

**Bond Issue Thoughts**

K2

We want to reduce greenhouse gas emissions by moving to renewable energy.

The Climate Action Plan emissions inventory says 54% of emissions come from transportation at 417,000 metric tons of CO<sub>2</sub> equivalent. But emissions from our two biomass plants alone are more than all transportation emissions, 455,000 metric tons, yet they don't appear in the emissions inventory or the plan.

My belief is that the state of California will soon stop counting biomass power as carbon neutral or renewable, just because it makes no sense in the current crisis. Growing trees to replace the wood we are burning every day takes 50 to 100 years; we don't have that kind of time.

Humboldt County needs a target for reductions. The CAP plan includes a target of about 950,000 metric tons of CO<sub>2</sub> released in 2030. This is not sufficient. International climate bodies have said we need to cut 2015 emissions in half by 2030; that would be about 700,000 metric tons of CO<sub>2</sub> equivalents rather than 950,000 tons<sup>1</sup>

However, the 455,000 metric tons of CO<sub>2</sub> due to biomass power are not counted in either estimate. So I suggest that you use bond issue funds to contract for a Life Cycle Assessment of biomass power. We need to know what the net emissions are over the entire life cycle of biomass power and what the emissions would be from alternative uses of sawmill waste such as creating biochar. We need to measure and weigh the elephant!

I strongly endorse a bond issue to finance renewable energy projects in Humboldt County. But I hope that you think big. What is needed in the next ten years is "industrial scale" or "utility scale" solutions – or maybe we should say "elephant scale."

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<sup>1</sup> CAP assumes 40% reduction from 1990 levels. International climate bodies: Rogelj, J., Popp, A., Calvin, K.V. *et al.* Scenarios towards limiting global mean temperature increase below 1.5 °C. *Nature Clim Change* **8**, 325–332 (2018). <https://doi.org/10.1038/s41558-018-0091-3>