

Renewable Wood Energy: Helping the EU Kill Coal

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Vox Magazine recently published an article titled <u>"Europe's renewable energy policy is built on burning</u> <u>American trees.</u>" The author, clearly, is not a fan of renewable wood energy.

This is a debate worth having.

The article we would write is "Renewable Wood Energy: Helping the EU kill coal."

First, a primer.

Bioenergy, in the form of wood pellets, uses wood that is not suitable for higher value products (like 2x4s or furniture). Instead, wood pellets are produced from lower value wood – including "thinnings," limbs, tops, small and crooked trees – or even sawdust or other industrial wood "waste."

Bioenergy plays an increasingly important role in the renewable energy space. As an alternative to coal, wood pellets help heat generators and power producers reduce their carbon footprint up to 85% on a lifecycle basis, often without undergoing major renovations to their existing structures. That's why, in Europe, bioenergy represents more than 60% of renewable energy consumption, and is widely seen as part of the strategy for meeting ambitious carbon reduction goals. According to a <u>report</u> published this week, the U.K.'s carbon emissions fell for the sixth consecutive year in 2018, hitting some of the lowest levels seen since 1888. Biomass-fired power is a key reason that's been possible.

Here's why: Power generation using bioenergy also provides a reliable, clean source of energy that complements the intermittency of wind and solar energy, ensuring a stable grid without having to rely on fossil fuel-fired backup. In other words, we can use bioenergy when the sun isn't shining or the wind isn't blowing. Absent bioenergy – the most likely backup plan is: use more fossil fuels.

The Vox article argues that bioenergy makes the climate crisis worse. That's wrong. Let's look at the facts.

First, there are 50% more trees in the US than there were 50 years ago. In other words -- in a time of expanding population and increasing demand for forest products, the total volume of trees grown in the U.S. increased by 50%. Today, in the southeast U.S. private forest owners are growing 40% more wood than they remove every year.

How does using wood create more trees? It seems counter-intuitive, but the reality is the key to keeping forests as forests is strong demand for forest products. Additional demand raises the value landowners can get from keeping their land as managed forests. Absent strong demand, landowners have the incentive to convert their land for a higher return. That could mean a farm, a housing development, or a strip mall. Moreover, EU renewable energy regulations require sustainable sourcing. Under the EU Renewable Energy Directive, bioenergy must be sourced from a region that has *stable or increasing carbon stocks*.

Second, bioenergy is a key part of an all-in solution on fighting climate. The recent report from the UN Intergovernmental Panel on Climate Change laid out, with urgency, the steps we need to take to keep global temperatures from rising more than 1.5 degrees Celsius. The IPCC has long supported the role that that renewable wood energy can play in climate change, both as a low-carbon source of power and heat, but also as a contributor to afforestation and conservation. The most recent report noted the "flexibility that makes bioenergy and bioenergy technologies valuable for the decarbonization of energy use."

Other articles have supported the IPCC finding. *The Economist* recently noted, in an article titled "<u>How</u> <u>modern bioenergy helps reduce global warming</u>," that decarbonizing the heat and transport sectors will "be impossible without the contribution of a critical, yet often overlooked source of renewable energy: modern bio-energy."

Third, the *Vox* article wrongly suggests that using renewable wood energy increases emissions, and in the short-term we are creating a so-called "carbon debt." In other words, they argue, yes this is a renewable resource, but it takes too long to regrow, so any increased harvest used for bioenergy will cause short-term emissions that will warm the climate while the trees are growing back. But this argument misses the point. Bioenergy is simply replacing demand for one product with another. Harvest for bioenergy causes no new short-term emissions. Instead, it replaces a fossil fuel with a renewable fuel (and incentivizes landowners to grow more trees).

Finally, it's important to put this issue in the context of current policy and political solutions. In Washington, much of the conversation around climate today revolves around the "Green New Deal" – which often means very different things to different people. But the heart of the Green New Deal conversation is the dual goal of moving away from fossil fuels while supporting renewable energy jobs – and, importantly, rural jobs. Renewable wood energy does just that.

We don't have to look any further than Governor Jay Inslee – who just announced he is running for President on a mostly single-issue platform of fighting climate change – for a succinct <u>explanation</u> of the benefits of bioenergy. A long-time supporter of this renewable energy, he noted at event several years ago in Washington state: "Enabling clean, renewable heat and power generation from forest biomass not only creates jobs and economic activity in our timber-dependent communities, it supports our efforts to reduce greenhouse gas emissions and increase treatment of our forested lands for health and fire reduction." We couldn't agree more.

So why the push back from bioenergy opponents? If renewable wood energy is so great, why do some strident environmental groups oppose it? As with many issues, people often take an all or nothing approach on renewable energy. Some argue that no forest should be a "working forest" – we should simply never touch them. Others often advocate one-size-fits-all solutions (like 100% wind or solar) that

simply aren't feasible today – and might never be. We take the view that we should use all tools in the tool box – and do the things today that most quickly replace fossil fuels and minimize emissions.

The Vox article was right about one thing – we have limited time to make real progress on climate change. Those who argue against an all-in approach that includes renewable wood energy are only helping the coal industry continue its dominance.