

Shower with a Friend

*How conserving the wet stuff cascades into megawatt savings.
Jan 2010*

alternativesjournal.ca

BY [Carol Maas](#)
| [New Energy 36.1](#)

FOR MOST CANADIANS, energy efficiency is synonymous with light bulbs. Switching to compact fluorescents might be simple and inexpensive, but it is not the only cost-effective way to reduce energy use in homes, businesses and utilities. Reducing water use, especially the hot stuff that flows from showers and cleans our clothes, also cuts the amount of energy we consume in myriad ways.

To bring water from its source to your tap and back again, it must be pumped, treated and oftentimes heated before it's used, only to be pumped and treated all over again before being released back into the environment. In fact, according to Ontario Municipalities: An Electricity Profile, a 2008 report prepared by Power Application Group Inc., water and wastewater services are consistently the single largest account on municipal energy bills. Unless we do more to protect our fresh water, treatment costs will rise as more complex technology is required to handle more and more contamination.

Here are a few ways that saving water will reduce energy consumption:

Shore up your showering

Action:Reduce the time you spend in the shower by 1½ minutes and swap a 12-litre-per-minute showerhead for a 9½-litre-per-minute model.

Energy savings equivalent:800 to 1000 kilowatt-hours (kWh) per year per home – or the energy saved from replacing 12 to 15 incandescent light bulbs with compact fluorescent ones.

Home water heating is the second largest source of residential greenhouse gas emissions in Canada. Taking shorter or fewer showers, and using an efficient showerhead reduce hot-water use, thereby lowering greenhouse gas emissions. Efficient showerheads are the norm in hardware stores, and range in price from \$10 to \$50. This measure is even more cost-effective than changing 12 to 15 light bulbs (\$30 to \$75), so do both and save on your energy bill.

Turn Drips into Energy

Action:Fix a dripping faucet and save as much as 11,000 litres of water per year.

Energy savings equivalent:300 to 500 kWh per year (assuming half of the drip is hot water), or approximately the same amount of energy as you would save if you eliminated the electricity used by home electronics that are left in standby mode (often referred to as “phantom” draw).

When you venture into the hardware store to invest \$30 to \$60 for a smart power strip to reduce phantom draw, spring for a faucet washer or O-rings and fix your leaky taps too. It will be the best toonie you've spent in a long time. And while you're at it, check your toilet for leaks by adding a few drops of food colouring to the tank. The coloured water will show up in the bowl if there is a problem.

Don't flush energy away

Action:Replace a 13-litre toilet with a 4½-litre WaterSense model and conserve more than 100 litres of drinking water per day in an average Canadian home.

Energy savings equivalent: If 50 per cent of Canadian households traded 13-litre to 20-litre toilets for 4½-litre models, the municipal energy savings for pumping would be approximately equivalent to improving the mechanical efficiency of every water and wastewater pump in Canada by five per cent.

We flush huge volumes of treated water down our toilets, so they offer a gold mine of an opportunity for reducing municipal energy use. Check to see if your province offers a \$100 rebate for replacing inefficient toilets through the ecoEnergy Home Retrofit program. For less than \$200, you can pick up a WaterSense-approved model that has been proven to flush effectively.

Rethink your lawn

Action: Switch from an irrigated lawn to naturalized or water-efficient landscaping (xeriscaping), and use rainwater when outdoor watering is required. It can save 60,000 to 100,000 litres of water per year in your home.

Energy savings equivalent: If 100,000 homeowners stopped watering their lawns, the municipal energy saved would be equal to replacing 60,000 to 100,000 incandescent light bulbs with CFLs in municipal buildings.

Canadian municipalities expend energy to treat drinking water to a quality that surpasses much of what is consumed around the world. Then we dump it onto our lawns or use it to wash our driveways. Xeriscaping and using rainwater for outdoor landscapes reduce peak demands for potable water, which often occur at the same time as peak energy-use.

Encourage governments to save too

Action: Get behind a campaign to have your community decrease its water-use by 20 per cent over 20 years.

Greenhouse gas emissions savings equivalent: If all municipalities in Ontario met this goal by 2029, it would result in an emission reduction of 1.3 megatonnes of CO₂-equivalent per year, which is equal to offsetting the electricity use for 90 per cent of homes in Toronto.

Water metering and volume-based pricing are known to deter wasteful water practices. As responsible citizens, we can support the adoption of these tools. But that's not all. Communities across the country are embracing water-conservation programs that reduce water use in both homes and businesses. The Town of Cochrane, Alberta, for instance, requires that 25 per cent of the lawn around new houses and 100 per cent around businesses is naturalized. The City of Guelph, Ontario, is piloting rainwater-harvesting and grey-water reuse initiatives, and the Capitol Regional District in Victoria, BC, offers free water-use audits to local businesses.

Less is more

If using less seems to be too expensive or too much work, then there is something wrong with our accounting and engineering systems. Conserving water and energy means that we will have more resources on reserve for when the unexpected happens. It makes our communities more robust and resilient.

Tackling climate change requires that we all do our part; there is no silver bullet. No matter how clean or green new sources of water and energy may be, conservation is the preferred action.

A\J is a not-for-profit media organization that relies on support from readers like you

to keep our content flowing.

[Subscribe now](#) or [donate today](#) to keep Canada's Environmental Voice talking.



Like our stuff?



Common lilacs make great water-saving flowers for your garden



Sunset over the Mackenzie River

Carol Maas is the innovation and technology director with the [POLIS Water Sustainability Project](#). She takes short

showers, launders clothes in the cold stuff and her gardens take no water at all.



People of a Feather review

