



Reducing water and energy consumption with  
Xeros washing machines

# 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
- How do Xeros washing machines work?
  - + Why they use less water
  - + How they cut your energy costs
  - + Why you use less detergent
  - + How they protect your clothes
- Proven results
  - + Case studies from existing users
  - + Typical ROI of switching to Xeros
  - + Delivering the correct wash requirements for healthcare and other specialist markets
- Questions

# Introductions

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# Rachel Clinton



# Ian Hewitt



# Marcus Rose



# Stephen Hayes



# Ecoprod can help you significantly cut your water use, use less energy and reduce your carbon footprint



# Ecoprod clients



**SCIENCE  
MUSEUM  
GROUP**



**SKANSKA**



MARKS &  
SPENCER



**SOPHOS**



**UNIVERSITY OF  
GREENWICH**



# What is the Xeros washing system?

Unique, groundbreaking sustainable technology, that prolongs the lifespan of textiles, whilst reducing water, energy and chemistry consumption and delivering significant improvements in wash performance.



Up to 70% water saving



Up to 50% energy saving



Up to 50% detergent saving

- ✓ Less shrinkage
- ✓ Less creasing
- ✓ Less transfer damage
- ✓ Less colour fade
- ✓ Less dye transfer
- ✓ Less microfibre release



# How do Xeros washing machines work?

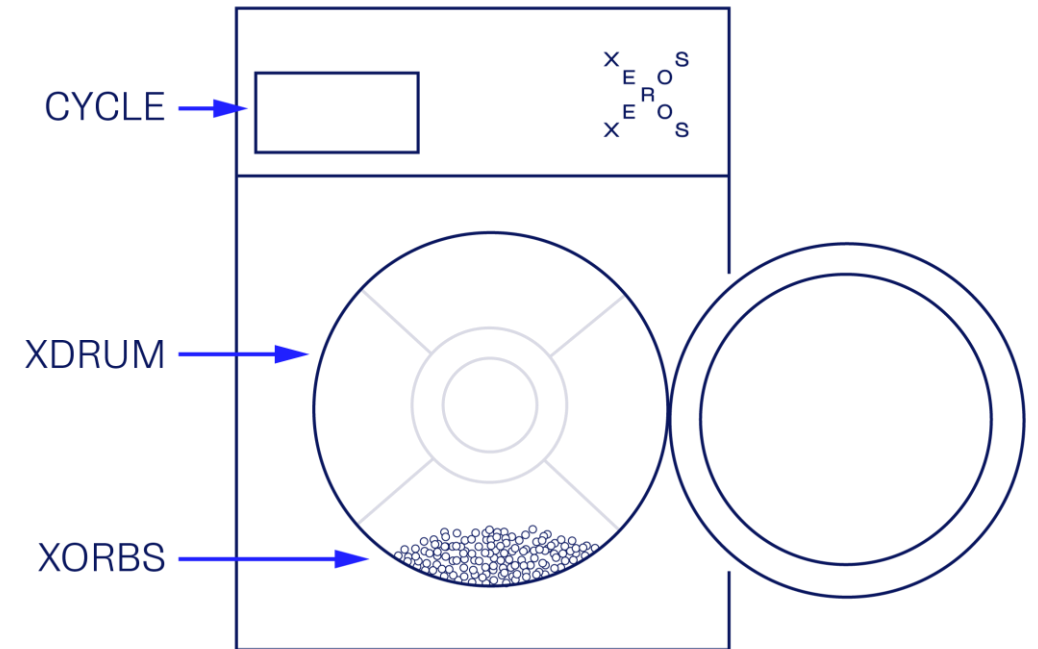
XEROS SYSTEM =

XORBS + XDRUM + WASH CYCLES

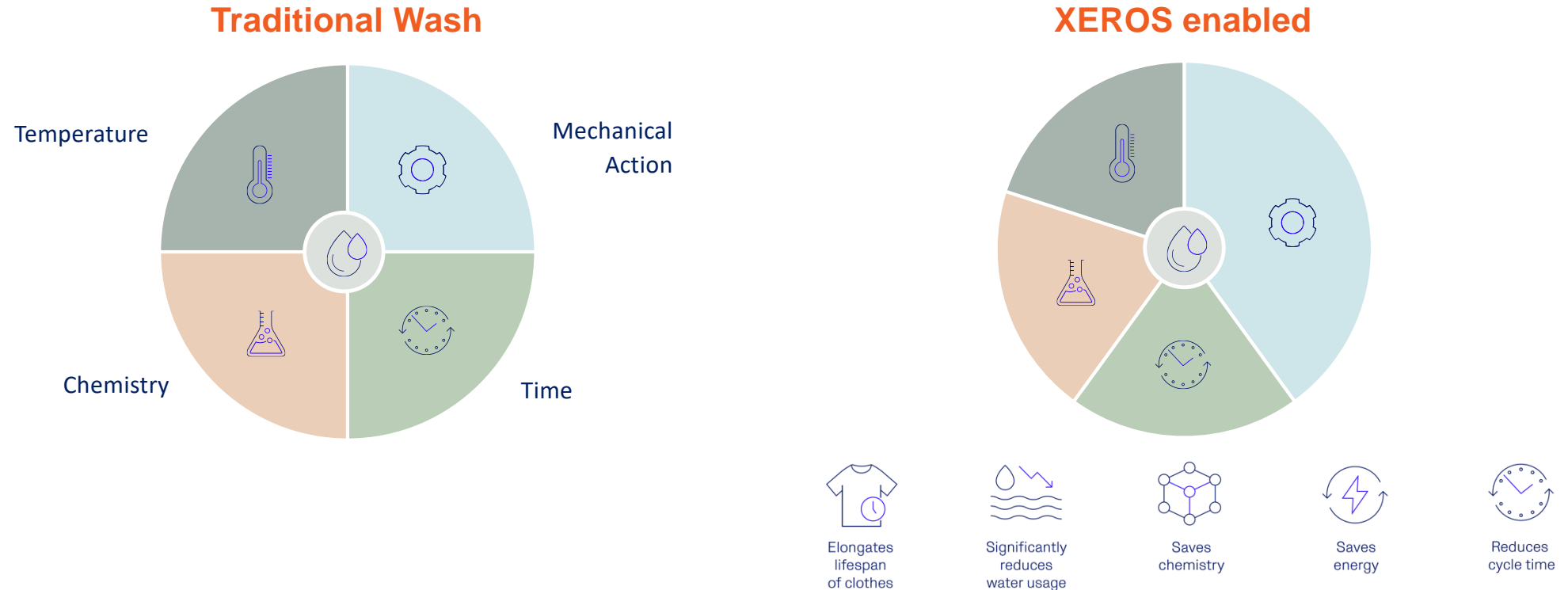
**Xorbs** patented, reuseable polymer beads released into the wash

**Xdrum** releases the XOrbs into the wash then harvests them back into the drum at the end

**Cycles** unique wash cycles manage the process from start to finish to help deliver the benefits



# How do Xeros washing machines work?



Washing processes rely on temperature, chemistry (detergent) and cycle length.

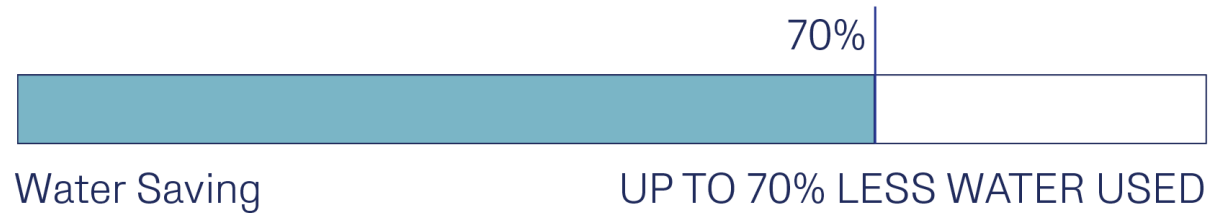
XOrbs disrupt the traditional cleaning process by replacing harsh fabric-on-fabric interaction with a gentle mechanical action without requiring any user intervention.

# Why Xeros washing machines use less water

## Less water



Significantly  
reduces  
water usage



- XOrbs replace water as the primary cleaning agent
- Reducing the amount of water required by up to 70%
- The gentler nature of XOrbs also reduces microfibre shedding by around 50% compared to conventional machines.

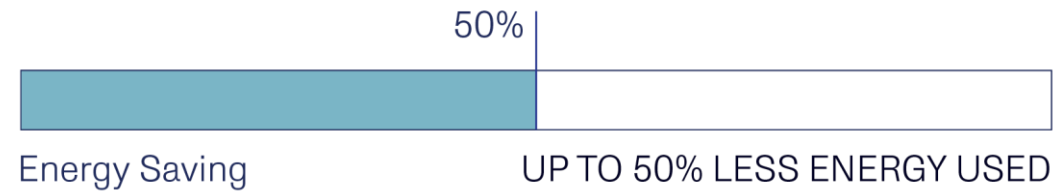
**POWER OF XORBS = up to 70% less water**

# How you lower your energy costs with Xeros

Less energy



Saves energy

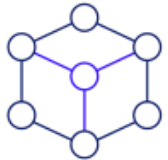


- The mechanical action of XOrbs enables the cleaning cycle to be run at lower temperatures, cutting energy costs by **up to 50%**

**POWER OF XORBS = up to 50% energy savings**

# Why you use less detergent with Xeros

## Less detergent



Saves  
chemistry



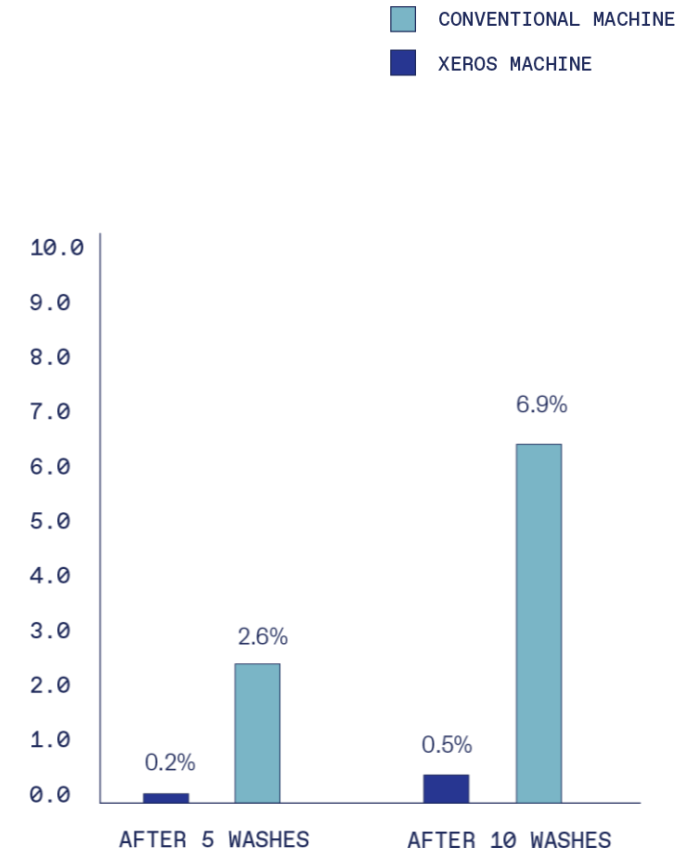
- While detergent is still a part of the process, only half as much needs to be used with the Xeros system as compared to standard commercial washing machines as **XOrbs drive detergent deep into the fibres** to make it more effective. Less water also means it is less diluted.

**POWER OF XORBS = up to 50% less detergent**

# How Xeros washing machines protect your clothes

## Less shrinkage

After production yarns are under strain (stretched out). The increased weight from XOrbs maintains the strain – keeping them pinned down - leading to less shrinkage. In addition, washing with colder temperatures can also help this.



# How Xeros washing machines protect your clothes

## Less transfer damage

XOrbs roll between layers of clothing, eliminating the abrasion from garment to garment which often leads to transfer damage and rubbing. The garments pictured here are shown after 10 washes in a conventional and a Xeros enabled machine.



# How Xeros washing machines protect your clothes

NORMAL WASH

XEROS

CONTROL TEST

10 WASHES

30 WASHES

50 WASHES



**XEROS RETAINS  
BRIGHTNESS WITH NO  
DAMAGE**



# How Xeros washing machines protect your clothes

## Less creasing

XOrbs mix in between the fabrics creating less 'sharp' edges and less tangling as the fabrics are pinned down due to the XOrb weight.

Results show that **less ironing** is required.



# How Xeros washing machines protect your clothes

## Less colour fade

Colour fading can come from two things:

- Destroyed fibres that stick out (from friction)
- Re-deposition of dyes

XOrbs cause less destruction to cotton fibres whilst the nylon material prevents re-deposition of dye onto fabrics.



# XEROS Case Study



Georges SAS is a commercial laundry service based in France. They specialise in the cleaning and maintenance of corporate clothing, specialised workwear and PPE.

Today, they process the clothing of over 55,000 employees for high profile clients including SNCF, Renault Design, Bouygues, Notre Dame de Paris, Air France and EDF.

Whilst cleaning worker's PPE garments following the Notre Dame fire and the Eiffel Tower restoration, it was found that the Xeros powered process was able to effectively clean lead from garments. This meant the uniforms could be reused, rather than disposed of, saving the clients substantial outlay by extending garment life.

SNCF, one of Georges' key customers, have experienced around **20% (12 -18 months) garment life extension** since working with Georges and the Xeros technology.

This garment extension created **estimated uniform savings of over €500,000.**

# Return on Investment

38KG MACHINE EXAMPLE					
UTILITY	Cost per L in £	Difference per kg	Saving per kg	Saving per wash	Total saving per year
WATER	£0.0043	5	£0.02	£0.82	£2,385.64
POWER	0.035	0.07	0.00245	£0.09	£271.85
DETERGENT	10.52	9	0.09468	£3.60	£10,505.69
				<b>TOTAL</b>	<b>£13,163.18</b>

- Significant savings can be achieved through the application of the Xeros system.
- In many cases full ROI can be achieved within 18 months, and as little as 3 months against a traditional machine.
- A full evaluation of your set-up and savings can be drawn up quickly and easily.

DATA SOURCES:  
[WWW.GREENMATCH.CO.UK/AVERAGE-ELECTRICITY-COST-UK](http://WWW.GREENMATCH.CO.UK/AVERAGE-ELECTRICITY-COST-UK)  
[WWW.PROCESSINDUSTRYINFORMER.COM/PROCESS-INDUSTRY-WATER-COST](http://WWW.PROCESSINDUSTRYINFORMER.COM/PROCESS-INDUSTRY-WATER-COST)  
 CHEMISTRY COST £105.20 PER 10LTR  
 IFB BTRA SAVINGS DURING TESTING

# XEROS Benefits Summary



**Up to 70% water saving**

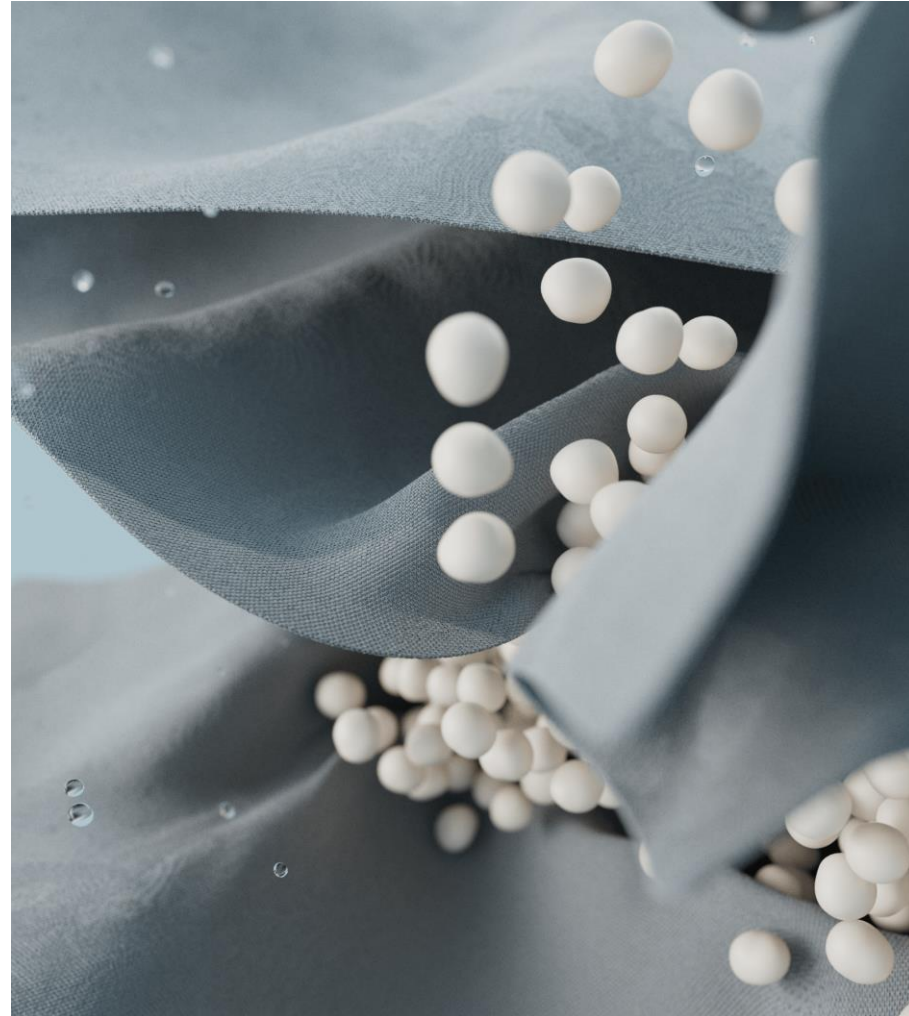


**Up to 50% energy saving**



**Up to 50% detergent saving**

- ✓ Less shrinkage
- ✓ Less creasing
- ✓ Less transfer damage
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- ✓ Less dye transfer
- ✓ Less microfibre release



# Other resources

- [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](mailto:rachel.clinton@ecoprod.co.uk)

# Questions?

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