



How to reduce water consumption in your business

FAQs

- + Is this session being recorded? Yes, we will send a link to watch and share after the session.
- + Can I get a copy of the slides? Yes, we will send a link to download them after the session.
- + How can I ask questions? All lines are muted so please use the Q&A function, if we run out of time we will follow up with you separately.

Agenda

- Introductions
- Why saving water is so important
- The likely future impact of water shortages on businesses
- The three pillars of water saving
 - Use less water – how water saving technology can help you use less water throughout all areas of your operations
 - Waste less water – advice on how to reduce water wastage by spotting leaks and floods before they have an impact as well as opportunities for behavioural change within your organisation
 - Reuse and recycle your water – how rainwater harvesting and greywater recycling can impact on your overall water usage
- The importance of having a water management strategy and where to start with developing one
- How Ecoprod can help you use less water
- Questions

Introductions

Rachel Clinton



Jacob Tompkins



Marcus Rose

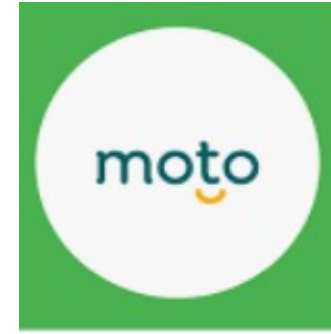


Paul Musgrove



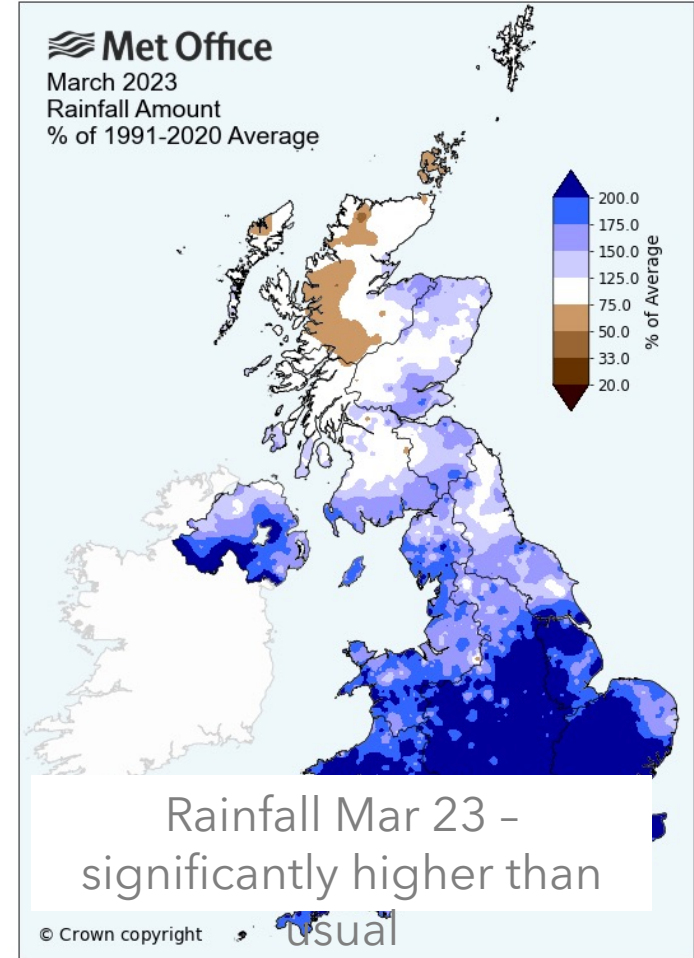
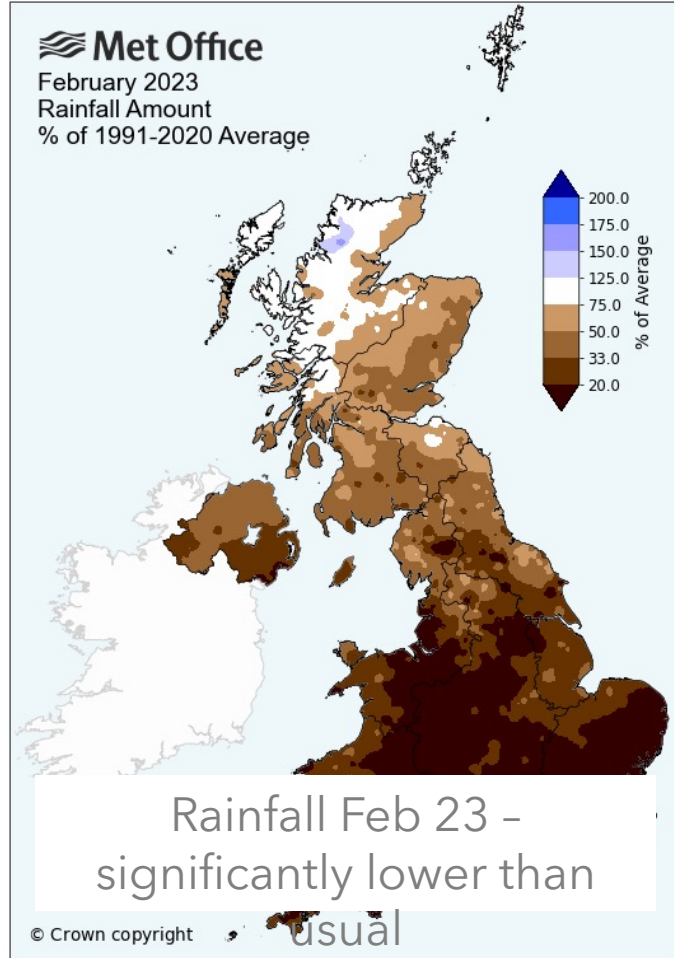
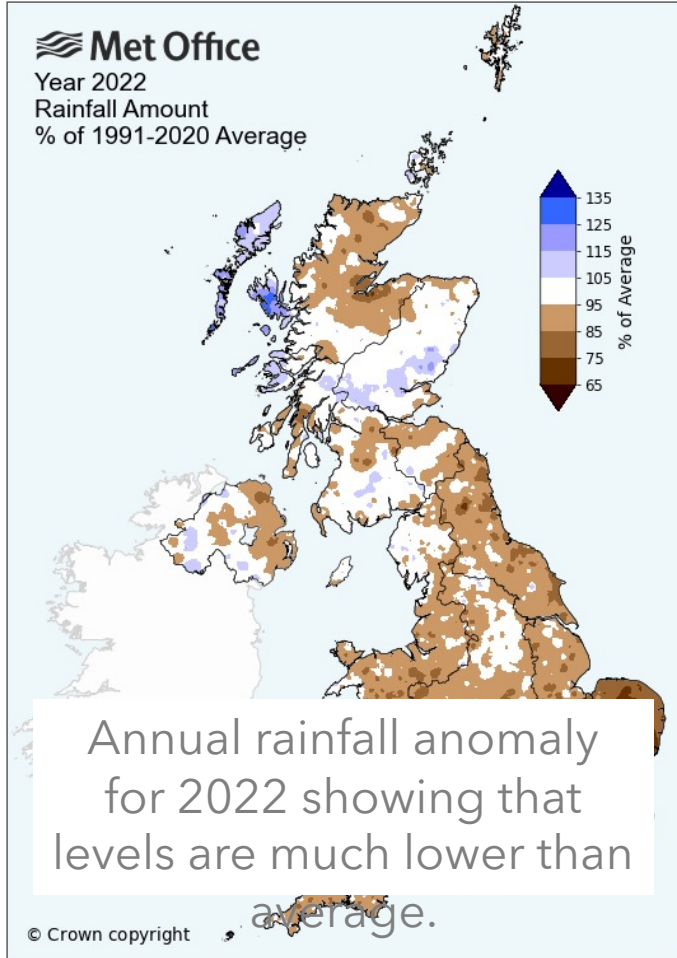
About us





Why water saving is important

- + We are already seeing the impact of water shortages due to climate change in the UK
- + Daily use needs to be reduced from 140 litres per person to 100 litres per person or lower
- + Cutting water use also saves you money and reduces your carbon footprint as well as enabling you to demonstrate your commitment to sustainability
- + There are significant energy savings associated with reduced water use (pumping, heating, cooling)



Water saving pillar one: use less water

Urinals and toilets

- + Switching to waterless urinals will save you up to 100,000 litres of water per urinal per year
- + Waterless urinals are also easier to clean and maintain so your costs reduce in those areas too
- + Switch toilets to dual flush cisterns
- + Regular maintenance is important – leaking toilet cisterns can waste between 400-600 litres of water per day

Water saving taps

- + Taps left running is one of the most common sources of wasted water in organisations
- + Sensor taps ensure that water is only running when it is needed
- + They also offer improved hygiene and cleanliness
- + Switching to sensor taps also cuts your energy usage as you need less hot water
- + Using sensor taps can reduce water usage by up to 70%

Showers

- + Encourage staff and customers to limit the time they spend in the shower
- + Install water efficient shower heads which can cut water use by up to 40%
- + If you're refitting your shower rooms then you can install purpose built water saving showers
- + Reducing shower flow is one of the most effective energy saving measures
- + Electric point of use heating showers are the most water and energy efficient

Kitchens

- + Encourage filling sinks for washing up rather than leaving taps running
- + Move to push or spray taps if sink is just used for rinsing cups
- + Look at the different dishwasher programs to ensure you're using the most efficient one
- + Point of use water heaters are much more efficient in terms of energy and water usage
- + Think about installing plumbed-in water coolers
- + Use kitchens to promote your messaging to staff

Washroom Savings

- + Waterless urinals can save 100,000 litres of water per urinal per annum
- + Reduced flow taps can save up to 70% of water usage
- + Check the programming of your sensor taps to reduce flow time
- + Electronic showers can also hugely reduce water use by reducing the flow and the automatic flow times
- + Install cistern displacement devices or dual flush retrofit devices in toilets

Changing people's behaviour

- + The best way to save water is by encouraging simple behaviour changes amongst your staff
- + Create a water saving culture in your organisation
- + Run a staff awareness campaign
- + Encourage staff to submit their water saving ideas
- + Talk about your water saving policies and procedures in staff induction sessions and team meetings
- + Advice applies to your supply chain, visitors, customers

Water saving pillar two: waste less water

Smart leak detection systems

- + Leaking taps and toilets are one of the most common causes of wasted water
- + A leaking toilet wastes between 215 and 400 litres of water per day / cost from £300 up to £6,000 per year
- + The Aguardio Leak Sensor detects such water leaks by measuring the temperature difference between the water inlet pipe temperature and the ambient room temperature
- + Smart no-dig leak detection and repair systems from Aquapea

Change behaviour

- + Aguardio Shower Sensor encourages people to take shorter showers
- + Shower duration was found to be 13% shorter when a real time shower clock is visible
- + Simple measure such as posters and stickers can reduce wastage
- + Internal newsletters and surveys can create a water saving culture
- + Posters with details of how to report leaking taps etc can help reduce wastage

Intelligent water management systems

- + Intelligent water management system monitors water usage within your building 24/7 using machine learning tools
- + It learns about water usage patterns in your organisation and immediately alerts you to any potential problems
- + It can help you spot leaks before they become a problem
- + It can automatically shut off the water (or enable you to do it remotely) in the event of detecting a problem

Intelligent water management systems

- + Conti+ CNX enables the complete management of up to 150 connected products such as taps, showers or urinals
- + You can manage tasks such as hygienic flushing and thermal disinfection remotely
- + All safety routines are logged for future reference
- + Conti+ Service App enables water flow and hygiene controls via mobile phone or tablet

Putting in place an effective installation, monitoring and maintenance system

- + Have a regular maintenance regime even if things seem to be working fine
- + A lot of problems can be hard to spot
- + Encourage staff to report any issues they come across
- + Monitor water usage and check for leaks
- + Ensure you have the right loggers and meters
- + Get equipment professionally installed – this may automatically include after sales support or maintenance continuity

Water saving pillar three: reuse and recycle your water

Integrated water management

Definition CIRIA:

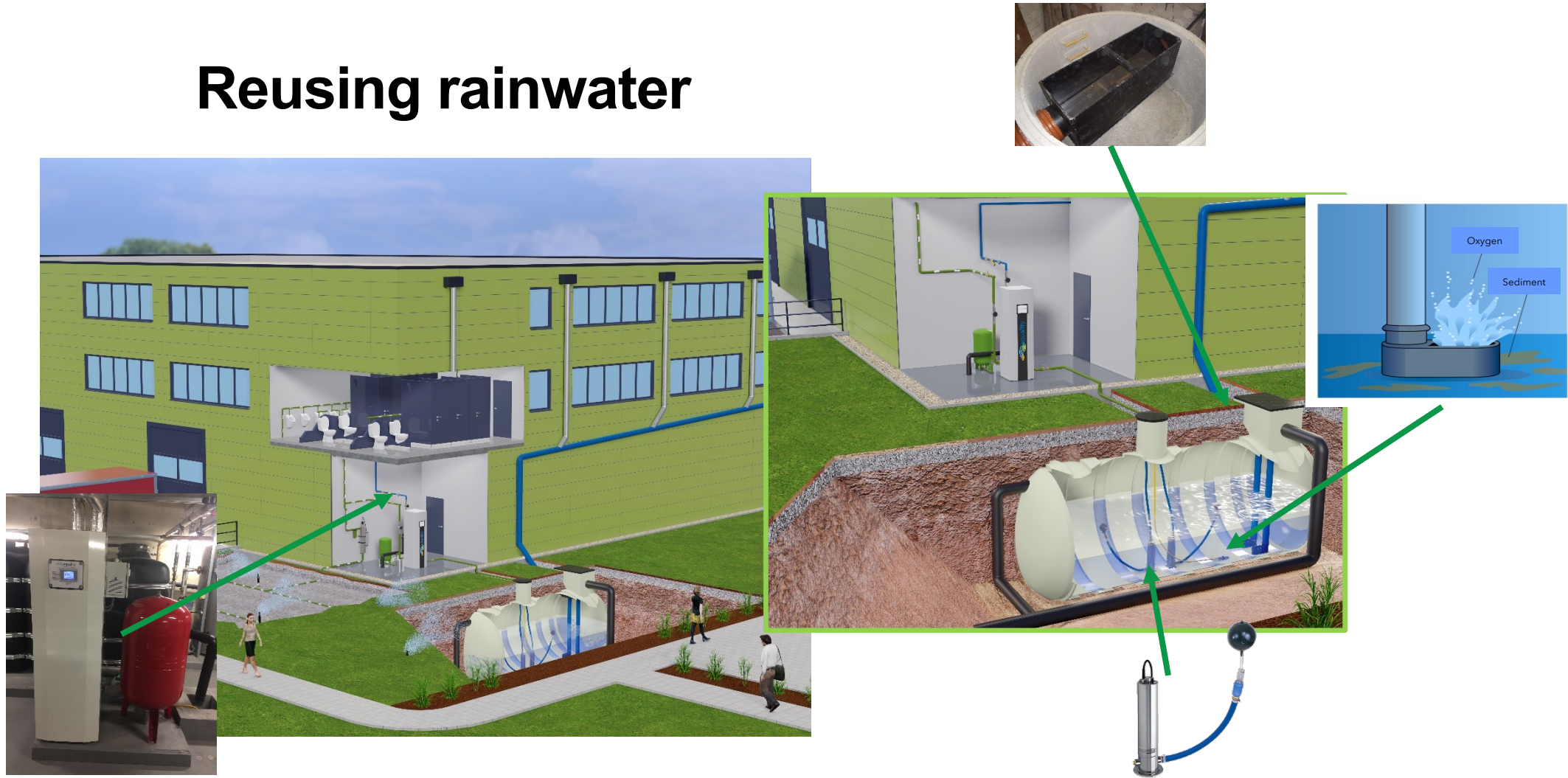
A collaborative approach to managing land and water that delivers coordinated management of water storage, supply, demand, wastewater, flood risk, quality of water and the wider environment

Rainwater/ stormwater management

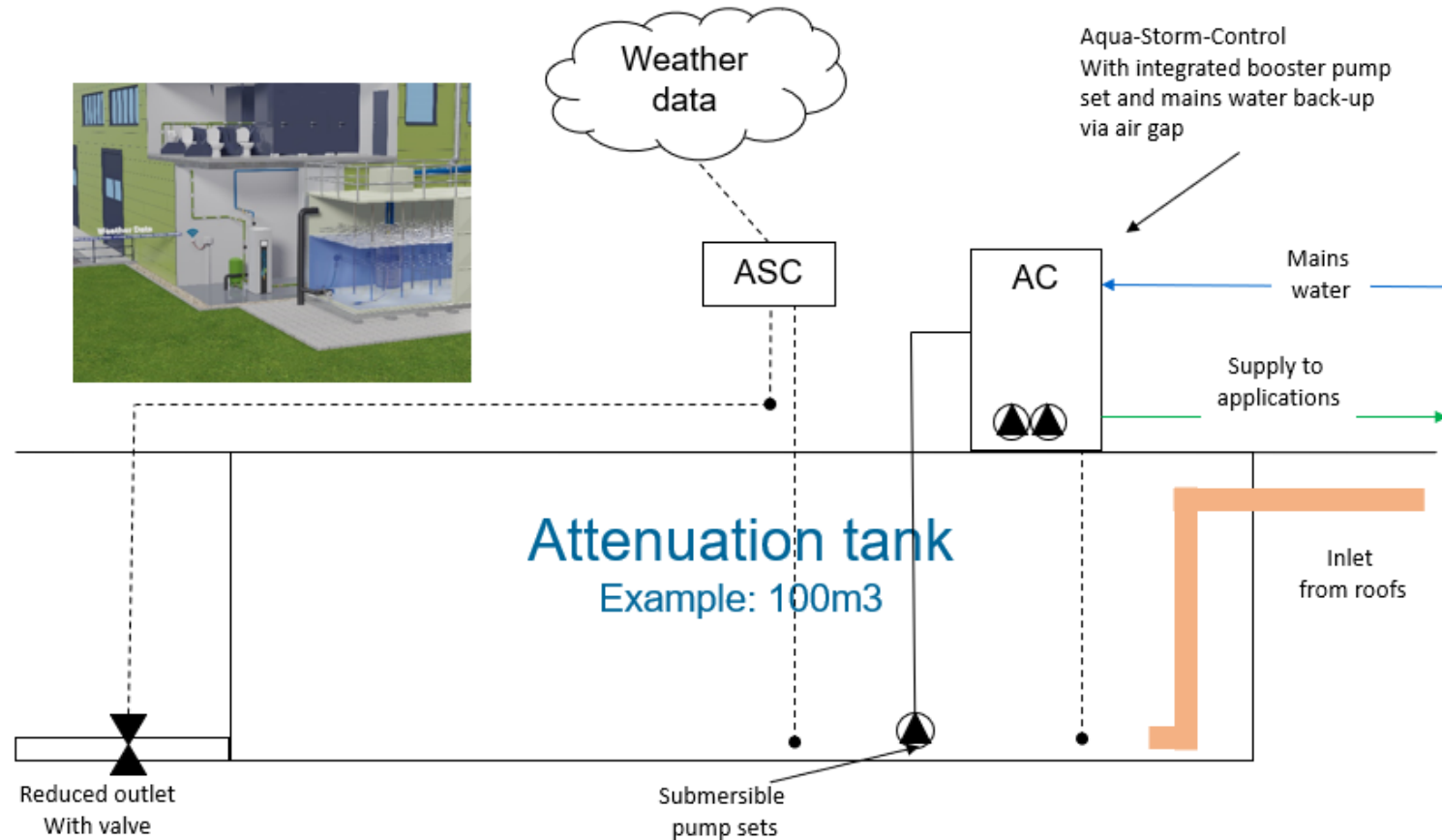
- Ponds, swales, raingardens etc.
- Green roof
- Attenuation tanks/Blue roofs
- Rain-/Stormwater harvesting
- Greywater recycling
- Other water reuse/recycling



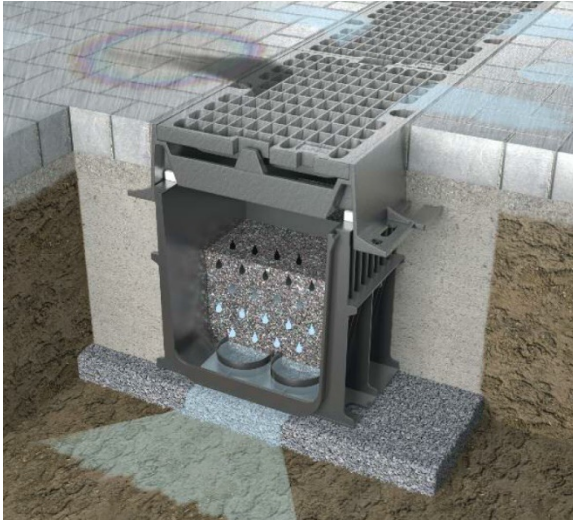
Reusing rainwater



Smart rainwater harvesting (inc attenuation / flood management)



Reusing stormwater



- Treatment channels
- Chamber filter
- Filter media & bioretention

Recycling greywater

Aqua-Recycling control
remote control and monitoring unit

Greywater filter
Back-wash filter for hair and other particles

Buffer tank
Buffers the incoming greywater for treatment

Membrane treatment tank
Aerates and treats the greywater

Process water storage tank
Stores water for potential demand

Aqua-Control
booster pump set with integrated mains water back-up and controls



Bio-mechanical
greywater recycling
systems:

Landscaping

- + Analyse how much water your water features use, consider evaporative loss and ensure water is recycled into the system
- + Use drought tolerant plants in your garden
- + Mulch your flowerbeds and pots so they retain moisture better
- + Water plants early in the morning or late in the evening
- + Rainwater harvesting – install water butts and tanks to make use of rainwater
- + Consider living wall features which can be rain fed or use grey water

Air conditioning & cooling towers

- + Use the appropriate air conditioning system – some use water, some don't
- + Is the maintenance regime for your cooling tower water efficient?
- + Use fans and natural ventilation where possible
- + If using evaporative air conditioners then set your thermostat to 24c for most efficient operation
- + You can harvest condensation from air conditioning to recycle it for other uses
- + Ensure you switch off heating and cooling when the building isn't occupied

The importance of having a water management strategy

What is a water management strategy?

- + Does what it says on the tin
- + Businesses often forget about water, don't have the tools to manage it and don't think strategically about water
- + Comprehensive overview of all things water

The benefits of a formal water management strategy

- + Complying with regulations
- + Reducing costs
- + Reducing carbon
- + Benefiting the environment
- + Benefiting your staff and customers
- + Guides decision making

The elements of a water management strategy

- + Where does your water come from?
- + What do you use it for?
- + Where does it go?
- + How much does each of these stages cost?

How to develop a water management strategy

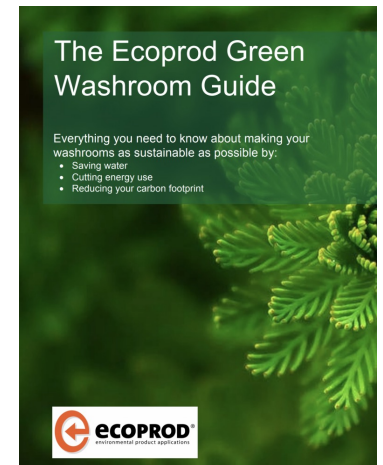
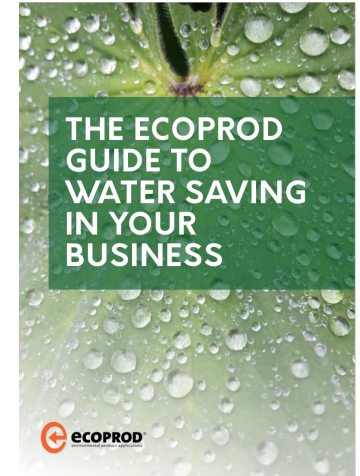
- + How can you improve what you've already got?
- + How do you monitor and maintain your water management strategy once it's in place?
- + Who is responsible for implementing your water management strategy?
- + How do you keep it live and maintain momentum?

Tracking the success of your water management plans

- + Talk to your water supplier about smart metering and online billing
- + Smart meters give you the data you need to properly monitor and understand your water usage
- + Measure the before and after water usage levels relating to any changes you make
- + Ask suppliers if they can help you with measurement of water savings and ROI calculations

Other resources

- [Green washroom guide](#)
- [Guide to water saving in your business](#)
- Drop us a line to arrange a 1-2-1 call or site visit rachel.clinton@ecoprod.co.uk



Questions?

0844 800 7890

enquiries@ecoprod.co.uk

www.ecoprod.co.uk

