

## Feedback on Deforestation and forest degradation – reducing the impact of products placed on the EU market

March 3, 2020

Please accept this feedback from the Partnership for Policy Integrity (PFPI), a US based NGO working with allies across Europe for the protection and restoration of natural forests.<sup>1</sup>

We welcome the Commission’s recognition of the need to minimize the EU’s contribution to deforestation and forest degradation worldwide. However, we believe any serious concern for these issues must necessarily lead to the declassification of biomass as a renewable energy source eligible for subsidy in the RED II. **Accordingly, we believe the EU must conduct a serious analysis of how ending subsidies for biomass burning would help reduce forest degradation and loss of the global forest carbon sink.**

In its classification of biomass as a renewable energy eligible for subsidy, the RED I and preceding policies are responsible for a large increase in wood burning in Europe, for both domestic heating and industrial-scale electricity (data for figures 1, 2, and 3 data from Eurostat; these and other figures taken from PFPI presentations on bioenergy, hence additional captioning).

### The EU is aggressively promoting bioenergy as “carbon neutral” renewable energy in the Renewable Energy Directive

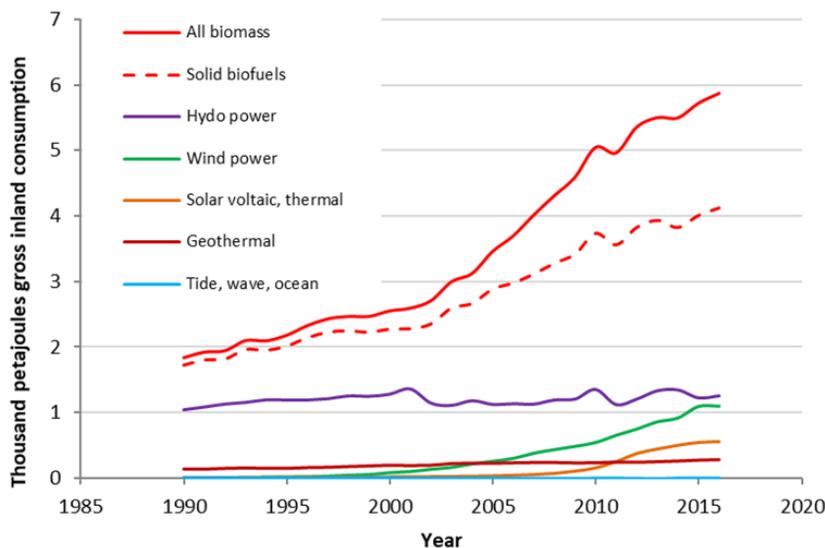


Figure 1. Growth of all biomass use, and solid biomass use (mostly wood) in the EU since 1990.

<sup>1</sup> Partnership for Policy Integrity website: <https://www.pfpi.net/>

## EU “solid biofuels” mostly wood; large increase since 1990

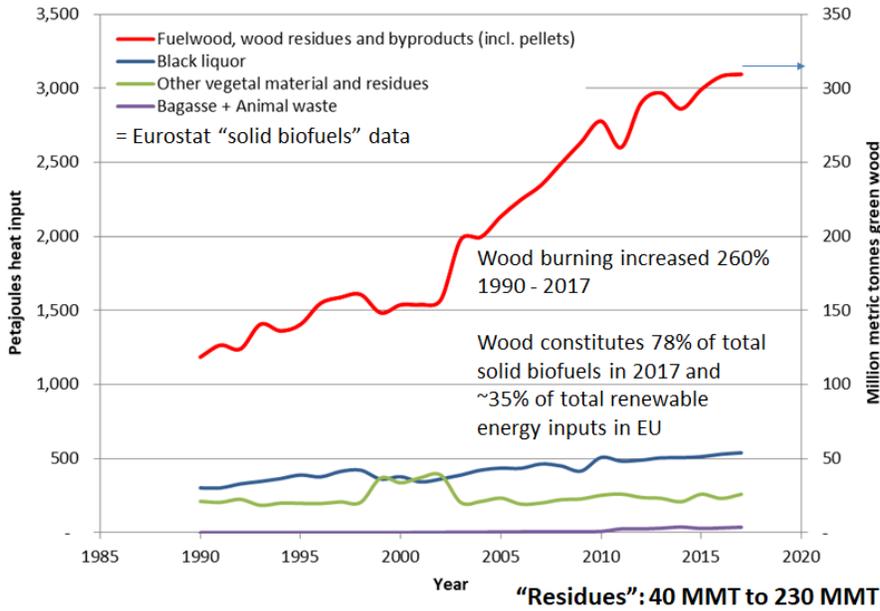
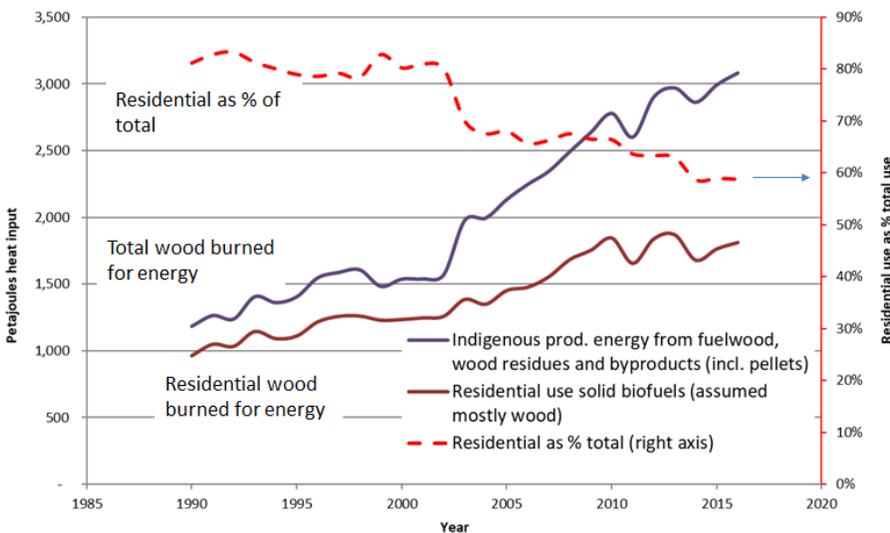


Figure 2. Composition of “solid biomass” in the EU.

## Of total wood burned for energy, residential use ~60%\*



\* Residential wood use and total wood use likely significantly underreported by Eurostat

Figure 3. All wood use for energy, and amount and percent of wood for residential heating in the EU.

Wood use for energy, including for residential heating, comprises about 50% of total wood use, according to Eurostat data. The EU’s Joint Research Commission has determined that over 12% of the wood used in the EU comes from “unaccounted sources,” which is likely to mean it is illegally harvested. In some countries – perhaps not coincidentally those with large use of wood for energy –unaccounted

wood makes up a much higher percentage of total wood use. For instance, the following countries burn a large percentage of the wood used, and also have a large percentage of unaccounted wood.

Country	approx % wood use for energy	approx % “unaccounted” wood
Austria	44.3	18.9
Italy	79.8	41.2
Latvia	58.5	43.9
Romania	57.9	42.7
Spain	56.2	38.6

Table 1. Proportion of wood used for energy, and proportion unaccounted wood, from JRC report.<sup>2</sup>

Does the use of wood for energy impact the forest carbon sink? The circumstantial evidence is strong in certain cases. For instance, Latvia has seen a massive loss in the forest carbon sink since 1990, which covaries strongly with the amount of wood being burned for energy and being manufactured into pellets (Figure 4). Slovakia is another country where a steep reduction in the forest carbon sink has co-varied with increased harvesting for biomass (Figure 5).

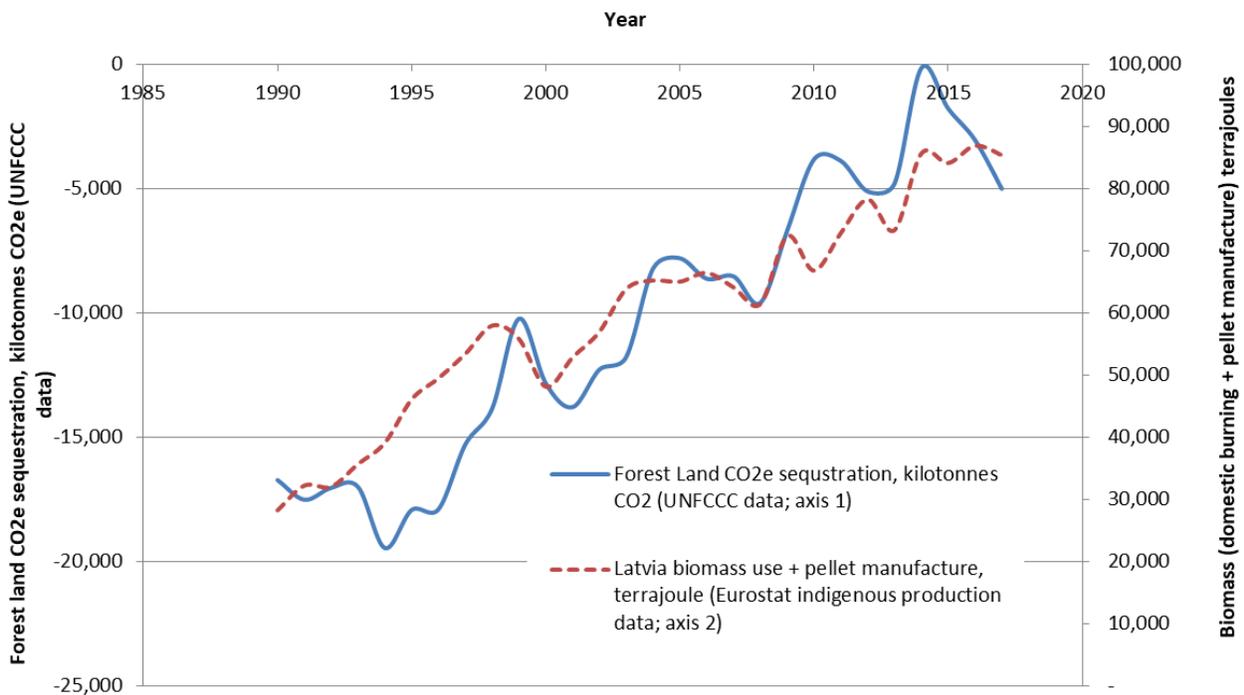


Figure 4. Covariance between biomass harvesting and loss of forest carbon sink, Latvia

<sup>2</sup> Pilli, R. and A. Camia (2019). "Wood Resource Balances of EU-28 and Member States, year 2015." Available at <https://ec.europa.eu/knowledge4policy/publication/wood-resource-balances>

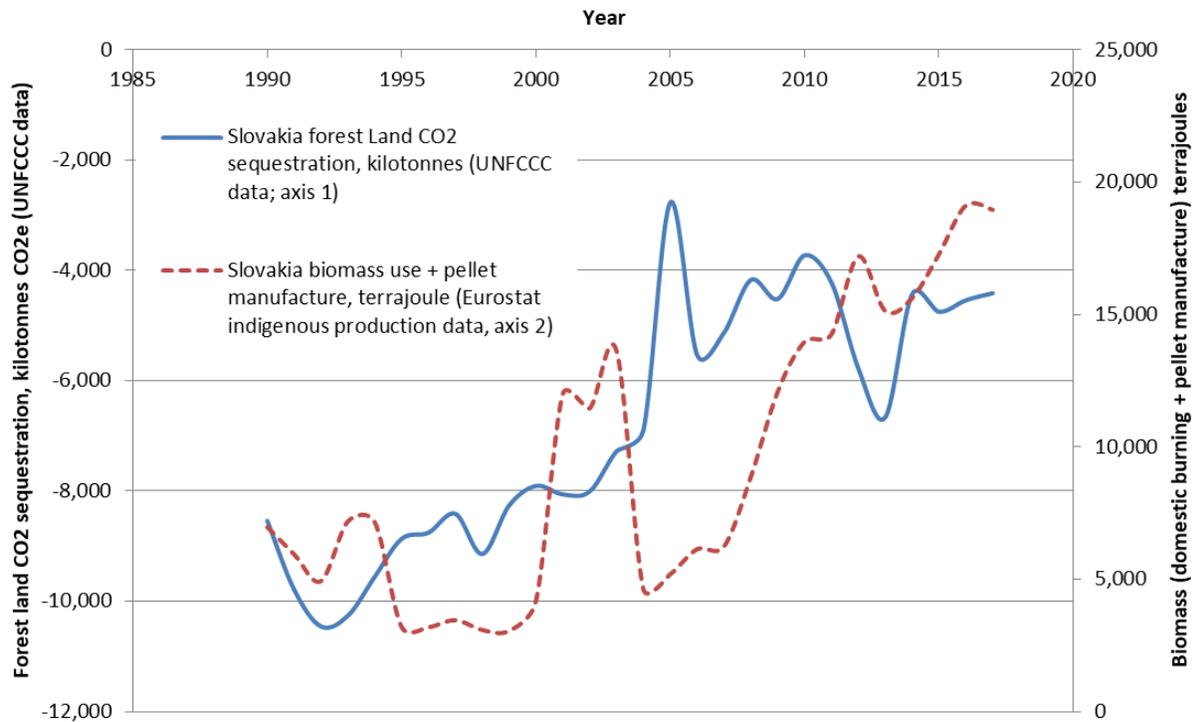


Figure 5. Covariance between biomass harvesting and loss of forest carbon sink, Slovakia

While harvested wood products count as carbon sequestration, burning wood adds CO<sub>2</sub> to the atmosphere. There is little if any near-term mitigation benefit over in most wood-burning scenarios, even when wood substitutes for fossil fuels. Burning wood emits more CO<sub>2</sub> per unit energy than burning fossil fuels, and an abundance of carbon modeling studies show that the net emissions impact is similar or lower if forests are instead allowed to continue growing and sequestering carbon (see for instance a recent paper by the EU's own science advisory body, EASAC, plus colleagues<sup>3</sup>). In reality, since wood burning directly competes with other renewable energy technologies for renewable energy subsidies, the surge in emissions from wood-burning is even more pronounced, because wood-burning is actually competing for subsidies with true zero-emissions energy like wind and solar, rather than coal.

The steep increase in wood use for energy – and very likely the incentives for additional and illegal logging – are unquestionably being driven by the eligibility of wood burning as renewable energy that counts toward EU-mandated member state targets for renewable energy generation. The majority of wood burned in the EU is harvested in the EU. However, the market for wood pellets and chips for fuel in the EU is also driving extremely damaging forest harvesting in the US, Canada, and even Brazil. The wood pellet industry is especially devastating to forests because the industry requires relatively “clean wood” to make the pellets. This wood can in some cases be provided from mill residues like sawdust, but the majority of wood pellets are made from whole trees and large-diameter residues that are debarked, chipped, and processed. Biomass demand is unquestionably damaging forests and is even leading to human rights abuses, as shown below. To characterize these impacts as “forest degradation”

<sup>3</sup> Norton, M., et al (2019). "Serious mismatches continue between science and policy in forest bioenergy." GCB Bioenergy 0(0).

would be a kindness. In fact, for timeframes over which the EU claims it wants to reduce emissions, it is functionally indistinguishable from deforestation.



Figure 6. Wetland forest harvested for wood pellets in North Carolina. Photo Marlboro Productions.



Figure 7. Wetland forest harvested for wood pellets in North Carolina. Photo Dogwood Alliance.



Figure 8. Series of Google Earth satellite shots showing clearcutting of hardwood forest and replacement by pine plantation. North Carolina, USA.



Figure 9. Area clearcut for wood pellets in Estonia. Photo Dutch TV.



### Logging of 180-yr-old beech forest in Bükk National Park, Hungary

“According to WWF, the approximately 600 m3 of timber produced is largely suitable only for low market value firewood or fiber due to the very high age of the trees.”

[https://index.hu/belfold/2019/05/06/bukk\\_fakivagas\\_wwf/](https://index.hu/belfold/2019/05/06/bukk_fakivagas_wwf/)



Figure 10. Photos from WWF investigation into illegal logging in Hungary.<sup>4</sup>



Figure 11. Brazilian landholder’s house bulldozed by biomass company that makes woodchips to ship to Denmark. Story at <https://nyheder.tv2.dk/samfund/2020-02-24-hendes-hus-blev-buldozet-saa-koebenhavnerne-kan-fyre-op-med-tropisk-trae>

<sup>4</sup> [https://index.hu/belfold/2019/05/06/bukk\\_fakivagas\\_wwf/](https://index.hu/belfold/2019/05/06/bukk_fakivagas_wwf/)



Figure 12. The ship IDC Pearl heading down the Amazon River with over 30,000 tonnes of wood chips to be burned for renewable energy in Copenhagen. Photo and caption: TV 2.<sup>5</sup> (Rough calculation: this amount of chips would be sufficient to power a 50 MW biomass electric plant for about 15 days).

The continued treatment of burning forest wood as a “zero emissions” energy source in the RED II, making bioenergy eligible for lucrative renewable energy subsidies, will increase the amount of wood burned for energy.

RED II includes new sustainability, greenhouse gas, and land use criteria for biomass, and defines “forest biomass” as a standalone category for the first time. However, the criteria put no meaningful limits on the use of forest wood, put no timeframe for the “payoff” of carbon debt, and just as the so-called sustainability schemes that currently exist have done nothing to prevent clearcutting forests, the new EU criteria will similarly do nothing to forest destruction for fuel. The RED II promise that sustainability criteria will ensure that that burning forest biomass can “ensure high greenhouse gas emissions savings compared to fossil fuel alternatives”<sup>6</sup> is accordingly false. As the IPCC states, “If bioenergy production is to generate a net reduction in emissions, it must do so by offsetting those emissions through increased net carbon uptake of biota and soils”<sup>7</sup> - in other words, simply cutting forests and letting them grow back does not generate a reduction in CO<sub>2</sub> emissions (and in reality *increases* emissions relative to fossil fuel). However, the RED II does nothing to ensure additional carbon sequestration that can offset emissions – it simply greenlights continued forest clearcutting.

The EU’s own science advisory bodies have stated unequivocally that burning biomass will not deliver climate benefits. The EU’s Joint Research Centre says assumption of carbon neutrality “not valid”: “In

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<sup>5</sup> <https://nyheder.tv2.dk/samfund/2020-02-23-koebenhavn-braender-trae-fra-amazonas-for-at-hjaelpe-klimaet>

<sup>6</sup> Recital 101 p. 16 final RED II

<sup>7</sup> IPCC AR5 WG III 11.13.4 GHG emission estimates of bioenergy production systems, 2014. [https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc\\_wg3\\_ar5\\_full.pdf](https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_full.pdf) p. 877)

*the case of dedicated harvest of stemwood for bioenergy purposes and short term GHG reduction policy objectives (e.g. 2020) the assumption of “carbon neutrality” is not valid since harvest of wood for bioenergy causes a decrease of the forest carbon stock, which may not be recovered in short time, leading to a temporary increase in atmospheric CO<sub>2</sub> and, hence, increased radiative forcing and global warming.”<sup>8</sup>*

The European Academies Science Advisory Council (EASAC) says EU has created a “perverse incentive” to fell trees: *“The legal mandate to record forest biomass-fired energy as contributing to the EU’s renewable energy targets has had the perverse effect of creating a demand for trees to be felled in Europe or elsewhere in order to burn them for energy, thus releasing the carbon into the atmosphere which would otherwise stay locked up in the forest, and simultaneously drastically reducing the carbon sink strength of the forest ecosystems... The potentially very long payback periods for forest biomass raise important issues given the UNFCCC’s aspiration of limiting warming to 1.5 °C above preindustrial levels to ‘significantly reduce the risks and impacts of climate change’. On current trends, this may be exceeded in around a decade. Relying on forest biomass for the EU’s renewable energy, with its associated initial increase in atmospheric carbon dioxide levels, increases the risk of overshooting the 1.5°C target if payback periods are longer than this.”<sup>9</sup>*

Scientists across the world agree that burning biomass is as bad if not worse for CO<sub>2</sub> emissions than burning fossil fuels - so there can be no possible justification for the use of biomass at scale - it will only serve to speed up rather than curb the climate emergency.

Accordingly, we recommend that to minimize the EU’s contribution to forest loss and degradation, the EU stop subsidizing forest harvesting for fuel. Instead, invest the massive sums now being used to subsidize wood-burning – over 6.5 billion euro per year – in saving, restoring, and protecting forests for climate and biodiversity.

Thank you for the opportunity to comment.

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Director, PFPI

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<sup>8</sup> Agostini, A., et al. 2014. Carbon accounting of forest bioenergy JRC Scientific and Policy Reports. Ispra, Italy, Joint Research Centre, Institute for Energy and Transport.

[http://publications.jrc.ec.europa.eu/repository/bitstream/JRC70663/eur25354en\\_online.pdf](http://publications.jrc.ec.europa.eu/repository/bitstream/JRC70663/eur25354en_online.pdf)

<sup>9</sup> Letter to President Juncker and his response at <https://easac.eu/news/details/easacs-correspondence-with-the-president-of-the-european-commission-on-the-role-of-biomass-energy/>