

GUEST VIEWPOINT

Biomass plant will cut Seneca's carbon release

BY TODD PAYNE

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As the project manager for Seneca Sustainable Energy's cogeneration plant, I have a hard time understanding the criticism directed at this renewable and reliable source of power.

As we explored the development of the facility, I saw a great benefit in reducing greenhouse gases by using woody biomass rather than natural gas to fuel our sawmill's dry kilns. Plus, we would generate 18.8 megawatts of local electricity, enough to meet the energy needs of 13,000 homes. This is the kind of project encouraged by the Federal Energy Management Program (www.eere.energy.gov/femp) and by the state's Department of Energy (www.oregon.gov/energy/renew).

Everyone I spoke with as we developed our plans indicated that our new facility was a step in the right direction. No one raised any issues. I believe that's because the benefits of our facility outweigh its air emissions.

We are addressing climate change by replacing a fossil fuel with woody biomass, and reducing our carbon dioxide emissions by 3,500 tons annually.

To date, all carbon reduction programs recognize that biomass is an energy source with zero net carbon emissions from combustion.

That's because the "biogenic" carbon released is already in circulation in the atmosphere, as opposed to the "anthropogenic" carbon locked up in fossil fuels, such as natural gas, which are in long-term storage underground. This is the key advantage of using woody biomass to create heat and electricity.

Simply put, we are replacing "bad" carbon with "good" carbon. To ignore that fact minimizes a significant benefit of our project.

Natural gas is neither renewable nor sustainable. Wood fuel is widely recognized as both.

In public meetings, the Oregon Toxics Alliance has suggested locating the plant away from people. The most efficient and beneficial use of biomass fuel is in a combined heat and power application, as we propose. Siting the facility away from the mill would not allow its heat to be used in our dry kilns, so we would be forced to continue the use of natural gas.

We knew that our cogeneration plant would create some emissions. Our research and consultation with public officials indicated that those emissions would be well within the standards for protecting public health. In fact, we were encouraged to move forward because it is so important that our society reduce carbon dioxide created by dependence on fossil fuels.

To minimize our emissions, we will spend \$11 million on air pollution control technology. This is one-fourth of the total cost of the power plant, and most of the money is focused on reducing particulate emissions.

The Lane Regional Air Protection Agency will regulate our emissions and will review the plant's technical engineering and regulatory compliance to protect the health and welfare of the public.

In its April 20 guest viewpoint, the Oregon Toxics Alliance claimed to put the air emission numbers for the power plant into context. Unfortunately, only select pieces of information were provided. Saying the power plant would be among the largest industrial emission sources is meaningless without identifying all contributors to total emissions. Motor vehicles, not industrial sources, are the largest emitters of nitrous oxides and carbon monoxide in Lane County and Eugene. The power plant's NOx emissions will be about 2 percent of motor vehicle emissions, and far less than 1 percent of motor vehicle-generated CO.

The Oregon Toxics Alliance also asserted that Seneca should spend more money and put on additional air pollution controls to reduce NOx and CO emissions. Our application includes evaluations of the potential NOx and CO impacts, using EPA models and procedures coupled with local weather information.

Results showed that the NOx emissions from the plant plus the emissions from all other NOx sources produce an impact that is 65 percent below the standard established by the federal Environmental Protection Agency to protect the health of all citizens. The CO impact from the plant is even smaller. Our emissions are significantly below the public health standards for our community.

We had opportunities to sell our power outside our community. We believe strongly in local control and sustainability, so we are pursuing a power purchase agreement with the Eugene Water & Electric Board. By providing a reliable source of power that does not have to travel over transmission lines from distant sources, we are contributing to our community's energy independence.

When I started working on the cogeneration facility, my interest was in making the best of use of our mill residues and forest slash. I didn't realize just how important it is for a community to have sources of renewable, reliable power that don't have to be brought in from distant sources. I also have a greater appreciation of how the use of woody biomass in this plant can contribute to reducing the effects of the greenhouse gases.

My family and I live in west Eugene. I have no reservations about our cogeneration plant's impact on the health of my wife or children. I've seen the research. I've talked with countless experts, both government and private. The type of facility we're building is exactly what President Obama and Gov. Ted Kulongoski are encouraging.

We at Seneca are proud to be in a position to play a role in contributing to our community's energy independence and our country's efforts to reduce greenhouse gases that lead to global warming.

Todd Payne is the project manager for Seneca Sustainable Energy's cogeneration plant.