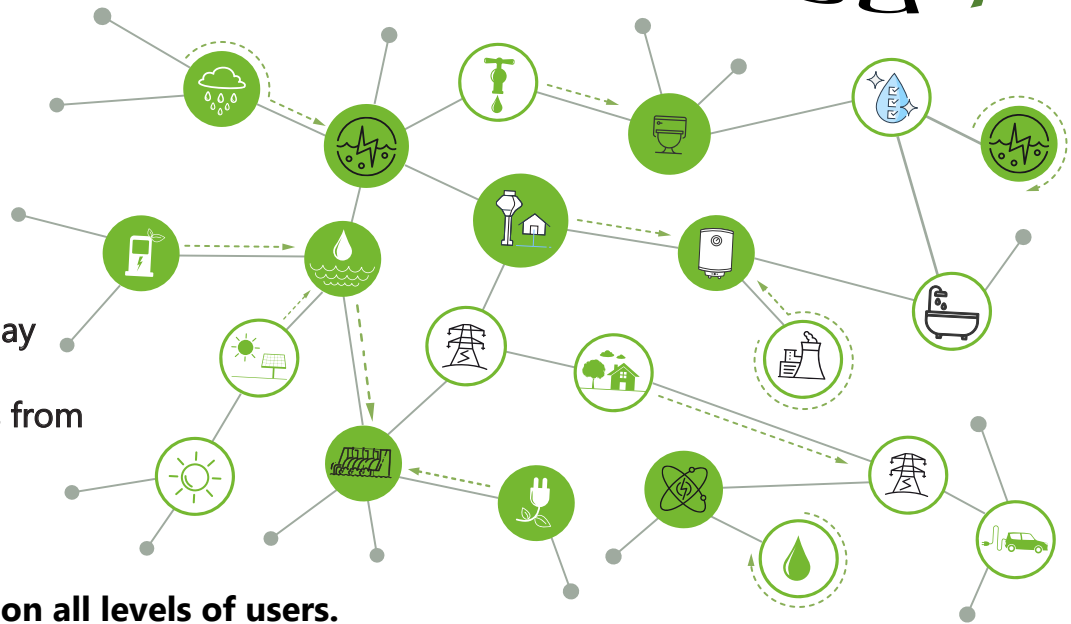


Using water for energy is more utility-scale.

DPU: According to the Department of Energy, nearly half of all water withdrawn - not consumed - in the US keeps power plants cool.

Water is obviously essential for hydropower, but is also used in concentrated solar, geothermal, nuclear, and bioenergy.

You: Help conserve water in power generation by reducing your electricity consumption at home. It may not directly save our water, but since our power comes from the dry western half of the country, every little bit of water helps.



Using energy for water is on all levels of users.

DPU: From the pumping at water sources to the transportation to consumers and back again to the wastewater treatment operations, water is very energy intensive. Energy requirements increase for every foot water is lifted and some of our wells are over 3000 feet down! We have dozens of wells, lift and pumping stations, and hundreds of miles of pipes.

You: On average, nearly 20% of your home energy use is spent on heating water. Save on your gas/electric bill by changing your water use habits.

Direct and Indirect Resource Consumption for Sample Appliances and Fixtures**

		Direct Consumption	Indirect Consumption
Faucet		<p>Energy for Water Heating Efficiency x Rate (\$/yr)</p>	<p>Water Consumed for Power Generation (gal/kWh)</p>
		<p>Drinking Water Quantity x Rate (\$/yr)</p>	<p>Unaccounted for Water (gal for gal)</p>
		<p>Wastewater Quantity x Rate (\$/yr)</p>	<p>Energy for Water Treatment/Distribution (kWh/gal)</p>
			<p>Energy for Wastewater Treatment (kWh/gal)</p>

Legend

- Energy for Hot Water (kWh or therm)
- Electricity (kWh)
- Water (gal)

Additional reading

**Quantifying Energy and Water Savings in the US Residential Sector
The State of US Urban Water: Data and the Energy-Water Nexus
The Water-Energy Nexus: Challenges and Opportunities

<https://pubs.acs.org/doi/full/10.1021/acs.est.6b01559>

<https://agupubs.onlinelibrary.wiley.com/doi/full/10.1002/2017WR022265>

<https://www.energy.gov/articles/water-energy-nexus-challenges-and-opportunities>