

Waterscan

Water matters

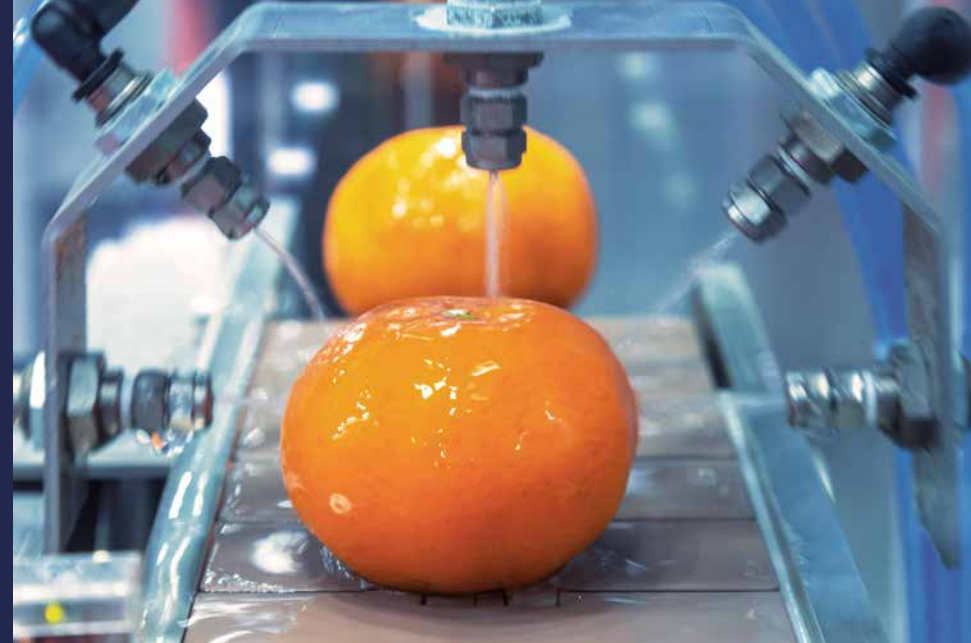
Insight for the UK's manufacturing sector

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Introduction

Everyone needs water. Water sustains life. It creates growth and prosperity. It's the lifeblood of your business.



Think for a second...

How long could your business continue to operate without it? The chances are, you've got about 30 minutes before production lines and your staff on any one site start grinding to a halt. Give it a day and you're in crisis management mode. Within a week, customer confidence and financial targets are impacted, and corporate reputation is at stake.

Now think for a minute...

When was the last time you analysed your organisation's water data? Do you know how much water all your sites consume and how much it costs your business?

If you're not sure, you're not alone. For most businesses, water plays second fiddle to gas and electricity. It's comparatively cheap, it's apparently readily available and there's little stakeholder pressure to act. So, what's the big deal?

Spare ten minutes and discover...

- Why water is the invisible risk in your business.
- How some companies in your sector are managing this risk.
- What you can do to start your journey to water sustainability.

Every day, over 50 billion litres of water are taken from the environment for public and commercial consumption in England and Wales.¹



Globally



Less than **1.2%** of all water on Earth is available for human use.²



By 2025, **two-thirds of the world's population** may be facing water shortages.³



The financial impact of water risks was **US\$301 billion** in 2020; 5x more than the cost of mitigating the risks.⁴



Water stress acts as a multiplier to shortages of other key resources and productivity.⁵

In the UK



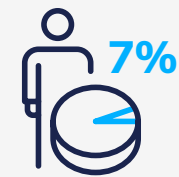
By 2050, England will need **28.5% more water** each day to meet demand.⁶



We use an average of **145 litres per person** per day in the UK, compared to 126 litres in Germany.⁷



The water industry expects supply interruptions to increase by **25%**.⁸



Only **7%** of **business customers** regard water efficiency as a priority.⁹

The invisible risk to your business

Water efficiency is still struggling to make it onto the boardroom agenda. Emissions and waste tend to be prioritised when setting corporate social responsibility agendas, targets and action plans.

This needs to change

In roughly twenty years from now, water demand, which is rising due to population growth and urban development, is predicted to exceed water availability, which is declining due to climate change, pollution and aging networks causing leakage.

At this tipping point, when water scarcity impacts our daily lives, everyone will sit up and take notice. That's also the point when it will be too late, far too late; especially for manufacturers which rely on secure, consistent water supplies and effective, compliant effluent management to function.

The water industry regulator, Ofwat, public bodies like Defra and the Environment Agency, and some water companies are working to reduce the probability of water shortages and to put effective resilience plans in place.

However, as businesses consume 30% of the UK's available water, we too need to play our part if we are to achieve a sustainable water future.

Businesses that are proactive on water will futureproof their operations through:



Lowering their bills and increasing competitiveness in their respective markets.



Becoming more resilient to the effects of climate change and water scarcity by making them less dependent on external factors.



Tackling more comprehensive corporate social responsibility targets and enhancing their progress reporting to investors and customers (noting that, while saving water is a success in itself, it will also positively impact other goals like emission reduction).



Building leadership and long-term reputational gains by playing an active, collaborative role in the communities and environments within which they operate.



The manufacturing sector

It is no surprise that the manufacturing sector requires a lot of water in comparison to others, but this isn't the only factor that poses challenges.

Trade effluent is a complex and highly variable area of water management affecting production businesses. Applying for consents, market set-up, validating costs, reporting breaches and requesting temporary discharge consents make this an aspect of water that's difficult to control.

Supply consistency and quality is another key concern, one which the manufacturer has historically managed directly with their local wholesaler. In today's market, manufacturers are one step removed from wholesalers, with retailers in between, which can lead to a lack of information around potential supply interruptions and water quality issues.

As an important contributor to UK GDP, it is essential that manufacturing operations are supported in their water conservation efforts so that they can keep production lines flowing while safeguarding profitability, regulatory compliance and long-term operational resilience.



Across Waterscan's food and drink manufacturing customers, on average, **267,000m³ of water is used** per site every year in the UK.



Leaky taps and pipes waste over 3 billion litres of water every day in the UK. That's over 9 billion cans of a soft drink.¹⁰



Unread meters = inaccurate invoices. Across England, **14% of water meters have not been read** for 12 months or more.¹¹



77% of complaints in the English market relate to **billing issues**.¹²



On-site abstraction is under scrutiny, creating risks for businesses with boreholes.



To address **water efficiency**, Defra is working to introduce mandatory efficiency labelling on water-using products.¹³



In the 2022-23 charging year there were **over 90 trade effluent tariff codes** in the market.



Trade effluent charges vary dramatically (from <£0.25/m³ to >£3.80), causing **potentially significant errors** and impacts on profitability.

Doing the right thing

Three examples of manufacturing companies that are taking leadership on water management in different ways.



Coca-Cola Europacific Partners: complete control

Around the world, consumers enjoy 2.1 billion beverages from the Coca-Cola Company every day.

With water use a key component of its manufacturing systems, water security is a key concern for Coca-Cola Europacific Partners (CCEP). Its 2030 Water Security Strategy focuses on increasing water security through a context-based approach to water replenishment, advocacy for smart water policies and responsible water use across its operations and supply chain.

Accordingly, it opted to Self-Supply manufacturing, warehousing and office sites across England. Key drivers for

pursuing this route were to enable CCEP to control the supply, volume and quality of water used in its operations, to give it a voice in the development of the English water market, and to develop a greater understanding of water stewardship.

CCEP was recognised by the Carbon Disclosure Project (CDP) by securing a place on its prestigious 'A list' for enhancing water security. It was also awarded a double 'A' score for leadership in corporate transparency and performance on water security.¹⁵



“Water is a hugely important ingredient in all our drinks and we have long had a commitment to manage this precious resource carefully. The deregulation of the water industry in the UK opened up opportunities for us to work with the most innovative water suppliers, those who share our passion for managing water supply and treatment in the most sustainable way.”

Head of Sustainability at Coca-Cola Europacific Partners, Great Britain.

Coca-Cola EUROPACIFIC
PARTNERS

Kellogg's: comprehensive CSR

Kellogg's was the first food manufacturing company to secure a Self-Supply licence for water and wastewater for its Manchester plant; the company's largest manufacturing operation in Europe.

Water reduction is a key pillar of Kellogg's global 2020 sustainability commitments because water is integral to its operations. The company recognises that growing water scarcity is a global risk for communities around the world where it sources ingredients and manufactures food. Kellogg's therefore sets bold targets to drive down water use. For example, it aims to reduce water use in global Kellogg-owned manufacturing facilities in high water-stress regions by 30% by the end of 2030.

Self-Supply gives Kellogg's greater control over its trade effluent discharge, cost savings by paying wholesale prices, and influence in the water market. It can also join peers at the cross-sector Self-Supply Users Forum for unparalleled insight and proactive risk management. A partnership agreement enables Waterscan to act as Kellogg's managing agent, to provide technical support and water efficiency advice. Organisations that Self-Supply save an average of 5% of their annual water consumption.¹⁴

“We decided that having a water Self-Supply licence will help us meet our water reduction targets faster as we will have complete control over and trust in our data.”

Plant Director at Kellogg's Manchester manufacturing site

The Kellogg's logo is displayed in its signature red, cursive script font.

Hanson UK: reducing water use

Hanson, a leading supplier of aggregates, concrete, asphalt and cement-related materials to the construction industry, has been working with Waterscan for over 15 years to reduce water use across its 300 UK manufacturing sites.

Hanson recognises water is a vital natural resource and understands the impact of its sites on the local environment both during and after use. Hence, water is a key area in its sustainability policy and performance reporting.

In its 2022 Sustainability Report, Hanson revealed that its water use reached a historical low at 5,328 megalitres in 2021. Mains water use has been reduced by over 15% and abstracted water over 20% since 2018.

Looking ahead, formal water management plans are being created to address the fact that some 111 Hanson sites will be in areas of high water stress by 2030.

This outstanding performance was achieved through a comprehensive and concerted drive to be proactive in all aspects of water stewardship. Measures included installing smart meters at 25 of its biggest sites to give full visibility of consumption, bill validation, leak identification and repair, and using more recycled water.



Make water work for you

In our experience, the majority of leadership teams working in manufacturing are switched on to water, with clear strategies in place to reduce risks of downtime as a result of water-related incidents.

Many, however, are not making the most of their potential influence in the water market; an opportunity that arises from the scale of their consumption. As a result, these organisations may not be getting the competitive pricing and quality customer service they have been entitled to since 2017 when the water market opened to give customers choice over their supplier.

Perhaps this is because, with so many competing priorities, making significant changes to procurement approaches or instigating further efficiency measures is daunting.

Technology is one option. However, notwithstanding automated meter reading devices which are now significantly advanced, capital investment in water saving technologies often falls short of return on investment expectations. Most water saving hardware is still in its infancy; there are some great innovations in the pipeline, but these remain unproven at scale, and hence an investment risk.

Another option is to engage with your water supply chain – an attractive proposition since the water market opened - provided you have clear visibility of baseline data on which to negotiate price and service expectations. This data

also facilitates the setting of goals around saving money, time or water, linked to financial, administrative or sustainability objectives. Sadly, visibility around water consumption and cost is often sorely lacking and with it, the impetus for action.

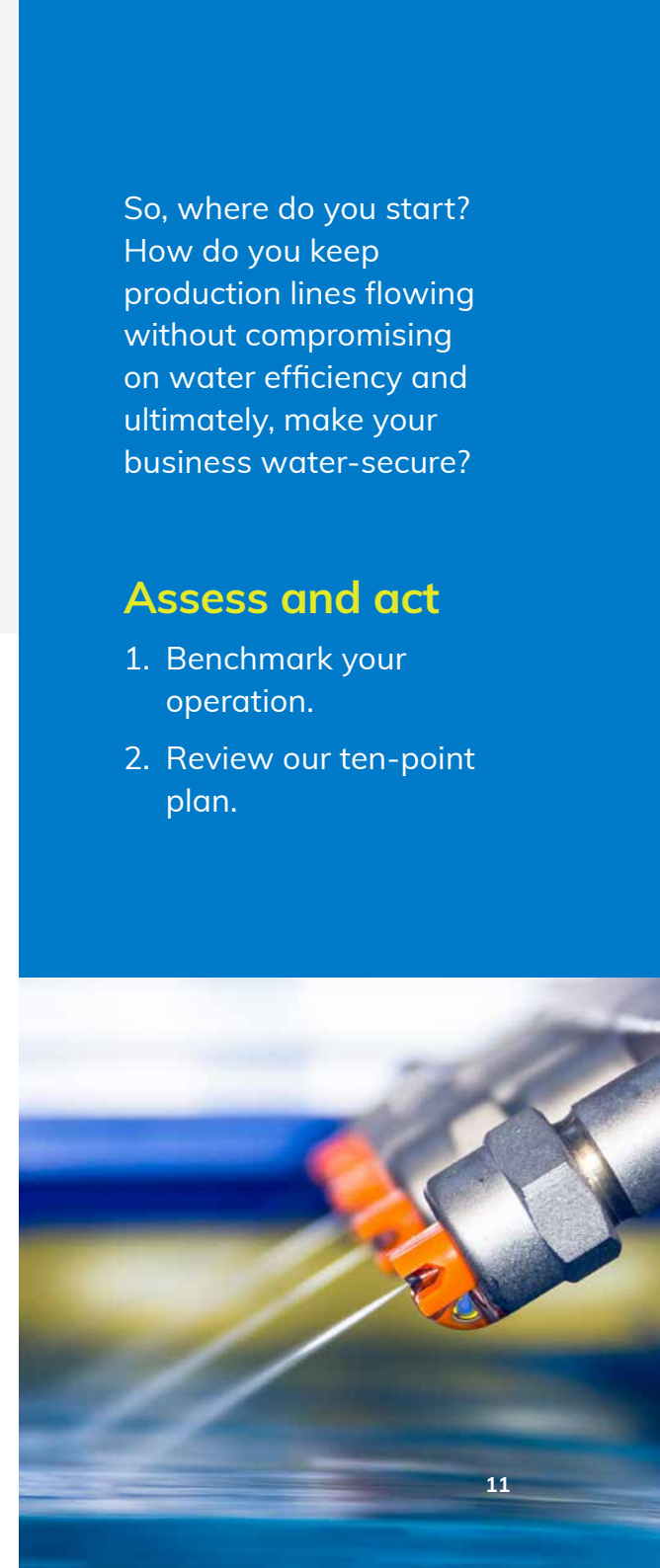
For all these reasons, instigating a water resilience strategy may not seem much of a priority right now.

Rest assured though, that the benefits of doing so are numerous, usually resulting in a swift return on investment and ongoing benefits to your business operations that will be realised for decades.

So, where do you start?
How do you keep
production lines flowing
without compromising
on water efficiency and
ultimately, make your
business water-secure?

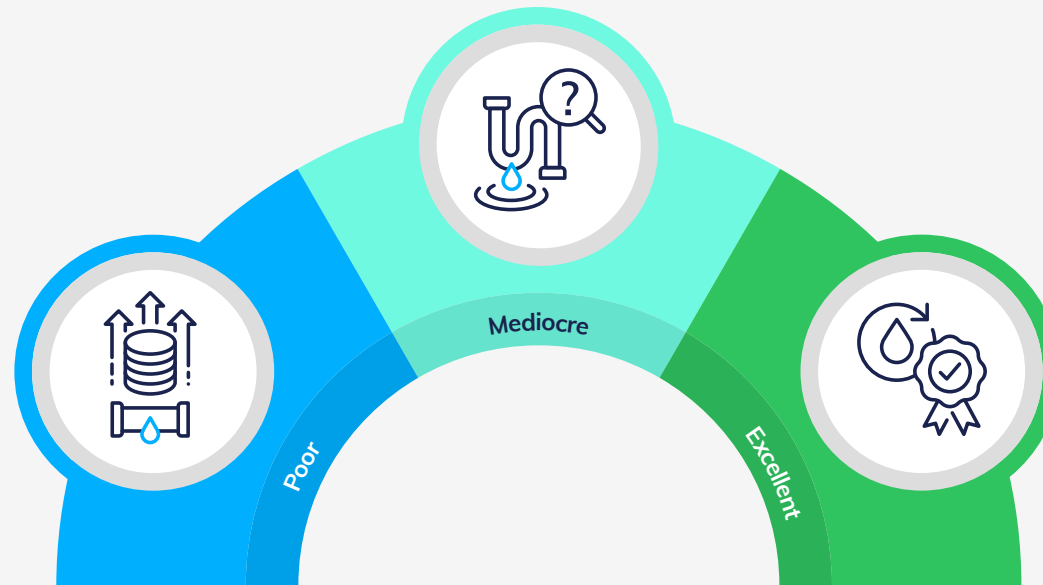
Assess and act

1. Benchmark your operation.
2. Review our ten-point plan.



Step 1: assess

Benchmark your operation



Understand what leadership on water looks like

Poor

These companies will just pay their water bills and not give any further consideration to water. Their back-office staff will be spending a lot of unnecessary time on billing administration and supplier liaison because of poor trade effluent set ups, inaccurate meter readings and they could even be juggling multiple water retail contracts.

They're likely to be paying far more than they need to but getting involved in the open water market seems daunting and an extremely low priority (after all, "it's much cheaper than energy!"). The result is that their businesses are operating with continuity and cost risks.

Mediocre

These companies will have some awareness of their overall water consumption but will not be sure how or where it is used, nor how much of this is essential or how much could be saved.

They're likely to take a reactive approach to efficiency measures, perhaps only fixing leaks when they cause disruption to operations and will only consider water saving equipment when they need to replace something.

Excellent

These companies will have full visibility of how much water they use, and where, down to site level across all operations. They will have trade effluent management under control and optimised for their situation.

This visibility means that they'll be able to operate in a lean and efficient way with close to no consumption or cost wastage, fully engaged staff who value water and with confidence that no water-related event will adversely impact business operations.

They are also likely to be working proactively and collaboratively with others to protect local supplies and set new benchmarks in corporate social responsibility.

Step 2: act

10 steps to water resilience

Some simple steps to start reducing risk and building resilience across your operations



1 Evaluate your current position

Assess which parts of your operations could be affected by a potential water shortage and the level of these impacts. Make sure you include facilities that may not consume a lot of water but would have a big impact on the day-to-day running of your business if they couldn't be used, such as staff welfare amenities. Then, expand your assessment to consider the impact of water shortages to your wider stakeholders including customers and suppliers.



2 Understand your vulnerability

Consider the geographical location of all of your premises: are you in a water-stressed catchment area or one that is prone to low rainfall? Find out if there is a lot of local development planned as this may increase demand in the catchment area(s) in which you operate. The Environment Agency has much of the information that you need.



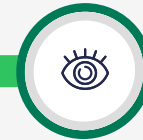
3 Build your business continuity plan

Ensure that all of the business threats identified in steps one and two are included in your corporate risk assessment and business continuity plan. Consider what measures need to be put in place to mitigate these risks.



4 Benchmark your usage

It's also useful at this stage to benchmark your usage against similar premises or within your industrial sector to understand if your water consumption compares favourably or otherwise. A poor benchmark position could lead to negative reputational impacts as well as operational ones.



5 See your blind spots

Obtain full visibility of water consumption across your estate – ask your water retailer for this information and insist that it is actual (not estimated) and from a recent (less than three months old) meter reading. This should include how much water you're using, where it's all going, how much of it is necessary and if any is being lost through leaks or other wastage. If you cannot get full visibility, this exercise will highlight blind spots.



10 Plan for emergencies

Create back-up plans for what are likely to be inevitable water shortages in the future and support these with an effective crisis communications plan for effective deployment. These could include third party emergency supplies, for example. If you need to report an emergency issue, contact your wholesaler directly - you can find links on our website.



9 Collaborate with your neighbours

Joining forces with other stakeholders in the same water catchment area will proactively increase overall resilience for mutual benefit. Catchment Based Approach Partnerships bring together businesses, local authorities, water companies, landowners and public bodies to protect our valuable water environments.



8 Reach out to your retailer

Speak to your water provider(s) to advise them of your concerns and forward plans. Understand their plans and priorities to boost resilience and ask about any incentives they could offer to support your efforts.



7 Increase your efficiency

With full visibility of usage and the bigger environmental picture, you will now be able to address any areas of your business that could use less water. Prioritise your sites that are in water stressed geographies to guard against a water outage and protect natural resources. Perhaps there are leaks on some sites which could be easily rectified. Or, where there are no leaks, a staff awareness and engagement programme may be required.



6 Address your blind spots

Any gaps in your data set can be addressed through technologies like automated meter reading (AMR), data loggers and even good water management software. Speaking to colleagues on the ground is also likely to bring valuable insight to the table. Your water retailers should be fully supportive of your efforts here.

- 1 <https://www.discoverwater.co.uk/where-water-comes-from>
- 2 <https://www.cdp.net/en/water>
- 3 <https://www.worldwildlife.org/threats/water-scarcity>
- 4 <https://www.cdp.net/en/research/global-reports/global-water-report-2020>
- 5 https://www3.weforum.org/docs/WEF_Global_Risks_Report_2023.pdf
- 6 https://consult.defra.gov.uk/water-efficiency-labelling/water-efficiency-labelling/supporting_documents/Water%20efficiency%20labelling%20consultation.pdf
- 7 <https://www.discoverwater.co.uk/amount-we-use>
- 8 <https://www.water.org.uk/news-item/water-2050-white-paper/>
- 9 <https://www.ofwat.gov.uk/regulated-companies/markets/business-retail-market/five-years-open-for-business-taking-stock-review-of-the-fifth-year-of-the-business-retail-water-market-2021-22/>
- 10 <https://www.discoverwater.co.uk/leaking-pipes>
- 11 <https://mosl.co.uk/documents-publications/5602-2021-22-ampr-final/file>
- 12 <https://www.ofwat.gov.uk/publication/five-years-open-for-business-taking-stock-review-of-the-fifth-year-of-the-business-retail-water-market-2021-22/>
- 13 https://consult.defra.gov.uk/water-efficiency-labelling/water-efficiency-labelling/supporting_documents/Water%20efficiency%20labelling%20consultation.pdf
- 14 https://www.ofwat.gov.uk/wp-content/uploads/2020/08/State-of-the-market-2019_20.pdf
- 15 <https://www.cocacolaep.com/media/news/2022/cdp-2022/>