A WaterWise Nation
Act Today. Sustain Tomorrow.

The Energy-Water Connection: Why Saving Energy Also Saves Water

When we think about saving water, we often picture turning off taps or using rain tanks. But one of the most overlooked ways to save water is by saving energy especially in the industrial and energy sectors.
That's because energy production and use are closely tied to water consumption.

How are energy and water connected?
Water is essential for producing energy, and energy is needed to treat, pump, and heat water. In short, you can't manage one without affecting the other.

Examples of how energy production uses water:

- Coal and nuclear power plants need huge amounts of water for cooling.
- Hydropower depends entirely on water flow.
- Biofuel production consumes water for growing feedstock.
- Refining oil and gas involves water-intensive processes

And how water systems use energy:

- Municipal water systems require electricity for pumping, treating, and distributing water.
- Hot water use in homes and businesses is one of the largest energy demands.
- Wastewater treatment also relies heavily on electrical systems

Real-World impact: Saving Energy = Saving Water

Let's look at what this connection means in practice.

1

Reduce electricity = reduce water use at power plants
When you use less grid electricity, let's say, by switching to LED lights or using solar panels you reduce demand on coal-fired power stations.

That also reduces the millions of litres of water those plants would have used for cooling.

2

Improve energy efficiency in water systems Better pumping systems,leak detection, and pressure management in municipal or industrial water networks mean lower energy use, lower costs, and less strain on water infrastructure.

3

Switching to renewable energy often uses less water
Solar PV and wind energy generation use very little or no water, especially compared to coal or nuclear. So, investing in renewables is not just about cleaner energy, it's also a smart water conservation strategy.