

Learning from Mistakes in the Media to Improve the Communication of Wood Bioenergy Research

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Successful applied research into wood bioenergy requires communication of meaningful insights to inform decision-makers and the general public. Effective communication strategies make such insights accessible. However, recent media reports often exhibit a near total absence of findings from peer-reviewed or quantitative research, highlighting a failure to communicate between applied researchers and reporters. As a result, the general public's understanding of wood-based bioenergy remains incomplete. At a minimum, researchers can address three common lapses when communicating results of their research related to wood-based energy to increase the public's access to technical results. First, **provide context** to give policymakers a sense, on a relative basis, of the importance of a given issue. Second, **properly distinguish between "causal" relationships and mere happenstance** or correlations. And finally, **confirm facts** and conclusions. Faulty assertions can cast doubts on the broader work and body of research.

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How the Public Learns about Wood-Based Energy

Wood bioenergy investments—which include projects aimed at generating electricity, biofuels, and pellets from woody raw materials—necessitate decisions from a range of stakeholders. And yet, natural resource professionals, energy firms, and policymakers struggle to make decisions, drawing upon scattered information about the status of wood bioenergy markets and technologies. Herein lies an opportunity and need for rigorous, objective, and accessibly communicated reporting related to the research. Successful applied research into wood bioenergy, or into fields of any type, requires both meaningful insights to inform decision-makers and effective communication strategies to make those insights accessible.

How grave are such deficiencies in the communication of wood bioenergy research? If judged by a sample of media reports in widely read outlets, the near total absence or mention of peer-reviewed or quantitative research indicates a true failure to communicate between applied researchers and reporters. Many newspaper articles imply that the drawbridge is up, the phone lines are down, and the door is closed. As a result, the general public's understanding of wood bioenergy remains incomplete.

Common Errors in Wood Bioenergy Communications

While, as a former advisor told me, "for example is not a proof", some recent reports on wood bioenergy issues demonstrate how the media can fail to meaningfully inform readers and decision-makers on the status of woody biomass supplies and the

actual development of wood bioenergy markets. In tracking bioenergy research and reporting, my team has observed three common errors in major media coverage:

1. Failure to provide context.
2. Improperly assigning “causal” relationships.
3. Errors of fact.

For example, Roger Harrabin of the BBC, in a March 5, 2013 article “*Biofuels: MPs to Consider Subsidies for Power Stations*” about potential subsidies for using wood at power stations in the UK, reported that power producer Drax plans to convert approximately half of the boilers at its coal-fired power station in Yorkshire to wood pellets. Harrabin notes that this would “burn more wood than the entire output from the UK’s timber industry.” And how much wood would that be?

Providing context does not require exhaustive supplementary analysis. Using the online “ForesSTAT” database from the United Nations, I tracked down the necessary data in four minutes. The UK produced one-half of one percent of the world’s industrial timber in 2011. The U.S. timber industry is 32 times bigger. EU timber production is over 38 times bigger. This failure to provide context for UK’s timber industry is like reporting on hamburger sales in India or breweries built by BYU graduates. While these could prove interesting, the numbers may prove trivial.

A more recent May 28, 2013 report by Mr. Harrabin, “*Renewable Energy: Burning US Trees in UK Power Stations*”, further addresses the growing trade of wood pellets from the U.S. to the UK. While the story gives ink to all sides, it lacks the context to illuminate the scale or likelihood of operational impacts on U.S. forests from UK pellet demand. In fact, bioenergy is a relatively small business in the U.S. and will remain that way for the foreseeable future. Readily available research and studies conducted by private firms and conservation groups, while sometimes diverging on potential implications, generally align with the facts on the current state of affairs. One study, “*Biomass Supply and Carbon Accounting for Southeastern Forests*”, was conducted for the National Wildlife Federation and the Southern Environmental Law Center (with whom Mr. Harrabin produced an interview). The study incorporates academic and private studies, and provides necessary context relative to potential policy outcomes.

On Tuesday May 28, 2013, the *Wall Street Journal* published a front page story related to wood bioenergy markets that managed to score the trifecta and to feature all three common errors appearing in media reports related to wood and timber industries. Posted online on May 27th, the article, “*Europe’s Green-Fuel Search Turns to American’s Forests*” by Justin Scheck and Ianthe Jeanne Dugan contains factual errors, fails to provide context or measures of scale, and improperly implies causal relationships. For example, the article does not scale UK demand to the U.S. forest industry. During normal economic conditions, the U.S. forest industry consumes ~500 million tons of wood per year. Currently, the U.S. is exporting on the order of 2 million tons of pellets per year.

The *Wall Street Journal* also dwells on the topic of swamp logging in North Carolina. Few people would look to swamp logging as inherently desirable or preferable. However, it represents between 1% and 4% of related forestry activities, and the article skirts the primary economic drivers and realities for U.S. forest management. Regardless of the wood pellet demand in the UK, forest owners in the U.S. will not overhaul their

long-term forest management strategies or harvest practices on account of pellet markets. The economics don't make sense. The U.S. remains a "sawtimber" market where landowners grow trees mainly for lumber production.

Conclusions and Considerations for Researchers

When the Forest History Society commissioned Amanda Lang and me to author the brief book *Wood for Bioenergy*, the explicit purpose was to make available data and applied research accessible to a broader audience. However, in writing the book, we struggled with our "researchy" tendencies to include extra technical details for the purpose of completeness. When copyeditors provided feedback, they commonly recommended that we continue to simplify concepts and results. In short, I recognized that the charge to "clearly communicate research results" is easier said than executed. That said, an observable absence of rigor and common errors in media reports provide a set of examples that we, as researchers, can turn into practical guidelines to improve the communication and accessibility of our insights and results.

At a minimum, we can account for three lapses. First, we must strive to **provide context** to give policymakers a sense, on a relative basis, of the importance of a given issue. What is the magnitude of a problem? One of the greatest gifts we can provide in research is to explain context and relative importance. Second, we need to properly **distinguish between "causal" relationships and mere happenstance** or correlations. Does it really only rain when Aunt Sally wears her cashmere sweater? And finally, we need to **confirm facts and conclusions**, while also expressing the importance of such confirmation in our conversations with reporters. Faulty assertions cast doubts on the broader work and body of research.

Being effective in our fields requires skills beyond the technical. Technical skills divorced from the ability to communicate that we have these skills, and the insights we generate from applying these skills, may limit our influence on decisions and funding for further research. Rather, success depends on our ability to communicate what we know to others.