Sutherland's 2021 Horizon Scan for Global conservation and biological diversity

Example of the form submitted for a topic submitted and selected for the 2020 Horizon Scan

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Topic title:

Europe's policy to treat wood as low-carbon fuel poised to harm global forests in the name of energy transition

Rationale

In 2018, as the European Parliament voted to double Europe's 2015 renewable energy levels by 2030, it also allowed countries, power plants and factories to claim that cutting down trees just to burn them for energy fully qualifies as low-carbon, renewable energy¹. It did so against the warning of 800 scientists². Because meeting a small quantity of Europe's energy use requires a large quantity of wood, and because of the example it sets for the world, this Directive profoundly threatens the world's forests³. Why? Makers of wood products have generated electricity and heat from wood process wastes for decades. But although burning these wastes emits CO₂, it benefits the climate because the wastes would quickly decompose and release their carbon anyway. The situation has now evolved: over the last decade, Europe has expanded its use of wood harvested to burn directly for energy, either from U.S. and Canadian forests in the form of wood pellets mostly derived from main stem and branches⁴, and by promoting the intensification of European forest exploitation for wood pellets like in several countries (France*, Romania, Slovakia, Sweden,...)5. Harvesting additional wood just for burning is likely to increase carbon in the atmosphere for decades to centuries^{3,6}. Given the level of wood aimed at through the new Directive, this will probably require expanding harvests in forests all over the world³. Moreover, at the UNFCCC-COP23, tropical forest countries including Indonesia and Brazil jointly declared goals "to increase the use of wood ... to generate energy as part of efforts to limit climate change"⁷. Once countries and powerful private companies become invested in such efforts, further expansion will become harder to stop⁸. The implication for conservation is double, with indirect effects through climate and direct effects on forest ecosystems. The Directive repeatedly cites a goal to preserve biodiversity, but its provisions will afford little protection as prohibitions on harvesting wood directly for bioenergy apply only to primary forests. Scientists and decision makers should educate themselves on this -still controversial⁹- issue likely of huge importance for conservation.



Reference list:

- 1. http://www.europarl.europa.eu/doceo/document/TA-8-2018-0009 EN.html
- 2. Beddington, J. et al. (2018). Letter from scientists to the EU parliament regarding forest biomass. http://empowerplants.files.wordpress.com/2018/01/scientist-letter-on-eu-forest-biomass-796-signatories-as-of-january-16-2018.pdf
- 3. Searchinger T.D. et al. (2018). Europe's renewable energy directive poised to harm global forests. *Nature Comm.* 9, Article number: 3741
- 4. Walker, S. et al. (2015). An Analysis of UK Biomass Power Policy, US South Pellet Production and Impacts on Wood Fiber Markets (RISI).
- 5. For France, see: Ministère de l'Agriculture et de l'Alimentation (2016). Plan National de la Forêt et du Bois 2016-2026, 60p.
- 6. Laganière J. et al. (2017). Range and uncertainties in estimating delays in greenhouse gas mitigation potential of forest bioenergy sourced from Canadian forests. *GCB Bioenergy* 9, 358–369; Booth M.S. (2018). Not carbon neutral: assessing the net emissions impact of residues burned for bioenergy. *Environ. Res. Lett.* 13, 035001.
- 7. Biofuture Platform (2017). Biofuture@COP23: Major countries agree to scale up the low carbon bioeconomy and develop sustainable biofuels targets. http://biofutureplatform.org/major-countries-agree-scale-low-carbon-bioeconomy-develop-sustainable-biofuels-targets/; Doyle, A. & Roche, A. (2017). Nineteen nations say they'll use more bioenergy to slow climate change. http://www.reuters.com/article/us-climatechange-accord-biofuels/nineteen-nations-say-theyll-use-more-bioenergy-to-slow-climate-change-idUSKBN1DG2DO
- 8. The effect can already be seen in the United States, where Congress in both 2017 and 2018 added provisions to annual spending bills declaring nearly all forest biomass carbon free—although environmentalists have so far fought to limit the legal effects to a single year
- 9. Smeets E.M.W. & Faaij A.P.C. (2006). Bioenergy potentials from forestry in 2050. Clim. Change 81, 353–390. ; Searchinger T. & Lucht W. (2018). Why 'sustainable forest management' does not make wood a good climate alternative to fossil fuels. euractiv.com: http://www.euractiv.com/section/climate-environment/opinion/why-sustainable-forest-management-does-not-make-wood-agood-climate-alternative-to-fossil-fuels/ (2018). ; Cowie A. et al. (2018). Response to Chatham House report "Woody Biomass for Power and Heat: Impacts on the Global Climate".