

Our Local Energy Carbon Footprint  
Informing your carbon related energy decisions  
Conservation Corner – February 2017

The availability and seemingly abundant supply of energy is often taken for granted by most of us as we go through our daily routines and activities, providing the ability to see the floor as we wake up in the morning, likely by an alarm fueled by energy programmed to get us going. We move on in our morning ritual to a shower or bath with water that has been pre-heated by energy, then on to the kitchen with its host of appliances all powered and ready for our use thanks to energy.

As communities near and far alike are gaining a better understanding of the seriousness and consequences of climate change, people are paying more and more attention to energy and finding out where theirs come from, how it is generated, how far it travels to get to them, how much is wasted through that delivery and how much is used by all of us collectively every day.

All of these bits of energy information help us understand how much of an impact we each have on the changing climate and, while it has been improving slightly recently, the generation, delivery and use of energy is one of three primary categories that cause the carbon emissions that create the potentially disastrous climate future we are currently faced with. (spoiler alert, transportation and consumption of “stuff” are the two other categories that need serious attention)

Here in Ashland, the energy we use for heating, cooling, lighting, appliances, technology and all kinds of other stuff, is primarily from either electricity or natural gas. One, natural gas, is no doubt a fossil fuel and the impacts associated with this source have been studied and are pretty clearly a significant contributor to our climate problems. The other, electricity, is a bit more nuanced to categorize and pin down as to its climate impacts.

The City of Ashland is somewhat unique in that its electricity is distributed locally through a municipal electric utility (only a dozen or so others in Oregon), meaning that the community owns and manages the wires, meters, transformers and other equipment used within the City limits to distribute the large volumes and voltages of power from the large regional transmission lines to our homes and businesses.

The City’s Electric Utility purchases almost all of the power for the community from Bonneville Power Administration (BPA), which generates electricity primarily through the hydroelectric dams on the Columbia and Snake River systems. While this is enviable low-carbon energy (no energy is totally carbon free so far), the electricity that is used every day relates very little to our purchase of the BPA electricity generated over 200 miles away, but actually to what is added (generated) and removed (consumed) to our grid much closer to home.

While the power generated closer to us also contains hydropower from several nearby sources and a small but growing amount of solar, the mix also contains electricity generated from far less clean sources like natural gas and coal. The mix between them changes often (sometimes daily) due to scheduled maintenance of transmission lines, power station fluxuations, changes in consumption throughout the region, etc.

What results can be a challenging exercise in figuring out how “clean” our local electricity is. Thankfully, what isn’t much of a challenge, is understanding that in comparing the carbon emissions of our local electricity to natural gas, electricity comes out on top and continues to improve (lower carbon) over time.

So, when thinking about being good energy stewards, doing as much conservation and energy efficiency work as possible at your home or business is always the best and most impactful action to take (plug: visit the City’s website [www.ashland.or.us/conserves](http://www.ashland.or.us/conserves) for great energy efficiency programs). Installing solar systems to generate local renewable electricity is excellent as well. This reduces the total electricity we consume and lessens the need for additional power generation in the region (currently natural gas fired generation plants)

What is often overlooked as a direct way to improve your personal carbon footprint is finding ways to reduce your use of natural gas. Avista, the region’s natural gas provider has a variety of programs available to help customers be more efficient with their use of natural gas. <https://www.avistautilities.com/savings>.

Beyond that, switching away from natural gas entirely is a sure fire way to reduce your carbon emissions from the energy that we all enjoy and rely on.

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