



## EcoSave water softeners for all industries



# EcoSave from the Envirogen Group: the most efficient water softener available generating up to 80% less effluent and using 50% less salt

**EcoSave is a compact and efficient water softening solution for all industry sectors. Its unique design generates significant salt and effluent reductions during operation, when compared to conventional systems, delivering high-quality softening, all in one space-saving design. The long-term savings on operating costs and the reduction of environmental impact make the EcoSave the better alternative, delivering fast return on investment and operational savings for years to come.**

## The true cost of softening water

Water softening is a crucial step in water treatment processes for many manufacturing and power generation processes. It is widely used across all industry sectors to protect boilers, cooling towers, pipework and machinery from the damaging effects of the build-up of scale, as well as providing consistent manufacturing and rinse water streams.

Although softeners are already used in many businesses for many varied processes, outdated technology can result in unnecessary costs. Installing the latest water softening technology can uncover substantial savings and help meet efficiency and environmental targets.

## How does EcoSave work?

EcoSave water softeners use ion exchange processes to strip out scale-forming ions, replacing them with sodium ions from salt. The EcoSave uses counter-current regeneration technology to reduce the amount of salt required for these processes.

A conductivity meter carefully monitors the rinse water during the final stages of the regeneration cycle to shut-off the process as soon as the brine has been displaced from the ion exchange beds. This feature prevents water wastage, unlike traditional systems which are often over-rinsed in order to ensure that all brine has been removed.

Creating up to 80% less effluent and using up to 50% less salt than conventional softeners, EcoSave dramatically reduces operating costs, typically delivering payback on expenditure within 18 months. These combined savings will continue for years to come.



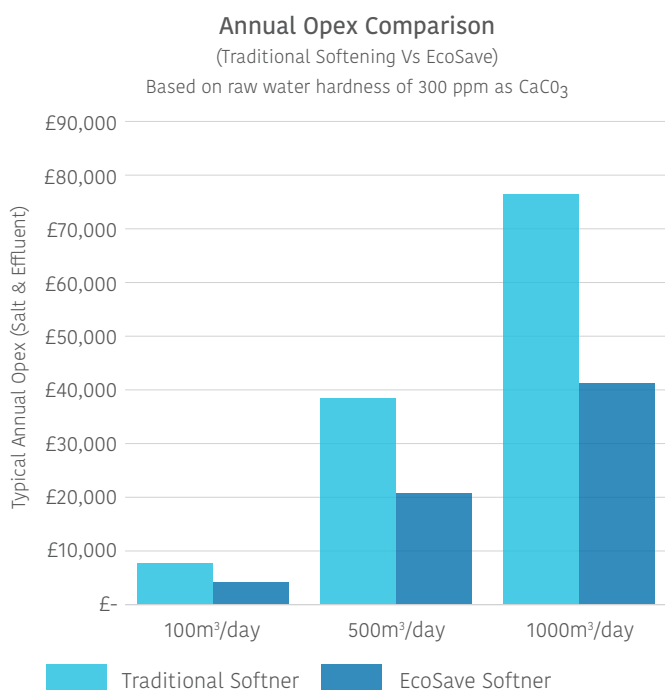
The combined effect of counter-current regeneration and rinse water monitoring is unique to the EcoSave system ensuring softened water quality of less than 1ppm total hardness, whilst consuming much lower quantities of salt when compared to traditional systems.

The EcoSave is a duplex system with a range of standard models delivering between 10 - 50 cubic metres/hour of softened water an hour, 24 hours a day, with larger bespoke models available for higher flow applications.

Water hardness meters are also available to monitor outgoing water quality to ensure compliance with pre-set conditions. Any change will trigger an alarm which allows the EcoSave system to be adjusted, so that water standards continue to be met and downstream processes and equipment are protected.

**The EcoSave is a compact design which can be integrated seamlessly with your system layout. Ongoing performance is ensured through straightforward servicing and maintenance and simple resin replacement.**

### Immediately reduce operating costs



The results are clear to see. Whatever your water usage on site, and whatever the hardness of your incoming water supply, an EcoSave water softener can substantially reduce your ongoing annual operating costs for both salt supply and effluent disposal.

“Compared to the former unit, we are saving more than £25,000 each year. We used to receive a salt delivery every six weeks, now we only need one delivery every five months. Despite the low price of salt and a water hardness level of only 130 ppm, our entire investment will have paid off in just 18 months.”  
**Cooling Plant Manager**

### Could you reduce your operational costs and improve efficiencies by installing the latest water softening technology?

Investment in the latest EcoSave technology delivers immediate benefits:

- Most efficient water softener system on the market
- Up to 80% reduction in wastewater production
- Up to 50% less salt required
- Improved water quality less than 1ppm (compared to 10-30ppm for traditional Softener)
- Substantially reduced operating costs
- Typical payback within 18 months
- Decreased environmental impact to support business sustainability targets

“The existing 20-year old softener vessels were becoming less efficient and showing signs of wear and tear and the cost of repair would have been half the cost of this new replacement. The plant will pay for itself in less than 2 years due to the regeneration cycle using 50% less salt and 80% less water going to drain. Envirogen pulled out all the stops to order and install it within our 2-week annual shutdown.”  
**Senior Engineer**

### Ask us about our EcoSave cost/benefit analysis tool

When you supply us just a few basic figures on your water costs and consumption and current salt usage, we'll demonstrate your site-specific cost savings, providing a full illustration of your return on investment and ongoing operational savings.

“We were washing our water softening resins for longer than we needed to ensure that they were fully charged ready for reuse and we knew that this process was wasteful. The installation of conductivity sensors, combined with the EcoSave system, has already had a big impact on our salt usage and we are sending much less wastewater to drain. The system is proving so effective that it will pay for itself within two years and we will reduce our operating costs for years to come.”

**Engineering Manager,  
leading manufacturer.**

## About Envirogen

Envirogen provides water solutions to many industry sectors supplying industrial water and wastewater treatment and processing solutions. We solve complex challenges relating to water availability and quality and help our customers to increase productivity, reduce costs and meet environmental and sustainability targets.

We do this through offering:

- Best in class technology
- Expertise in design, project management and engineering
- World-class manufacturing capability

Envirogen is a global company with offices and distribution centres across the globe. Our European headquarters are based in the UK.

## European Headquarters

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