Both Sides of Energy Equation Must Do More to cut Emissions

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The city of Eugene has an important role in reducing greenhouse gas emissions from energy used by homes, businesses and vehicles to meet the goals of its Climate Recovery Ordinance. But the city cannot do it alone. Local energy suppliers and large energy users must also aggressively slash emissions. This is not happening.

As Eugene’s primary electricity provider, the Eugene Water & Electric Board can help cut emissions by pushing hard to slash energy use and fully electrify buildings and transportation. It is pursing these ends, but tepidly.

EWEB offers customers rebates to install more energy-efficient heat pumps, windows and other building improvements. The rebates could be greatly increased. It could also launch an updated version of the Solarize Eugene program to bring solar photovoltaic contractors and customers together to increase installations by reducing costs.

Fifty percent of properties in Eugene are rentals, however, and landlords often have little incentive to invest in efficiency improvements or renewables because renters pay the utility bills. I was told an internal marketing group has been formed to address this barrier.

EWEB offers a small rebate to people who purchase electric vehicles, and recently partnered with the University of Oregon, the city of Eugene and auto dealers to make the vehicles more affordable. However, it is not installing new charging stations. EWEB has also begun offering modest incentives to encourage natural gas users to switch to electricity. But far more is needed to completely electrify Eugene.

Northwest Natural is Oregon’s natural gas utility. The company’s staff told me it seeks to reduce its emissions by 30 percent by 2035. It has, for example, reduced leakage in pipelines. It owns only the pipelines in town, however, not those that bring gas to Eugene.
The company also seeks to reduce the carbon intensity of its fuels by putting methane generated from organic farm waste and at landfills into its supply lines. The utility “decoupled” the costs of maintaining its pipelines from the gas flowing within them, which allows it to promote energy efficiency while remaining profitable. And it wants to shift gasoline-powered heavy vehicles to less carbon-intensive natural gas.

While these are positive steps, natural gas is composed primarily of methane, which is an extremely powerful greenhouse gas that must be nearly eliminated to prevent serious climate damage.

The UO is one of Eugene’s larger energy users. Through efficiency improvements, emissions per square foot on campus have been reduced. However, five of the six recent construction projects are tied to a steam heating system powered by natural gas. Total emissions have therefore remained steady. Technologies exist to transition to electricity, but the UO has no funding to install them. Many new buildings will soon be constructed, which are also likely to be tied to the gas-powered steam system.

The Eugene School District’s energy use per square foot is lower than most other school systems. Yet it does not appear to have calculated its emissions or planned to reduce them to meet the CRO goals.

The Lane Transit District has purchased three electric buses, with two more on order, and plans to order five more. But the other 90 buses will continue to run on diesel and gasoline as the district studies how the electric buses function and, if they work well, seek funds for additional electric vehicles.

A lack of urgency is a principal reason for modest progress. Many organizations seem to have little motivation to act because their emissions seem small in a global context.

This thinking is deeply flawed. The Earth’s atmosphere is like a bathtub. It has a faucet, which is the inflow of emissions. It has a drain, which is the outflow of emissions sequestered by forests and other ecological systems. And there’s the tub itself, which is the amount of greenhouse gasses concentrated there.

For 10,000 years the inflow and outflow of greenhouse gasses into the tub were in relative balance. But humans have increased the faucet’s inflow, and by despoiling ecosystems that sequester carbon we restricted the outflow of the drain. The
amount of emissions in the tub is consequently now higher than any time in the last 3 million years.

This analogy shows the importance of not confusing annual emissions with atmospheric concentrations. Whether large and small, all new emissions cause the tub’s level to rise and increase the likelihood of catastrophe.

Slight improvements are being made. But until local energy suppliers and larger users act with greater awareness, boldness and urgency, little progress will be made in meeting the goals of Eugene’s CRO — and we will not do our part to minimize the climate crisis.

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