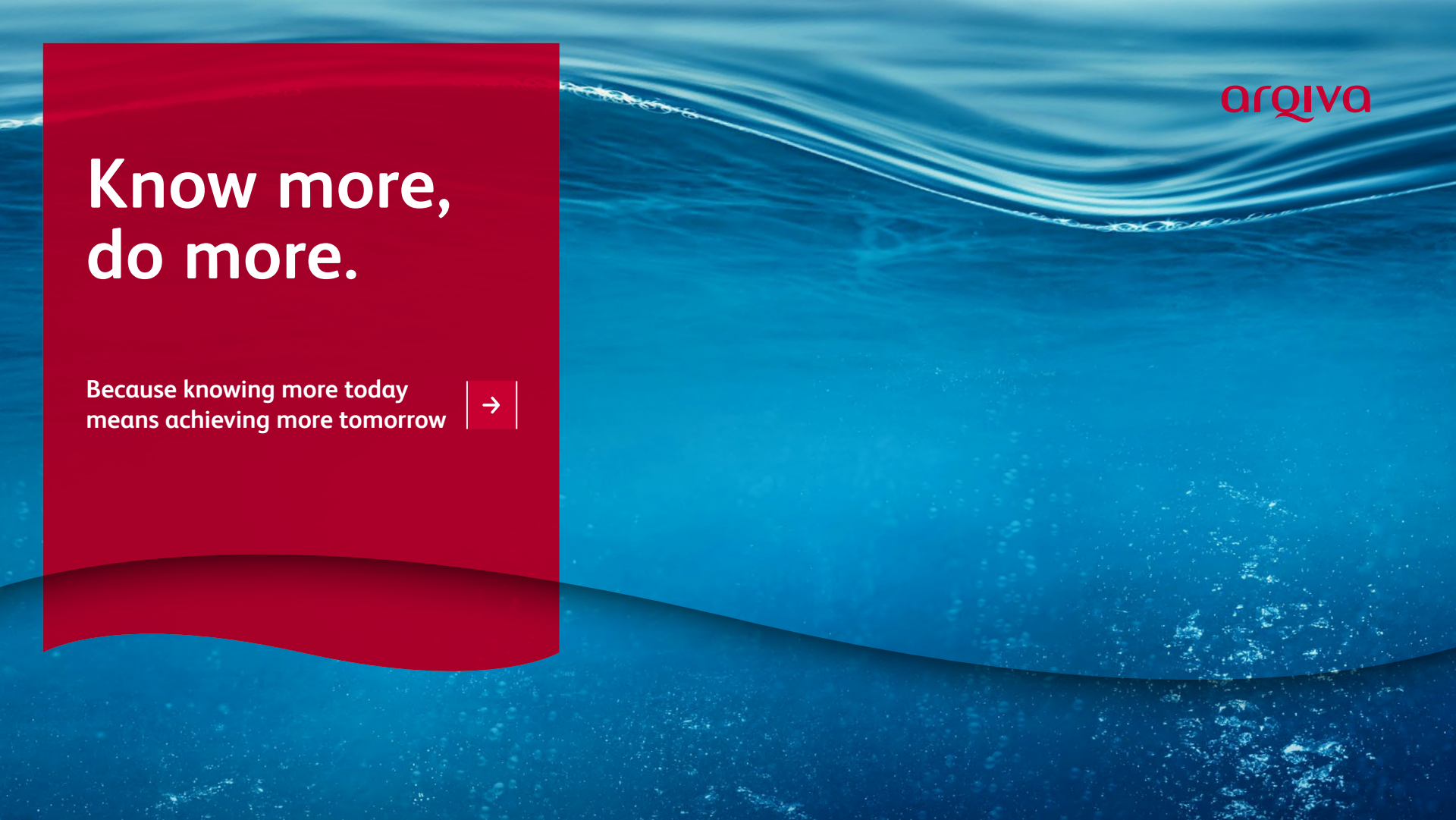
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Know more,
do more.
Because knowing more today
means achieving more tomorrow

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By the middle of the century, England will need an extra 3 billion litres of water a day to avoid a national water deficit. Given the uncertainties around climate change and population growth that figure may be even higher. So it's hardly surprising that Ofwat is asking water companies to plan for the long term and, when making new investments, to ensure these solutions have 'optionality' to flex to meet evolving needs. Needs that are likely to include new approaches to sewer level monitoring, water quality analysis and more.

We've already seen the impact smart water meters – and the data they provide – can have on identifying and tackling customer-side leaks and reducing household usage in the space of just a few years. By the end of the decade, as smart network deployment accelerates, the quality and quantity of data available will allow for incredibly in-depth analysis that will inform hugely impactful planning and management strategies. If these smart sensors and their insights were extended beyond household metering to give water companies the 'optionality' to monitor everything from supply-side to customer-side, the impacts could prove nothing short of transformational.

Given the number of challenges and uncertainties on the horizon, water companies that make the right 'no regrets' technology investment decisions today will be in a far better position to adapt fast to change and future-proof their business.

Alongside minimising the risk of being encumbered by stranded assets unable to support new use cases or keep pace with the demands of a fast changing regulatory landscape, they'll be able to initiate smarter water resource planning strategies that feature enhanced monitoring and improved ways of working.

Which is why Ofwat is urging companies to take a long-term strategic view when it comes to the metering technologies they deploy, setting out a series of reference scenarios – including adverse climate and demand scenarios – that should inform their long term adaptive planning vision.

The good news is that today's always-on, always connected AMI (Advanced Metering Infrastructure) solutions, with hourly meter readings, are capable of delivering all the granular data water companies need to respond fast to such scenarios and identify a core pathway for navigating change.

Providing hourly real-time data on water consumption on a per-property basis together with intelligent data processing capabilities, AMI delivers the insights that will be needed to change customer behaviours and boost supply-side resilience through more targeted and responsive leakage management tactics. But that's not all. Because the more knowledge and insight water companies have, the more they can do.

For example, using AI and machine learning technologies to interrogate their data in more meaningful and powerful ways will enable them to identify and rank leaks to target the right people at the right time while using the minimal amount of in-house resources.

These solutions also make it possible for water companies to extend their network's monitoring capabilities and proactively address other issues. They can, for example, use sensors to mitigate against the sewerage blockages that can lead to multi million pound fines if water pollution and internal sewer flooding targets are missed. By triggering alarms the moment set levels are breached, companies will be able to take prompt and highly targeted action to prevent such events from occurring. They can even deploy real-time sensors to keep a finger on the pulse of things like water quality analysis – without having to extend workloads for their operational monitoring teams. Everything is automated, and data is instantly available, the moment it's needed.

One thing's for sure. Those companies that are able to unlock the power of data across their business will be best positioned to get the most from the metering technologies that they deploy at scale. Making the art of the possible and achievable reality.

Whether that's integrating consumption data with customer data to unleash innovative new tariff options that reward positive customer behaviours. Or undertaking initiatives to better support vulnerable customers. Or delivering data-driven insights that help customers make better and more informed choices around their personal consumption. It all adds up to better operations, better regulator relationships and high customer satisfaction scores.

Today's AMI technologies are already helping to connect organisations, their operations and their customers to a new world of insights that will deliver significant societal and performance benefits. Combine this with increasingly smart analytics services that do all the heavy lifting – especially when it comes to delivering the growing number of data sets and intelligence that regulators are demanding – and companies who make the right technology investment decisions today will be best positioned to respond faster and for tomorrow, without regret.