

## Appian delivers game-changing visibility on investment and infrastructure

Water may be all around us, but delivering a total of 1.2 billion litres daily to around 4.3 million customers requires extensive planning, infrastructure, and investment.

Anglian Water is the largest water and water recycling company in England and Wales by geographic area served. Its commitment to environmentally-friendly production of clean and safe water means it is involved in multiple capital-intensive projects, including the installation and maintenance of smart metres, pipelines, and pumping stations.

### The challenge.

#### Lack of transparency in environmental impact reporting.

Anglian Water operates in the UK's driest region, where a growing population means demand for water is rising while droughts are increasingly restricting supply. Managing this mismatch effectively requires the business to invest wisely and be certain that its investments are delivering where it counts.

Anglian Water's previous analysis and reporting process lacked bandwidth and was based primarily on monthly cycles. Reports were slow to produce and critical decisions were being made using ageing data.

Furthermore, Anglian Water was keen to take immediate steps to put in place data foundations to set out a longer-term vision for net zero transformation, which will enable it to drive climate-conscious decision making on investments and ways of operating.

### The goal.

#### Smoother transitions between asset management plans with a unified platform.

Anglian Water also needed to smooth the transition process between five-year asset management plans (AMPs), which cover the water industry in England and Wales and typically coincide with system and procedural updates and amendments.

Linked to this goal is Anglian Water's increased focus on capital carbon. Since 2015, Anglian Water's mature programme has assessed the embodied energy in pipes and other plant infrastructure, and emissions are now so closely linked to cost that Anglian Water has a carbon element running through its financial planning models. The business is targeting a 65% reduction in carbon emissions by the end of the current AMP and a 70% reduction by 2030.

In advancing this plan, Anglian Water has had to consider the increasing prevalence of remote work. With many staff now working at least partially from home, Anglian Water needed a platform that would allow it to deliver on its ambitions and commitments while enabling secure availability of real-time data at the user's location of choice.



#### Industry:

Utilities

#### Website:

[www.anglianwater.co.uk](http://www.anglianwater.co.uk)

#### Process focus:

Appian Low-Code Platform,  
Totex Delivery Workflow (TDW)



If people report a leak, they can now see that someone is coming to fix it at 1:00 p.m. on Tuesday. Low-code plays a huge part in that interaction.

Oliver Grist  
Portfolio Management  
Office Manager, Anglian Water

## The solution.

### A unified and informative interface.

To meet their goal, Anglian Water worked with Cognizant to build the Totex Delivery Workflow (TDW) solution, a low-code, cloud-based platform that gives Anglian Water employees an organized view of all relevant business data. Crucially, TDW enables instant access to data that can then be converted into meaningful business intelligence. Metrics and KPIs are now available in real time, enabling responsive and accurate decisions without the lengthy lags that hampered the previous system. And the cloud-based, device-agnostic infrastructure means this information is as readily available on a mobile phone as it is on a laptop or PC.

"A key part of my role is to provide a unified view of our investment performance," says Oliver Grist, Portfolio Management Office Manager at Anglian Water.

The move away from static, on-premise installations also means systems can be updated and improved continuously, and much of the work can be carried out by Anglian Water's in-house teams. The low-code environment also means processes can easily be duplicated and reused, so transitioning between AMPs, which previously involved considerable periods of adjustment, is now smooth and rapid.

## The benefits.

### A sharpened focus.

Customers are more aware than ever of the value and quality of service they receive from utilities providers, with climate and sustainability also increasingly top of mind. Appian is now enabling Anglian Water to sharpen its focus on its environmental responsibilities while providing a customer experience inspired by tech giants, such as Amazon.

Anglian Water also uses TDW to assess the carbon intensity of its materials and construction processes to deliver a capital carbon value for any proposed investment or asset intervention. Anglian Water has forged what it describes as a "cast-iron relationship" between capital carbon and asset costs, concluding that reduced carbon correlates directly with reduced cost.

With this knowledge, Anglian Water can now iterate the design of an asset through the investment and design phases, with approval gates to cut both capital carbon and costs.

The improved working environment delivered by TDW means Anglian Water can seamlessly blend the physical and virtual and become more attractive to potential staff in doing so. The new insights and processes that TDW delivers are, however, just a starting point, and Anglian Water is already looking at ways to extend its influence and further develop its operations.

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**Anglian Water has already achieved a 63% capital carbon reduction on its 2010 baseline.**

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We have to understand how much of the various materials we are using, Appian allows us to add all those numbers together across all of our capital carbon footprint programmes and come up with numbers that we can then address and reduce. Being able to sit in a meeting and bring up information, wherever that might be and without having to wait for an analyst to crunch the data, is a game-changer. That expectation is set now.

Richard Buckingham  
Climate Change and Carbon  
Manager, Anglian Water