Eugene won't meet its carbon-reducing goals

By Bob Doppelt

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Left unabated, human-induced climate disruption is a civilization-changing event. To prevent devastating effects, greenhouse gas emissions must be hurriedly slashed to almost zero. The city of Eugene has adopted some of the strongest emission reduction goals in the nation. Although important progress has been made, Eugene will not meet its goals.

The city must decide how to respond.

In 2008, the City Council set a goal of carbon-neutrality for all city operations, meaning there will be no net release of greenhouse gas emissions. The Climate Recovery Ordinance, adopted in 2014 and updated in 2016, not only calls for city operations to be carbon-neutral by 2020, it also requires the city to reduce its use of fossil fuel by 50 percent by 2030 compared with 2010 levels. In addition, the CRO calls for a 7.6 percent annual reduction in emissions generated community-wide, and for fossil fuel use to be cut by 50 percent by 2030.

Let's examine progress toward reducing emissions generated by city operations, and discuss efforts to cut communitywide emissions at a later date.

To become carbon-neutral, the city set a goal of reducing its own emissions by 60 percent, and then purchasing carbon offsets for the remainder. The last assessment, completed in 2016, indicated that emissions from city operations had dropped 19.5 percent compared with 2010. Despite having had 10 years to achieve carbon neutrality, however, various reports and numerous interviews clarify that it will take until 2030 — not 2020 — to slice city government's emissions by 60 percent.

The city's vehicles are its largest source of emissions. Data from 2016 shows that, compared with 2010, gasoline usage had barely dropped, and diesel usage actually increased.

Shifting to electric cars is essential to cut vehicle emissions, but making the change will require additional funds and clear direction. No technologies exist yet to electrify the city's firetrucks and other heavy vehicles.

The use of natural gas in 31 buildings and other facilities is the city's second-largest source of emissions. Heating swimming pools constitutes the largest overall source of emissions, with the Echo Hollow pool being the single greatest source of emissions among all city facilities.

Natural gas was once considered a "bridge fuel," because it is less carbon-intensive than coal or oil. However, the drilling, extraction and transportation of natural gas involves leakage of methane, a greenhouse gas 34 times more potent than carbon dioxide. Using natural gas is not likely to appreciably reduce the city's actual emissions.

The real solution is to electrify all heating processes — but again, this will require firm direction and sufficient resources.

Because the city cannot cut emissions by 60 percent, carbon offsets must play a larger role if the city is to become carbon neutral within two years.

The city's staff plans to purchase third-party verified offsets from regional or local organizations such as those generating wind or solar energy that displace fossil fuels. At best, this should be a temporary option. That's because all emissions have consequences.

The Obama administration estimated that the social costs of carbon—the economic harm done by greenhouse gasses to infrastructure, health, agriculture and other aspects of society globally — is around \$40 per metric ton. Researchers at Stanford University said the cost is \$220 per ton. Others have gauged the social costs to be significantly higher.

Using the lower price of \$40, the 5,900 metric tons of emissions produced by city operations in 2016 created \$236,000 of damage globally. Using the Stanford price, the city generated \$1,298,000 in damages. No matter what the actual damage, these figures underscore the need to eliminate emissions, not just offset them.

Further, virtually all emissions must be promptly eradicated, not just 60 percent more than a decade from now. This was made clear again last month when scientists at the UK Met office issued the warning that within as little as five years,

global temperatures could rise above the 2.7 degree Fahrenheit threshold that unleashes uncontrollable climate disruption. Time is of the essence.

The City Council took a risk when it established the CRO; it knew the goals were ambitious. But it was the right thing to do.

Council members now have another important decision to make. Will they grasp the urgency of cutting emissions, find the money and require that almost all of the city's emissions be eliminated well before 2030? Or will they allow 12 years to pass before the city eliminates merely 60 percent of its contribution to the climate crisis?

The city's decision will illuminate our values, affect the Earth's climate and likely influence how other communities reduce emissions.

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