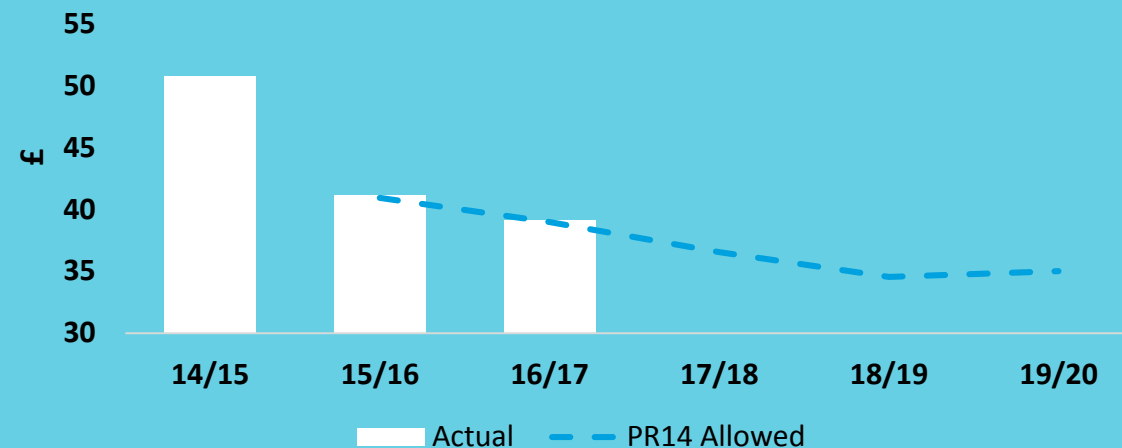
Driving down Cost to Serve

We have put in place a series of initiatives to reduce costs without negative impact on customer service:

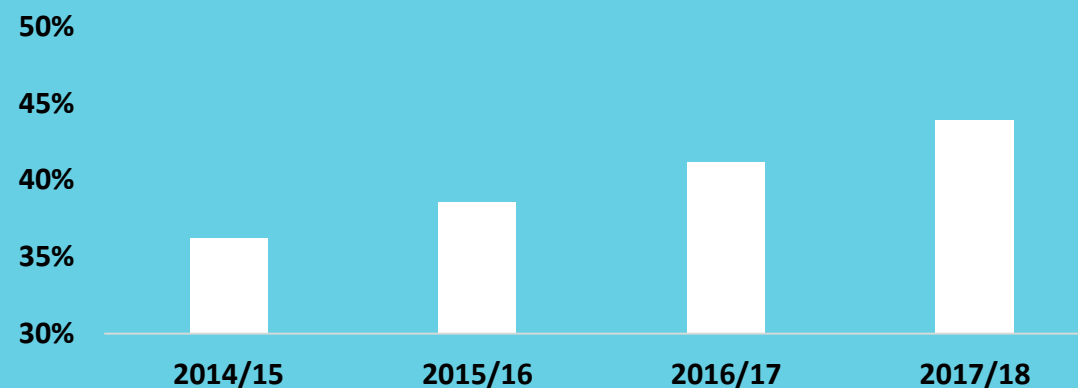
- Delivering operational efficiencies
- Growing digital penetration
- Improved revenue management
- Improved affordability propositions
- Stronger won't pay debt management
- Customers choosing to use self service channels continues to grow.



Cost to Serve - £ per customer



% of automated/self serve transactions



Responding to the future challenges

Econometric models for Household Retail

At the last price review Ofwat based retail cost allowances on simple Cost to Serve models. These models can not easily account for many important factors that drive retail costs.

We have presented Ofwat with robust econometric models demonstrating that extreme deprivation and household bill size are important factors in modelling retail costs.

Ofwat have indicated that these factors are being considered as part of design options for final PR19 cost models. They will consult on draft cost models on 29th March.

Improved cost drivers

Old Cost to Serve model*	Econometric proposed factors
Number of unique customers	Number of unique customers
Meter penetration	Meter penetration
	Percentage dual service customers
	Average deprivation levels
	Extreme deprivation levels
	Average bill size

A small number of additional cost drivers substantially improves the quality of retail cost models.

**Ofwat also made a top down adjustment for dual service customer numbers*

Ofwat methodology

Previous retail Cost to Serve models proved too basic at the last price review. Many companies, including UU successfully argued for special adjustments. Ofwat have been working closely with companies in the run up to PR19 to develop more effective cost assessment methodologies.

Ofwat has signalled in their Final Methodology and Cost Assessment consultation that they will move away from a simple Cost to Serve unit cost, and instead use econometric models for retail functions at PR19.



Well placed for the next AMP

Improving service and reducing costs for customers today and our future customers

Service

Ofwat SIM Survey 2016/17 Annual Report

Industry Leading



UU and ENW first utility data share for **Priority Services** customers



over **50,000** customers registered



Institute of Customer Service: UKCSI results – January 2018 **4th most improved company**

Cost

Since 2014/15 we have reduced regulatory bad debt

by £24m/yr



The highest DD penetration across the industry at **69.8%** despite our affordability challenges

Using segmentation and external data to **drive efficient service and cash collection**

750,000 customer registered for My Account portal

Reduced **Cost to Serve per a customer from over £50 to £39**

Reduced **Stage 1** complaints by **32%**
Stage 2 by **62%** over two years

Innovation

Highest digital presence with **44% of customer contacts automated**



First ever North West Affordability Summit

Co-creation with our **7,300 Water Talk panel** helping design our services and propositions

First fully integrated app in sector

More than 100,000 customers being helped through one of our support schemes



External recognition for our great performance

We are receiving external recognition for best practice in Customer Services, Collections and Debt Management and Complaint Handling.

WOW!



Best rising star - Victoria Chester from our contact centre in Whitehaven.

100 Club - 30 of our Field staff won the 100 award as they have received over a 100 personal nominations each direct from customers.

Customer experience delivery of the year - best large business

WOW! Awards WINNERS November 2017

Social



#1 in the January 2018 water brand influence report



Utility Week



Team of the Year – customer facing Customer Care Award

Utility Week Awards Finalist December 2017

Cash Collection



Excellence in Treating Customer Vulnerability – Collections & Debt Management
Credit Awards WINNER May 2017



Water Team of the Year
U&T Awards WINNER October 2017 Best Vulnerable Customer Support Team
U&T Awards Finalist October 2017



Innovative approaches to customer engagement and satisfaction

Market Research Society Awards Shortlisted September 2017



Responsible approach to Consumers Project of the Year
2018 CICM British Credit Awards Finalist February 2018

Complaint Handling



Best Utilities Pro-active Complaint Handling – Utilities Team – Utilities, Trains & Housing
UK Complaint Handling Awards Finalist February 2018



Steve Mogford
Chief Executive

Summary



United Utilities is leading the way



United Utilities is now a leader among the WASCs



We have a clear vision and a long term strategy

The industry faces many challenges



Environmental



Affordability



Maintaining shareholder returns



Reputational

United Utilities is ideally placed to meet these challenges and our innovation capabilities are at the heart of this.

Innovation and our Systems Thinking approach is central to our strategy and will deliver long term value for customers, the environment and shareholders.

A young child with curly hair is sitting at a table, holding a white cup to their mouth. The child is wearing a patterned shirt and a red bib. The background is a blurred indoor setting. The text "Any questions?" is overlaid in large white font across the center of the image.

Any questions?

Cautionary statement

This presentation contains certain forward-looking statements with respect to the operations, performance and financial condition of the group. By their nature, these statements involve uncertainty since future events and circumstances can cause results and developments to differ materially from those anticipated. The forward-looking statements reflect knowledge and information available at the date of preparation of this presentation and the company undertakes no obligation to update these forward-looking statements. Nothing in this presentation should be construed as a profit forecast.

Certain regulatory performance data contained in this presentation is subject to regulatory audit.

This announcement contains inside information, disclosed in accordance with the Market Abuse Regulation which came into effect on 3 July 2016 and for UK Regulatory purposes the person responsible for making the announcement is Simon Gardiner, Company Secretary.